

**STATE OF SOUTH CAROLINA****ORDINANCE NO. 10-11-635****COUNTY OF EDGEFIELD**

*An Ordinance to add Chapter 156, Flood Damage Prevention to the Edgefield County Code, "An Ordinance Establishing Regulations Designed To Promote The Public Health, Safety And General Welfare Of Edgefield County's Citizenry In The Event Of An Inundation Which Poses Loss Of Life, Property, Disruption Of Commerce And Governmental Services, Extraordinary Public Expenditures Of Flood Protection And Relief, And Impairment Of The Tax Base, All Of Which Adversely Affect The Public Health, Safety, And General Welfare"*

**WHEREAS**, the flood hazard areas of Edgefield County, South Carolina are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

**WHEREAS**, furthermore, these flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

**THEREFORE**, the Edgefield County Council does ordain that the purpose of this ordinance, within the areas of jurisdiction, to protect human life and health, minimize property damage, and encourage appropriate construction practices to minimize public and private losses due to flood conditions by requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. Uses of the floodplain which are dangerous to health, safety, and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion are restricted or prohibited. These provisions attempt to control the alteration of natural floodplains, stream channels and natural protective barriers, which are involved in the accommodation of floodwaters, and control filling, grading, dredging and other development, which may increase flood damage or erosion. Additionally, the ordinance prevents or regulates the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

**ARTICLE I. OBJECTIVES****Section 156.10. Objectives**

The objectives of this chapter are to protect human life and health, 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 to ensure that potential homebuyers are

notified that property is in a flood area. The provisions of the chapter 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 chapter is to minimize expenditure of public money for costly flood control projects and rescue and relief efforts associated with flooding.

#### **Section 156.11. Floodplains Are an Important Asset to the Community**

They 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.

#### **Section 156.12. Lands to Which this Chapter Applies**

This chapter shall apply to all areas of special flood hazard within the jurisdiction of unincorporated Edgefield County, South Carolina as identified by the Federal Emergency Management Agency in its Flood Insurance Study, dated March 3, 2011 with accompanying maps and other supporting data, which are hereby adopted by reference and declared a part of this chapter.

#### **Section 156.13. Development Permit Requirement**

A Flood Development Permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities.

#### **Section 156.14. Compliance**

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this chapter and other applicable regulations.

#### **Section 156.15. Interpretations**

In the interpretation and application of this chapter all provisions shall be considered as minimum requirements, (Intent: to be construed in favor of the governing body), and deemed neither to limit nor repeal any other powers granted under State law. This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

#### **Section 156.16. Partial Invalidity and Severability**

If any part of this chapter is declared invalid, the remainder of the chapter shall not be affected and shall remain in force.

### **Section 156.17. Warning and Disclaimer of Liability**

The degree of flood protection required by this chapter 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 man-made or natural causes. This chapter 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 chapter shall not create liability on the part of Edgefield County or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

## **ARTICLE II. DEFINITIONS**

### **Section 156.20. General**

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

### **Section 156.21. Definitions**

**(A) - Accessory Structure** - 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.

**(B) - Addition to an existing building** - 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 load-bearing wall is provided between the addition and the existing building, the addition(s) shall be considered a separate building and must comply with the standards for new construction.

**(C) - Agricultural structure** - 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 chapter.

**(D) - Appeal** - a request for a review of the local administrator's interpretation of any provision of this chapter.

**(E) - Base flood** - the flood having a one percent chance of being equaled or exceeded in any given year.

**(F) - Basement** - means any enclosed area of a building, which is below grade on all sides.

**(G) - Building** - any structure built for support, shelter or enclosure for any occupancy or storage.

**(H) - Development** - any man-made 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.

**(I) - Existing manufactured home park or** - 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.

**(J) - Flood** - 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.

**(K) - Flood Hazard Boundary Map (FHBM)** - 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.

**(L) - Flood Insurance Study** - 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.

**(M) - Flood proofing** - any combination of structural or non-structural 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.

**(N) - Floodway** - 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.

**(O) - Historic Structure** - any structure that is:

(1) 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; or

(2) 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; or

(3) individually listed on a State inventory of historic places; or

(4) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified

(a) by an approved State program as determined by the Secretary of Interior, or

(b) directly by the Secretary of Interior in states without approved programs.

(5) Some structures or districts listed on the State or local inventories MAY NOT be "Historic" as cited above, 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.

**(P) - Limited storage** - 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 156.41(E) of this chapter.

**(Q) - Lowest Floor** - 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 chapter.

**(R) - Manufactured home** - 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".

**(S) - Manufactured home park** - a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**(T) - New construction** - 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.

