

## CHAPTER 155: EROSION AND SEDIMENT CONTROL

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### **GENERAL PROVISIONS**

#### **§ 155.001 PURPOSE.**

In order to protect the general health, safety, and welfare of the people of Newberry County, South Carolina, the Stormwater Management and Sediment Control Ordinance is enacted to prevent the erosion of soils, to prevent the sedimentation of streams, to control stormwater runoff from developing areas, to reduce the damage potential of flood water, protect properties near land disturbing activities, to prevent the clogging of ditches, to prevent the silting of lakes, to provide

unobstructed and sanitary channels for storm water runoff, to prevent flooding caused by the encroachment of buildings or other structures on natural waterways and drainage channels, to prevent pollution of surface water and groundwater, to promote groundwater recharge, and to preserve the natural scenic beauty of Newberry County for posterity.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.002 AUTHORITY.**

This chapter is authorized pursuant to the provisions of the S.C. Code §§ 4-9-30 and 4-9-40, by the provisions of Chapters 14 and 18 of Title 48, as amended.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.003 JURISDICTION.**

The provisions of this chapter shall apply to all lands within the jurisdiction of Newberry County, South Carolina, and those municipalities which, by approval of SCDHEC and by approval of SCDHEC and by written agreement executed with the County, contract to have these provisions administered within their corporate limits. All lands under the jurisdiction of an entity with the power of eminent domain are exempt from the provisions of this chapter; however, such lands are regulated by the S.C. Department of Health and Environmental Control, S.C. Code § 48-18-70, and Regulation 72-300, as amended.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.004 RULES OF LANGUAGE AND INTERPRETATIONS.**

(A) The word **SHALL** is mandatory; the word **MAY** is permissive.

(B) The particular shall control the general.

(C) Words used in the present tense shall include the future, and words used in the singular include the plural, and the plural the singular, unless the context clearly indicates the contrary.

(D) All public officials, bodies and agencies to which reference is made are those of Newberry County, South Carolina, unless otherwise indicated. The duties of the Environmental Management Administrator in this chapter may also be performed by the county's designee and or contracted representative.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.005 DEFINITIONS.**

Words used in this chapter shall have their customary meanings as determined by the standard dictionary definition except for the following specific words and terms which are herein defined. In any case, the Environmental Management Administrator, or county designee shall have the right to define or interpret any words or terms contained within this chapter.

**APPLICANT.** A person, firm, government agency, partnership, or any other entity who seeks to obtain approval or a permit under the requirements of this chapter and who will be responsible for the land disturbing activity and related maintenance thereof.

**BASE FLOOD ELEVATION.** Base flood elevation (BFE) shall have the same meaning as is set forth in federal regulations governing flood plain management.

**BASEMENT.** That portion of a building having its floor subgrade (below ground level) on all sides.

**BEST MANAGEMENT PRACTICES.** A wide range of management procedures, schedules of activities, prohibition on practices and other management practices which have been demonstrated to control effectively the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

**CONSTRUCTION** Any building or erection of a structure or any preparation for the same.

**DEVELOPMENT.** Any man-made change to improved or unimproved real estate, including, but not limited to, building or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials.

**DRAINAGEWAY.** A natural or manmade lane depression with the purpose of collection and removal of surface or subsurface water from a given area by gravity via natural means or by systems constructed to remove water and is commonly applied herein to surface water.

**EASEMENT.** A grant or reservation made by the owner of the land for use by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

**ELEVATED BUILDING.** A non-basement building to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (post and piers), shear walls, or breakaway walls.

**EMBANKMENT or FILL.** A deposit of soil, rock other material placed by man.

**ENVIRONMENTAL MANAGEMENT ADMINISTRATOR.** The Environmental Management Administrator as designated by the county.

**EROSION.** The general process by which soils or rock fragments are detached and moved by the action of wind, water, ice and gravity.

**FLOOD.** A temporary rise in the level of water which results in the inundation of areas not ordinarily covered by water. For purposes of this chapter, a **FLOOD** shall be construed to be any inundation which has a return frequency of 100 years or less, and shall be known as the **BASE FLOOD**.

**FLOOD MAPS.** The maps which are made a part of this chapter as though copied herein, and which designate within the unincorporated jurisdiction of Newberry County and within those municipalities which, by executed agreement, have contracted for the provisions of this chapter to be administered within their respective corporate boundaries, the elevation and/or boundaries of land subject to inundation by a flood. The specific studies and maps listed below shall be incorporated herein, including any amendments thereto, as well as any authorized studies received from the U.S. Corps of Engineering or other agency which specifically relate to the flooding of land within the county and which clarify or extend the information contained in the following.

(1) **FLOOD INSURANCE RATE MAP (FIRM).** An official map of a community on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicably to the community. The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Rate Map for Newberry County, South Carolina (unincorporated area), latest edition with accompanying maps and other supporting data.

(2) **FLOOD INSURANCE STUDY.** The official report provided by Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary-Floodway Map and the water surface elevation of the base flood.

**FLOOD PLAIN.** Any land area determined by the Federal Emergency Management Agency (FEMA) or Newberry County as susceptible to being inundated by flood waters resulting from a flood with a return frequency of 100 years or less.

**FLOODPROOFING.** Any combination of structural and non-structural modification, additions, changes, or adjustment to new or existing structures which has the effect of reducing or eliminating the potential for flood damage to real estate or improved real property, to water and sanitary facilities, or to structures and their contents.

**FLOODWAY.** The channel of river or watercourse, and the adjacent lands areas, that must be reserved in order to discharge a flood within a return frequency of 100 years without cumulatively increasing the water surface elevation more than 1 foot.

