CHAPTER 5 - Environmental Protection

ARTICLE 5.1. - PURPOSE.

This Article sets out the minimum requirements and standards for the protection of the natural environment within the county, including restrictions to protect lands and waters from the effects of excessive soil erosion and sedimentation and to prevent the alteration of natural floodplains and stream channels.

ARTICLE 5.2. - EROSION AND SEDIMENT CONTROL.

Sec. 5.2.1. - Purpose

In order to protect the general health, safety, and welfare of the people of the county and to protect the natural assets and resources of the county for posterity, this erosion and sediment control and stormwater management ordinance is enacted to protect the lands and waters from the effects of excessive soil erosion and sedimentation, to prevent siltation of streams and lakes, to prevent clogging of drainage channels, to reduce excessive flood damage, and to prevent damages to the property of adjacent landowners. (State Law reference— Stormwater management and sediment reduction act, S.C. Code 1976, § 48-14-10 et seq.; delegation of control to local governments, S.C. Code 1976, § 48-14-60.)

Sec. 5.2.2. - Authority for provisions.

Sec. 5.2.3. - This chapter is adopted under the authority and powers granted by the General Assembly of South Carolina in S.C. Code 1976, title 48, ch. 13 and by other powers granted to counties by the General Assembly of the state. (Code 1999, § 154.02; Ord. No. 88-268, 4-12-1988)

Sec. 5.2.4. - Jurisdiction.

- 5.2.4.1 The provisions of this chapter shall apply to all unincorporated lands within the jurisdiction of the county.
- 5.2.4.2 By mutual consent and action of the county and any municipality within the county, this chapter may be adopted by any municipality in the county and enforcement assigned to the county in accordance with the provisions contained herein. (Code 1999, § 154.03; Ord. No. 88-268, 4-12-1988)

5.2.4.3

Sec. 5.2.5. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning: (Code 1999, § 154.04; Ord. No. 88-268, 4-12-1988; Ord. No. 04-05-561, 6-22-2005)

- (1) Interpretation.
- a. As used in this chapter, the term "shall" indicates mandatory compliance, and the term "may" is to be construed as permissive.
- b. The term "county" shall refer to both the area encompassed by the geographical boundaries of the county, and the governmental organization thereof.

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c. The terms "soil and water conservation district" and "district" refer to both the Edgefield Soil and Water Conservation District board of directors and the Edgefield Soil and Water Conservation District staff.

(2) Definitions

Approval means a final review and approval by the county in accordance with its established ordinances and procedures. For vesting purposes, phased development plans remain subject to individual reviews of all phases as a precondition to any claims of a vested right.

Conditional approval means an interim action by a local governing body providing authorization for a site-specific development plan or phased development plan, which plan remains subject to further approval, based on such terms and conditions as the local governing body may set forth.

Construction means any building or erection of a structure or any land disturbance for the same.

Developer means any person acting on his own behalf as a property owner, or as an agent for a property owner, who makes application for plan approval and a grading permit under the provisions of this chapter.

Edgefield County means the unincorporated areas of Edgefield County.

Erosion means the general process by which soil and rock fragments are detached and moved by the action of wind, water, ice, and gravity, either naturally or induced.

Erosion and sediment control and stormwater management plan means a plan which fully indicates 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 will provide for the successful management of stormwater, which is approved as provided herein for application to a particular area or parcel of ground.

Fill means a deposit of soil, rock, or other material placed by man.

Grading means any displacement of soil by stripping, excavating, filling, stockpiling, or any combination thereof, and shall include the land in its excavated or filled state.

Grading permit means a certificate issued to perform work pursuant to an approved erosion and sediment control and stormwater management plan prepared under the provisions of this chapter.

Land means any ground, soil, or earth, including marshes, swamps, drainageways, and areas not permanently covered by water.

Land disturbance means 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 drainageway.

Land use ordinances means those ordinances that address the development of land and may include, but are not limited to, zoning, subdivision, road construction and dedication, mobile home, advertising and agricultural site ordinances.

Landowner means an owner of a legal or equitable interest in real property, including heirs, devisees, successors and assigns, and personal legal representatives of the owner. It may include a person holding a valid option to purchase real property pursuant to a contract with the owner to act as his representative for purposes of submitting a proposed development plan.

Local governing body means the county council or any county body authorized by county ordinance and the South Carolina Code of Laws 1976, as amended, to make land use and land development determinations concerning the unincorporated areas of the county.

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

Phased development plan means a development plan submitted by a landowner to a local governing body that indicates accurately the type, density, and intensity of uses proposed for a specific property, or properties, and which is to be developed in stages. For approval determination purposes, each stage of a phased development plan shall be treated as a site-specific development plan.

Professional soil conservationist means a person who has successfully completed a four-year course of study in an accredited college or university leading to a bachelor of science degree with major study in soil conservation or a closely related natural resource or agricultural field such as agronomy, wildlife biology, agricultural education, or agricultural engineering, with a minimum of 30 semester hours (or the equivalent) in natural resources or agricultural subjects, including the equivalent of three semester hours in soils; and three years experience in the planning and application of erosion and sediment control practices; the experience having been obtained under the supervision of another professional soil conservationist.

Property or real property means all property that is subject to the land use and land development ordinances or regulations.

Registered land surveyor means a person who is registered by the state as a Tier B Land Surveyor pursuant to S.C. Code 1976, title 40, ch. 22.

Registered landscape architect means a person who is registered by the state pursuant to S.C. Code 1976, title 40, ch. 28.

Registered professional engineer means a person who is registered by the state pursuant to S.C. Code 1976, title 40, ch. 22.

Residential subdivision means the division of a tract or parcel of land into two or more lots, building sites, or other divisions for the immediate or future purpose of single-family residential development.

Runoff means that portion of the precipitation on the land which reaches the stormwater management system.

Sedimentation means the process which operates at or near the surface of the ground to deposit soil, debris, and other materials either on other ground surfaces or in water channels.

Site-specific development plan means a development plan submitted by a landowner to a local governing body that indicates accurately the type, density, and intensity of uses proposed for a specific property.

Soil and water conservation district board means the governing body of the Edgefield Soil and Water Conservation District as established pursuant to S.C. Code 1976, title 48, ch. 9.

Stormwater management means a general term applied to the removal of surface or subsurface water from a given area either by gravity via natural means or by systems constructed to so remove water, commonly applied herein to surface water.

Stormwater management system means the surface and subsurface system for the removal of water from the land, including both the natural elements of streams, marshes, swales, and ponds, whether of an intermittent or continuous nature, and manmade elements which include culverts, retention facilities, and storm sewer systems.

Structure means anything constructed or erected, the use of which requires a location on the ground, or attached to something having location on the ground.

Suspension of other work or stop-work order means an unappealable order to immediately cease all construction and land disturbance work other than that necessary to bring the project site into conformance with the plan, specifications, and time schedule specified in the erosion and sediment control and stormwater management plan required by this chapter, until conformance is achieved.

Vegetation means all plant growth, including trees, shrubs, grasses, and mosses.

Vested right means the right to undertake and complete the development of property under the terms and conditions of a site-specific development plan or phased development plan in conjunction with the Edgefield County Code of Ordinances, and with the approval of the applicable local governing body.

Sec. 5.2.6. - Relationship with other laws, regulations, and ordinances.

Whenever the provisions of this chapter impose more restrictive standards than are required in or under any other law, regulation, or ordinance, the requirements herein contained shall prevail. Whenever the provisions of any other law, regulation, or ordinance require more restrictive standards than are required herein, the requirements of such law, regulation, or ordinance shall prevail. (Code 1999, § 154.05; Ord. No. 88-268, 4-12-1988)

Sec. 5.2.7. - Incorporation into other ordinances.

This chapter may be incorporated, either in part or in its entirety, into other county ordinances in a manner prescribed by law. (Code 1999, § 154.06; Ord. No. 88-268, 4-12-1988)

Sec. 5.2.8. - Agreements with municipalities.

The county may, by mutual agreement and the binding action of both governing bodies, assume responsibility for the administration and enforcement of an erosion and sediment control ordinance with identical or substantially identical provisions for any incorporated municipality within the county. (Code 1999, § 154.07; Ord. No. 88-268, 4-12-1988)

ARTICLE 5.3. - EROSION AND SEDIMEMTATION CONTROL; PERMITS

Sec. 5.3.1. - Required - Unless otherwise provided within this chapter, the surface of land in the county shall not be disturbed or altered for any purpose whatsoever, except in accordance with an erosion and sediment control and stormwater management plan approved by the soil and water conservation district board and the county department of public works and a grading permit issued by the county. Waiver of chapter requirements may be granted by the county upon determination that the integrity of this chapter will not be violated by such action. (Code 1999, § 154.20; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.2. - Exemptions. (Code 1999, § 154.21; Ord. No. 88-268, 4-12-1988)

- 5.3.2.1 The provisions of this chapter shall not apply to:
- 5.3.2.2 Agricultural and silvicultural land management and cultural practices, or to the construction of on-farm buildings and structures used in a farming operation to include drainage and irrigation structures and ponds necessary for agriculture and silviculture;
- 5.3.2.3 Construction or land improvement of single-family residences or their accessory buildings. A single-family residence property owner may make land improvements on his single lot without an approved erosion and sediment control plan and without obtaining a grading permit. The initial development of residential subdivisions is not exempt from the provisions of this chapter. All construction work (roads, sewer, lot grading, etc.) done to establish a residential subdivision for the construction of single-family residences on individual lots shall comply with the provisions of this chapter;
- 5.3.2.4 Mining and mineral resource extraction operations conducted in accordance with a mining permit issued by the Mining and Reclamation Division of the South Carolina Land Resources Commission;
- 5.3.2.5 Emergency repairs or maintenance of existing structures and facilities which require ground to be broken;
- 5.3.2.6 Construction or land improvement by a state or federal agency;

- 5.3.2.7 Construction of transmission lines for electricity, water, telephone, gas, sanitary sewers, and storm sewers and other utility construction which will require disturbing the natural ground surface of less than one acre. The width of the right-of-way shall be considered as the area to be disturbed;
- 5.3.2.8 Any site, not otherwise exempted, being one acre or less involving the movement of less than 500 cubic yards of soil unless the grading takes place within 200 feet of the banks of a stream or river;
- 5.3.2.9 Any water impoundment to be used for private recreation purposes that has been designed by (or whose plans have been approved by) the soil and water conservation district.