**(U) - New manufactured home park** - 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.

**(V) - Recreational vehicle** - a vehicle that is:

- (1) built on a single chassis; and
- (2) 400 square feet or less when measured at the largest horizontal projection; and
- (3) designed to be self-propelled or permanently towable by a light duty truck; and
- (4) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use.

**(W) - 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.

**(X) - Structure** - a walled and roofed building, a manufactured home, including a gas or liquid storage tank, or other man-made facility or infrastructure that is principally above ground.

**(Y) - Substantial improvement** - 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:

- (1) 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,
- (2) any alteration of a historic structure provided that the alteration would not preclude the structure's continued designation as a historic structure.
- (3) 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.

**(Z) - Variance** - the grant of relief from a term or terms of this chapter.

**(AA) - Violation** – the failure of a structure or other development to be fully compliant with these regulations.

### **ARTICLE III. ADMINISTRATION**

#### **Section 156.30. Designation of Local Administrator**

The Edgefield County Administrator or his/her designee is hereby appointed to administer and implement the provisions of this chapter.

#### **Section 156.31. Adoption of Letter of Map Revisions (LOMR)**

All LOMRs that are issued in the areas identified in Section 156.12 of this chapter are hereby adopted.

#### **Section 156.32. Designation of Party Responsible for Biennial Report**

The Edgefield County Administrator or his/her designee is hereby designated as the party responsible to submit the Biennial Report to FEMA.

#### **Section 156.33. Development Permit and Certification Requirements**

Application for a Development Permit *within a 100-year Floodplain* located within the

unincorporated areas of Edgefield County shall be made to the County Administrator or his/her designee on forms furnished by him or her 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:

**(A)** - 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 156.34(A) or Sections 156.42 and 156.53. The plot plan must be prepared by or under the direct supervision of a registered land, surveyor or professional engineer and certified by same.

**(B)** - The plot plan required by Section 156.34(A) must show the floodway, if any, as identified by the Federal Emergency Management Agency or the floodway identified pursuant to either Section 3156.34(A) or Sections 156.42 and 156.53.

**(C)** - Where base flood elevation data is provided as set forth in Section 156.12 or Section 156.34(A), the application for a development permit within the flood hazard area shall show:

**(1)** - the elevation (in relation to mean sea level) of the lowest floor of all new and substantially improved structures, and

**(2)** - if the structure will be floodproofed in accordance with Section 156.41(B), the elevation (in relation to mean sea level) to which the structure will be floodproofed.

**(D)** - If no base flood elevation data is provided as set forth in Section 156.12 or Section 304.10, the application for a development permit must show construction of the lowest floor at least three (3) feet above the highest adjacent grade.

**(E)** - Where any watercourse will be altered or relocated as a result of proposed development, the application for a development permit shall include:

**(1)** a description of the extent of watercourse alteration or relocation;

**(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,

**(3)** a map showing the location of the proposed watercourse alteration or relocation.

(F) - When a structure is floodproofed, the applicant shall provide certification from a registered, professional engineer or architect that the non-residential, floodproofed structure meets the floodproofing criteria in Section 156.41(B).

(G) - 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.

(H) - Upon completion of the development a registered professional engineer, land surveyor or architect, shall certify that Sections 156.33 (F), (G) and (H) are built in accordance with the submitted plans and previous pre-development certifications.

(I) - 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 with the Federal Emergency Management Agency prior to actual construction.

(J) - Within 60 days of completion of an alteration of a watercourse, referenced in Section 156.33(E), the applicant shall submit as-built certification, by a registered professional engineer, to the Federal Emergency Management Agency.

#### **Section 156.34. Duties and Responsibilities of the Local Administrator**

Duties of the local administrator shall include, but not be limited to:

(A) – Implement a review system in order to assure all development permits meet the requirements of this chapter.

(B) - Ensure that the proposed development has received permits from those governmental agencies from which approval is required by Federal or State law, including section 156.54 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334.

(C) - Notify adjacent communities and the South Carolina 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.

**(D)** - In addition to the notifications required in Section 156.34(C ), 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.

**(E)** - Prevent encroachments within floodways unless the certification and flood hazard reduction provisions of Article IV are met.

**(F)** - Obtain and review actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved structures.

**(G)** - 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 156.33(G).

**(H)** - When flood proofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with Section 156.41(B).

**(I)** - 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), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

**(J)** - When base flood elevation data or floodway data has not been provided in accordance with Section 156.12, obtain, review and reasonably utilize 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 chapter. Data from preliminary, draft, and final Flood Insurance Studies constitutes best available data from a federal, state or other source. If an appeal is pending on the study in accordance with 44 CFR Ch. 1, Part 67.5 and 67.6, the data does not have to be used.