**FLOOR.** The top surface of an enclosed area in a building (including basement), that is, top of slab in concrete slab construction or top of wood flooring in wood frame construction.

**GRADING.** Any displacement of soil by stripping, excavating, filling, stockpiling, or any combination thereof, including the land in its excavating or filled state.

**LAND.** Any ground, soil, or earth, including marshes, swamps, drainage ways, and areas not permanently covered by water within the county.

**LAND DISTURBANCE.** Any activity involving clearing, grading, transporting, filling or any other activity which causes land to be exposed to the danger of erosion, or which might create an alteration in the natural drainage way.

**MAJOR DRAINAGE CHANNEL.** A natural or man-made channel within a major drainage system, and which is shown USGS Contour maps, published by the United States Geologic Survey from time to time.

**NATURAL WATERWAYS.** Waterways that are part of the natural topography. They usually maintain a continuous or seasonal flow during the year and are characterized as being irregular in cross-section with a meandering course. Construction channels such as drainage ditches shall not be considered natural waterways.

**NEW CONSTRUCTION.** Structures for which the start of construction commenced on or after the effective date of the initial Flood Insurance Rate Map for Newberry County, South Carolina (unincorporated areas), which is December 15, 1990, and includes any subsequent improvements to such structures.

**PERMIT.** A certificate issued to perform work authorized under the provisions of the chapter.

**PLANNING ENGINEER.** Newberry County Planning Engineer, or the person tasked with those duties and authority.

**POLLUTION.** The presence in the environment of any substance, including, but not limited to, sewage, sediment, industrial and other waste, air contamination, or any combination thereof in such quantity and of such characteristics and duration as may cause the environment to be contaminated, unclean, noxious, odorous, impure or degraded, or which tends to be injurious to human health or welfare; or which damages property, plant, animal or use of property.

**POST-DEVELOPMENT.** The conditions which exist following the completion of the land disturbance in terms of topography, vegetation, land use and rate, volume or direction of stormwater runoff.

**PRE-DEVELOPMENT.** The condition which exist prior to the completion of the land disturbance in terms of topography, vegetation, land use and rate, volume or direction of stormwater runoff.

**RECREATIONAL VEHICLE.** A vehicle which is:

- (1) Built on a single chassis;

- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal uses.

**REGISTERED LANDSCAPE ARCHITECT.** A landscape architect properly registered and licensed in South Carolina or permitted by the Licensing Board.

**REGISTERED PROFESSIONAL ENGINEER.** A person who is registered by the State of South Carolina pursuant to Chapter 22, Title 40, Code of Laws of South Carolina, 1976, as amended.

**REGISTERED TIER B LAND SURVEYOR.** A person who is registered by the State of South Carolina pursuant to Chapter 22, Title 40, Code of Laws of South Carolina, 1976, as amended.

**RUNOFF.** That portion of the precipitation on the land which reaches the drainage system.

**SEDIMENTATION.** The process which operates at or near the surface of the ground, or deposits soils, debris and other materials either on other ground surfaces or in water channels.

**STOP WORK ORDER.** An order directing the person responsible for the land disturbing activity to cease and desist all or any portion of the work which violates the provisions of this chapter.

**STORM DRAINAGE SYSTEM.** The surface and subsurface system for the removal of water from the land, including the natural elements of streams, marshes, swales, and ponds, whether of an intermittent or continuous nature, and the man-made element, which includes culvert, retention facilities and the storm sewer system, further defined as:

- (1) **MINOR DRAINAGE SYSTEMS.** All street drainage, curb and gutters, pipe systems, culverts, ditches and channels which drain less than 40 acres.
- (2) **COLLECTOR SYSTEM.** All drainage systems drainage at least 40 acres but less than 100 acres.
- (3) **MAJOR DRAINAGE SYSTEMS.** All drainage systems drainage at least 100 acres but less than 300 acres.
- (4) **FLOOD PLAIN SYSTEM.** All natural channels, creeks or rivers draining more than 300 acres.

**STORM FREQUENCY.** Rate or likely recurrence of a rainstorm defined as:

(1) **TWO-YEAR FREQUENCY STORM.** A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 2 years. It also may be expressed as an exceeded probability with a 50% chance of being equaled or exceeded in any given year.

(2) **TEN-YEAR FREQUENCY STORM.** A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 10 years. It also may be expressed as an exceeded probability with a 10% chance of being equaled or exceeded in any given year.

(3) **TWENTY-FIVE-YEAR FREQUENCY STORM.** A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 25 years. It also may be expressed as an exceeded probability with a 4% of being equaled or exceeded in any given year.

(4) **FIFTY-YEAR FREQUENCY STORM.** A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 50 years. It also may be expressed as an exceeded probability with a 2% chance of being equaled or exceeded in any given year.

(5) **ONE-HUNDRED YEAR FREQUENCY STORM.** A storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 100 years. It also may be expressed as an exceeded probability with a 1% chance of being equaled or exceeded in any given year.

**STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN.** A drainage system plan which fully indicated necessary land management and treatment measures, including a timetable of the schedule for their installation, which will effectively minimize soil erosion and sedimentation and which is approved as provided herein for application to a particular area or parcel of ground.

**STRUCTURE.** Anything constructed or erected, the use of which requires a locations on the ground, or attached to something having a location on the ground, including, but not limited to, tennis courts, swimming pools, fences, and buildings.