Sec. 5.3.3. - Application.

- 5.3.3.1 Type 1 plan (applicable land disturbance of greater than two acres). The developer shall apply in writing to the county for a grading permit to disturb or change land in the county excluding land in incorporated municipalities that have not adopted this chapter. Such application shall be accompanied by three copies of an erosion and sediment control and stormwater management plan prepared in accordance with section 18-57. The plan shall be certified by the applicant and by a registered professional engineer or a professional landscape architect or a registered land surveyor.
- 5.3.3.2 Type 2 plan (applicable land disturbance of two acres or less). A landowner may develop and certify his erosion and sediment control and stormwater management plan for a tract of land containing two acres or less, provided that:
- 5.1.1.1.1. The area to be disturbed will not flow water in any one direction for over 200 feet without a reduction in velocity.
- 5.1.1.1.2. The cuts and fills established will not exceed a height or depth of over five feet; and
- 5.1.1.1.3. There will be no concentrated off-site water to be controlled on the site.
- 5.1.1.1.4. A Type 2 plan must meet the objectives of Section 5.3.4.4 below and be submitted to the Soil and Water Conservation District. The district may assist in the development of a Type 2 plan.
- 5.3.3.3 Type 3 plan (any land disturbance related to utility installation). A Type 3 plan may be used only by a public utilities provider in the installation of utility services and shall be prepared in accordance with section 18-57. (Code 1999, § 154.22; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.4. - Application and plan requirements and contents.

5.3.4.1 Standards and requirements for preparation of erosion and sediment control and stormwater management plans. Erosion and sediment control and stormwater management plans shall be prepared according to the following. Plans shall include appropriate measures and practices for erosion and sediment control and stormwater management, installed in a timely sequence during the development process, and maintained to ensure their proper functioning.

- 5.1.1.1.5. Select land where the drainage pattern, topography, and soils are favorable for the intended use. Tracts of land vary in suitability for different uses. Consider the major characteristics of the land area and the kinds of soil in identifying and evaluating potential erosion, sediment, and stormwater problems, and in selecting appropriate control measures.
- 5.1.1.1.6. Expose the smallest practical area of land for the least possible time during development.
- 5.1.1.1.7. When feasible, retain and protect natural vegetation. Save topsoil, where practical, for replacing on graded areas.
- 5.1.1.1.8. Use temporary plant cover, mulching, sediment basins, silt traps, or other structures to control runoff, protect areas subject to erosion, and remove heavy sediment loads from runoff.
- 5.1.1.1.9. Provide for handling the increased runoff caused by changes in topography, soil, and surface conditions. Emphasis should be placed on the conservation of existing onsite soil. Effective means include the use of diversion ditches, grassed or surfaced waterways and outlets, enlarged and protected drainage channels, grade control structures, and effective use of street gutters and storm sewers.
- 5.1.1.1.10. Install permanent vegetative cover and other long term measures as soon as practical in the construction process.
- 5.1.1.1.1. Design stormwater management systems according to the following:
- 5.3.4.1.1.1. All roadway drainage systems should accommodate a ten-year, 24-hour design storm
- 5.3.4.1.1.2. All other systems and easements designed to handle the internal drainage created by the development should be designed to accommodate a 25-year, 24-hour design storm
- 5.3.4.1.1.3. The design criteria for improvements will be as follows:
- 5.3.4.1.1.3.1. *Open channels*. Open channels shall be provided with an improved section that will carry the runoff from the appropriate design rainfall and preclude the creation of backwater inundating any areas outside of dedicated stormwater runoff easements. The channel shall be protected against erosion.
- 5.3.4.1.1.3.2. *Closed storm sewers and culverts*. Closed storm sewers and culverts shall be constructed of precast or prefabricated pipe or box design, in conformance with county specifications. They shall be sized to carry the runoff from the appropriate design rainfall and to preclude the backup of headwater inundating any areas outside of dedicated drainage easements.
- 5.3.4.1.1.3.3. *Bridges*. Bridge design and construction shall be in accordance with standards adopted by the county.
- 5.3.4.2 *Contents of plan and application.* The erosion and sediment control and stormwater management plan (Types 1, 2, and 3, unless otherwise specified) and application for grading permit shall include, but not be limited to, the following data as applicable:

- 5.1.1.1.12. A vicinity map sufficient to locate the site and to show the relationship of the site to its general surroundings at a scale of not less than one mile to one inch;
- 5.1.1.1.13. The site drawn to a scale of not less than one inch to 200 feet, showing:
- 5.3.4.2.1.1. The boundary lines of the site on which the work is to be performed, including the approximate acreage of the site;
- 5.3.4.2.1.2. Existing contours with intervals of not more than five feet, extending 100 feet outside of the site boundary lines, and proposed finished contours with intervals of not more than five feet. The district and the county shall have the authority to alter this requirement as it deems necessary;
- 5.3.4.2.1.3. A time schedule and sequence of operations indicating the anticipated starting and completion dates of each development operation;
- 5.3.4.2.1.4. Proposed physical improvements on the site, including present development and future utilization if future development plans are unknown;
- 5.3.4.2.1.5. All stormwater management provisions, erosions, and sediment control measures, vegetative practices, or other protective devices to be constructed in connection with, or as a part of, the proposed work;
- 5.3.4.2.1.6. Provisions for erosion control and stormwater management during construction (temporary) and during the life of the facility (permanent). Such provisions shall include a timing schedule and sequence of operations indicating the anticipated starting and completion dates of a particular development sequence, and the estimated time of exposure of each disturbed area prior to completion of measures;
- 5.3.4.2.1.7. A plan for providing temporary and permanent vegetation, including, as appropriate, seeding mixes and application rates, type of sod, seedbed preparation, lime and fertilizer application, mulching, and other related data;
- 5.3.4.2.1.8. A grading plan for borrow pits and material processing facilities where applicable, showing the stormwater management system serving such areas;
- 5.3.4.2.1.9. A general description of the predominant soil types on the site.
- 5.1.1.1.14. The name and address of the property owner and developer;
- 5.1.1.1.15. A title, scale, North arrow, date, and the name of the individual or organization preparing plat, with seal;
- 5.1.1.1.16. Such supplemental reports, data, and additional information supporting the plan and specifications as the conservation district may reasonably require, including but not limited to any of the following (applies to Type 1 plan only):
- 5.3.4.2.1.10. Storm drainage computations and studies including the estimated runoff from the area served by drains, adequacy of outlets, ditch and pipe computations, and a map showing the drainage area of land tributary to the site. Future development within the watershed should be projected and planned for accordingly and noted on the vicinity map referred to in subsection (b)(1) of this section;
- 5.3.4.2.1.11. Field investigation reports indicating the nature, condition, and characteristics of existing drainage and flooding conditions;
- 5.3.4.2.1.12. Results from actual soils investigations, reports, or test borings;
- 5.1.1.1.17. Applicant's certification statement:

I (We) hereby certify that all clearing, grading, construction, and/or development will be done pursuant to this plan and will indemnify any person damaged by failure to comply therewith.
Permit Applicant
Date
5.1.1.1.18. Design certification statement (applies to Type 1 plan only):
I hereby certify that this plan is designed to contain soil on the property concerned to the maximum extent, and to provide for the control of the runoff from the property, and that all the provisions are in accordance with the Erosion and Sediment Control and Stormwater Management Ordinance for Edgefield County, South Carolina.
Registered Professional Engineer; or
Professional Soil Conservationist; or
Registered Landscape Architect; or
Registered Land Surveyor
Date
5.1.1.1.19. Soil and Water Conservation District Board certification statement:
I hereby certify that I have checked this plan and that the provisions for erosion, sediment control, and stormwater management are in accordance with the Erosion and Sediment Control and Stormwater Management Ordinance for Edgefield County, South Carolina.
S&WCD Representative
Date
5.1.1.1.20. Edgefield County certification statement:
[same as Soil and Water Conservation District certification statement]
Edgefield Co. Representative
Date
5.3.4.3 Assistance in development of plan. Assistance in the development of the plan required under this chapter may be found in the following publications and any other publications with accepted technical standards for erosion and sediment control and

- stormwater management (Code 1999, § 154.23; Ord. No. 88-268, 4-12-1988):
- 5.1.1.1.21. Erosion and Sediment Control ... in Developing Areas, issued by the U.S. Department of Agriculture, Soil Conservation Service, Strom Thurmond Building, 1835 Assembly Street, Columbia, South Carolina 29201, dated July 1974;
- 5.1.1.1.22. Urban Hydrology for Small Watersheds, Technical Release No. 55 issued by the U.S. Department of Agriculture, Soil Conservation Service, Strom Thurmond Building, 1835 Assembly Street, Columbia, South Carolina 29201, dated January 1975;
- 5.1.1.1.23. Erosion and Sediment Control Practices for Developing Areas, S.C. Land Resources Commission, 2221 Devine Street, Columbia, South Carolina 292035, dated June 1985.