**(K)** - When the exact location of boundaries of the areas special flood hazards 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.

**(L)** - Make on-site inspections of projects in accordance with Section 156.35.

**(M)** - Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with Section 156.35.

**(N)** - Maintain all records pertaining to the administration of this chapter and make these records available for public inspection.

### **Section 156.35. Administrative Procedures**

**(A) - Inspections of Work in Progress:** As the work pursuant to a permit progresses, the County Administrator or his/her 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/her 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.

**(B) - Stop-Work Orders:** Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this chapter, the County Administrator or his/her 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.

**(C) - Revocation of Permits:** The County Administrator or his/her 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 any substantial departure from the approved application, plans or specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any permit mistakenly issued in violation of an applicable State or local law may also be revoked.

**(D) - Periodic Inspections:** The County Administrator or his/her 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.

**(E) - Violations to be Corrected:** When the County Administrator or his/her 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.

**(F) - 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/her designee shall give him written notice, by certified or registered mail to his last known address or by personal service, that:

(1) - the building or property is in violation of the Flood Damage Prevention Code;

(2) - a hearing will be held before the County Administrator or his/her designee at a designated place and time, not later than 10 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

(3) - following the hearing, the County Administrator or his/her designee may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.

**(G) - Order to Take Corrective Action:** Upon a hearing, the County Administrator or his/her designee finds the building or development in violation of the Flood Damage Prevention Code, he/she 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, the County Administrator or his/her designee find that there is imminent danger to life or other property, he/she may order that corrective action be taken in such lesser period as may be feasible.

**(H) - 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/her designee and the clerk within 10 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.

**(I) - 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.

#### **ARTICLE IV. PROVISIONS FOR FLOOD HAZARD REDUCTION**

##### **Section 156.40. 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:

- (A) - All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (B) - All new construction and substantial improvements shall be constructed with flood resistant materials and utility equipment resistant to flood damage;
- (C) - All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages;
- (D) - 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 shower heads, 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;
- (E) - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (F) - 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;
- (G) - On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and,
- (H) - Any alteration, repair, reconstruction or improvement to a structure, which complies with the provisions of this chapter, shall meet the requirements of "new construction" as contained in this chapter. This includes post-FIRM development and structures.
- (I) - Non-Conforming Buildings or Uses. Non-conforming buildings or uses may not be enlarged, replaced or rebuilt unless such enlargement or reconstruction is in conformance with the provisions of this chapter. However, this chapter 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 chapter.
- (J) - American with Disabilities Act (ADA). A building must meet the specific

standards for floodplain construction outlined in Section 156.41, 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.

### **Section 156.41. Specific Standards**

In all areas of special flood hazard where base flood elevation data has been provided, as set forth in Section 156.12 or Section 156.34(A), the following provisions are required:

**(A) - 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 Section 156.41(E).

**(B) - Non-Residential Construction.** New construction or substantial improvement of any commercial, industrial or non-residential 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 Section 156.41(E). 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 Sections 156.33(G) and (I). A variance may be considered for wet-floodproofing agricultural structures in accordance with the criteria outlined in Section 156.53 of this chapter. Agricultural structures not meeting the criteria of Section 156.53 must meet the non-residential construction standards and all other applicable provisions of this chapter. Structures, which are flood proofed, are required to have an approved maintenance plan with an annual exercise. The maintenance plan must be approved by the County Administrator or his/her designee and notification of the annual exercise shall be provided to same.

**(C) - Manufactured Homes**

**(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 sub-division in which manufactured homes incurred "substantial damage" as the result of a flood shall be elevated on a permanent foundations. 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.

(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 Section 156.41(C)(1) 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.

(3) - Manufactured homes shall be anchored to prevent flotation, collapse or lateral movement. For the purpose of this requirement, manufactured homes must be anchored to resist flotation, collapse or lateral movement in accordance with Section 40-29-10 of the *South Carolina Manufactured Housing Board Regulations*, as amended. 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.

(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/her designee and the Emergency Preparedness Director.

**(D) - 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 be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use, or meet the requirements of Section 156.33 and Sections 156.40 and 156.40(C).

**(E) - Elevated Buildings.** New construction or substantial improvements of elevated buildings that include fully enclosed areas that are usable solely for the parking of vehicles, building access, or limited storage in an area other than a basement, and which are subject to flooding shall be designed to preclude finished space and be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

(1) - Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

(a) - 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.