**SUBDIVISION.** As defined by the Newberry County Zoning Regulations (latest edition).

**VEGETATION.** All plant growth, including trees, shrubs, mosses, and grasses.

**WATER QUALITY.** The physical, chemical, radiological and biological attributes that affect the suitability of water for agriculture, industry, drinking, recreation, and other uses.

**WATER QUANTITY.** Those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff to downstream areas resulting from land disturbing activities.

**WATERSHED.** The drainage area contributing stormwater runoff to a single point.

**WETLANDS.** As defined by the appropriate federal or state permitting agency.

(Am. Ord. 06-21-05, passed 6-15-2006)

## **PROCEDURE**

### **§ 155.015 PERMIT.**

Unless otherwise provided within this chapter, the surface of land in Newberry County shall not be disturbed or altered for any purpose whatsoever, nor any major drainage channel impeded or encroached upon, nor any alteration or encroachment of a flood area, except in accordance with a Stormwater Management and Sediment Control Plan. Approval shall be issued by the Environmental Management Administrator or county designated representative prior to any construction, grading or land disturbance of any nature. Waiver of such permit may be granted upon determination that the integrity of this chapter will not be violated by such action.

(Am. Ord. 06-21-05, passed 6-15-2006)

### **§ 155.016 EXEMPTION.**

The provisions of §§ 155.015 *et seq.* shall not apply to:

(A) Agriculture land management and culture practices, or to the construction of on-farm building and structures used in a farming operation, provided that such practices or structures do not impede, encroach or alter a major drainage channel or flood area.

(B) Construction or land improvement of single-family residences or buildings accessory to such residences, which are not a part of a residential subdivision, provided that such construction does not impede, encroach or alter a major drainage channel or flood area.

(C) Land improvement to a single-family residence in a development subdivision, provided that such construction does not impede, encroach or alter a major drainage channel or flood area.

(D) Mining and mineral resource extraction operation conducted in accordance with a valid mining permit issued by SCDHEC Bureau of Solid and Hazardous Wastes in accordance with the South Carolina Mining Act, provided that such construction does not impede, encroach or alter a major drainage channel or flood area.

(E) Land disturbing activities undertaken on forest land for the production and harvesting timber and timber products, or on forest lands owner or managed by the South Carolina Forestry Commission.

(F) Land disturbing activities of the S.C. Department of Transportation conforming to the requirements of S.C. Code § 48-18-70, and corresponding Regulation 72-400.

(G) Activities relating to the routine maintenance and/or repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities, and other related structures and facilities of a railroad company.

(H) Land disturbing activities, that are conducted under another state or federal environmental permit, license, or certification are conditioned on compliance with the minimum standards and criteria developed under this chapter.

(I) Activities undertaken by local governments or special purpose or public service districts relating to the repair and maintenance of existing facilities or structures.

(J) Any of the following land disturbing undertaken by any person who provides gas, electrification or communications services, subject to the jurisdiction of the South Carolina Public Service Commission or corporations organized and operating pursuant to S.C. Code §§ 33-49-10 *et seq.*:

(1) Land disturbances conducted pursuant to Title 58, Chapter 33, of the South Carolina Code, or land disturbances conducted pursuant to any other certification or authorization issued by the Public Service Commission;

(2) Land disturbances conducted pursuant to a federal environmental permit, including Section 404 of the Federal Clean Water Act, including permits issued by the Federal Energy Regulatory Commission.

(3) Land disturbances associated with emergency maintenance or construction of electric, gas, or communications facilities, when necessary to restore service or when the governor declares the area to have sustained a disaster and the actions are undertaken to protect the public from a threat to health or safety;

(4) Land disturbances associated with routine maintenance and/or repair of electric, gas, or communications lines;

(5) Land disturbances associated with the placement of poles for overhead distribution or transmission of electric energy or of communications services;

(6) Land disturbances associated with the placement of underground lines for distribution or transmission of electric or of gas or communication services; or

(7) Land disturbances conducted by a person filing environmental reports, assessments or impact statements with the United States Department of Agriculture, Rural Electrification Administration in regards to a project.

(K) Construction of ponds that are not subject to the South Carolina Dams and Reservoirs Safety Act provided that such structure do not impede, encroach or alter a major drainage channel or flood area.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.017 APPROVAL PROCESS.**

(A) The applicant shall make application with the required fees as noted on the Newberry County Fee Schedule to the Department of Environmental Management for a Land Disturbance Permit (Level I, II, or III) to disturb land in Newberry County. Such application shall be accompanied by Stormwater Management and Sediment Control Plans prepared in accordance with the provisions of §§ 155.035 *et seq.* Most land disturbances will generally conform to the following categories; however, the Environmental Management Administrator may require a Level III Permit in those cases where extensive land disturbance is planned for a development with a disturbed area of less than 1 acre.

(B) Land disturbance permit Level I required for:

- (1) Clearing activities where no improvements are involved; and
- (2) Defined as an area of less than 1 acre.

(C) Land disturbance permit Level II require for:

- (1) All developments with a disturbed area of at least 1 acre but not more than 2 acres and/or
- (2) All encroachment and/or alteration activities within a flood plain or major drainage channel where no drainage or flood study is required.

(D) Land disturbance permit Level III required for:

- (1) All development with a disturbed area greater than 2 acres; and/or
- (2) All encroachment and/or alteration activities within a flood plain or major drainage channel where a drainage or flood study is required.

