June 22, 2005

City County Inspections Division
C/o Charles Norton
P. O. Box 2511
Winston-Salem, NC 27102

RE: ZONING TEXT AMENDMENT UDO-137

Dear Mr. Norton:

The attached report of the Planning Board to the Forsyth County Board of Commissioners and City of Winston-Salem City Council is sent to you at the request of the Commissioners and Council Members.

When the text amendment is scheduled for public hearing, you will be notified by Jane Cole, Clerk to the County Commissioners and Renee Henderson, City Secretary, of the date on which the Commissioners and City Council will hear this petition.

Sincerely,

A. Paul Norby, AICP
Director of Planning

Attachment

pc: Jane Cole, County Manager's Office
    Renee Henderson, City Secretary
FORSYTH COUNTY
BOARD OF COMMISSIONERS

MEETING DATE: ________________  AGENDA ITEM NUMBER: ____________

SUBJECT:-

A. Public Hearing on Zoning Text Amendment proposed by the City-County Inspections Division to amend various sections of Chapter C, Article VII- EROSION CONTROL, of the Unified Development Ordinances so that the ordinance meets state-mandated requirements (UDO-137).

B. Approval of Ordinance

COUNTY MANAGER’S RECOMMENDATION OR COMMENTS:-

SUMMARY OF INFORMATION:-

See attached staff report.

After consideration, the Planning Board recommended approval of the rezoning text amendment.

ATTACHMENTS:-   X YES       ___ NO

SIGNATURE: ______________________________ DATE:
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<thead>
<tr>
<th><strong>ACTION REQUEST FORM</strong></th>
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<tr>
<td><strong>DATE:</strong> June 22, 2005</td>
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<tr>
<td><strong>TO:</strong> The Honorable Mayor and City Council</td>
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<tr>
<td><strong>FROM:</strong> A. Paul Norby, AICP, Director of Planning</td>
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**COUNCIL ACTION REQUEST:**

Request for Public Hearing on Zoning Text Amendment proposed by the City-County Inspections Division

**SUMMARY OF INFORMATION:**

Zoning Text Amendment proposed by the City-County Inspections Division to amend various sections of Chapter C, Article VII-EROSION CONTROL, of the *Unified Development Ordinances* so that the ordinance meets state-mandated requirements (UDO-137).

**PLANNING BOARD ACTION:**

**MOTION ON PETITION:** APPROVAL  
**FOR:** UNANIMOUS  
**AGAINST:** NONE  
**SITE PLAN ACTION:** NOT REQUIRED
STAFF REPORT

DOCKET #: UDO-137
STAFF: Charles Norton

REQUEST

UDO Text amendment proposed by the City-County Inspections Division to amend Chapter C – Environmental Ordinance, Article VII – Erosion Control to correct discrepancies between our local ordinance and the North Carolina Sedimentation Control Commission’s Model Local Ordinance, and to provide editorial changes in the current language to address errors or needed changes since the original adoption of this ordinance.

BACKGROUND

The North Carolina Sedimentation Control Commission (SCC) is responsible for insuring that the Sedimentation Pollution Control Act of 1973 (Act) is enforced effectively across the state. This is achieved through enforcement of the Act by the North Carolina Department of Environment and Natural Resources district offices, or through enforcement of locally adopted ordinances by various jurisdictions across the state that have been delegated this authority by the SCC. The purpose of the Act is to protect lake, river and stream watercourses, and public & private property from soil sedimentation resulting from land disturbing activities, primarily land development & construction projects.

The Sedimentation Control Commission has delegated a local Sedimentation and Erosion Control Program to Winston-Salem/Forsyth County for enforcement of a local ordinance modeled after the North Carolina Sedimentation Pollution Control Act of 1973. As a part of that delegation, the SCC periodically performs audits of our local program and provides recommendations to correct deficiencies of the local program in order achieve or maintain compliance with the statutory requirements of the Act.

A recent audit of the Winston-Salem/Forsyth County Sedimentation and Erosion Control Program in September 2004 identified several deficiencies in our current program. One of the major deficiencies noted was that the portions of the UDO concerning sedimentation and erosion control were not consistent with provisions of the most recent Model Local Ordinance adopted by the Sedimentation Control Commission on August 18, 2004. This recent audit resulted in Winston-Salem/Forsyth County’s local program being placed on probation by the SCC until recommended improvements are made to correct the identified deficiencies. The Sedimentation Control Commission will review the probationary status and progress of needed corrective actions for the Winston-Salem/Forsyth County program at their August 2005 quarterly meeting.
Localities having local sedimentation and erosion control programs are obligated to comply with Sedimentation Control Commission guidelines and recommendations, or will be subject to having delegation of their local programs revoked. Therefore, failure to amend our local erosion control ordinance to be consistent with the State’s Model Local Ordinance may result in the loss of local enforcement of soil sedimentation and erosion control regulations on development activities throughout Forsyth County.

ANALYSIS

The State of North Carolina allows regulatory authority to local jurisdictions for the administration and enforcement of local soil sedimentation and erosion control ordinances within their jurisdictions. This allows the review, approval and permitting of land disturbing activities related to construction and development projects to remain at the local level instead of going through a State Agency process. This benefits the local building & development community by reducing delays and additional costs involved in the State’s review and approval process, and provides local guidance and assistance on projects in a more timely, effective manner.

However, North Carolina through its Sedimentation Control Commission closely monitors erosion programs in local jurisdictions to insure adequacy in the administration & enforcement of the programs, and that local ordinances are consistent with the State statutes. This amendment adds and/or modifies language of our local erosion control ordinance to be consistent with the State’s Model Local Ordinance as requested by the North Carolina Sedimentation Control Commission. The proposed amendment includes the following:

- Provides editorial changes to correct incorrect section references and typographical errors, and to change the title of the local official responsible for the administration and interpretation of this section of the Ordinance from Superintendent of Inspections to Director of Inspections.
- Modifies or adds several definitions.
- Adds an additional exclusion to the application of the Ordinance for Emergency Activities.
- Eliminates provisions for buffer zones in proximity to designated trout waters, as there are no such designated waters within Forsyth County.
- Provides a new section to address acceptable fill materials.
- Modifies the time frame for establishing sufficient ground cover after land disturbing activity from 90 calendar days to 30 calendar days, and clarifies that this time begins at the completion of any phase of grading and not the completion of the development.
- Modifies language relating to requirements for graded slopes, storm water outlet protection, erosion control plans and Notice of Violation.
o Eliminates specific permit fees, and provides that fees shall be as each of the bodies of Local Government from time to time prescribe and establish by ordinance or resolution.

o Provides additional criteria for assessment of civil penalties and establishes an appeal process to contest such assessment.

o Provides a new section to allow Director of Inspections to require a person who engaged in land disturbing activity and failed to retain sediment generated from the activity, to restore the waters and land affected by the failure.

**RECOMMENDATION**

**APPROVAL.**

Charley Norton presented the staff report.

**PUBLIC HEARING**

FOR: None

AGAINST: None

**WORK SESSION**

MOTION: Clarence Lambe moved approval of the zoning text amendment.
SECOND: Dara Folan
VOTE:
   FOR: Clark, Eickmeyer, Folan, King, Lambe, Mullican, Smith
   AGAINST: None
   EXCUSED: None

A. Paul Norby, AICP
Director of Planning
Be it resolved, by the City Council of the City of Winston-Salem, North Carolina that the Unified Development Ordinances (UDO) is hereby amended as follows:

**Section 1.** Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)\(^1\)

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person conducting the land disturbing activity.

\(^1\) State of North Carolina regulations pursuant to the North Carolina Sedimentation Pollution Control Act of 1973 shall apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products, livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is required on a phase of a project except that which is necessary for establishing permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION
Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING
One of two (2) types of grading, rough or fine.

PLAN
An erosion and sedimentation control plan.

SEDIMENT
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION
The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION
Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES
The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF
The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY
An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products and which are conducted in accordance with Forest Practice Guidelines Related to Water Quality (best management practices) as adopted by the North Carolina Department of Environment and Natural Resources. If land disturbing activity undertaken on forest land for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under Section 7-16 without having an erosion control plan approved by the Director of Inspections and without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity, including protected floodway fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this Ordinance if the plan fails to address the following control objectives:

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7-6.1 IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

7-6.2 LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

7-6.3 LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

7-6.4 CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

7-6.5 CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

7-6.6 MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

7-6.7 PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

7-7 MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

7-7.1 BUFFER ZONE

(A) Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone

Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications

No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions

With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

(1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

(2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 5-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

7-7.6 TOP OF SLOPE

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

7-7.7 PRIOR PLAN APPROVAL

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES

(A) Notification

No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference

When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas

Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land
disturbing activity within a high quality water zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality water zones shall be so planned, designed and constructed to provide protection from the runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40) micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60) calendar days following completion of construction or development, whichever period is shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity. Persons shall conduct land disturbing activity so that the post construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
(A) Maximum Permissible Velocities
The velocity established by Table 7.1; or,

(B) Velocity Prior to Development
The velocity of the ten-year storm runoff in the receiving watercourse prior to development. If conditions in Section 7.9.1(A) and (B) cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the prior to development velocity by ten percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES
Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. It is recognized that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives are to:

(A) Infiltration
Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways
Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators
Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures.