**(b)** - 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.

**(c)** - 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,

**(d)** - 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.

**(2)** - 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 foundations walls should be considered so that obstructions to damaging flood flows are minimized.

**(3)** - 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).

**(4)** - 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 Sections 156.41(A), (B) and (C).

**(5)** - All construction materials below the required lowest floor elevation specified in Sections 156.41(A), (B) and (C) shall be of flood resistant materials.

**(F)** - 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 Section 156.41(A) and (B) respectively, provided that the following criteria are met:

**(1)** - All applicants must submit to the County Administrator or his/her 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:

- (a) - a specified time for which the temporary use will be permitted;
- (b) - the name, address and phone number of the individual responsible for the removal of temporary structures or development;
- (c) - the period prior to the event at which any structures will be removed (i.e. minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
- (d) - a copy of the contract or other suitable instrument with a trucking company to insure the availability of removal equipment when needed;
- (e) - designation, accompanied by documentation, of a location outside the floodplain to which any temporary structure will be moved;
- (f) - 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,
- (g) - a plan to restore the area to its natural condition once the temporary permit expires or the temporary use is terminated, whichever is first.

(2) - The structure is mobile or can be made so and is capable of being removed from the site with a maximum of four (4) hours warning.

(3) - The structure will not remain on the property for more than 180 days.

**(G) - 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 Sections 156.41(B) and (E). When accessory structures of \$3000 or less are to be placed in the floodplain, the following criteria shall be met:

- (1) - Accessory structures shall not be used for human habitation (including work, sleeping, living, cooking or restroom areas); and
- (2) - Accessory structures shall be designed to have low flood damage potential; and
- (3) - Accessory structures shall be constructed and placed on the building site to offer the minimum resistance to the flow of floodwaters; and
- (4) - Accessory structures shall be firmly anchored to prevent flotation, collapse or lateral movement of the structure; and

- (5) - Service facilities such as electrical and heating equipment shall be installed in accordance with Section 156.40 (D); and
- (6) - Openings to relieve hydrostatic pressure during a flood shall be provided below base flood elevation in conformance with Section 156.41(E).
- (H) - Floodways. Located within areas of special flood hazard established in Section 156.12, 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:
- (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/her designee.
- (2) - If Section 156.41(H)(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article IV.
- (3) - Stream crossings for any purpose (i.e., timber harvesting operations), if temporary, shall be permitted in accordance with Section 156.41(F). Otherwise, the development shall comply with all applicable flood hazard reduction provisions of Article IV.
- (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 Section 156.41(C) are met.
- (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.
- (I) - 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:

- (1) - Fill may not be placed in the floodway unless it is in accordance with Section 156.42(A);
- (2) - Fill may not be placed in tidal or nontidal wetlands without the required State and federal permits;
- (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;
- (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) - Fill slopes shall be no greater than two horizontal to one vertical. Flatter slopes may be required where velocities may result in erosion; and,
- (6) - The use of fill shall not increase flooding or cause drainage problems on neighboring properties.

#### **Section 156.42. Standards for Streams without Established Base Flood Elevations and/or Floodways**

Located within the areas of special flood hazard established in Section 156.12, 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:

- (A) - 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.
- (B) - If Section 156.42(A) 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 code provisions of Article IV and shall be elevated or floodproofed in accordance with elevations established in accordance with Section 156.34(J). 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 Ch. 1, Part 67.5 and 67.6, the data does not have to be used.

(C) - 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*.

(1) Contour Interpolation

(a) Superimpose approximate Zone A boundaries onto a topographic map and estimate a BFE.

(b) Add one-half of the contour intervals of the topographic map that is used to the BFE.

(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.

(3) Hydrologic and Hydraulic Calculations

Perform Hydrologic and Hydraulic Calculations to determine BFEs using FEMA approved methods and software. The methods include, but not limited to the following:

- |     |                      |
|-----|----------------------|
| (a) | HEC-RAS 3.1.1 and up |
| (b) | HEC-1 4.0.1 and up   |
| (c) | HEC-2 4.6.2          |
| (d) | HEC-HMS 1.1 and up   |
| (e) | FLO-2D               |
| (f) | QUICK-2              |
| (g) | SFD                  |
| (h) | WSPRO                |

**Section 156.53 Standards for Subdivision Proposals**

All subdivision proposals shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations.

(A) **403.1** - 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;

(B) **403.2** - All subdivision proposals shall have adequate drainage provided to

reduce exposure to flood hazards; and,

(C) **403.3** - 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 setbacks requirements of Section 156.42(A).