(E) For all permits, the county reserves the right to require the applicant to reimburse the county for the actual cost of any required engineer review fee incurred by the county.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.018 APPROVAL OR DISAPPROVAL OF APPLICATION.**

(A) All Storm Water Management and Sediment Control Plans shall be submitted to the Newberry County Environmental Management Office. The plan shall contain supporting computations, drawings, and sufficient information describing the manner, location, and type of measures in which stormwater runoff will be managed for the entire land disturbance. The approved plan shall serve as the basis for water quantity and water quality control on all subsequent construction. A copy of the plan shall be available on the job site and the issued land disturbance permit shall be posted at the job site in a conspicuous place.

(B) Upon receipt of a completed application for a land disturbance permit that disturbs less than 5 acres the Environmental Management Administrator or his or her designee shall accomplish the review of the plans and have either the approval, denial, or review comments transmitted to the applicant within 10 working days. Upon receipt of a complete application for a land disturbance permit that disturbs 5 acres or greater the Environmental Management Administrator or his or her designee shall accomplish the review of the plans and have either the approval, denial, or review comments transmitted to the applicant within 20 working days. A completed application is defined as a completed application form as well as all required submission. If notice is not given to the applicant or if action is not taken by the end of the twentieth working day period, the applicants plan will be considered approved.

(C) If an application is denied, the applicant may elect to correct the indicated deficiencies in conformance with the provisions of this chapter and resubmit the application to the Department of Environmental Management with no additional fee assessed.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.019 OTHER AUTHORIZATION OR REQUIREMENT.**

Where any authorization, bond, or other securities are required by applicable laws, regulations or ordinances for any part of the proposed work to be done under the plan, the applicant shall, upon request, furnish the Department of Environmental Management with satisfactory evidence that such requirements have been met before the commencement of work under an approved application.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.020 EXPIRATION OF PERMIT.**

A land disturbance permit will remain valid for up to 5 years from the date of issuance, provided that the project is in compliance with the chapter and is not inactive for a period of 12 consecutive months.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.021 RESPONSIBILITY OF APPLICANT.**

During any land disturbance operation, the applicant shall be responsible for carrying out the proposed work in accordance with the permit, approved plan, specifications, and time schedule, and in compliance with all requirements of this chapter.

(Am. Ord. 06-21-05, passed 6-15-2006)

### **PLAN REQUIREMENTS**

#### **§ 155.035 REQUIREMENTS FOR STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN PREPARATION.**

General requirements for all Stormwater Management and Sediment Control Plans will include, but are not limited to the following:

(A) Select land where the drainage pattern, topography and soils are favorable for the intended use. Tracts of land vary in suitability for different uses. Knowing the major characteristics of the land area and kinds of soil helps in identifying and evaluating potential problems.

(B) Expose the smallest practical area of land to the elements for the least possible time during development.

(C) When feasible, retain and protect natural vegetation. Save topsoil, where practical, for replacing on graded areas.

(D) Use temporary plant cover, mulching, or structures to control runoff and protect areas subject to erosion during construction.

(E) Wherever possible, utilize natural drainage structures, with minimal or no manmade improvements, to handle the increase run-off from development.

(F) Engineer the drainage systems of the development according to the Newberry County Development Guidelines.

(G) Use sediment basins, filter fencing, rock check dams, and/or other forms of silt traps, where required, to remove heavy sediment loads from runoff waters leaving the disturbed area.

(H) Install the permanent vegetative cover and the long-term erosion protection structures as soon as practical in the development process.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.036 SPECIFIC REQUIREMENTS FOR THE PERMANENT STORMWATER MANAGEMENT PORTION OF THE STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN APPROVAL PROCESS.**

Specific Requirements for the permanent stormwater management portion of the Stormwater Management and Sediment Control Plan approval process will include, but are not limited to the following:

(A) Stormwater management must be addressed on a watershed basis to provide a cost effective water quantity and water quality solution to the specific watershed problems.

(B) All storm drainage systems will be classified based on the size of the contributing drainage basin or sub-watershed as follows:

(1) *Minor drainage systems: Zero to < 40 acres.*

(a) All street drainage, curb and gutters, pipe systems, culverts, ditches and channels which drain less than 40 acres will be designed to carry flows resulting from a 10-year frequency storm. Minimum allowable pipe diameter shall be 15 inches.

(b) The plan shall identify all drainageways.

(2) *Collector systems: Forty to < 100 acres.*

(a) All drainage systems draining at least 40 acres but less than 100 acres shall be designed to carry flows resulting from a 25-year frequency storm.

(b) The plan shall identify all drainageways.

(3) *Major drainage channels: One hundred to < 300 acres.* For all drainage systems draining at least 100 acres but less than 300 acres, encroachment upon major drainage channels and the adjacent overflow land shall be avoided as much as possible. All unavoidable improvements such as channel improvements, culverts or bridges along these channels shall be designed to carry a flow resulting from a 50-year frequency storm. In a subdivision, an easement sufficient to accommodate the flow from a 50-year frequency storm shall be dedicated to Newberry County for scheduled maintenance of the channel, and any other maintenance required may be permitted to be performed by a third party, upon written request to the county. In all other development activities, the plan shall identify all drainageways.

(4) *County or FEMA flood plains: Three hundred and more acres.*

(a) For all natural channels, creeks or rivers draining more than 300 acres, encroachment upon these channels and

the adjacent overflow land shall be avoided as much as possible. All unavoidable improvements such as culverts or bridges along these channels shall be designed to carry a flow resulting from a 100-year frequency storm.