(D) Cross Sections; Erosion Resistant Lining
Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse
Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

7-9.3 EXCEPTIONS
This rule shall not apply where it can be demonstrated that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

<table>
<thead>
<tr>
<th>Material</th>
<th>Maximum Permissible Velocities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.P.S.</td>
</tr>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

7-10 BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

7-11 ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt...
requested, or other means reasonably calculated to give actual notice. The notice will set forth the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued pursuant to the Act by the Commission or Local Government and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the authority serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first obtaining a permit therefore from the Director of Inspections, except that no permit shall be required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one or diverse ownership being developed as a unit, will be aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet for construction of a single family dwelling which is located on a lot existing prior to October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision Regulations (F,W)/Subdivision Ordinance (K,C,L). In determining the area, land under one ownership, or land in diverse ownership being developed as a unit, will be aggregated.

7-16.2 FEE

The fee for permits required by this section shall be as the governing bodies of Local Government from time to time prescribe and establish by ordinance or resolution. When permits are requested for incremental grading in sections, the fee established by this section

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Deleted: (A). For the purpose of fighting fires;

(B) For the stockpiling of raw or processed sand, stone, or gravel in material processing plants and storage yards, provided that sediment control measures have been utilized to protect against off-site damage;

(C) That does not exceed twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated;

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Deleted: one hundred eighty-five dollars ($185) per site, plus ninety dollars ($90) for each acre or part of an acre to be graded up to a maximum fee of three thousand one hundred fifty dollars ($3,150)
shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be equal to double the normal permit fee.

7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the Director of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The Director of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the Director of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the...
security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any monies in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1” to 100’), showing:

(A) Standard Documentation
Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions
Existing conditions, available in part from the Planning Board, which shall include: structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans
The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other
A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation

Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty

Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision

Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply

Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment
Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved. The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY
No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21 INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH
The Director of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

7-21.6 NOTIFICATION TO DIRECTOR OF INSPECTIONS

The holder of a development permit shall notify the Director of Inspections when grading is to begin and again when the graded area has been protected.

7-22 PENALTIES

7-22.1 CIVIL PENALTIES

(A) Procedure

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan is required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C). No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) Amount and Enforcement

The Director of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the Director of
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment
A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties
Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5).

7-22.2 CRIMINAL PENALTIES
Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF

7-23.1 VIOLATION OF THE ORDINANCE
Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION
Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.
Be it resolved, by the Board of Commissioners of Forsyth County, North Carolina that the *Unified Development Ordinances* (UDO) is hereby amended as follows:

**Section 1.** Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)"

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person conducting the land disturbing activity.

---

1 State of North Carolina regulations pursuant to the *North Carolina Sedimentation Pollution Control Act of 1973* shall apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products, livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is required on a phase of a project except that which is necessary for establishing permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION
Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING
One of two (2) types of grading, rough or fine.

PLAN
An erosion and sedimentation control plan.

SEDIMENT
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION
The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION
Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES
The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF
The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY
An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products and which are conducted in accordance with Forest Practice Guidelines Related to Water Quality (best management practices) as adopted by the North Carolina Department of Environment and Natural Resources. If land disturbing activity undertaken on forest land for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under Section 7-16 without having an erosion control plan approved by the Director of Inspections and without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity, including protected floodway fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this Ordinance if the plan fails to address the following control objectives:
7-6.1 IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

7-6.2 LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

7-6.3 LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

7-6.4 CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

7-6.5 CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

7-6.6 MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

7-6.7 PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

7-7 MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

7-7.1 BUFFER ZONE

(A) Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone
Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications
No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions
With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 7-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

| 7-7.6 TOP OF SLOPE |

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

| 7-7.7 PRIOR PLAN APPROVAL |

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

| 7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES |

(A) Notification
No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference
When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas
Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land
disturbing activity within a high quality water zone shall be governed by this section.
Larger areas may be uncovered within the boundaries of the tract with the written approval
of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality
water zones shall be so planned, designed and constructed to provide protection from the
runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as
calculated according to the procedures in the United States Department of Agriculture Soil
Conservation Service's *National Engineering Field Manual for Conservation Practices* or
according to procedures adopted by any other agency of this State or the United States or
any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that
the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40)
micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year
storm which produces the maximum peak rate of runoff as calculated according to
procedures in the United States Department of Agriculture Soil Conservation Service's
*National Engineering Field Manual for Conservation Practices* or according to the
procedures adopted by any other agency of this State or the United States or any generally
recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and
constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a
vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or
where the slopes are stabilized by using mechanical devices, structural devices or other
acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain
accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land
disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60)
calendar days following completion of construction or development, whichever period is
shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected
from increased degradation by accelerated erosion caused by increased velocity of runoff from
the land disturbing activity. Persons shall conduct land disturbing activity so that the post
construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge
point does not exceed the greater of:
(A) Maximum Permissible Velocities

The velocity established by Table 7.1; or,

(B) Velocity Prior to Development

The velocity of the ten-year storm runoff in the receiving watercourse prior to development. If conditions in Section 7-9.1(A) and (B) cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the prior to development velocity by ten percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES

Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. It is recognized that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives are to:

(A) Infiltration

Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways

Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators

Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures.

(D) Cross Sections; Erosion Resistant Lining

Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse

Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

7-9.3 EXCEPTIONS

This rule shall not apply where it can be demonstrated that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

Table 7.1  
Maximum Permissible Velocities for Storm Water Discharges

<table>
<thead>
<tr>
<th>Material</th>
<th>Maximum Permissible Velocities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.P.S.</td>
</tr>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

7-10  BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

7-11  ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt
requested, or other means reasonably calculated to give actual notice. The notice will set forth the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued pursuant to the Act by the Commission or Local Government and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the authority serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first obtaining a permit therefore from the Director of Inspections, except that no permit shall be required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one or diverse ownership being developed as a unit, will be aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet for construction of a single family dwelling which is located on a lot existing prior to October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision Regulations (F,W)/Subdivision Ordinance (K,C,L). In determining the area, land under one ownership, or land in diverse ownership being developed as a unit, will be aggregated.

7-16.2 FEE

The fee for permits required by this section shall be as the governing bodies of Local Government from time to time prescribe and establish by ordinance or resolution. When permits are requested for incremental grading in sections, the fee established by this section

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Deleted: (A). For the purpose of fighting fires;

¶(B) For the stockpiling of raw or processed sand, stone, or gravel in material processing plants and storage yards, provided that sediment control measures have been utilized to protect against off-site damage;

¶(C) That does not exceed twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one ownership, or land in diverse ownership being developed as a unit will be aggregated;

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shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be equal to double the normal permit fee.

7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the Director of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The Director of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the Director of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the

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security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1” to 100’), showing:

(A) Standard Documentation

Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions

Existing conditions, available in part from the Planning Board, which shall include: structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans

The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection, or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other

A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation
Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty
Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision
Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply
Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment
Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or an amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved.

The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY
No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21 INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH
The Director of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

7-21.6 NOTIFICATION TO DIRECTOR OF INSPECTIONS

The holder of a development permit shall notify the Director of Inspections when grading is to begin and again when the graded area has been protected.

7-22 PENALTIES

7-22.1 CIVIL PENALTIES

(A) Procedure

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan is required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C).

No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) Amount and Enforcement

The Director of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the Director of
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment
A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties
Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5).

7-22.2 CRIMINAL PENALTIES
Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF
7-23.1 VIOLATION OF THE ORDINANCE
Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION
Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.

Section 2. This ordinance shall be effective upon adoption.
Be it resolved, by the Village Council of the Village of Clemmons, North Carolina that the Unified Development Ordinances (UDO) is hereby amended as follows:

Section 1. Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)\(^1\)

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person conducting the land disturbing activity.

(\(^1\) State of North Carolina regulations pursuant to the North Carolina Sedimentation Pollution Control Act of 1973 shall apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is
controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products,
livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been
completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is
required on a phase of a project except that which is necessary for establishing
permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and
Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North
Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of
pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination
thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION
Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING
One of two (2) types of grading, rough or fine.

PLAN
An erosion and sedimentation control plan.

SEDIMENT
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION
The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION
Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES
The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF
The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY
An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products
and which are conducted in accordance with Forest Practice Guidelines Related to Water
Quality (best management practices) as adopted by the North Carolina Department of
Environment and Natural Resources. If land disturbing activity undertaken on forest land for
the production and harvesting of timber and timber products is not conducted in accordance
with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall
apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise
regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General
Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided
in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under
Section 7-16 without having an erosion control plan approved by the Director of Inspections and
without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all
public and private property from damage caused by such activity, including protected floodway
fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe
Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more
restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this
Ordinance if the plan fails to address the following control objectives:
7-6.1 IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

7-6.2 LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

7-6.3 LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

7-6.4 CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

7-6.5 CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

7-6.6 MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

7-6.7 PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

7-7 MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

7-7.1 BUFFER ZONE

(A) Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone
Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications
No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions
With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 7-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

7-7.6 TOP OF SLOPE

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

7-7.7 PRIOR PLAN APPROVAL

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES

(A) Notification

No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference

When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas

Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land
disturbing activity within a high quality water zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality water zones shall be so planned, designed and constructed to provide protection from the runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40) micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to the procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60) calendar days following completion of construction or development, whichever period is shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity. Persons shall conduct land disturbing activity so that the post construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:
(A) Maximum Permissible Velocities
The velocity established by Table 7.1; or,

(B) Velocity Prior to Development
The velocity of the ten-year storm runoff in the receiving watercourse prior to development.
If conditions in Section 7-9.1(A) and (B) cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the prior to development velocity by ten percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES

Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. It is recognized that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives are to:

(A) Infiltration
Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways
Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators
Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures.