**Section 156.54 Standards for Areas of Shallow Flooding (AO Zones)**

Located within the areas of special flood hazard established in Section 156.12, are areas designated as shallow flooding. The following provisions shall apply within such areas:

(A) - 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 (3) feet above the highest adjacent grade.

(B) - All new construction and substantial improvements of non-residential structures shall:

(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 (3) feet above the highest adjacent grade; or,

(2) - be completely flood proofed 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.

**ARTICLE V. VARIANCE PROCEDURES**

**Section 156.50. Establishment of Appeal Board**

The Edgefield County Building Code Board of Adjustments and Appeals as established by Edgefield County Council shall hear and decide requests for variances from the requirements of this chapter.

**Section 156.51. 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.

**Section 156.52. Historic Structures**

Variations 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.

### **Section 156.53. Agricultural Structures**

Variations 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 156.57(D), this section and the following standards:

**(A)** - use of the structure must be limited to agricultural purposes as listed below:

**(1)** - pole frame buildings with open or closed sides used exclusively for the storage of farm machinery and equipment;

**(2)** - steel grain bins and steel frame corn cribs;

**(3)** - general-purpose barns for the temporary feeding of livestock, which are open on at least one side;

**(4)** - for livestock confinement buildings, poultry houses, dairy operations and similar livestock operations, variations 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 156.41(B) of this chapter; and,

**(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.

**(B)** - 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;

**(C)** - 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 5 feet per second, fast-flowing floodwaters can exert considerable pressure on the building's enclosure walls or foundation walls;

(D) - the agricultural structure must meet the venting requirement of Section 156.41(E)(1) of this chapter;

(E) - 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 Section 156.41(A), (B) 156.40(D) of this chapter;

(F) - the agricultural structure must comply with the floodway encroachment provisions of Section 156.41(H) of this chapter; and,

(G) - 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 156.41(F).

#### **Section 156.54. 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 chapter, and:

(A) - the danger that materials may be swept onto other lands to the injury of others;

(B) - 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;

(C) - the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(D) - the importance of the services provided by the proposed facility to the community;

(E) - the necessity to the facility of a waterfront location, where applicable;

(F) - the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(G) - 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;

(H) - 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;

(I) - 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,

(J) - 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.

### **Section 156.55. Findings**

Findings listed above 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.

### **Section 156.56. Floodways**

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

### **Section 156.57. Conditions**

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

(A) - The appeals 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.

(B) - The appeals board shall only issue a variance upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(C) - The appeals board shall issue a variance only upon a showing of good and sufficient cause and a determination that failure to grant the variance would result in an exceptional hardship. 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.

(D) - 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.

(E) - The County Administrator or his/her designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

(F) - The appeals board shall not issue a variance for unpermitted development or other development that does not comply with the provisions of this chapter. Violations shall be corrected in accordance with Section 156.35(E) of this chapter.

## **ARTICLE VI. LEGAL STATUS PROVISIONS**

### **Section 156.60. Effect on Rights and Liabilities under the Flood Damage Prevention Code**

### **Section 156.61. Effect upon Outstanding Building Permits**

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 by the before the date this chapter is adopted. However, that when construction is not begun under such outstanding permit within a period of sixty (60) days subsequent to adoption of this chapter, construction or use shall be in conformity with the provisions of this chapter.

### **Section 156.62. Effective Date**

This code shall become effective upon adoption

### **Section 156.63. Enforcement**

(A) - 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 Section 56-7-80, et seq. and Section 6-29-950(a), et seq., Code of Laws of South Carolina, 1976, as amended, are hereby adopted and incorporated by reference as if fully set forth herein. 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.

(B) - The County Administrator or his /her designee is authorized to prescribe and approve such administrative policies and procedures, including forms, as he or she may deem appropriate for the proper administration and enforcement of this chapter.

**APPROVED** by the Edgefield County Council at its regular meeting the \_\_\_\_\_ day of \_\_\_\_\_, 2011.

\_\_\_\_\_  
Dean Campbell, Chair

\_\_\_\_\_  
Genia Blackwell, Vice Chair

\_\_\_\_\_  
Willie C. Bright, Councilman

\_\_\_\_\_  
Norman Dorn, Councilman

\_\_\_\_\_  
Rodney Ashcraft, Councilman

**ATTEST**

\_\_\_\_\_  
Barbara R. Stark  
Clerk to Council

**APPROVED AS TO CONTENT**

\_\_\_\_\_  
Michael S. Medlock  
County Attorney