(b) If there are no detailed flood studies and base flood elevations available in these areas, the applicant shall provide a detailed flood study delineating the 100-year flood plain and the floodway. One-hundred year flood limits along with base flood elevation and the floodway will be shown on the Stormwater Management and Sediment Control Plans and also on the final plat if applicable. In a subdivision, the property line shall stop at the floodway line and the floodway shall be dedicated to Newberry County. In all other development activities, the plan shall identify all drainageways.

(5) *Drainage systems to be analyzed and revised.* All drainage systems regardless of its size or classification shall be analyzed and revised as necessary to ensure that overflow of the system would not result in a likelihood of dwelling flooding, property damage or public access and/or utility interruption be greater than 1% in any given year. All hydrological computations shall be based on the contributing watershed being fully developed.

(C) All hydrologic computations shall be accomplished using a volume based hydrograph method acceptable to the Planning Engineer. The storm duration shall be the 24-hour rainfall event, applicable SCS distribution with a 5-minute burst duration time increment. The Rational or Modified Rational Method is acceptable for sizing individual culverts or storm drains that are not part of a pipe network or system and do not have a contributing drainage area greater than 20 acres. The storm duration for this method shall be equal to the time of concentration of the contributing drainage area or a minimum of 5 minutes, whichever is greater.

(D) Stormwater management requirements for a specific project shall be based on the entire area to be developed, or if phased, the initial submittal shall control that area proposed in the initial phase and establish a procedure and obligation for the total site control.

(E) (1) Stormwater quantity control is an integral part of overall stormwater management. Detention ponds to control the peak run-off and volume may be required in area where there are known drainage problems or where the downstream natural or manmade channels are inadequate to accommodate projected run-off. The requirements for a detention pond and/or downstream capacity improvements will be determined by the Planning Engineer, in accordance with applicable state or federal regulations. Newberry County strongly encourages developers and engineers to make use of existing natural channels in their natural state, not to encroach into the natural flood prone areas and use channel improvements and/or detention ponds only as a last resort.

(2) The following design criteria for flow control shall be used where required by the Environmental Management Administrator:

(a) Post-development peak discharge rates shall not exceed pre-development discharge rates for 2-, 10- and 25-year frequency, 24-hour duration storm events unless the subject development is in a known problem watershed such that additional flow will negatively impact the watershed or there is insufficient flow capacity downstream in which case the peak discharge rate after the development may be restricted up to 1/2 the pre-development rates or whatever the system capacity downstream.

(b) Where ponds are the proposed method of control the person responsible for the land disturbance shall submit to Newberry County, when required, an analysis of the impact of stormwater flows downstream in the watershed for the 2-, 10-, 25-, 50- and 100-year storm events. The analysis shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing modifications of the proposed land disturbance, with and without the pond. The results of the analysis will determine the need to modify the pond or to eliminate the pond requirements. Lacking a clearly defined downstream point of construction, the downstream impacts shall be established, with the concurrence of Newberry County.

(F) Discharge velocities shall be reduced to provide a non-erosive velocity flow from a structure, channel, or other control measure or the velocity of the 10-year, 24-hour storm runoff in the receiving waterway prior to the land disturbance, whichever is greater.

(G) All ponds, other than a retention or detention pond engineered as part of a stormwater system, that impede, encroach or alter a major drainage channel or flood plain must be capable of accommodating stormwater from a 100-year storm event based on built-out conditions for the watershed.

(H) Where existing wetlands are intended as a component of an overall stormwater management system, the approved Stormwater Management and Sediment Control Plan shall not be implemented until all necessary federal and state permits have been obtained.

(I) All stormwater management and sediment control practices shall be designed, constructed and maintained with consideration for the proper control of mosquitoes and other vectors.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.037 TYPES OF STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLANS.**

(A) *Types.* For the purpose of this chapter, stormwater management, erosion and sedimentation plans shall be divided into three levels: Level I, II and III. The county reserves the right to request flood or hydraulic study as deemed necessary. The Level II and III county permits will also serve as the notice of intent (NOI) for the State's NPDES permit. Fees will be collected by the county and forwarded to SCDHEC for processing and granting permit coverage.



(B) *Level I Stormwater Management and Sediment Control Plan.* All clearing activities where no new improvements are involved and clearing is less than 1 acre shall submit a Level I Stormwater Management and Sediment Control Plan. This plan does not require preparation or certification by a registered engineer, registered landscape architect, or a Tier B Land Surveyor. The Level I Stormwater Management and Sediment Control Plan is comprised only of a narrative description accompanied by a sketched plan.

(C) *Level II Stormwater Management and Sediment Control Plan.* All development with a disturbed area of at least 1 acre, but not more than 2 acres shall submit a Level II Stormwater Management and Sediment Control Plan. The plan will also serve as the submittal of the state's required NPDES Permit a Level II Stormwater Management and Sediment Control Plan does not need to be prepared, certified and sealed by a registered professional engineer, registered landscape architect or a Tier B Land Surveyor. The Level II Stormwater Management and Sediment Control Plan also is comprised only of a narrative description accompanied by a sketched plan.

(D) *Level III Stormwater Management and Sediment Control Plan.*

(1) All development with a disturbed area of more than 2 acres must submit a Level III Stormwater Management and Sediment Control Plan. The plan will also serve as the submittal of the State's required National Pollution Discharge Elimination System (NPDES Permit).