Sec. 5.3.5. - Fees.

- 5.3.5.1 The application for plan approval in the county shall be accompanied by a non-refundable fee in accordance with a fee schedule as adopted from time to time by the county. (Code 1999, § 154.24; Ord. No. 88-268, 4-12-1988)
- 5.3.5.2 All fees are payable to Edgefield County.

Sec. 5.3.6. - Approval.

- 5.3.6.1 Erosion and sediment control and stormwater management plans shall be reviewed within 30 days from the date of submittal. If a plan conforms with the requirements of this chapter, the district and county shall approve the plan and the county shall issue a grading permit to the applicant with a copy of the approved plan. (Code 1999, § 154.25; Ord. No. 88-268. 4-12-1988)
- 5.3.6.2 If the erosion and sediment control stormwater management plan does not conform with the requirements of this chapter, the plan shall be disapproved, and written notification indicating the reason for plan disapproval shall be forwarded to the applicant by the county.
- 5.3.6.3 If an erosion and sediment control plan is disapproved, the applicant may elect to correct the indicated deficiencies in conformance with the provisions of this chapter and resubmit the plan to the county.

Sec. 5.3.7. - Variances and exceptions.

5.3.7.1 The county may, upon application to it and showing of undue hardship, grant variances and exceptions to any of the provisions of this chapter provided such variance or exception is in harmony with the general purpose and intent of this chapter. (Code 1999, § 154.26; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.8. - Appeals.

- 5.3.8.1 Any person aggrieved by a decision of the district or county may appeal the decision in writing within 15 working days. The applicant shall be notified within 30 days as to the affirmation or denial of the appeal. The appeal shall be directed to the county council.
- 5.3.8.2 Any person aggrieved by the decision of an appeal to the district or the county may appeal to a court of competent jurisdiction. Such appeal shall be filed within 30 days after the decision of the district or county.

(Code 1999, § 154.27; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.9. - Extension of time.

5.3.9.1 If the applicant is unable to complete the work within the time specified in the approved plan and grading permit, he may, prior to the expiration of such time, present in writing a request to the district for an extension of time, setting forth the reason for the requested extension. (Code 1999, § 154.28; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.10. - Responsibility of permittee.

5.3.10.1 The applicant shall be responsible for carrying out the proposed work in accordance with the approved erosion and sediment control and stormwater management plan and grading permit, and in compliance with the requirements of this chapter. (Code 1999, § 154.29; Ord. No. 88-268, 4-12-1988)

Sec. 5.3.11. - Vested rights.

5.3.11.1 A vested right, as defined herein, is established for two years upon final approval of a site-specific development plan or phased development plan.

- 5.3.11.2 A landowner of a property with a vested right may, for five consecutive years immediately subsequent to the initial two-year vested right term apply annually for a one-year extension of said vested right; provided that, such applications must be made prior to the expiration of any initial two-year term or extensions thereof. If no application for annual extension is made timely, the vested right shall be considered as having expired with the present term, whether it be an initial term or an extension term thereof.
- 5.3.11.3 The county planning commission may, but is not required to, allow the establishment of a two-year vested right for a conditionally approved site-specific development plan or phased development plan. Such vested right must be approved by a majority vote of the planning commission, duly assembled, and must be communicated to the landowner in writing.
- 5.3.11.4 No vested right shall attach until, in accordance with the Edgefield County Code of Ordinances, all plans are received, required approvals granted, applicable fees paid, and administrative appeals resolved in the applicant's favor.
- 5.3.11.5 The county board of zoning appeals is not authorized to grant or otherwise approve a vested right, and no vested right shall be established or accrue as the result of any decision by the board of zoning appeals.

(Code 1999, § 154.30; Ord. No. 04-05-561, 6-22-2005; Ord. No. 12-13-654, § 2, 10-2-2012)

Sec. 5.3.12. - Conditions and limitation of vested rights.

- 5.3.12.1 The form and content of any submitted plan must comply with state laws and regulations, as well as county ordinances and regulations, regarding building and land development, including but not limited to the following: land use, zoning, planning, stormwater management, sediment control, electrical service, plumbing, mechanical, life safety and fire codes.
- 5.3.12.2 For any phased development plan, an approved site-specific development plan shall be required with respect to each phase. Such site-specific plans must be in accordance with all applicable laws, regulations, and codes then in effect.
- 5.3.12.3 A vested right established under conditional approval may be terminated by the county planning commission, following notice and a public hearing concerning the landowner's failure to meet the terms of conditional approval.
- 5.3.12.4 No developer or landowner shall proceed with any investment in grading, installation of street or other infrastructure, or other significant expenditures prior to the planning commission issuing the proper permit. Such expenditures and investments made prior to permit issuance shall not give rise to a vested right.
- 5.3.12.5 An issued building permit does not expire and will not be revoked, based upon expiration of a vested right. However, nothing in this language prevents the revocation of a building permit for other, lawful reasons.
- 5.3.12.6 A vested right may be revoked by the county planning commission upon the commissions; determination, after notice and public hearing, that there was material misrepresentation by the landowner, or that the landowner has failed substantially to comply with the terms and conditions of approval.
- 5.3.12.7 A vested plan is subject to later enacted federal, state, and local laws, ordinances and regulations adopted to protect the public health, safety, and welfare. The issuance of any building permit vests a construction project only under building and construction codes in force at the time of the permit's issuance.

(Code 1999, § 154.31; Ord. No. 04-05-561, 6-22-2005)

5.3.12.8 Reserved.

ARTICLE 5.4. - EROSION AND SEDIMENTATION CONTROL; REGULATIONS

Sec. 5.4.1. - Maintenance during construction.

The person engaged in or conducting the land disturbing activity shall be responsible for maintaining all temporary and permanent erosion, sedimentation, and stormwater management measures and facilities during the development of the site. (Code 1999, § 154.40; Ord. No. 88-268, 4-12-1988)

5.4.1.1 Maintenance following installation.

Once installed and a final inspection completed as provided in section 18-111, the temporary and permanent erosion, sedimentation, and stormwater management facilities shall be maintained in one of the following manners:

5.1.1.1.24. Facilities maintained by owner.

- 5.4.1.1.1.1. The owner of the property on which work has been done pursuant to this chapter, or any other person or agent in control of such property, shall maintain in good condition and 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 restorations and maintenance shall be in accordance with the approved plan.
- 5.4.1.1.1.2. The facilities to be maintained by the owner shall provide adequate access to permit the county to inspect and, if necessary, to take corrective action. Should the owner fail to properly maintain the facilities under his responsibility, the county shall give such owner written notice of the nature of the corrective action necessary. Should the owner fail, within 15 days from the date of the notice, to take, or commence taking, corrective action to the satisfaction of the county, the county may enter upon lands and take corrective action to place the facilities in working condition. The owner of the facility shall be assessed the cost of the work and any penalties and there shall be placed a lien on the property to cover such costs and penalties. This lien may be placed on the tax bill and collected as ordinary taxes by the county.
- 5.4.1.1.1.3. In cases where the owner is a homeowner's association or other collective/member organization, failure to maintain common facilities will be the basis for corrective action by the county council to be funded by the imposition of a special taxing unit or other arrangement designed to provide funds for such corrective actions.
- 5.1.1.1.25. Facilities maintained by the county. All facilities to be maintained by the county must be designed and constructed consistent with the requirements of this chapter and dedicated to the county by deed with attached record drawings and accepted by the county council. These deeds shall include sufficient easements to allow the county to properly maintain these facilities. The owner shall maintain and be responsible for the facilities for one year after the facilities have been accepted by the county council. (Code 1999, § 154.41; Ord. No. 88-268, 4-12-1988)

5.1.1.1.26. Reserved.

ARTICLE 5.5. - EROSION AND SEDIMENTATION CONTROL; ADMINISTRATION AND ENFORCEMENT

Sec. 5.5.1. - Procedural guidelines.

The county shall publish and make available to the public guidelines outlining the application and plan review procedure and identifying the county representative for administration and enforcement, and may, from time to time, revise those guidelines in accordance with this chapter and the Stormwater Management and Sediment Reduction Act, S.C. Code 1976, § 48-14-10 et seq. (Code 1999, § 154.50; Ord. No. 88-268, 4-12-1988)

Sec. 5.5.2. - Notice of provisions; copies.

The county and the county soil and water conservation district shall provide proper notification of this chapter to those persons applying for building, grading, or other construction permits. A copy of this chapter shall also be made available upon request. (Code 1999, § 154.51; Ord. No. 88-268, 4-12-1988)

Sec. 5.5.3. - Inspections.

A legally authorized representative of the county shall periodically inspect the work done under the approved plan and grading permit. Upon completion of such work, he shall make a final inspection and, if the work has been completed in accordance with the plan and permit, the county shall issue to the applicant a letter of satisfactory completion. (Code 1999, § 154.52; Ord. No. 88-268, 4-12-1988)

Sec. 5.5.4. - Noncompliance.