(D) Cross Sections; Erosion Resistant Lining
Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse
Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

7-9.3 EXCEPTIONS

This rule shall not apply where it can be demonstrated that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

### Table 7.1
Maximum Permissible Velocities for Storm Water Discharges

<table>
<thead>
<tr>
<th>Material</th>
<th>Maximum Permissible Velocities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.P.S.</td>
</tr>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

7-10 BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the *Mining Act of 1971*; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person *conducting* the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

7-11 ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt...
requested, or other means reasonably calculated to give actual notice. The notice will set forth the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued pursuant to the Act by the Commission or Local Government and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the authority serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first obtaining a permit therefore from the Director of Inspections, except that no permit shall be required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one or diverse ownership being developed as a unit, will be aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet for construction of a single family dwelling which is located on a lot existing prior to October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision Regulations (F,W)/Subdivision Ordinance (K,C,L). In determining the area, land under one ownership, or land in diverse ownership being developed as a unit, will be aggregated.

7-16.2 FEE

The fee for permits required by this section shall be as the governing bodies of Local Government from time to time prescribe and establish by ordinance or resolution. When permits are requested for incremental grading in sections, the fee established by this section

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Deleted: (A). For the purpose of fighting fires;¶

¶ (B). For the stockpiling of raw or processed sand, stone, or gravel in material processing plants and storage yards, provided that sediment control measures have been utilized to protect against off-site damage;¶

¶ (C). That does not exceed twenty thousand (20,000) square feet in surface area on one tract for construction of a single family dwelling or ten thousand (10,000) square feet on one tract for any other purpose. In determining the area, lands under one or diverse ownership being developed as a unit will be aggregated;¶

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Deleted: one hundred eighty-five dollars ($185) per site, plus ninety dollars ($90) for each acre or part of an acre to be graded up to a maximum fee of three thousand one hundred fifty dollars ($3,150)
shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be equal to double the normal permit fee.

7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the Director of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The Director of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the Director of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the...

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security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any monies in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1” to 100’), showing:

(A) Standard Documentation
Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions
Existing conditions, available in part from the Planning Board, which shall include:
structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans
The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection, or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other
A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading...
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation
Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty
Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision
Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply
Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment

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Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or an amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved. The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY

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No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21 INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH
The Director of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

7-21.6 NOTIFICATION TO DIRECTOR OF INSPECTIONS

The holder of a development permit shall notify the Director of Inspections when grading is to begin and again when the graded area has been protected.

7-22 PENALTIES

7-22.1 CIVIL PENALTIES

(A) Procedure

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan is required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C).

No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) Amount and Enforcement

The Director of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the Director of
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment
A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties
Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5).

7-22.2 CRIMINAL PENALTIES
Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF
7-23.1 VIOLATION OF THE ORDINANCE
Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION
Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.

Section 2. This ordinance shall be effective upon adoption.
AN ORDINANCE AMENDING
CHAPTER C ENVIRONMENTAL ORDINANCE OF
THE UNIFIED DEVELOPMENT ORDINANCES
REGARDING EROSION CONTROL

Be it resolved, by the Board of Aldermen of Kernersville, North Carolina that the Unified Development Ordinances (UDO) is hereby amended as follows:

Section 1. Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)\(^1\)

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person conducting the land disturbing activity.

\(^1\) State of North Carolina regulations pursuant to the North Carolina Sedimentation Pollution Control Act of 1973 shall apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products, livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is required on a phase of a project except that which is necessary for establishing permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION

Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING

One of two (2) types of grading, rough or fine.

PLAN

An erosion and sedimentation control plan.

SEDIMENT

Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION

The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION

Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES

The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF

The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY

An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products and which are conducted in accordance with Forest Practice Guidelines Related to Water Quality (best management practices) as adopted by the North Carolina Department of Environment and Natural Resources. If land disturbing activity undertaken on forest land for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under Section 7-16 without having an erosion control plan approved by the Director of Inspections and without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity, including protected floodway fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this Ordinance if the plan fails to address the following control objectives:
7-6.1 IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

7-6.2 LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

7-6.3 LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

7-6.4 CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

7-6.5 CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

7-6.6 MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

7-6.7 PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

7-7 MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

7-7.1 BUFFER ZONE

(A) Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone
Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications
No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions
With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 7-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

7-7.6 TOP OF SLOPE

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

7-7.7 PRIOR PLAN APPROVAL

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES

(A) Notification

No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference

When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas

Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land...
disturbing activity within a high quality water zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality water zones shall be so planned, designed and constructed to provide protection from the runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40) micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to the procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60) calendar days following completion of construction or development, whichever period is shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity. Persons shall conduct land disturbing activity so that the post construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:

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(A) Maximum Permissible Velocities
The velocity established by Table 7.1; or,

(B) Velocity Prior to Development
The velocity of the ten-year storm runoff in the receiving watercourse prior to development. If conditions in Section 7-9.1(A) and (B) cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the prior to development velocity by ten percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES

Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. It is recognized that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives are to:

(A) Infiltration
Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways
Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators
Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures.

(D) Cross Sections; Erosion Resistant Lining
Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse
Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

7-9.3 EXCEPTIONS

This rule shall not apply where it can be demonstrated that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

### Table 7.1
**Maximum Permissible Velocities for Storm Water Discharges**

<table>
<thead>
<tr>
<th>Material</th>
<th>F.P.S.</th>
<th>M.P.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

### 7-10 BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

### 7-11 ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt
requested, or other means reasonably calculated to give actual notice. The notice will set forth
the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued
pursuant to the Act by the Commission or Local Government and will state the time within
which such measures must be completed. In determining the measures required and the time
allowed for compliance, the authority serving notice shall take into consideration the economic
feasibility, technology, and quantity of work required, and shall set reasonable and attainable
time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion
control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned
reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first
obtaining a permit therefore from the Director of Inspections, except that no permit shall be
required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000)
square feet in surface area on one tract for construction of a single family dwelling or ten
thousand (10,000) square feet on one tract for any other purpose. In determining the
area, lands under one or diverse ownership being developed as a unit, will be
aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square
feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet
for construction of a single family dwelling which is located on a lot existing prior to
October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision
Regulations (F,W)/Subdivision Ordinance (K,C,L). In determining the area, land under
one ownership, or land in diverse ownership being developed as a unit, will be
aggregated.

7-16.2 FEE

The fee for permits required by this section shall be, as the governing bodies of Local
Government from time to time prescribe and establish by ordinance or resolution. When
permits are requested for incremental grading in sections, the fee established by this section

Deleted: Superintendent

Deleted: Superintendent

Deleted: (A). For the purpose of
fighting fires;

¶

(B). For the stockpiling of raw or
processed sand, stone, or gravel in
material processing plants and storage
yards, provided that sediment control
measures have been utilized to protect
against off-site damage;

¶

(C). That does not exceed twenty
thousand (20,000) square feet in surface
area on one tract for construction of a
single family dwelling or ten thousand
(10,000) square feet on one tract for any
other purpose. In determining the area,
lands under one or diverse ownership
being developed as a unit will be
aggregated;

Deleted: D

Deleted: E

Deleted: one hundred eighty-five
dollars ($185) per site, plus ninety dollars
($90) for each acre or part of an acre to
be graded up to a maximum fee of three
thousand one hundred fifty dollars
($3,150)
shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be **equal to double the normal permit fee**.

### 7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

### 7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the **Director** of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The **Director** of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

### 7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

### 7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

#### 7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the **Director** of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the **Director** of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the **Director** of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the
security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any monies in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1" to 100′), showing:

(A) Standard Documentation
Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions
Existing conditions, available in part from the Planning Board, which shall include: structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans
The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection, or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other
A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation
Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty
Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision
Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply
Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment
Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or an amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved. The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY
No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21 INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH

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The Director of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

7-21.6 NOTIFICATION TO DIRECTOR OF INSPECTIONS

The holder of a development permit shall notify the Director of Inspections when grading is to begin and again when the graded area has been protected.

7-22 PENALTIES

7-22.1 CIVIL PENALTIES

(A) Procedure

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan in required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C). No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) Amount and Enforcement

The Director of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the Director of
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment
A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties
Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5)

7-22.2 CRIMINAL PENALTIES
Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF

7-23.1 VIOLATION OF THE ORDINANCE
Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION

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Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.

Section 2. This ordinance shall be effective upon adoption.
Be it resolved, by the Town Council of the Town of Lewisville, North Carolina that the Unified Development Ordinances (UDO) is hereby amended as follows:

Section 1. Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)"

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and sedimentation in order to prevent the pollution of water and other damage to lakes, watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person conducting the land disturbing activity.

1 State of North Carolina regulations pursuant to the North Carolina Sedimentation Pollution Control Act of 1973 shall apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products, livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is required on a phase of a project except that which is necessary for establishing permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION
Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING
One of two (2) types of grading, rough or fine.

PLAN
An erosion and sedimentation control plan.