(2) A Level III Stormwater Management and Sediment Control Plan must be prepared, certified and sealed by a registered professional engineer, registered landscape architect or a Tier B Land Surveyor.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.038 LEVEL I STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN REQUIREMENTS.**

The Level I Stormwater Management and Sediment Control Plan shall contain the following, as applicable:

(A) Complete application form and clearing schedule with a certification by the person responsible for the land disturbance that the land disturbance will be accomplished pursuant to the plan and that Newberry County has the right to conduct on-site inspections;

(B) An anticipated starting and completion date of the various stages of land disturbance activities and the expected date the final stabilization will be completed;

(C) A description of the sediment control measures to be used during land-disturbing activities. These activities are required to utilize appropriate measures to control the quantity of stormwater runoff.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.039 LEVEL II STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN REQUIREMENTS.**

The Level II Stormwater Management and Sediment Control Plan shall contain the following, as applicable:

(A) Completed application form and construction schedule with a certification by the person responsible for the land disturbance that the land disturbance will be accomplished pursuant to the plan and that Newberry County has the right to conduct on-site inspection.

(B) An anticipated starting and completion date of the various stages of land disturbance and the expected date the final stabilization will be completed.

(C) A description of the sediment control measures to be used during land disturbance. These activities are required to utilize best management practices to control erosion and sediment, and to utilize appropriate measures to control the quantity of stormwater runoff;

(D) A general description of topographic and soil condition of the tract;

(E) A general description of adjacent property and a description of existing structures, building and other fixed improvements located on surrounding properties, and;

(F) A sketched plan (engineer's, landscape architect's or surveyor's seal not required) to accompany the narrative shall contain:

(1) A site location drawing of the proposed project, indicating the location of the proposed project in relation to roadways, jurisdiction boundaries, streams, and rivers.

(2) The boundary lines of the site on which the work is to be performed;

(3) the location of temporary and permanent vegetation and structural erosion and sediment control measures.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.040 LEVEL III STORMWATER MANAGEMENT AND SEDIMENT CONTROL PLAN REQUIREMENTS.**

The Level III Stormwater Management and Sediment Control Plan shall contain the following, applicable:

(A) Completed application form and construction schedule with a certification by the person responsible for the land

disturbance that the land disturbance will be accomplished pursuant to the plan and that Newberry County has the right to conduct on-site inspections;

(B) A vicinity map sufficient to locate the site and show the relationship of the site to its general surroundings at a scale of not smaller than 1 inch to 1 mile.

(C) A site plan completed by registered professional engineer, registered landscape architect or a Tier B Land Surveyor and drawn to a scale of not smaller than 1 inch to 200 feet, showing:

- (1) The boundary lines of the site on which the work is to be performed, including the approximate acreage of the site;
- (2) Existing contours with interval of not more than 2 feet, extending not less than 100 feet outside of the site boundary lines;
- (3) Proposed contours of disturbed areas with interval of not more than 2 feet;
- (4) Proposed physical improvements on this site, including present development and future utilization if future development is planned;
- (5) A plan for temporary and permanent vegetative and structural erosion and sediment control measures which specify the erosion and sediment control measures to be used during all phases of clearing, grading, filling, construction, and permanent development and shall describe their proposed operation;
- (6) (a) An approved concept plan or preliminary development plan which provides for stormwater runoff control during construction and during the life of the facility;  
(b) A time schedule and sequence of operations indicating the anticipated start and completion dates of each development operation;  
(c) Should an approved preliminary development plan include a time schedule for phased construction over a time period of more than 6 months, then an anticipated construction schedule for each specific phase may be submitted separately provided the proposed time schedule for each construction phase does not deviate from the approved preliminary development plan by more than 3 months.
- (7) A complete and adequate grading plan for borrow pits and material processing facilities where applicable, including restoration and re-vegetation measures;
- (8) A general description of the predominant soil types on the site;
- (9) A description of the maintenance program for sediment control facilities including inspection programs, vegetative establishment of exposed soils, methods and frequency of removal and disposal of solid waste material removal from control facilities and disposition of temporary structural measures;
- (10) Plans to minimize vehicle tracking of sediment from land disturbing activities onto paved public roads carrying significant amount of traffic (ADT of 25 vehicles or greater);
- (11) All development with land disturbing activities involving 5 acres, or more must provide water quality protection as outline in Chapter 72, Section 72-307C of the S.C. Stormwater Management and Sediment Reduction Regulation;
- (12) Water quality must be guaranteed on these sites which disturb 10 acres or more and that the stormwater runoff drains to a single outlet from land disturbing activities by using 1 of the following methods:
  - (a) The plan shall control runoff during the land disturbing by a sediment basin where sufficient space and other factors allow these controls to be maintained until the final inspection. The sediment basin shall be designed and constructed to accommodate the anticipated sediment loading from the land disturbance and meet a removal efficiency of 80% suspended solids or 0.5 ML/L peak settleable solids concentration, whichever is less. The outfall device or system design shall take into account the total drainage area flowing through the disturbed area to be served by the basin, or
  - (b) Other practices may be acceptable if they achieve an equivalent removal efficiency of 80% for suspended or 0.5 ML/L peak settleable solids concentration, which ever is less. The efficiency shall be calculated for disturbed condition for the 10-year, 24-hour event.
- (13) Water quality must be guaranteed on these sites which disturb 5 acres or more and that the stormwater runoff drains to a single outlet from land disturbing activities by using 1 of the following methods:
  - (a) Permanent water quality ponds having a permanent pool shall be designed to store and release the first 1/2 inch of runoff from the site over a 24-hour period. The storage volume shall be designed to accommodate, at least, 1/2 inch of runoff from the entire site.
  - (b) Permanent water quality ponds, not having a permanent pool, shall be designed to release the first inch of runoff from the site over a 24-hour period.
- (14) The name and address of the property owner and developer.
- (15) Title, scale, north arrow, date and name of individual or organization preparing plat, and seal.