- 5.5.4.1 When the county finds that the work done or not done under any grading permit issued under the provision of this chapter fails to conform to the approved plan, it may, by written order, direct conformance, direct suspension of other work until conformance is achieved (stop-work order), or direct such other measures that it deems necessary for erosion and sediment control and stormwater management.
- 5.5.4.2 In the event the county issues a notice of noncompliance, the landowner, developer, or utilities company will have no more than ten days to comply with the approved plan. Emergency control measures to ensure interim protection must be initiated upon receipt of the notice of noncompliance.
- 5.5.4.3 A second notice of noncompliance on the same project constitutes an immediate stop-work order and shall serve to initiate appropriate legal actions against the violator.
- 5.5.4.4 If land disturbing activities which are not exempted in this chapter are initiated without an approved plan, any landowner, developer, or utilities company shall have no more than five days after notification to submit a plan and request for grading permit. If a plan is not received and approved within the allotted time, a stop-work order will be issued until the landowner, developer, or utilities company is in full compliance with this chapter. Approved emergency control measures to ensure interim protection must be initiated immediately upon receipt of the notice of noncompliance.
- 5.5.4.5 Deadlines falling on weekends, holidays, or other days when the offices of the district or the county are closed will be automatically extended until the next workday unless otherwise specified in the notice.

(Code 1999, § 154.53; Ord. No. 88-268, 4-12-1988)

Sec. 5.5.5. - Civil penalties for violations.

5.5.5.1 Any person who violates any provision of this chapter, or who initiates or continues a land disturbing activity for which a stormwater management and sediment control plan is required except in accordance with the terms, conditions, and provisions of an approved plan, is subject to a civil penalty of not more than \$1,000.00. No penalty may be assessed until the

person alleged to be in violation has been notified of the violation. Each day of a violation constitutes a separate violation.

5.5.5.2 The county shall make written demand for payment upon the person responsible for the violation and set forth in detail the violation for which the penalty has been invoked. If payment is not received or equitable settlement reached within 30 days after demand for payment is made, a civil action may be filed by the county attorney in the circuit court of the county to recover the amount of the penalty.

Sec. 5.5.6. - Injunctive Relief.

- 5.5.6.1 When the county has reasonable cause to believe that any person is violating or is threatening to violate the requirements of this chapter, it may, either before or after the institution of any other action or proceeding authorized by this chapter, institute a civil action for injunctive relief to restrain the violation or threatened violation. The action must be brought in the circuit court of the county.
- 5.5.6.2 Upon determination by the court that an alleged violation is occurring or is threatened, it shall enter the order necessary to abate the violation or to prevent the threatened violation. The institution of an action for injunctive relief under subsection (a) of this section does not relieve any party to the proceeding from any civil penalty prescribed for violations of this chapter.
- 5.1.1.1.27. Reserved.

ARTICLE 5.6. - FLOOD DAMAGE PREVENTION

Sec. 5.6.1. - Objectives.

- 5.6.1.1 The objectives of this article are to:
- 5.1.1.1.28. Protect human life and health;
- 5.1.1.1.29. Maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize flood blight areas; and
- 5.1.1.1.30. Ensure that potential homebuyers are notified that property is in a flood area.
- 5.6.1.2 The provisions of the article are intended to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets and bridges located in the floodplain, and prolonged business interruptions. In addition, an important floodplain management objective of this article is to minimize expenditure of public money for costly flood control projects and rescue and relief efforts associated with flooding. (Ord. No. 10-11-635, § 156.10, 2-25-2011)

Sec. 5.6.2. - Definitions.

- 5.6.2.1 Unless specifically defined below, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.
- 5.6.2.2 Accessory structure means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common urban accessory structures. Pole barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.
- 5.6.2.3 Addition to an existing building means an extension or increase in the floor area or height of a building or structure. Additions to existing buildings shall comply with the requirements for new construction regardless as to whether the addition is a substantial

improvement or not. Where a firewall or loadbearing wall is provided between the addition and the existing building, the addition shall be considered a separate building and must comply with the standards for new construction.

- 5.6.2.4 *Agricultural structure* means a structure used solely for agricultural purposes in which the use is exclusively in connection with the production, harvesting, storage, drying, or raising of agricultural commodities, including the raising of livestock. Agricultural structures are not exempt from the provisions of this article.
- 5.6.2.5 *Appeal* means a request for a review of the local administrator's interpretation of any provision of this article.
- 5.6.2.6 Area of shallow flooding means a designated AO or VO zone on a community's flood insurance rate map (FIRM) with base flood depths of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
- 5.6.2.7 Area of special flood hazard means the land in the floodplain within a community subject to a one percent or greater chance of being equaled or exceeded in any given year.
- 5.6.2.8 Base flood means the flood having a one percent chance of being equaled or exceeded in any given year.
- 5.6.2.9 Basement means any enclosed area of a building, which is below grade on all sides.
- 5.6.2.10 *Building* means any structure built for support, shelter or enclosure for any occupancy or storage.
- 5.6.2.11 *Costal high hazard area* means an area of special flood hazard extending from offshore to the inland limit of the primary frontal dune along an open coast and any other area subject to velocity wave action from storms or seismic sources.
- 5.6.2.12 *Critical development.* Development that is critical to the community's public health and safety is essential to the orderly functioning of a community, store, or produce highly volatile, toxic, or water-reactive materials, or house occupants that may be insufficiently mobile to avoid loss of life or injury. Examples of critical development include jails, hospitals, schools, fire stations, nursing homes, wastewater treatment facilities, water plants, and qas/oil/propane storage facilities.
- 5.6.2.13 *Development* means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.
- 5.6.2.14 *Elevated building* means a nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns, piers, or shear walls parallel to the flow of water.
- 5.6.2.15 Executive Order 11988 (Floodplain Management). Issued by President Carter in 1977, this order requires that no federally assisted activities by conducted in or have the potential to affect identified special flood hazard areas, unless there is no practicable alternative.
- 5.6.2.16 *Existing construction* means, for the purposes of determining rates, structures for which the start of construction commenced before the effective date of the FIRM, or before January 1, 1075, for FIRMs effective before that date.
- 5.6.2.17 Existing manufactured home park or manufactured home subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the

installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before May 19, 1982.

- 5.6.2.18 Expansion to an existing manufactured home park or manufactured home subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete slabs).
- 5.6.2.19 *Flood* or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, or the unusual and rapid accumulation of runoff of surface waters from any source.
- 5.6.2.20 Flood Hazard Boundary Map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as zone A.
- 5.6.2.21 Flood Insurance Rate Map (FIRM) means 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 applicable to the community.
- 5.6.2.22 Flood Insurance Study (FIS) means the official report (dated February 1, 1984) provided by the 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.
- 5.6.2.23 *Floodproofing* means any combination of structural or nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.
- 5.6.2.24 Flood-resistant material means any building material capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water soluble or is not resistant to alkali or acid in water, including normal adhesives for abovegrade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2-93, Flood-Resistant Materials for Buildings Located in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program, document number FIA-TB2, dated 4/93, and available from the Federal Emergency Management Agency. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.
- 5.6.2.25 *Floodway* means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
- 5.6.2.26 Freeboard means a factor of safety usually expressed in feet above a blood level for purposes of floodplain management. The term "freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.
- 5.6.2.27 Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

- 5.6.2.28 *Highest adjacent grade* means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of the structure.
- 5.6.2.29 Historic structure means any structure that is:
- 5.1.1.1.31. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior (DOI)) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- 5.1.1.1.32. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- 5.1.1.1.33. Individually listed on a state inventory of historic places; or
- 5.1.1.1.34. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified:
- 5.6.2.29.1.1. By an approved sate program as determined by the Secretary of the Interior; or
- 5.6.2.29.1.2. Directly by the Secretary of the Interior in states without approved programs.
- 5.6.2.30 Some structures or districts listed on the state or local inventories may not be "historic" as cited in this definition, but have been included on the inventories because it was believed that the structures or districts have the potential for meeting the "historic" structure criteria of the DOI. In order for these structures to meet NFIP historic structure criteria, it must be demonstrated and evidenced that the South Carolina Department of Archives and History has individually determined that the structure or district meets DOI historic structure criteria.
- 5.6.2.31 *Increased cost of compliance (ICC)* applies to all new and renewed flood insurance policies effective on and after June 1, 1997. The NFIP shall enable the purchase of insurance to cover the cost of compliance with land use and control measures established under section 1361. It provides coverage for the payment of a claim to help pay for the cost to comply with state or community floodplain management laws or ordinances after a flood event in which a building has been declared substantially or repetitively damaged.
- 5.6.2.32 *Limited storage* means an area used for storage and intended to be limited to incidental items, which can withstand exposure to the elements and have low flood damage potential. Such an area must be of flood-resistant or breakaway material, void of utilities except for essential lighting and cannot be temperature controlled. If the area is located below the base flood elevation in an A, AE and A1-A30 zone, it must meet the requirements of section 18-182(5).
- 5.6.2.33 Lowest adjacent grade (LAG) means an elevation of the lowest ground surface that touches any of the exterior walls of a building or proposed building walls.
- 5.6.2.34 *Lowest floor* means the lowest floor of the lowest enclosed area. Any unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor provided that such an enclosure is not built so as to render the structure in violation of other provisions of this article.
- 5.6.2.35 *Manufactured home* means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