SEDIMENT
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION
The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION
Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES
The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF
The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY
An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products and which are conducted in accordance with Forest Practice Guidelines Related to Water Quality (best management practices) as adopted by the North Carolina Department of Environment and Natural Resources. If land disturbing activity undertaken on forest land for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under Section 7-16 without having an erosion control plan approved by the Director of Inspections and without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity, including protected floodway fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this Ordinance if the plan fails to address the following control objectives:
IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

BUFFER ZONE

Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone

Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications

No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions

With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

(1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

(2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 5-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

7-7.6 TOP OF SLOPE

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

7-7.7 PRIOR PLAN APPROVAL

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES

(A) Notification

No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference

When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas

Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land
disturbing activity within a high quality water zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality water zones shall be so planned, designed and constructed to provide protection from the runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's National Engineering Field Manual for Conservation Practices or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40) micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's National Engineering Field Manual for Conservation Practices or according to the procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60) calendar days following completion of construction or development, whichever period is shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity. Persons shall conduct land disturbing activity so that the post construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:

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(A) Maximum Permissible Velocities
The velocity established by Table 7.1; or,

(B) Velocity Prior to Development
The velocity of the ten-year storm runoff in the receiving watercourse prior to development. If conditions in Section 7-9.1(A) and (B) cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the prior to development velocity by ten percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES
Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. It is recognized that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results. Some alternatives are to:

(A) Infiltration
Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways
Avoid increases in storm water discharge velocities by using vegetated or roughened swales and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators
Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple riprapped sections to complex structures.

(D) Cross Sections; Erosion Resistant Lining
Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse
Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

7-9.3 EXCEPTIONS
This rule shall not apply where it can be demonstrated that storm water discharge velocities will not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

<table>
<thead>
<tr>
<th>Material</th>
<th>Maximum Permissible Velocities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F.P.S.</td>
</tr>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

7-10 BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

7-11 ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt
requested, or other means reasonably calculated to give actual notice. The notice will set forth
the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued
pursuant to the Act by the Commission or Local Government and will state the time within
which such measures must be completed. In determining the measures required and the time
allowed for compliance, the authority serving notice shall take into consideration the economic
feasibility, technology, and quantity of work required, and shall set reasonable and attainable
time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion
control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned
reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first
obtaining a permit therefore from the Director of Inspections, except that no permit shall be
required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000)
square feet in surface area on one tract for construction of a single family dwelling or ten
thousand (10,000) square feet on one tract for any other purpose. In determining the
area, lands under one or diverse ownership being developed as a unit, will be
aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square
feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet
for construction of a single family dwelling which is located on a lot existing prior to
October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision
Regulations (F,W)/Subdivision Ordinance (K,C,L). In determining the area, land under
one ownership, or land in diverse ownership being developed as a unit, will be
aggregated.

7-16.2 FEE

The fee for permits required by this section shall be, as the governing bodies of Local
Government from time to time prescribe and establish by ordinance or resolution. When
permits are requested for incremental grading in sections, the fee established by this section
shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be equal to double the normal permit fee.

7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the 
Director of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The Director of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the Director of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the

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security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any monies in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1” to 100’), showing:

(A) Standard Documentation
Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions
Existing conditions, available in part from the Planning Board, which shall include: structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans
The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection, or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other
A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation
   Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty
   Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision
   Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply
   Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment
Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or an amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved. The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY
No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21  INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH

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The Director of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

7-21.6 NOTIFICATION TO DIRECTOR OF INSPECTIONS

The holder of a development permit shall notify the Director of Inspections when grading is to begin and again when the graded area has been protected.

7-22 PENALTIES

7-22.1 CIVIL PENALTIES

(A) Procedure

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan in required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C).

No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) Amount and Enforcement

The Director of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the Director of
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment
A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties
Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5)

7-22.2 CRIMINAL PENALTIES

Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF

7-23.1 VIOLATION OF THE ORDINANCE

Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION
Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.

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Section 2. This ordinance shall be effective upon adoption.
AN ORDINANCE AMENDING
CHAPTER C ENVIRONMENTAL ORDINANCE OF
THE UNIFIED DEVELOPMENT ORDINANCES
REGARDING EROSION CONTROL

Be it resolved, by the Board of Aldermen of the Town of Walkertown, North Carolina that the
Unified Development Ordinances (UDO) is hereby amended as follows:

Section 1. Chapter C Environmental Ordinance Article VII "Erosion Control" is hereby
amended to read as follows:

"CHAPTER C - ENVIRONMENTAL ORDINANCE
ARTICLE VII - EROSION CONTROL (F,W,C,L)¹

7-1 GENERAL

This section is adopted for the purposes of:

7-1. Regulating certain land disturbing activities to control accelerated erosion and
sedimentation in order to prevent the pollution of water and other damage to lakes,
watercourses, and other public and private property by sedimentation; and,

7-1.2 Establishing procedures through which these purposes can be fulfilled.

7-2 DEFINITIONS

As used in this chapter, unless the context clearly indicates otherwise, the following definitions
apply:

ACCELERATED EROSION
Any increase over the rate of natural erosion as a result of land disturbing activity.

ACT
The North Carolina Sedimentation Pollution Control Act of 1973 and all rules and orders
adopted pursuant to it and amendments.

ADEQUATE EROSION CONTROL MEASURE, STRUCTURE OR DEVICE
One which controls the soil material within the land area under responsible control of the person
conducting the land disturbing activity.

¹ State of North Carolina regulations pursuant to the North Carolina Sedimentation Pollution Control Act of 1973 shall
apply in Kernersville. (K)
A person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control of another person.

AGRICULTURAL LAND
Any parcel of land which is used in the raising of agricultural, dairy, or forest products, livestock, poultry, or fur-bearing animals.

BEING CONDUCTED
A land disturbing activity has been initiated and permanent stabilization of the site has not been completed.

BORROW
Fill material which is required for on-site construction and is obtained from other locations.

BUFFER ZONE
The strip of land adjacent to a lake or natural watercourse.

COMMISSION
The North Carolina Sedimentation Control Commission.

COMPLETION OF CONSTRUCTION OR DEVELOPMENT
Completion of construction or development means that no further land disturbing activity is required on a phase of a project except that which is necessary for establishing permanent ground cover.

DEPARTMENT
The North Carolina Department of Environment, Health and Natural Resources.

DIRECTOR
The Director of the Division of Land Resources of the Department of Environment, Health and Natural Resources.

DISCHARGE POINT
That point at which storm water runoff leaves a tract of land.

DISTRICT
The Forsyth Soil and Water Conservation District created pursuant to Chapter 139, North Carolina General Statutes.

ENERGY DISSIPATOR
A structure or a shaped channel section with mechanical armoring placed at the outlet of pipes or conduits to receive and break down the energy from high velocity flow.

EROSION
The wearing away of land surface by the action of wind, water, gravity, or any combination thereof.
EXISTING GRADE
The elevation among the ground surface of a site as recorded in topographic mapping at two (2) foot or four (4) foot contour intervals, on file in the office of the Planning Board, or as surveyed and mapped at a contour interval of not more than four (4) feet, by a licensed surveyor or a registered professional engineer.

GROUND COVER
Any natural vegetative growth or other material which renders the soil surface stable against accelerated erosion.

HIGH QUALITY WATERS
Those classified as such in 15A NCAC 2B.0101(e)(5) - General Procedures, which is incorporated herein by reference to include further amendments pursuant to General Statutes 150B-14(c).

HIGH QUALITY WATER (HQW) ZONES
Areas that are within one mile of high quality waters and drain to high quality waters.

LAKE OR NATURAL WATERCOURSE
Any stream, river, brook, swamp, sound, bay, creek, run, branch, canal, waterway, estuary, and any reservoir, lake or pond, natural or impounded, in which sediment may be moved or carried in suspension, and which could be damaged by accumulation of sediment.

LAND DISTURBING ACTIVITY
Any use of the land by any person in residential, industrial, educational, institutional, or commercial development, highway and road construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation.

LOCAL GOVERNMENT
Any county, incorporated village, town, or city, or any combination of counties, incorporated villages, towns, and cities, acting through a joint program pursuant to the provisions of the act.

NATURAL EROSION
The wearing away of the earth's surface by water, wind, or other natural agents under natural environmental conditions undisturbed by man.

PARENT
An affiliate that directly, or indirectly through one or more intermediaries, controls another person.

PERSON
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.

PERSON CONDUCTING LAND DISTURBING ACTIVITY
Any person who may be held responsible for a violation unless expressly provided otherwise by this Chapter, the Act, or any order adopted pursuant to this Chapter or the Act.

PERSON RESPONSIBLE FOR THE VIOLATION
Person responsible for the violation, as used in this Chapter, and General Statute 113A-64, means:

(A) The developer or other person who has or holds himself/herself out as having financial or operational control over the land disturbing activity; and/or,

(B) The landowner or person in possession or control of the land when he/she has directly or indirectly allowed the land disturbing activity or has benefited from it or he/she has failed to comply with any provision of this Ordinance, the Act, or any order adopted pursuant to this Ordinance or the Act as it imposes a duty upon him.

PHASE OF GRADING
One of two (2) types of grading, rough or fine.

PLAN
An erosion and sedimentation control plan.

SEDIMENT
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION
The process by which sediment resulting from accelerated erosion has been or is being transported off the site of the land disturbing activity or into a lake or natural watercourse.

SILTATION
Sediment resulting from accelerated erosion which is settleable or removable by properly designed, constructed, and maintained control measures; and which has been transported from its point of origin within the site of a land disturbing activity; and which has been deposited, or is in suspension in water.

STORM DRAINAGE FACILITIES
The system of inlets, conduits, channels, ditches and appurtenances which serve to collect and convey storm water through and from a given drainage area.

STORM WATER RUNOFF
The surface flow of water resulting from precipitation in any form and occurring immediately after rainfall or melting.

SUBSIDIARY
An affiliate that is directly, or indirectly through one or more intermediaries, controlled by another person.
TEN-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in ten (10) years, and of a duration which will produce the maximum peak rate of runoff, for the watershed of interest under average antecedent wetness conditions.