(Am. Ord. 06-21-05, passed 6-15-2006)

## **§ 155.041 PROVISIONS FOR FLOOD HAZARD REDUCTION.**

All development within the FEMA or county flood plains, major drainage channels and other flood-prone areas as designed by the Planning Engineer are subject to the following provisions as applicable.

(A) (1) Whenever a regulatory 100-year flood boundary line is proposed to be relocated due to fill, excavation or errors and discrepancies discovered on the Flood Insurance Rate Maps (FIRM), an application shall be made to the Federal Emergency Management Agency (FEMA), for a Letter of Map Revision (LOMA), through Newberry County.

(2) The applicant is responsible for providing all documents required by FEMA which may include topographic maps, hydraulic and hydrologic data and any applicable review fees to be submitted to Newberry County prior to final plat approval in subdivision developments and prior to final inspection in other types of land development.

(3) The county shall notify adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse and submit copies of such notification to the Federal Insurance Administrator.

(B) Design all culverts, bridges, and other drainage structures in accordance with the specifications and design standards of the Environmental Management Administrator's Office so that a 100-year frequency flow through a major drainage channel will not overtop and roadway.

(C) Applications shall obtain all necessary permits from those governmental agencies from which approval is required by state or federal law.

(D) The Environmental Management Administrator shall review subdivision proposal and other proposed new developments to determine whether such proposals will be reasonable secure from the effects of flooding. If any subdivision proposal or other proposed new development is in a flood-prone area, the Environmental Management Administrator shall require the submission of the base flood elevation data, and any such proposal shall be reviewed to assure that:

(1) All such proposals are consistent with the need to minimize flood damage with the flood prone area.

(2) All public utilities and facilities, such as sewer, gas, electrical, and water systems, are located and constructed to minimize or eliminate flood damage.

(3) Adequate drainage is provided to reduce exposure to flood hazards.

(4) Where a flood study is required by the Environmental Management Administrator, base flood discharges shall be based on full watershed development.

(5) All based flood elevation shall be based on maximum 1.0-foot rise and all floodways within the subdivision shall be dedicated to Newberry County.

(6) All base flood elevations shall be based on the National Geodetic Vertical Datum (NGVD) or the North American Vertical Datum (NAVD).

(E) The applicant shall design new and replacement water and sewer systems within flood prone areas so as to minimize or eliminate infiltration of flood waters into the system. On-site waste disposal systems shall be located to avoid impairment to the system or contamination from the system during flooding.

(F) All new construction and substantial improvements of residential structures shall meet the requirements outlined in the Newberry County Flood Prevention Ordinance.

(Am. Ord. 06-21-05, passed 6-15-2006)

## **§ 155.042 REFERENCE.**

All calculations, formulae and data used in the preparation of Stormwater Management and Sediment Control Plans shall be subject to review by the Environmental Management Administrator who may require other calculations made, formulae used, or data supplied.

(Am. Ord. 06-21-05, passed 6-15-2006)

## **§ 155.043 CERTIFICATION.**

Certifications shall be issued by the Newberry County Environmental Management Administrator or county designee, and issued on the Stormwater Management and Sediment Control forms.

(Am. Ord. 06-21-05, passed 6-15-2006)

## **ADMINISTRATION**

## **§ 155.055 INSPECTION.**

The Environmental Management Administrator or county authorized representative shall inspect the work done under the approved plan periodically as deemed advisable. An inspection report shall be filled out upon completion of each official inspection. Inspection reports shall be maintained by Newberry County on all detention and retention structures and those inspection reports shall include the following items:

- (A) The date of inspection;
- (B) The name of the inspector;
- (C) The condition of (if applicable)
  - (1) Vegetation;
  - (2) Fences;
  - (3) Spillways;
  - (4) Embankments;
  - (5) Reservoir area;
  - (6) Outlet channels;
  - (7) Underground drainage;
  - (8) Other items which could effect the proper function of the structure;
- (D) Description of needed maintenance.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.056 ENFORCEMENT.**

(A) Wherever the Environmental Management Administrator or authorized representative finds that the work done or not done under any land disturbance permit issued under the tenets of this chapter fails to conform to the approved plan or plans, he or she shall direct conformance to the plan as he or she deems necessary, to include the issuance of a written order to comply, to issue a stop work order, to revoke the permit issued, or to seek redress through legal actions, or to withhold the release of permanent electric power to the site.

(B) Enforcement of this chapter may be by arrest warrant sought from and issued by a Magistrate, or by an officer duly authorized to issue ordinance summonses by Newberry County, or otherwise by a duly commissioned law enforcement officer who observes an offense being committed.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.057 FEE SCHEDULE.**

The application for a land disturbance permit to disturb or change land in Newberry County shall be accompanied by a non-refundable fee. The fee schedule for obtaining a land disturbance permit shall be established by Newberry County Council. In addition to the Newberry County permit fees the NPDES general permit fee will also apply to all land disturbances of 1 acre or more acres. This fee is established in the SC fee regulation, R61-30.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.058 WAIVERS AND VARIANCES.**

(A) *Waivers.*

(1) The Environmental Management Administrator may grant waivers from the stormwater management requirements of this chapter for individual land disturbances if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of this chapter will result in unnecessary hardship and not fulfill the intent of the chapter. The Environmental Management Administrator may require a written request from the applicant containing descriptions, drawings, and any other information that is necessary to evaluate the proposed land disturbance(s). A separate written waiver request may be required if there are subsequent additions, extensions, or modifications which would alter the approved stormwater runoff characteristics to a land disturbance receiving a waiver.