- 5.6.2.36 *Manufactured home park or subdivision* means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- 5.6.2.37 *Mean sea level* means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD).
- 5.6.2.38 National Geodetic Vertical Datum (NGVD), as corrected in 1929, means the elevation reference points set by National Geodetic Survey based on mean sea level.
- 5.6.2.39 New construction means a structure for which the start of construction commenced after the effective date of the first floodplain management code, chapter or standard (August 1, 1984) based upon specific technical base flood elevation data which establishes the area of special flood hazard. The term also includes any subsequent improvements to such structure.
- 5.6.2.40 New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing lots on which manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete slabs) is completed on or after February 1, 2011.
- 5.6.2.41 North American Vertical Datum (NAVD) means the datum point established at Pointe-au-Pére on the St. Lawrence River, Québec Province, Canada, based on the mass or density of the earth. The datum listed as the reference datum on flood insurance rate maps should be used for elevation certificate and floodproofing certificate completion.
- 5.6.2.42 Recreational vehicle means a vehicle that is:
- 5.1.1.35. Built on a single chassis;
- 5.1.1.1.36. 400 square feet or less when measured at the largest horizontal projection;
- 5.1.1.1.37. Designed to be self-propelled or permanently towable by a light-duty truck; and
- 5.1.1.1.38. Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use.
- 5.6.2.43 Repetitive loss means a building covered by a contract for flood insurance that has incurred flood-related damages on two occasions during a ten-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each such flood event.
- 5.6.2.44 Section 1316 of the National Flood Insurance Act of 1968. The act provides that no new flood insurance shall be provided for any property found by the Federal Emergency Management Agency to have been declared by a state or local authority to be in violation of state or local ordinances.
- 5.6.2.45 Start of construction, for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for footings, piers or

foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

- 5.6.2.46 *Structure* means a walled and roofed building, a manufactured home, including a gas or liquid storage tank, or other manmade facility or infrastructure that is principally above around.
- 5.6.2.47 Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Such repairs may be undertaken successively and their costs counted cumulatively. Please refer to the definition of "substantial improvement."
- 5.6.2.48 *Substantial improvement* means any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures, which have incurred substantial damage, regardless of the actual repair work performed. However, the term does not include either:
- 5.1.1.1.39. Any project of improvement to a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions (does not include American with Disabilities Act compliance standards); or
- 5.1.1.1.40. Any alteration of a historic structure provided that the alteration would not preclude the structure's continued designation as a historic structure.
- 5.6.2.49 Permits shall be cumulative for a period of five years. If the improvement project is conducted in phases, the total of all costs associated with each phase, beginning with the issuance of the first permit, shall be utilized to determine whether substantial improvement will occur.
- 5.6.2.50 Substantially improved existing manufactured home park or subdivision means where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction, or improvement commenced.
- 5.6.2.51 *Variance* means the grant of relief from the terms of this article.
- 5.6.2.52 *Violation* means the failure of a structure or other development to be fully compliant with these regulations.
- (Ord. No. 10-11-635, §§ 156.20, 156.21, 2-25-2011; Ord. No. 10-11-636, § 1(156.21), 4-5-2011)

Sec. 5.6.3. - Floodplains are an Important Asset to the Community.

5.6.3.1 Floodplains perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, groundwater recharge, prevention of erosion, habitat for diverse natural wildlife populations, recreational opportunities and aesthetic quality. These functions are best served if floodplains are kept in their natural state. Wherever possible, the natural characteristics of floodplains and their associated wetlands and water bodies should be preserved and enhanced. Decisions to alter floodplains, especially floodways and stream channels, should be the result of careful planning

processes, which evaluate resource conditions and human needs. (Ord. No. 10-11-635, \S 156.11, 2-25-2011)

Sec. 5.6.4. - Lands to which this article applies.

5.6.4.1 This article shall apply to all areas of special flood hazard within the jurisdiction of the unincorporated county as identified by the Federal Emergency Management Agency in its flood insurance study dated September 14, 2018 with accompanying maps and other supporting data, which are hereby adopted by reference and declared a part of this article. (Ord. No. 10-11-635, § 156.12, 2-25-2011; Ord. No. 18-19-745, § 1, 9-4-2018)

Sec. 5.6.5. - Development permit requirement.

5.6.5.1 A flood development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities. (Ord. No. 10-11-635, § 156.13, 2-25-2011)

Sec. 5.6.6. - Compliance.

5.6.6.1 No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations. (Ord. No. 10-11-635, § 156.14, 2-25-2011)

Sec. 5.6.7. - Interpretations; abrogation and greater restrictions.

- 5.6.7.1 In the interpretation and application of this article, all provisions shall be:
- 5.1.1.41. Considered as minimum requirements;
- 5.1.1.1.42. Construed in favor of the county council; and
- 5.1.1.1.43. Deemed neither to limit nor repeal any other powers granted under state law.
- 5.6.7.2 This article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. No. 10-11-635, § 156.15, 2-25-2011)
- 5.6.7.3 Sec. 18-138. Warning and disclaimer of liability.
- 5.6.7.4 The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the county or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made hereunder. (Ord. No. 10-11-635, § 156.17, 2-25-2011)

5.6.7.5 Reserved.

ARTICLE 5.7. - FLOOD DAMAGE PREVENTION; ADMINISTRATION

Sec. 5.7.1. - Local administrator—Designated.

5.7.1.1 The county administrator or his designee is hereby appointed to administer and implement the provisions of this article. (Ord. No. 10-11-635, § 156.30, 2-25-2011)

Sec. 5.7.2. - Local administrator-Duties and responsibilities.

- 5.7.2.1 Duties of the local administrator shall include, but not be limited to, the following:
- 5.7.2.2 Implement a review system to assure all development permits meet the requirements of this article.
- 5.7.2.3 Ensure that the proposed development has received permits from those governmental agencies from which approval is required by federal or state law, including section 400 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334.
- 5.7.2.4 Notify adjacent communities and the state department of natural resources, land, water and conservation division, state coordinator for the National Flood Insurance Program, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- 5.7.2.5 Prevent encroachments within floodways unless the certification and flood hazard reduction provisions of Article 5.8 Provisions for Flood Hazard Reduction are met. Obtain and review actual elevation, in relation to mean sea level, of the lowest floor of all new or substantially improved structures.
- 5.7.2.6 Obtain the actual elevation, in relation to mean sea level, to which the new or substantially improved structures have been floodproofed, in accordance with section 18-160(7).
- 5.7.2.7 When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with section 18-182(2).
- 5.7.2.8 Make the necessary interpretation where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- 5.7.2.9 When base flood elevation data or floodway data has not been provided in accordance with section 18-134, obtain, review and reasonably utilize the best available base flood elevation data and floodway data available from a federal, state or other source in order to administer the provisions of this article. Data from preliminary, draft, and final flood insurance studies constitutes the best available data from a federal, state or other source. If an appeal is pending on the study in accordance with 44 CFR 67.5 and 67.6, the data does not have to be used.
- 5.7.2.10 Make on-site inspections of projects in accordance with section 18-161.
- 5.7.2.11 Serve notices of violations, issue stop work orders, revoke permits and take corrective actions in accordance with section 18-161.
- 5.7.2.12 Maintain all records pertaining to the administration of this article and make these records available for public inspection.
- 5.7.2.13 In addition to the notifications required in subsection 5.7.2.1.3 of this section, written reports of maintenance records must be maintained to show that maintenance has been provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished. This maintenance must consist of a comprehensive program of periodic inspections, and routine channel clearing and dredging, or other related functions. The assurance shall consist of a description of maintenance activities, frequency of performance and the local official responsible for maintenance performance. Records shall be kept on file for FEMA inspection.

5.7.2.14 When the exact location of boundaries of the areas of special flood hazard conflict with the current, natural topography information at the site, the property owner may apply and be approved for a Letter of Map Amendment (LOMA) by FEMA. A copy of the Letter of Map Amendment issued from FEMA will be maintained by the local administrator in the permit file. (Ord. No. 10-11-635, § 156.34, 2-25-2011; Ord. No. 10-11-636, § 1(156.34), 4-5-2011)

Sec. 5.7.3. - Sec. 18-158. - Adoption of letter of map revisions (LOMR).

5.7.3.1 All letter of map revisions (LOMRs) that are issued in the areas identified in section 18-134 are hereby adopted. (Ord. No. 10-11-635, § 156.31, 2-25-2011)

Sec. 5.7.4. - Sec. 18-159. - Designation of party responsible for biennial report.

5.7.4.1 The county administrator or his designee is hereby designated as the party responsible to submit the biennial report to FEMA. (Ord. No. 10-11-635, § 156.32, 2-25-2011)

Sec. 5.7.5. - Sec. 18-160. - Development permit and certification requirements.