TRACT
All contiguous land and bodies of water being disturbed or to be disturbed as a unit, regardless of ownership.

TWENTY-FIVE-YEAR STORM
The storm water runoff resulting from precipitation of an intensity expected to be equaled or exceeded, on the average, once in twenty-five (25) years, and of a duration which will produce the maximum peak rate of runoff, from the watershed of interest under average antecedent wetness conditions.

UNCOVERED
The removal of ground cover from, on, or above the soil surface.

UNDERTAKEN
The initiating of any activity, or phase of activity, which results or will result in a change in the ground cover or topography of a tract of land.

VELOCITY
The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. The cross section of the main channel shall be that area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks. Overload flows are not included for the purpose of computing velocity of flow.

WASTE
Surplus materials resulting from on-site land disturbing activities and being disposed of at other locations.

WORKING DAYS
Days exclusive of Saturday and Sunday during which weather conditions or soil conditions permit land disturbing activity to be undertaken.

7-3 ADMINISTRATION AND INTERPRETATION OF THIS SECTION OF THE ORDINANCE

7-3.1 ADMINISTRATION
The Director of Inspections shall be responsible for the administration of this section of the Ordinance.

7-3.2 MINIMUM REQUIREMENTS; EXCEPTION
In their interpretation and application, the provisions of this section of the Ordinance shall be held to be minimum requirements, except where they are expressly stated to be maximum requirements.

7-3.3 CONFLICTS WITH OTHER ORDINANCES AND LAWS

Whenever any provisions of this section of the Ordinance and any other ordinance or law impose overlapping or contradictory regulations, the provision which is more restrictive or imposes higher standards or requirements shall govern.

7-3.4 CIVIL REMEDIES

It is not intended that any provision of this section of the Ordinance shall restrict or impair the right of any private or public person to bring any legal or equitable action for redress against nuisances, hazards, or injuries to persons or property.

7-3.5 LIABILITY FOR DAMAGES

Failure of the Director of Inspections to observe or recognize conditions which violate the intent and purpose of this section of the Ordinance or to deny a development permit applied for under this section of the Ordinance shall not relieve the property owner from responsibility for the condition or damages resulting therefrom and shall not result in the city/county or its officers or agents being responsible for conditions or damages resulting therefrom.

7-3.6 REMOVAL OF COVER AND CHANGE OF ELEVATIONS

The holder of a development permit may remove existing cover or change existing elevations of the land only in accordance with the purposes of this section of the Ordinance and within the time schedules and methods for such changes set forth in this section of the Ordinance.

7-4 SCOPE AND EXCLUSIONS

This section of the Ordinance shall apply to land disturbing activity undertaken by any person, with the following exclusions:

7-4.1 AGRICULTURAL ACTIVITIES

Those undertaken on agricultural land for the production of plants and animals useful to humans, including but not limited to: forage and sod crops, grain and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of all such animals; bees and apiary products; and, fur producing animals;

7-4.2 FORESTRY ACTIVITIES
Those undertaken on forest land for the production and harvesting of timber and timber products and which are conducted in accordance with Forest Practice Guidelines Related to Water Quality (best management practices) as adopted by the North Carolina Department of Environment and Natural Resources. If land disturbing activity undertaken on forest land for the production and harvesting of timber and timber products is not conducted in accordance with Forest Practice Guidelines Related to Water Quality, the provisions of this chapter shall apply to such activity and any related land disturbing activity on the tract;

7-4.3 MINING

Activity undertaken by persons as defined in General Statute 113A-52(8) who are otherwise regulated by the provisions of the Mining Act of 1971, General Statute 74-46 through General Statute 74-68; and,

7-4.4 STATE OF NORTH CAROLINA JURISDICTION

Land disturbing activity over which the State has exclusive regulatory jurisdiction as provided in General Statute 113A-56(a).

7-4.5 EMERGENCIES

Any activity which is essential to protect human life during an emergency.

7-5 GENERAL REQUIREMENTS

7-5.1 PLAN AND PERMIT REQUIRED

No person shall initiate any land disturbing activity upon a tract which requires a permit under Section 7-16 without having an erosion control plan approved by the Director of Inspections and without having purchased the applicable permit through the Inspections Division office.

7-5.2 PROTECTION OF PROPERTY

Persons conducting land disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity, including protected floodway fringe areas specified in Section 2-3.1(B)(3)(b) of Article II Floodway and Floodway Fringe Regulations of this Ordinance.

7-5.3 CONFLICTING PROVISIONS

Whenever conflicts exist between federal, State or local laws, ordinances or rules, the more restrictive provision shall apply.

7-6 BASIC CONTROL OBJECTIVES

An erosion and sedimentation control plan may be disapproved pursuant to Section 7-18 of this Ordinance if the plan fails to address the following control objectives:
7-6.1 IDENTIFY CRITICAL AREAS

On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive special attention;

7-6.2 LIMIT TIME OF EXPOSURE

All land disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

7-6.3 LIMIT EXPOSED AREA

All land disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

7-6.4 CONTROL SURFACE WATER

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

7-6.5 CONTROL SEDIMENTATION

All land disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and,

7-6.6 MANAGE STORM WATER RUNOFF

When the increase in the velocity of storm water runoff resulting from a land disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

7-6.7 PROTECTION OF FLOODWAY AND FLOODWAY FRINGE AREAS

All land disturbing activity is to be planned and conducted so as to protect floodway and floodway fringe areas in accordance with Section 2-3 Standards for Flood Damage Reduction of Article II of this Ordinance.

7-7 MANDATORY STANDARDS FOR LAND DISTURBING ACTIVITY

No land disturbing activity subject to the control of this section of the Ordinance shall be undertaken except in accordance with the following mandatory standards:

7-7.1 BUFFER ZONE

(A) Lake or Natural Watercourse
No land disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land disturbing activity. This subdivision shall not apply to a land disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse.

(B) Width of Buffer Zone

Unless otherwise provided, the width of a buffer zone is measured from the edge of the water to the nearest edge of the disturbed area, with the twenty-five percent (25%) of the strip nearer the land disturbing activity containing natural or artificial means of confining visible siltation.

7-7.2 GRADED SLOPES, MECHANICALLY STABILIZED SLOPES AND FILLS

(A) Slope Specifications

No cut or fill greater than ten (10) vertical feet shall be made which creates a slope steeper than one and one-half (1.5) to one (1.5:1) unless approval is granted during plan review by the Director of Inspections. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control devices or structures. The angle for graded slopes and fills must be demonstrated to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints. Mechanically stabilized slopes, including but not limited to riprap, cribs, timber or masonry retaining walls, shall not exceed ten (10) feet in height without intervening terraces ten (10) feet in width with a minimum slope of three (3) to one (3:1). In any event, slopes left exposed and such terraces will, within 15 working days or 30 calendar days of completion of any phase or grading, whichever period is shorter, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(B) Exceptions

With prior approval of the Director of Inspections, the ten (10) foot height limit for mechanically stabilized slopes may be increased for:

(1) Wing Walls and Earth Retaining Devices. Wing walls allowing sub-grade access and other earth retaining devices required for the structural support of buildings, bridges, dams, culverts, or similar structures; or,

(2) Storm Water Channels. Mechanical stabilization required for engineered storm water channels.

7-7.3 FILL MATERIAL

Unless a permit from the Department’s Division of Waste Management to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding twelve (12) inches.
7-7.4 GROUND COVER AND REVEGETATION OF SLOPES

(A) Deadlines for Establishing Ground Cover
Whenever land disturbing activity is undertaken on a tract requiring a permit under Section 7-16, the person conducting the land disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover and slope revegetation sufficient to restrain erosion after completion of construction or development. Except as provided in Section 7-8.2(E) of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within fifteen (15) working days or thirty (30) calendar days following completion of construction or development, whichever period is shorter.

(B) Revegetation of Slopes
All cut and fill slopes in excess of three (3) to one (3:1) slope and greater than ten (10) feet in height and intervening terraces required in Section 7-7.2 shall be revegetated to provide plant cover over the entire area. Said revegetation shall include a minimum of one tree per two hundred (200) square feet of surface area. The trunk of any required tree shall be no closer than ten (10) feet from any other required tree. Said trees may be a mixture of evergreen and deciduous, a minimum of twelve (12) inches high at planting with a minimum height at maturity of twenty-five (25) feet.

7-7.5 FLOODWAY AND FLOODWAY FRINGE AREAS

(A) Limits of Encroachment
Cut or fill or other activities shall meet the limits of encroachment specified in Section 2-3 Standards For Flood Damage Reduction of Article II of this Ordinance.

(B) Designation in the Field
The limit of grading and encroachment according to Section 2-3.1(B)(3)(b)(i) of Article II Floodway and Floodway Fringe Regulations of this Ordinance, consisting of a line delineating one-half the distance between the outer edge of the floodway fringe and the outer edge of the floodway for the zoning lot in question, or other line provided by a certified engineering study in accordance with that same section of Article II, shall be designated in the field by the applicant or property owner by means of highly visible and durable plastic material or other means acceptable to the Erosion Control Officer, prior to the issuance of the grading permit.

(C) Subdivisions
For subdivisions, the designation of limits of grading or encroachment into the floodway fringe area required in (B) above shall be provided by the property owner or developer for the entire zoning lot being subdivided prior to the issuance of grading permits and
construction of streets or other improvements. The Erosion Control Officer shall review the proposed encroachment prior to the issuance of permits for the development of individual lots created through the subdivision process.”