(2) A project may be eligible for a waiver of stormwater management for water quantity control if the applicant can demonstrate that:

(a) The proposed project will have no significant adverse impact on the receiving natural waterway or downstream properties; or

(b) The imposition of peak control requirements for rates of stormwater runoff would aggravate downstream flooding.

(B) *Variations.*

(1) The Board of Zoning Appeals (BZA) may, upon application to it and showing of undue hardship, grant variance and exception to any of the provisions of this chapter, providing such variance or exception is in harmony with the general purpose and intent of this chapter. A written request for variance shall be provided to the BZA and shall state the specific variance(s) sought and the reason(s) with supporting data for their granting. The BZA may request and consider the opinion of the Environmental Management Administrator before deciding upon any variance.

(2) In any event, the conditions and criteria for granting an appeal or variance request regarding property within the

identified floodplain or floodway shall be as outlined in 44 Code of Federal Regulations Chapter 1, Section 60.6 (Latest edition), based on a showing of all of the following:

- (a) Good and sufficient cause;
- (b) Determination that failure to grant variance would result in exceptional hardship to the applicant;
- (c) A determination that the granting of a variance will not result in increase flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of public, or conflict with existing local or ordinances; and
- (d) A variance is the minimum necessary, considering the flood hazard, to afford relief.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.059 APPEALS, HEARINGS AND CITIZEN COMPLAINTS.**

(A) Any person aggrieved by this chapter or by the decision of the Environmental Management Administrator may appeal to the BZA which acts as the local Hearing Board by written notice to its secretary. Such appeal shall be filed within 30 days after the decision.

- (1) A hearing by the BZA is available following a request to determine the property of:
  - (a) The denial or revocation of a land disturbance permit;
  - (b) A citizen complaint concerning program operation;
  - (c) The issuance of a notice of violation or non-compliance with the plan the regulations included in this chapter;
  - (d) The issuance of fines as a result of this chapter;
  - (e) The issuance of a stop work order as a result of this chapter.
- (2) All hearings shall be initiated by the BZA which shall give notice to all parties of the hearing.
  - (a) All parties must receive the notice of hearing not less than 30 days;
  - (b) The notice will be sent by the Secretary of the BZA;
  - (c) A reference to the particular section of the statutes and rules involved;
  - (d) A short and plain statement of matters asserted.
- (3) All requests for hearings must be received 2 weeks prior to the scheduled monthly meeting of the BZA by its Secretary in order to be heard at its next meeting.
- (4) After hearing all parties, a decision will be issued by the BZA based on the majority of the members voting on the appeal.

(B) Any person who shall feel aggrieved by any decision on an appeal to the BZA may appeal to SCDHEC in accordance with S.C. Code § 48-18-70 and Regulation 72-314.

(Am. Ord. 06-21-05, passed 6-15-2006)

### **MAINTENANCE**

#### **§ 155.070 MAINTENANCE DURING CONSTRUCTION.**

The applicant is responsible for maintenance and the preventive maintenance of all completed stormwater management practices to ensure proper functioning. The responsible inspection agency shall ensure preventive maintenance through inspection of all stormwater management practices.

(Am. Ord. 06-21-05, passed 6-15-2006)

#### **§ 155.071 MAINTENANCE RESPONSIBILITIES AFTER DEVELOPMENT.**

Temporary and permanent erosion, sedimentation and stormwater management facilities, once installed and after a final inspection has been completed, shall be maintained in 1 of the following manners:

- (A) *Facilities maintained by owner.*
  - (1) The owner of the property on which work has been done pursuant to this ordinance, or any other person or agent in control of such property, shall maintain in good condition and shall promptly repair and restore all grade surfaces, walls, drains, dams and structures, vegetation, erosion and sediment control measures, and other protective devices. Such repairs or restoration and maintenance shall be in accordance with the approved plan.
  - (2) The facility to be maintained by the owner shall provide adequate access to permit County Authorities to inspect and, if necessary, to take corrective action. If the owner or any other person or agent in control of such property fails to maintain properly the facilities for which he or she is responsible under the provisions of this chapter, the Newberry County

shall give such owner, person or agent in control written notice describing specifically the deficiency. If the owner, person or agent in control fails, within 10 days from the date of receipt of such notice, to take or commence corrective action, such owner, person or agent shall be subject to the penalties found in this chapter.

(B) *Facilities Maintained by Newberry County.* All facilities to be maintained by Newberry County must be designed and constructed in accordance with the requirements of this chapter and all such facilities shall be dedicated to the county by deed with attached record drawing, after the county has accepted the conveyance of such facilities by appropriate action of the county governing body. Such deed shall include sufficient ingress-egress easements to permit the county to properly maintain such facilities.

(Am. Ord. 06-21-05, passed 6-15-2006)

**§ 155.999 PENALTY.**

All violations of the provision of the chapter by any person, partnership, or corporation, whether public or private, that come to the attention of any responsible individual concerned shall be reported to the Environmental Management Administrator. Violation of the provisions of this chapter or failure to comply with any of its requirements shall constitute a misdemeanor within the trial jurisdiction of the Magistrate's Court. Any person, firm, or corporation who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than the maximum allowable penalty jurisdiction of the Magistrate's Court. Each day such violation continues shall be considered a separate offense. The Environmental Management Administrator or other appropriate county official may also seek injunctive relief or any other appropriate action in courts of competent jurisdiction to enforce the provisions of this chapter.

(Am. Ord. 06-21-05, passed 6-15-2006)