- 5.7.5.1 Application for a development permit within a 100-year floodplain located within the unincorporated areas of the county shall be made to the county administrator or his designee on forms furnished by him prior to any development activities. The development permit may include, but not be limited to, plans in duplicate drawn to scale showing: the nature, location, dimensions and elevations of the area in question; existing or proposed structures; and the location of fill materials, storage areas and drainage facilities. Specifically, the following information is required:
- 5.7.5.2 A plot plan that shows the 100-year floodplain contour or a statement that the entire lot is within the floodplain must be provided by the development permit applicant when the lot is within or appears to be within the floodplain as mapped by the Federal Emergency Management Agency or the floodplain identified pursuant to either section 18-157(1) or sections 18-183 and 18-184. The plot plan must be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by the same.
- 5.7.5.3 The plot plan required by section 18-157(1) must show the floodway, if any, as identified by the Federal Emergency Management Agency or the floodway identified pursuant to either section 18-157(1) or sections 18-183 and 18-184.
- 5.7.5.4 Where base flood elevation data is provided as set forth in section 18-134 or section 18-157(1), the application for a development permit within the flood hazard area shall show:
- 5.7.5.4.1. The elevation, in relation to mean sea level, of the lowest floor of all new and substantially improved structures; and
- 5.7.5.4.2. If the structure will be floodproofed in accordance with section 18-182(2), the elevation (in relation to mean sea level) to which the structure will be floodproofed.
- 5.7.5.5 If no base flood elevation data is provided as set forth in section 18-132 or 18-134, the application for a development permit must show construction of the lowest floor at least three feet above the highest adjacent grade.
- 5.7.5.6 Where any watercourse will be altered or relocated as a result of proposed development, the application for a development permit shall include:
- 5.7.5.6.1. A description of the extent of watercourse alteration or relocation;

- 5.7.5.6.2. An engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and
- 5.7.5.6.3. A map showing the location of the proposed watercourse alteration or relocation.
- 5.7.5.7 When a structure is floodproofed, the applicant shall provide certification from a registered, professional engineer or architect that the nonresidential, floodproofed structure meets the floodproofing criteria in section 18-182(2).
- 5.7.5.8 A floor elevation or floodproofing certification is required after the lowest floor is completed. As soon as possible after completion of the lowest floor and before any further vertical construction commences, or floodproofing by whatever construction means, whichever is applicable, it shall be the duty of the permit holder to submit to the county engineer a certification of the elevation of the lowest floor or floodproofed elevation, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. Any work done prior to submission of the certification shall be at the permit holder's risk. The local administrator shall review the floor elevation survey data submitted. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.
- 5.7.5.9 Upon completion of the development, a registered professional engineer, land surveyor or architect shall certify that section 18-160(6), (7) and (8) are built in accordance with the submitted plans and previous predevelopment certifications.
- 5.7.5.10 If the proposed project will affect the configuration of the watercourse, floodway, or base flood elevation for which a detailed flood insurance study has been developed, the applicant shall apply for and must receive approval for a conditional letter of map revision (CLOMR) with the Federal Emergency Management Agency prior to actual construction.
- 5.7.5.11 Within 60 days of completion of an alteration of a watercourse, referenced in section 18-160(5), the applicant shall submit as-built certification, by a registered professional engineer, to the Federal Emergency Management Agency.

(Ord. No. 10-11-635, § 156.33, 2-25-2011)

Sec. 5.7.6. - Sec. 18-161. - Administrative procedures.

- 5.7.6.1 Inspections of work in progress. As the work pursuant to a permit progresses, the county administrator or his designee shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local chapter and the terms of the permit. In exercising this power, the county administrator or his designee has a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
- 5.7.6.2 *Stop work orders.* Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this article, the county administrator or his designee may order the work to be immediately stopped. The stop work order shall be in writing and directed to the person doing the work. The stop work order shall state the specific work to be stopped, the specific reasons for the stoppage, and the conditions under which the work may be resumed. Violation of a stop work order constitutes a misdemeanor.

- 5.7.6.3 Revocation of permits. The county administrator or his designee may revoke and require the return of the development permit by notifying the permit holder in writing, stating the reason for the revocation. Permits shall be revoked for:
- 5.7.6.3.1. Any substantial departure from the approved application, plans or specifications;
- 5.7.6.3.2. Refusal or failure to comply with the requirements of state or local laws; or
- 5.7.6.3.3. False statements or misrepresentations made in securing the permit.
- 5.7.6.3.4. Any permit mistakenly issued in violation of an applicable state or local law may also be revoked.
- 5.7.6.4 *Periodic inspections*. The county administrator or his designee and each member of his inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- 5.7.6.5 *Violations to be corrected.* When the county administrator or his designee finds violations of applicable state and local laws, it shall be his duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law on the property he owns.
- 5.7.6.6 Actions in event of failure to take corrective action. If the owner of a building or property shall fail to take prompt corrective action, the county administrator or his designee shall give him written notice, by certified or registered mail to his last known address or by personal service, that:
- 5.7.6.6.1. The building or property is in violation of the Flood Damage Prevention Code;
- 5.7.6.6.2. A hearing will be held before the county administrator or his designee at a designated place and time, not later than ten days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and
- 5.7.6.6.3. Following the hearing, the county administrator or his designee may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.
- 5.7.6.6.4. Order to take corrective action. Upon a hearing, if the county administrator or his designee finds the building or development in violation of the Flood Damage Prevention Code, he shall make an order in writing to the owner requiring the owner to remedy the violation within a period of not less than 60 days. However, if the county administrator or his designee finds that there is imminent danger to life or other property, he may order that corrective action be taken in such lesser period as may be feasible.
- 5.7.6.6.5. *Appeal.* Any owner who has received an order to take corrective action may appeal from the order to the local board of appeals by giving notice of appeal in writing to the county administrator or his designee and the clerk within ten days following issuance of the final order. In the absence of an appeal, the order of the engineer shall be final. The board of appeals shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.
- 5.7.6.6.6. Failure to comply with order. If the owner of a building or property fails to comply with an order to take corrective action from which no appeal has been taken or fails to comply with an order of the board of appeals following an appeal action, he shall be guilty of a misdemeanor and shall be punished in the discretion of the court.

(Ord. No. 10-11-635, § 156.35, 2-25-2011)

5.7.6.6.7. Reserved.

ARTICLE 5.8. - FLOOD DAMAGE PREVENTION; PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 5.8.1. - General standards.

Development may not occur in the floodplain where alternative locations exist due to the inherent hazards and risks involved. Before a permit is issued, the applicant shall demonstrate that new structures cannot be located out of the floodplain and that encroachments onto the floodplain are minimized. In all areas of special flood hazard, the following provisions are required:

- 5.8.1.1 All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- 5.8.1.2 All new construction and substantial improvements shall be constructed with flood-resistant materials and utility equipment resistant to flood damage;
- 5.8.1.3 All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages;
- 5.8.1.4 Electrical, ventilation, plumbing, heating and air conditioning equipment (including ductwork), and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. This requirement does not preclude the installation of outdoor faucets for showerheads, sinks, hoses, etc., as long as cut off devices and back flow devices are installed to prevent contamination to the service components and thereby minimize any flood damages to the building;
- 5.8.1.5 All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- 5.8.1.6 New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters:
- 5.8.1.7 On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- 5.8.1.8 Any alteration, repair, reconstruction or improvement to a structure, which complies with the provisions of this article, shall meet the requirements of "new construction" as contained in this article. This includes post-FIRM development and structures;
- 5.8.1.9 Nonconforming buildings or uses. Nonconforming buildings or uses may not be enlarged, replaced or rebuilt unless such enlargement or reconstruction is in conformance with the provisions of this article. However, this article shall not prevent the repair, reconstruction or replacement of an existing building or structure located totally or partially within the floodway, provided the bulk of the building or structure below base flood elevation in the floodway is not increased and provided that such repair, reconstruction or replacement meets all of the other requirements of this article; and
- 5.8.1.10 Americans with Disabilities Act (ADA). A building must meet the specific standards for floodplain construction outlined in section 5.8.3, as well as any applicable ADA requirements. The ADA is not justification for issuing a variance or otherwise waiving these requirements. In addition, the cost of improvements required to meet the ADA provisions shall be included in the costs of the improvements for calculating substantial improvement. (Ord. No. 10-11-635, § 156.40, 2-25-2011)

Sec. 5.8.2. - Specific standards.

- 5.8.2.1 In all areas of special flood hazard where base flood elevation data has been provided, as set forth in section 18-134 or 18-157(1), the following provisions are required:
- 5.8.2.1.1. Residential construction. New construction or substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor elevated no lower than two feet above the base flood elevation. No basements are permitted. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with subsection 5.8.3.5 of this section.
- Nonresidential construction. New construction or substantial improvement of any commercial, industrial or nonresidential structure, including manufactured homes, shall have the lowest floor elevated no lower than two feet above the level of the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with subsection (5) of this section. No basements are permitted. Structures located in A-zones may be floodproofed in lieu of elevation if all areas of the structure below the required elevation are watertight with walls impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered, professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in section 18-160(7) and (9). A variance may be considered for wet-floodproofing agricultural structures in accordance with the criteria outlined in section 18-204. Agricultural structures not meeting the criteria of section 18-204 must meet the nonresidential construction standards and all other applicable provisions of this article. Structures, which are floodproofed, are required to have an approved maintenance plan with an annual exercise. The maintenance plan must be approved by the county administrator or his designee and notification of the annual exercise shall be provided to the same.