7-7.6 TOP OF SLOPE

The top or toe of any slope steeper than a ratio of one and one-half (1.5) horizontal units to one vertical unit (1.5:1) shall be no less than two (2) feet from any neighboring property line or from any public right-of-way, parking lot, drive, or walk intended for public use, unless a retaining wall is built.

7-7.7 PRIOR PLAN APPROVAL

No person shall initiate any land disturbing activity upon a tract requiring a permit under Section 7-16 unless, thirty (30) or more days prior to initiating the activity, an erosion and sedimentation control plan for such activity is filed with and approved by the Director of Inspections, the associated fees are paid, and the permit is issued by the Director of Inspections.

7-7.8 PRIOR TO LAND DISTURBING ACTIVITIES

(A) Notification

No person may initiate a land-disturbing activity before notifying the agency that issued the plan approval of the date that the land-disturbing activity will begin.

(B) Preconstruction Conference

When deemed necessary by the approving authority a preconstruction conference may be required.

7-8 DESIGN AND PERFORMANCE STANDARDS

7-8.1 DESIGN STANDARDS

Except as provided in this Ordinance, erosion and sedimentation control measures, structures and devices, shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's National Engineering Field Manual for Conservation Practices, or other acceptable calculation procedures.

7-8.2 HIGH QUALITY WATER ZONES

In high quality water zones, the following design standards shall apply:

(A) Uncovered Areas

Uncovered areas in high quality water zones shall be limited at any time to a maximum total area within the boundaries of the tract of twenty (20) acres. Only the portion of the land
disturbing activity within a high quality water zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of the Director.

(B) Erosion and Sedimentation Control Measures, Structures, and Devices
Erosion and sedimentation control measures, structures and devices within high quality water zones shall be so planned, designed and constructed to provide protection from the runoff of the twenty-five-year storm which produces the maximum peak rate of runoff as calculated according to the procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(C) Sediment Basins
Sediment basins within high quality water zones shall be designed and constructed such that the basin will have a settling efficiency of at least seventy percent (70%) for the forty (40) micron (0.04mm) size soil particle transported into the basin by the runoff of that five-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's *National Engineering Field Manual for Conservation Practices* or according to the procedures adopted by any other agency of this State or the United States or any generally recognized organization or association.

(D) Open Channels
Newly constructed open channels in high quality water zones shall be designed and constructed with side slopes no steeper than two (2) horizontal to one vertical (2:1) if a vegetative cover is used for stabilization, unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.

(E) Ground Cover
Ground cover sufficient to restrain erosion must be provided for any portion of a land disturbing activity in a high quality water zone within fifteen (15) working days or sixty (60) calendar days following completion of construction or development, whichever period is shorter.

7-9 STORM WATER OUTLET PROTECTION

7-9.1 POST CONSTRUCTION VELOCITY

Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity. Persons shall conduct land disturbing activity so that the post construction velocity of the ten-year storm runoff in the receiving watercourse to the discharge point does not exceed the greater of:

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(A) Maximum Permissible Velocities
   The velocity established by Table 7.1; or,

(B) Velocity Prior to Development
   The velocity of the ten-year storm runoff in the receiving watercourse prior to development.
   If conditions in Section 7.9.1(A) and (B) cannot be met, then the receiving watercourse to
   and including the discharge point shall be designed and constructed to withstand the
   expected velocity anywhere the velocity exceeds the prior to development velocity by ten
   percent (10%).

7-9.2 ACCEPTABLE MANAGEMENT MEASURES

Measures applied alone or in combination to satisfy the intent of this section are acceptable if
there are no objectionable secondary consequences. It is recognized that the management of
storm water runoff to minimize or control downstream channel and bank erosion is a developing
technology. Innovative techniques and ideas will be considered and may be used when shown
have the potential to produce successful results. Some alternatives are to:

(A) Infiltration
   Avoid increases in surface runoff volume and velocity by including measures to promote
   infiltration to compensate for increased runoff from areas rendered impervious.

(B) Vegetated or Roughened Swales and Waterways
   Avoid increases in storm water discharge velocities by using vegetated or roughened swales
   and waterways in lieu of closed drains and high velocity paved sections.

(C) Energy Dissipators
   Provide energy dissipators at outlets of storm drainage facilities to reduce flow velocities to
   the point of discharge. These may range from simple riprapped sections to complex
   structures.

(D) Cross Sections; Erosion Resistant Lining
   Protect watercourses subject to accelerated erosion by improving cross sections and/or
   providing erosion-resistant lining.

(E) Improvement of Receiving Devices or Watercourse
   Upgrade or replace the receiving device structure, or watercourse such that it will receive and
   conduct the flow to a point where it is no longer subject to degradation from the increased
   rate of flow or increased velocity.

7-9.3 EXCEPTIONS

This rule shall not apply where it can be demonstrated that storm water discharge velocities will
not create an erosion problem in the receiving watercourse.

7-9.4 MAXIMUM PERMISSIBLE VELOCITIES
The following is a table for maximum permissible velocities for storm water discharges:

<table>
<thead>
<tr>
<th>Material</th>
<th>F.P.S.</th>
<th>M.P.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine sand (noncolloidal)</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Sandy loam (noncolloidal)</td>
<td>2.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Silt loam (noncolloidal)</td>
<td>3.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Ordinary firm loam</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Fine gravel</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Stiff clay (very colloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Graded, loam to cobbles (noncolloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Graded, silt to cobbles (colloidal)</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Alluvial silts (noncolloidal)</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Alluvial silts (colloidal)</td>
<td>5.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Coarse gravel (noncolloidal)</td>
<td>6.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Cobbles and shingles</td>
<td>5.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Shales and hard pans</td>
<td>6.0</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source - Adopted from recommendation by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply velocity by 0.95 for slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels.

7-10 BORROW AND WASTE AREAS

When the person conducting the land disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971; and waste areas for surplus materials other than landfills regulated by the Department's Division of Waste Management, shall be considered as part of the land disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting the land disturbing activity is not the person obtaining the borrow and/or disposing of waste, these areas shall be considered a separate land disturbing activity.

7-11 ACCESS AND HAUL ROADS
Temporary access and haul roads, other than public roads, constructed or used in connection with any land disturbing activity shall be considered a part of such activity.

7-12 OPERATIONS IN LAKES OR NATURAL WATERCOURSES

Land disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel. The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics.

* Advisory Note: The United States Army Corps of Engineers should be notified of any planned operation in lakes or natural watercourses, including their adjacent wetlands, for possible issuance of Section 404 or other permits.

7-13 RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land disturbing activity shall install and maintain all temporary and permanent erosion and sedimentation control measures as required by the approved plan or any provision of this section of the Ordinance, the act, or any order adopted pursuant to this section of the Ordinance or the act. After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent erosion and sediment control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

7-14 ADDITIONAL PROTECTIVE MEASURES

Whenever the Director of Inspections determines that significant erosion and sedimentation is occurring as a result of land disturbing activity, despite application and maintenance of protective practices, the person conducting the land disturbing activity shall be required to and shall take additional protective action.

7-15 EXISTING UNCOVERED AREAS

7-15.1 SITES SUBJECT TO CONTINUED ACCELERATED EROSION

All uncovered areas which exist on the effective date of this section of the Ordinance as a result of land disturbing activity on a tract requiring a permit under this Article, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a groundcover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

7-15.2 NOTICE OF VIOLATION

The Director of Inspections will serve upon the land owner or other person in possession or control of the land a written notice of violation by registered or certified mail, return receipt

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requested, or other means reasonably calculated to give actual notice. The notice will set forth
the measures needed to comply with the Act, this ordinance or a rule or order adopted or issued
pursuant to the Act by the Commission or Local Government and will state the time within
which such measures must be completed. In determining the measures required and the time
allowed for compliance, the authority serving notice shall take into consideration the economic
feasibility, technology, and quantity of work required, and shall set reasonable and attainable
time limits of compliance.

7-15.3 EROSION CONTROL PLAN

The Director of Inspections reserves the right to require preparation and approval of an erosion
control plan in any instance where extensive control measures are required.

7-15.4 PLANNED RESERVOIR

This rule shall not require groundcover on cleared land forming the future basin of a planned
reservoir.

7-16 PERMITS

7-16.1 REQUIRED; EXCEPTIONS

No person shall undertake any land disturbing activity subject to this Ordinance without first
obtaining a permit therefore from the Director of Inspections, except that no permit shall be
required for any land disturbing activity:

(A) Located outside Salem Lake Watershed and not exceeding twenty thousand (20,000)
square feet in surface area on one tract for construction of a single family dwelling or ten
thousand (10,000) square feet on one tract for any other purpose. In determining the
area, lands under one or diverse ownership being developed as a unit, will be
aggregated; or,

(B) Located within Salem Lake Watershed and not exceeding ten thousand (10,000) square
feet on one site for any purpose, or not exceeding twenty thousand (20,000) square feet
for construction of a single family dwelling which is located on a lot existing prior to
October 10, 1985, or a lot of a minor subdivision as defined in the Subdivision
Regulations (F,W)Subdivision Ordinance (K,C,L). In determining the area, land under
one ownership, or land in diverse ownership being developed as a unit, will be
aggregated.

7-16.2 FEE

The fee for permits required by this section shall be, as the governing bodies of Local
Government from time to time prescribe and establish by ordinance or resolution. When
permits are requested for incremental grading in sections, the fee established by this section

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shall apply to each permit. The fee for sites where grading begins before a permit is obtained shall be equal to double the normal permit fee.