5.8.2.1.3. Manufactured homes.

- 5.8.2.1.3.1. Manufactured homes that are placed or substantially improved on sites in an existing, an expansion to an existing, a new or outside of a manufactured home park or subdivision in which manufactured homes incurred "substantial damage" as the result of a flood shall be elevated on a permanent foundation. The lowest floor of the manufactured home shall be elevated no lower than two feet above the base flood elevation and securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
- 5.8.2.1.3.2. Manufactured homes that are to be placed or substantially improved on sites in existing manufactured home parks or subdivisions that are not subject to the provisions of subsection (3)a. of this section must be elevated so that the lowest floor is elevated no lower than two feet above the base flood elevation. The home shall be securely anchored to an adequate foundation to resist flotation, collapse and lateral movement.
- 5.8.2.1.3.3. Manufactured homes shall be anchored to prevent flotation, collapse or lateral movement. Therefore, manufactured homes must be anchored to resist flotation, collapse or lateral movement in accordance with S.C. Code 1976, § 40-29-10, South Carolina Manufactured Housing Board Regulations. Additionally, when the elevation requirement would be met by an elevation of the chassis at least 36 inches or less above the grade at the sight, the chassis shall be supported by reinforced piers or other foundation elements of at least equivalent strength. When the elevation of the chassis is above 36 inches in height, an engineering certification is required.
- 5.8.2.1.3.4. An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood-prone areas. This plan shall be filed with and approved by the county administrator or his designee and the emergency preparedness director.
- 5.8.2.1.4. *Recreational vehicles.* A recreational vehicle is ready for highway use if it is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices and has no permanently attached additions. Recreational vehicles placed on sites shall either:
- 5.8.2.1.4.1. Be on site for fewer than 180 consecutive days;
- 5.8.2.1.4.2. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
- 5.8.2.1.4.3. Be on site for fewer than 180 consecutive days;

- 5.8.2.1.4.4. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
- 5.8.2.1.4.5. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
- 5.8.2.1.4.5.1. Provide a minimum of two openings on different walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. If there are multiple enclosed areas, each area must have openings in its exterior walls;
- 5.8.2.1.4.5.2. The bottom of each opening must be no more than one foot above the higher of the interior or exterior grade immediately under the opening. Only the portions of openings that are below the base flood elevation (BFE) can be counted towards the required net open area;
- 5.8.2.1.4.5.3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions; and
- 5.8.2.1.4.5.4. Fill placed around foundation walls must be graded so that the grade inside the enclosed area is equal to or higher than the adjacent grade outside the building on at least one side of the building.
- 5.8.2.1.4.6. Hazardous velocities. Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exists. If flood velocities are excessive (greater than five feet per second), foundation systems other than solid foundation walls should be considered so that obstructions to damaging flood flows are minimized.
- 5.8.2.1.4.7. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
- 5.8.2.1.4.8. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, except to enclose a single storage area and must be void of utilities except for essential lighting as required, and cannot be temperature controlled. One wet location switch and/or outlet connected to a ground fault interrupt breaker may be installed below the required lowest floor elevation specified in subsections (1), (2) and (3) of this section.
- 5.8.2.1.4.9. All construction materials below the required lowest floor elevation specified in subsections (1), (2) and (3) of this section shall be of flood-resistant materials.
- 5.8.2.1.5. *Temporary development.* Certain types of structures (e.g., fruit stands, construction site offices, portable toilets, etc.) may be situated temporarily on flood-prone property without having to comply with the elevation or floodproofing criteria of subsections (1) and (2) of this section respectively, provided that the following criteria are met:
- 5.8.2.1.5.1. All applicants must submit to the county administrator or his designee, prior to the issuance of the development permit, a written plan for the removal of any temporary structures or development in the event of a hurricane or flash flood warning notification. The plan shall be reviewed and approved in writing, and must include the following information:
- 5.8.2.1.5.1.1. A specified time for which the temporary use will be permitted;
- 5.8.2.1.5.1.2. The name, address and phone number of the individual responsible for the removal of temporary structures or development;

- 5.8.2.1.5.1.3. The period prior to the event at which any structures will be removed (i.e., a minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
- 5.8.2.1.5.1.4. A copy of the contract or other suitable instrument with a trucking company to ensure the availability of removal equipment when needed;
- 5.8.2.1.5.1.5. Designation, accompanied by documentation, of a location outside the floodplain to which any temporary structure will be moved;
- 5.8.2.1.5.1.6. A determination of permanent structures which would be adversely affected by increased flooding upstream or downstream, and a method for covering this liability, such as a performance bond: and
- 5.8.2.1.5.1.7. A plan to restore the area to its natural condition once the temporary permit expires or the temporary use is terminated, whichever is first.
- 5.8.2.1.5.2. The structure is mobile or can be made so and is capable of being removed from the site with a maximum of four hours warning.
- 5.8.2.1.5.3. The structure will not remain on the property for more than 180 days.
- 5.8.2.1.6. Accessory structures. An accessory structure or garage, the cost of which is greater than \$3,000.00, must comply with the elevated structure requirements of subsections (2) and (5) of this section. When accessory structures of \$3,000.00 or less are to be placed in the floodplain, the following criteria shall be met:
- 5.8.2.1.6.1. Accessory structures shall not be used for human habitation (including work, sleeping, living, cooking or restroom areas);
- 5.8.2.1.6.2. Accessory structures shall be designed to have low flood damage potential;
- 5.8.2.1.6.3. Accessory structures shall be constructed and placed on the building site to offer the minimum resistance to the flow of floodwaters;
- 5.8.2.1.6.4. Accessory structures shall be firmly anchored to prevent flotation, collapse or lateral movement of the structure;
- 5.8.2.1.6.5. Service facilities such as electrical and heating equipment shall be installed in accordance with section 18-181(4); and
- 5.8.2.1.6.6. Openings to relieve hydrostatic pressure during a flood shall be provided below base flood elevation in conformance with subsection (5) of this section.
- 5.8.2.1.7. Floodways. Located within areas of special flood hazard established in section 18-134 are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris and potential projectiles, and has erosion potential. The following provisions shall apply within such areas:
- 5.8.2.1.7.1. No encroachments, including fill, new construction, substantial improvements, additions, and other developments shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood. Such certification and technical data shall be presented to the county administrator or his designee.
- 5.8.2.1.7.2. If subsection (8)a. of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this division.

- 5.8.2.1.7.3. Stream crossings for any purpose (i.e., timber harvesting operations), if temporary, shall be permitted in accordance with section 18-182(6). Otherwise, the development shall comply with all applicable flood hazard reduction provisions of division 3 of this article.
- 5.8.2.1.7.4. No manufactured homes shall be permitted, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and the elevation standards of subsection (3) of this section are met.
- 5.8.2.1.7.5. Permissible uses within floodways may include general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife, and related uses. In addition, lawns, gardens, play areas, picnic grounds and hiking and horseback riding trails are acceptable uses, if they do not employ structures or fill. Substantial development of a permissible use may require a no-impact certification. The uses listed in this subsection are permissible only if and to the extent that they do not cause any increase in base flood elevations.
- 5.8.2.1.8. *Fill.* Fill is discouraged because storage capacity is removed from floodplains. Elevating buildings by other methods must be considered. An applicant shall demonstrate that fill is the only alternative to raising the building to at least one foot above the base flood elevation, and that the amount of fill used will not affect the flood storage capacity or adversely affect adjacent properties. The following provisions shall apply to all fill placed in the special flood hazard area:
- 5.8.2.1.8.1. Fill may not be placed in the floodway unless it is in accordance with section 18-183(1);
- 5.8.2.1.8.2. Fill may not be placed in tidal or nontidal wetlands without the required state and federal permits;
- 5.8.2.1.8.3. Fill must consist of soil and rock materials only. A registered professional geotechnical engineer may use dredged material as fill only upon certification of suitability. Landfills, rubble fills, dumps and sanitary fills are not permitted in the floodplain;
- 5.8.2.1.8.4. Fill used to support structures must comply with ASTM Standard D-698, and its suitability to support structures certified by a registered professional engineer;
- 5.8.2.1.8.5. Fill slopes shall be no greater than two horizontal measure to one vertical measure. Flatter slopes may be required where velocities may result in erosion; and
- 5.8.2.1.8.6. The use of fill shall not increase flooding or cause drainage problems on neighboring properties. (Ord. No. 10-11-635, § 156.41, 2-25-2011)

Sec. 5.8.3. - Standards for streams without established base flood elevations and/or floodways.

- 5.8.3.1 Located within the areas of special flood hazard established in section 18-134 are small streams where no base flood data has been provided or where no floodways have been identified. The following provisions apply within such areas:
- 5.8.3.1.1. No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within 100 feet of the stream bank unless certification with supporting technical data by a registered, professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- 5.8.3.1.2. If subsection 5.8.3.1.1 of this section is satisfied and base flood elevation data is available from other sources, all new construction and substantial improvements within

such areas shall comply with all applicable flood hazard provisions of this division and shall be elevated or floodproofed in accordance with elevations established in accordance with section 18-157(10). Data from preliminary, draft, and final flood insurance studies constitutes best available data. If an appeal is pending on the study in accordance with 44 CFR 67.5 and 67.6, the data does not have to be used.

- 5.8.3.1.3. When base flood elevation data is not available from a federal, state, or other source, one of the following methods for determining BFE's listed below refer to FEMA's manual *Managing Floodplain Development in Approximate Zone A Areas* .
- 5.8.3.1.3.1. Contour interpolation.
- 5.8.3.1.3.1.1. Superimpose approximate zone A boundaries onto a topographic map and estimate a BFE.
- 5.8.3.1.3.1.2. Add one-half of the contour intervals of the topographic map that is used to the BFF.
- 5.8.3.1.3.2. Data extrapolation. A BFE can be determined if a site within 500 feet upstream of a reach of a stream reach for which a 100-year profile has been computed by detailed methods, and the floodplain and channel bottom slope characteristics are relatively similar to the downstream reaches.
- 5.8.3.1.3.3. Hydrologic and hydraulic calculations. Perform hydrologic and hydraulic calculations to determine BFE's using FEMA-approved methods and software. The methods include, but are not limited to, the following:
- 5.8.3.1.3.3.1. HEC-RAS 3.1.1 and up
- 5.8.3.1.3.3.2. HEC-1 4.0.1 and up
- 5.8.3.1.3.3.3. HEC-2 4.6.2
- 5.8.3.1.3.3.4. HEC-HMS 1.1 and up
- 5.8.3.1.3.3.5. FLO-2D
- 5.8.3.1.3.3.6. QUICK-2
- 5.8.3.1.3.3.7. SFD
- 5.8.3.1.3.3.8. WSPRO
- 5.8.3.1.3.3.9. (Ord. No. 10-11-635, § 156.42, 2-25-2011)

Sec. 5.8.4. - Standards for subdivision proposals.

- 5.8.4.1 All subdivision proposals shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations.
- 5.8.4.1.1. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage. An access road at or above the base flood elevation shall be provided to allow emergency access during flood conditions;
- 5.8.4.1.2. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- 5.8.4.1.3. Base flood elevation data shall be provided for subdivision proposals and other proposed development, which is greater than the lesser of five lots or five acres. Development of detailed floodway data will be required should the applicant wish to appeal the setback requirements of section 18-183(1). (Ord. No. 10-11-635, § 156.53, 2-25-2011)

Sec. 5.8.5. - Standards for areas of shallow flooding (AO zones).

- 5.8.5.1 Located within the areas of special flood hazard established in section 18-134 are areas designated as shallow flooding. The following provisions shall apply within such areas:
- 5.8.5.1.1. All new construction and substantial improvements of residential structures shall have the lowest floor elevated to the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least three feet above the highest adjacent grade.
- 5.8.5.1.2. All new construction and substantial improvements of nonresidential structures shall:
- 5.8.5.1.2.1. Have the lowest floor elevated to the depth number specified on the flood insurance rate map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor shall be elevated at least three feet above the highest adjacent grade: or
- 5.8.5.1.2.2. Be completely floodproofed together with attendant utility and sanitary facilities to or above that level so that any space below that level is watertight with walls impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. (Ord. No. 10-11-635, § 156.54, 2-25-2011)

5.8.5.1.3. Reserved.

ARTICLE 5.9. - FLOOOD DAMAGE PREVENTION; APPEALS AND VARIANCES

Sec. 5.9.1. - Sec. 18-201. - Establishment of appeal board.

The county building code board of adjustments and appeals as established by county council shall hear and decide requests for variances from the requirements of this article. (Ord. No. 10-11-635, § 156.50, 2-25-2011)

Sec. 5.9.2. - Right to appeal.

Any person aggrieved by the decision of the appeal board or any party of interest may appeal such decision to the circuit court. (Ord. No. 10-11-635, § 156.51, 2-25-2011)

5.9.2.1 Historic structures.

Variances may be issued for the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure. (Ord. No. 10-11-635, § 156.52, 2-25-2011)

5.9.2.2 Agricultural structures.

Variances may be issued to wet floodproof an agricultural structure in accordance with Technical Bulletin 7-93, Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program, document number FIA-TB-7, dated 12/93, and available from the Federal Emergency Management Agency. In order to minimize flood damages during the base flood and the threat to public health and safety, the structure must meet all of the conditions and considerations of section 18-208(4), this section and the following standards:

5.9.2.2.1. Use of the structure must be limited to agricultural purposes as listed below:

- 5.9.2.2.1.1. Pole frame buildings with open or closed sides used exclusively for the storage of farm machinery and equipment;
- 5.9.2.2.1.2. Steel grain bins and steel frame corn cribs;
- 5.9.2.2.1.3. General-purpose barns for the temporary feeding of livestock, which are open on at least one side;
- 5.9.2.2.1.4. For livestock confinement buildings, poultry houses, dairy operations and similar livestock operations, variances may not be issued for structures, which were substantially damaged. New construction or substantial improvement of such structures must meet the elevation requirements of section 18-182(2); and
- 5.9.2.2.1.5. Detached garages and storage sheds solely used for parking and limited storage in connection with agricultural uses only, which are no greater than 400 square feet in area.
- 5.9.2.2.2. The agricultural structure must be built or rebuilt, in the case of an existing building, which is substantially damaged, with flood-resistant materials for the exterior and interior building components and elements below the base flood elevation;
- 5.9.2.2.3. The agricultural structure must be adequately anchored to prevent flotation, collapse or lateral movement. All of the structure's components must be capable of resisting specific flood-related forces including hydrostatic, buoyancy, hydrodynamic, and debris impact forces. Where flood velocities exceed five feet per second, fast-flowing floodwaters can exert considerable pressure on the building's enclosure walls or foundation walls;
- 5.9.2.2.4. The agricultural structure must meet the venting requirement of section 18-182(5)a;
- 5.9.2.2.5. Any mechanical, electrical or other utility equipment must be located above the base flood elevation so that they are contained within a watertight, floodproofed enclosure, which is capable of resisting damage during flood conditions. The structure must comply with sections 18-181(4) and 18-182(1), (2);
- 5.9.2.2.6. The agricultural structure must comply with the floodway encroachment provisions of section 18-182(8); and
- 5.9.2.2.7. Major equipment, machinery, or other contents must be protected. Such protection may include protective watertight floodproofed areas within the building, the use of equipment hoists for readily elevating contents, permanently elevating contents on pedestals or shelves above the base flood elevation or determining that property owners can safely remove contents without risk to lives and that the contents will be located to a specified site out of the floodplain in accordance with the temporary development provisions of section 18-182(6). (Ord. No. 10-11-635, § 156.53, 2-25-2011)

Sec. 5.9.3. - Sec. 18-205. - Considerations.

In passing upon such applications, the board of appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:

- 5.9.3.1 The danger that materials may be swept onto other lands to the injury of others;
- 5.9.3.2 The danger to life and property due to flooding or erosion damage, and the safety of access to the property in times of flood for ordinary and emergency vehicles;
- 5.9.3.3 The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- 5.9.3.4 The importance of the services provided by the proposed facility to the community;

- 5.9.3.5 The necessity to the facility of a waterfront location, where applicable;
- 5.9.3.6 The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- 5.9.3.7 The compatibility of the proposed use with existing and anticipated development, and the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- 5.9.3.8 The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;
- 5.9.3.9 The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges; and
- 5.9.3.10 Agricultural structures must be located in wide, expansive floodplain areas, where no other alternative location for the agricultural structure exists. The applicant must demonstrate that the entire farm acreage, consisting of a contiguous parcel of land on which the structure is to be located, must be in the special flood hazard area and no other alternative locations for the structure are available. (Ord. No. 10-11-635, § 156.54, 2-25-2011)

Sec. 5.9.4. - Findings.

Findings listed in section 18-205 shall be submitted to the appeal board, in writing, and included in the application for a variance. Additionally, comments from the department of natural resources, land, water and conservation division state coordinator's office must be taken into account and included in the permit file. (Ord. No. 10-11-635, § 156.55, 2-25-2011)

Sec. 5.9.5. - Designated floodways.

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result. (Ord. No. 10-11-635, § 156.56, 2-25-2011)

Commented [JF2]: Suggest a revised text rather than saying "must" here

Sec. 5.9.6. - Conditions.

Upon consideration of the factors listed in this division and the purposes of this article, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article. The following conditions shall apply to all variances:

- 5.9.6.1 The appeal board shall not issue a variance that will enable a structure to remain in violation of other federal, state, or local laws, regulations or codes.
- 5.9.6.2 The appeal board shall only issue a variance upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 5.9.6.3 The appeal board shall issue a variance only upon:
- 5.9.6.3.1. A showing of good and sufficient cause.
- 5.9.6.3.2. A determination that failure to grant the variance would result in an exceptional hardship.
- 5.9.6.3.3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or codes.
- 5.9.6.4 Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and a written statement that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. Such notification shall be maintained with a record of all variance actions.
- 5.9.6.5 The county administrator or his designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- 5.9.6.6 The appeal board shall not issue a variance for unpermitted development or other development that does not comply with the provisions of this article. Violations shall be corrected in accordance with section 18-161(e). (Ord. No. 10-11-635, § 156.57, 2-25-2011)

5.9.6.7 Reserved.

ARTICLE 5.10. - FLOOD DAMAGE PREVENTION; LEGAL STATUS PROVISIONS

Sec. 5.10.1. - Effect upon outstanding building permits.

5.10.1.1 Nothing herein contained shall require any change in the plans, construction, size or designated use of any building, structure or part thereof for which the chief building inspector or his authorized agents has granted a building permit before the date this article is adopted. However, that when construction is not begun under such outstanding permit within a period of 60 days subsequent to the adoption of the ordinance from which this article is derived, construction or use shall be in conformity with the provisions of this article. (Ord. No. 10-11-635, § 156.61, 2-25-2011; Ord. No. 10-11-636, § 1(156.60), 4-5-2011)

Sec. 5.10.2. - Enforcement.

5.10.2.1 All enforcement procedures, remedies, legal and equitable, processes and penalties provided in the enabling statutes for local government code violations including summons, injunctions, mandamus, stop orders and warrants and other applicable provisions of S.C. Code 1976, §§ 56-7-80 et seq. and 6-29-950(a) et seq. are hereby adopted and incorporated by reference as if fully set forth in this section. In addition to any applicable civil penalties, any person who violates any provision of this Code shall be guilty of a misdemeanor and, upon

conviction, shall be sentenced to the penalties within the jurisdiction of the magistrate court. Each day a violation exists shall constitute a new and separate offense.

5.10.2.2 The county administrator or his designee is authorized to prescribe and approve such administrative policies and procedures, including forms, as he may deem appropriate for the proper administration and enforcement of this article. (Ord. No. 10-11-635, § 156.63, 2-25-2011; Ord. No. 10-11-636, § 1(156.61), 4-5-2011