7-16.3 DISPLAY OF PERMIT

A development permit issued under this section of the Ordinance shall be prominently displayed on the property until a protected area has been established.

7-16.4 LAPSING AND REINSTATEMENT OF PERMIT

(A) Approved grading plans shall become void thirty (30) days after the applicant has been notified. Any future action on expired grading plans requires new plans to be submitted and approved.

(B) A development permit shall lapse at the end of six (6) months, unless it is reissued by the Director of Inspections. When the development permit lapses and the corrective action, as set forth in the development plan, has not been completed, the developer or owner shall be in violation of this section of the Ordinance.

(C) The Director of Inspections may, upon written request, reissue a lapsed permit, to be effective for a period not to exceed sixty (60) working days from the date of re-issuance after review of the original development plan and on-site inspection of the state of the work. The request for re-issuance shall include the reasons for incompletion of the work.

7-16.5 RECORDATION

Developer shall meet the requirements of State regulations for recordation and file in the office of the Register of Deeds a record of use of any site for a landfill and a rehabilitation reuse plan for the site, prior to the issuance of a zoning or grading permit.

7-17 IMPROVEMENT SECURITY REQUIRED OF CERTAIN PERMIT APPLICANTS

7-17.1 OUTSIDE SALEM LAKE WATERSHED

In areas outside Salem Lake Watershed, where the Director of Inspections deems it necessary to require security in order to assure performance of the conditions of the permit, the applicant for a permit to grade or remove vegetation or other protections from an area in excess of five (5) acres shall be required to file with the Finance Director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instruments satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the...
security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and shall be used to establish protective cover on the site. Any monies in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-17.2 WITHIN SALEM LAKE WATERSHED

For areas located within the Salem Lake Watershed, the applicant for a permit to grade or remove vegetation or other protection from an area in excess of three (3) acres shall be required to file with the finance director for the appropriate jurisdiction an improvement security in the form of an escrow account or other instrument satisfactory to the attorney for the appropriate jurisdiction, in an amount deemed sufficient by the Director of Inspections to cover all costs of protection or other improvements required to establish protective cover on the site in conformity with the standards specified in this section of the Ordinance. Such security shall be valid until the work is completed in accordance with the permit and until the same is released by the Director of Inspections. In case of a subdivision, the security required herein may be included with the security required for streets and other subdivision improvements, if any, and the instrument shall clearly specify the portion of the security applicable to the requirements of this section of the Ordinance. The applicable security shall be forfeited upon violation of this section of the Ordinance and it shall be used to establish protective cover on the site. Any moneys in excess of the cost of establishing protective cover shall be refunded to the developer. The security shall be released when the Director of Inspections has certified that the requirements of this section of the Ordinance have been met.

7-18 EROSION AND SEDIMENTATION CONTROL PLANS

7-18.1 PREPARATION

An erosion control plan shall be prepared for all land disturbing activities on a tract requiring a permit under this Article.

7-18.2 COPIES; REVISED PLANS

Persons conducting a land disturbing activity shall file three (3) copies of the erosion control plan with the Director of Inspections at least thirty (30) days prior to beginning such activity. One copy of the erosion control plan will be retained by the Director of Inspections, one copy will be forwarded to the Forsyth Soil and Water Conservation District, and one copy shall be kept at the job site until all construction is complete, all permanent sedimentation and erosion control measures are installed and the site has been stabilized. After approving the plan, if the Director of Inspections, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, he/she will require a revised plan. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the Director of Inspections. If following commencement of a land-disturbing activity pursuant to an approved plan, it is determined that the plan is inadequate to meet the requirements of this Ordinance, the Director of Inspections may require any revision of the plan that is necessary to comply with this Ordinance.
7-18.3 STATEMENT OF FINANCIAL RESPONSIBILITY

Erosion control plans may be disapproved unless accompanied by an authorized statement of financial responsibility and ownership. This statement shall be signed by the person financially responsible for the land disturbing activity or his/her attorney-in-fact. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and of the owner of the land or his/her registered agents. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or noncompliance with the plan, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

7-18.4 REVIEW AND RECOMMENDATIONS

The Forsyth Soil and Water Conservation District, within twenty (20) days of receipt of any plan, or within such additional time as may be prescribed by the Director of Inspections, shall review such plan and submit its comments and recommendations to the Director of Inspections. Failure of the soil and water conservation district to submit its comments and recommendations within twenty (20) days or within the prescribed additional time will not delay final action on the plan.

7-18.5 NOTICE OF APPROVAL, REJECTION, ETC.

The Director of Inspections will review each complete plan submitted to him/her and within thirty (30) days of receipt thereof will notify the person submitting the plan that it has been approved, approved with modifications, approved with performance reservations, or disapproved. Failure to approve or disapprove a complete erosion and sedimentation control plan within thirty (30) days of receipt shall be deemed approval. Denial of a plan must specifically state in writing the reasons for denial. The Director of Inspections must approve or deny a revised plan within fifteen (15) days of receipt, or it is deemed to be approved. If, following commencement of a land disturbing activity pursuant to an approved plan, the Director of Inspections determines that the plan is inadequate to meet the requirements of this section of the Ordinance, the Director of Inspections may require such revisions as are necessary to comply with this section of the Ordinance. The approval of an Erosion Control Plan is conditioned on the applicant's compliance with Federal and State water quality laws, regulations, and rules. A copy of the Erosion Control Plan for any land disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table must be forwarded to the Director of the Division of Water Quality.

7-18.6 ENVIRONMENTAL DOCUMENT

Any plan submitted for a land disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (General Statute 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Director of Inspections shall promptly notify the person submitting the plan that the thirty (30)
day time limit for review of the plan pursuant to Section 7-18.5 of this Ordinance shall not begin until a complete environmental document is available for review.

7-18.7 PREPARATION, FILING AND CONTENTS OF PLAN

It shall be the responsibility of the property owner or developer or his/her agent to apply to the Director of Inspections, on a form furnished by the Director of Inspections, for any development permit required by this section of the Ordinance. No application for a development permit shall be accepted unless accompanied by a development plan including the information specified in this section. Unless the Director of Inspections deems such seal and signature to be unnecessary due to the simplicity of the site situation and the limited nature of the erosion control measures required in the development plan, the development plan shall be prepared by, and shall bear the seal and signature of, a registered professional engineer, architect, landscape architect or a registered surveyor to the extent permitted by State law, and shall include maps of the site, at a scale not smaller than one inch represents one hundred (100) feet (1" to 100'), showing:

(A) Standard Documentation
   Standard documentation, available in part from the offices of the Tax Assessor or the Register of Deeds, which shall include the outer boundaries of the site, any interior property lines or easements, the relation of the site to the nearest or abutting street intersections, scale and north arrow, total acreage, ownership, address, and tax block and lot numbers of the property;

(B) Existing Conditions
   Existing conditions, available in part from the Planning Board, which shall include: structures, roads, driveways and contours at intervals of not more than four (4) feet, with elevations referred to mean sea level; wooded areas, any intermittent or permanent springs; any streams or other bodies of surface water; and, the location, dimensions and type of any existing constructed drainage way to, from or within the site;

(C) Proposed Development Plans
   The proposed development plan shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the tract and the measures planned to comply with the requirements of this Ordinance. Plan content may vary to meet the needs of specific site requirements. The plan shall also include any structures to be established or removed, any streets, roadways, driveways, parking or loading areas, easements or rights-of-way to be added or changed; any changes of ditches, catch basins, terraces or other devices; any non-vegetative protection, or support, including paving, riprap, walls or other structures or surfaces; areas of vegetation to be removed, location of trees to be retained and proposed vegetative cover; and, excepting applications for subdivision approval only, location of sewage treatment facilities, including septic tank and drain field, if public or community sewerage is not available; and,

(D) Other
   A statement, referenced to the map(s) if appropriate, as to whether the site will be developed in sections and any profiles, earth movement computations, drainage calculations, grading
specifications, temporary and permanent protective measures, including planting, or other explanatory data necessary for the interpretation of the site preparation, protection and development plan.

7-18.8 DISAPPROVAL

An erosion control plan, or draft plans if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters, may be disapproved upon a finding that an applicant, or a parent, subsidiary, or other affiliate of the applicant:

(A) Without An Approved Plan; Violation
Is conducting or has conducted land disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the Commission or a local government pursuant to the act and has not complied with the notice within the time specified in the notice;

(B) Civil Penalty
Has failed to pay a civil penalty assessed pursuant to the act or a local ordinance adopted pursuant to the act which is due and for which no appeal is pending;

(C) Misdemeanor or Criminal Provision
Has been convicted of a misdemeanor pursuant to General Statute 113A-64(b) or any criminal provision of a local ordinance adopted pursuant to the act; or,

(D) Failed to Comply
Has failed to substantially comply with State rules or local ordinances or regulations adopted pursuant to the act.

For purposes of this Section 7-18.8, an applicant's record may be considered for only two (2) years prior to the application date.

7-18.9 AMENDMENT OF PLAN

Application for amendment of an erosion control plan in written and/or graphic form may be made at any time under the same conditions as the original application. Until such time as said amendment is approved by the Director of Inspections, the land disturbing activities shall not proceed except in accordance with the erosion control plan as originally approved.

7-19 APPEALS BY PERMIT APPLICANT OR HOLDER

7-19.1 GENERAL

Except as provided in Section 7-19.2, the appeal of a disapproval or approval with modifications of a plan shall be governed by the following provisions:

(A) Appeal to Board of Adjustment
Appeal from any decision of the Director of Inspections by the applicant for, or holder of, a development permit shall be to the Board of Adjustment. The applicant or holder of a development permit shall have fifteen (15) calendar days from the date of written denial or revocation of a permit, or from denial of an extension of or an amendment to a permit, within which to appeal. An appeal shall be perfected by filing written notice, with reasons therefore, with the Director of Inspections within the time period prescribed.

(B) Board of Adjustment Action

The Board of Adjustment may affirm, reverse or modify the decision of the Director of Inspections, based upon a finding or determination as to whether the applicant or permit holder has met the requirements and conditions for the issuance of a development permit, extension thereof or an amendment thereto, as specified in this section of the Ordinance. The Board of Adjustment may impose further requirements or conditions upon the issuance, extension or amendment of a permit as may reasonably be deemed necessary to accomplish the purposes declared in this section of the Ordinance. Pending appeal, grading at the site shall proceed only in accordance with a currently effective development permit and plan issued and approved by the Director of Inspections.

(C) Appeal from Board of Adjustment

Appeal from the Board of Adjustment shall be to the North Carolina Sedimentation Control Commission as provided in General Statute 113A-61(c) and 15 NCAC 4B .0081(b), with notice of appeal filed within fifteen (15) days following issuance of the decision.

7-19.2 NOTIFICATION AND APPEAL TO THE COMMISSION

In the event that an erosion control plan is disapproved pursuant to Section 7-18.8 of this Ordinance, the Director of Inspections shall notify the Director of the Division of Land Resources of such disapproval within ten (10) days. The Director of Inspections shall advise the applicant and the Director in writing as to the specific reasons that the plan was disapproved. The applicant may appeal the Director of Inspections’ disapproval of the plan pursuant to Section 7-18.8 of this Ordinance directly to the Commission.

7-20 COMPLIANCE WITH PLAN REQUIREMENTS

7-20.1 VIOLATION

Any person engaged in land disturbing activities who fails to file a plan in accordance with this Ordinance, or who conducts a land disturbing activity except in accordance with provisions of an approved development plan shall be deemed in violation of this Ordinance.

7-20.2 NO BUILDING PERMITS

No building permits shall be issued until the required temporary erosion control measures are installed in accordance with the approved development plan.

7-20.3 NO CERTIFICATE OF OCCUPANCY
No certificate of occupancy shall be issued or granted where required under applicable subdivision or zoning regulations or other laws and ordinances unless and until the required erosion control measures at the site have been completed in accordance with a valid permit.

7-21  INSPECTIONS AND INVESTIGATIONS

7-21.1 PERIODIC INSPECTION

Agents, officials or other qualified persons authorized by the Director of Inspections will periodically inspect sites of land disturbing activity to determine compliance with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, and to determine whether the activity is being conducted in accordance with an approved plan, and whether the measures required in the plan are effectively controlling the erosion and sediment resulting from the land disturbing activity. Notice of the right to inspect shall be included in the notification of plan approval.

7-21.2 NOTICE OF VIOLATION

If, through inspection, it is determined that a person engaged in land disturbing activity has failed to comply with the act, this chapter, or rules or orders adopted or issued pursuant to this chapter, or has failed to comply with an approved plan, a notice of violation shall be served upon that person by registered or certified mail or other means reasonably calculated to give actual notice. The notice shall specify a date by which the person must comply with the Act, or this Ordinance, or rules or orders adopted pursuant to this Ordinance, and inform the person of the actions that need to be taken to comply with the Act, this Ordinance or rules or orders adopted pursuant to this Ordinance. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Local Government serving notice shall take into consideration the economic feasibility, technology, and quantity of work required, and shall set reasonable and attainable time limits of compliance. Any person who fails to comply within the time specified is subject to additional civil and criminal penalties for a continuing violation as provided in G.S. 113A-64 and this Ordinance.

7-21.3 CONDUCTING INVESTIGATIONS

The Director of Inspections shall have the power to conduct such investigations as he may reasonably deem necessary to carry out his duties as described in this section of the Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land disturbing activity. No person shall refuse entry or access to any authorized representative or agent of the city who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. An administrative search warrant may be obtained as provided in Section 1-10 of the Forsyth County Code and other applicable laws.

7-21.4 WRITTEN STATEMENTS OR REPORTS UNDER OATH

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The **Director** of Inspections shall also have the power to require written statements, or the filing of reports under oath, with respect to pertinent questions relating to land disturbing activity.

### 7-21.5 OBSTRUCTING AGENT OF LOCAL GOVERNMENT

No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Director of Inspections while that person is inspecting or attempting to inspect a land disturbing activity under this section.

### 7-21.6 NOTIFICATION TO **DIRECTOR** OF INSPECTIONS

The holder of a development permit shall notify the **Director** of Inspections when grading is to begin and again when the graded area has been protected.

### 7-22 PENALTIES

#### 7-22.1 CIVIL PENALTIES

(A) **Procedure**

Any person who violates any of the provisions of this section of the Ordinance, or rules, or orders adopted or issued pursuant to this section of the Ordinance, or who initiates or continues a land disturbing activity for which an erosion control plan is required, except in accordance with the terms, conditions, and provisions of an approved plan, shall be subject to a civil penalty of not more than five thousand dollars ($5,000) except that the penalty for failure to submit an erosion control plan shall be as provided in Section 7-22.1(C). No penalty shall be assessed until the person alleged to be in violation has been notified of the violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice shall describe the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in the assessment of a civil penalty or other enforcement action. If after the allotted time period has expired, the violator has not completed corrective action, a civil penalty may be assessed from the day the violation is first detected. However, no time period for compliance need be given for failure to submit an erosion control plan for approval or for obstructing, hampering, or interfering with an authorized representative while in the process of carrying out his official duties. Each day of continuing violation shall constitute a separate violation. A person may be assessed a one-time civil penalty of up to five thousand dollars ($5,000) for the day the violation is first detected.

(B) **Amount and Enforcement**

The **Director** of Inspections shall determine the amount of the civil penalty to be assessed under this section and shall provide notice to the person in violation directing the violator to either pay the assessment or contest the assessment by a written demand for a hearing within 30 days after receipt of the notice of assessment. The notice shall set forth in detail the civil penalty amount, a description of the violation for which the penalty has been imposed and the basis for assessment. In determining the amount of the penalty, the **Director** of...
Inspections shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, the amount of money the violator saved by noncompliance, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with this ordinance. Notice of the assessment shall be by registered or certified mail or other means reasonably calculated to give actual notice. If payment or demand for hearing to contest the assessment is not received or equitable settlement reached within thirty (30) days after demand for payment is made, the matter shall be referred to the City/County Attorney for institution of a civil action in the name of the City of Winston-Salem/Forsyth County in the appropriate division of the general courts of justice for recovery of the penalty. Any sums recovered shall be used to carry out the purposes and requirements of this chapter. Such actions must be filed within three (3) years of the date the final decision was served on the violator.

(C) Contest of Assessment

A hearing on a civil penalty shall be conducted by the Director of Inspections within thirty (30) days after the date of receipt of the written demand for hearing. The Director of Inspections shall render his decision on the civil penalty at the conclusion of the hearing. Appeal from the final decision of the Director of Inspections shall be to the Superior Court of Forsyth County where the violation occurred.

(D) Disbursal of Penalties

Civil penalties collected pursuant to this Ordinance shall be used or disbursed as directed by General Statute 113A-64(a)(5).

7-22.2 CRIMINAL PENALTIES

Any person who knowingly or willfully violates any provision of this section of the Ordinance, or rule or order adopted or issued pursuant to this section of the Ordinance, or who knowingly or willfully initiates or continues a land disturbing activity for which an erosion control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, shall be guilty of a Class 2 misdemeanor which may include a fine not to exceed five thousand dollars ($5,000).

7-23 INJUNCTIVE RELIEF

7-23.1 VIOLATION OF THE ORDINANCE

Whenever the Director of Inspections has reasonable cause to believe that any person is violating or threatening to violate this Ordinance, or any rule or order adopted or issued pursuant to this Ordinance, or any term, condition, or provision of an approved erosion control plan, he/she may, either before or after the institution of any other action or proceeding authorized by this Ordinance, institute a civil action in the name of the City of Winston-Salem/Forsyth County for injunctive relief to restrain the violation or threatened violation. The action shall be brought in the Superior Court of Forsyth County.

7-23.2 ORDER TO ABATE VIOLATION
Upon determination by a court that an alleged violation is occurring or is threatened, it shall enter such orders or judgments as are necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under this section shall not relieve any party to such proceedings from any civil or criminal penalty prescribed for violations of this section of the Ordinance.

7-24 PERMITS AND DEVELOPMENT PLANS PRESENTLY IN EFFECT TO REMAIN IN EFFECT

All permits and development plans approved by the Director of Inspections and other corrective measures required pursuant to the previous erosion control ordinance shall remain in full force and effect as if they had been approved pursuant to this section of the Ordinance; provided, however, any renewals or amendments of the permits and development plans previously approved shall be controlled by this section of the Ordinance.

7-25 RESTORATION AFTER NON-COMPLIANCE

The Director of Inspections may require a person who engaged in a land disturbing activity and failed to retain sediment generated by the activity, as required by G.S. 113A-57 (3), to restore the waters and land affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this ordinance.

7-26 SEVERABILITY

If any section or sections of this Ordinance is/are held to be invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

7-27 EFFECTIVE DATE

This Ordinance shall become effective upon adoption.

Section 2. This ordinance shall be effective upon adoption.