

## **Section 2.10 FHO, Flood Hazard Overlay District**

The Flood Hazard Overlay District includes (1) flood plains, (2) areas of shallow flooding, (3) areas of special flood hazard, and (4) floodways. The development of these areas, where shown on Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA) for Aiken County, may not occur where alternative locations exist, because of the inherent hazards and risks involved. Before a Building Permit and/or a Development Permit are issued, the applicant shall demonstrate that new structures cannot be located out of the Flood Hazard District. Where there is no alternative to a location in a Flood Hazard Overlay District, proposed development shall be regulated by the following.

### **Section 2.10.1 Findings of Fact**

(1) The special flood hazard areas of Aiken County 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.

(2) 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, flood-proofed, or otherwise unprotected from flood damages.

### **Section 2.10.2 Statement of Purpose**

It is the intent of this Section 2.10 to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(1) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights, or velocities;

(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

(4) Control filing, grading, dredging and other development which may increase erosion or flood damage; and

(5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

### **Section 2.10.3 Objectives**

(1) The objectives of this Section are:

(2) To protect human life and health;

(3) To minimize expenditure of public money for costly flood control projects;

(4) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(5) To minimize prolonged business interruptions;

(6) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in floodplains;

(7) To help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and

(8) To ensure that potential property buyers are notified that property is in a flood area.

### **Section 2.10.4 Lands to Which This Section Applies**

This Section 2.10 shall apply to all areas of special flood hazard within the unincorporated portions of Aiken County.

### **Section 2.10.5 Basis for Establishing Areas of Special Flood Hazard**

The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study, Aiken County, South Carolina, dated June 19, 2012, with accompanying maps and other supporting data, are adopted by reference and declared to be a part of this Chapter as if fully contained herein.

Upon annexation any special flood hazard areas identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study for the unincorporated areas of Aiken County, with accompanying map and other data are adopted by reference and declared part of this ordinance.

### **Section 2.10.6 Building Permits and/or Development Permits**

A Building Permit and/or a Development Permit shall be required in conformance with this Section 2.10 and with the provisions of Article 10 of this Chapter prior to the commencement of any development activities proposed to be located within areas of special flood hazard on the FEMA flood maps for Aiken County.

### **Section 2.10.7 Compliance**

No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this Section 2.10 and other applicable regulations.

### **Section 2.10.8 Abrogation and Greater Restrictions**

This Section 2.10 is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Section 2.10 and another ordinance conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

### **Section 2.10.9 Interpretation**

In the interpretation and application of this Section 2.10, all provisions shall be:

- (1) Considered as minimum requirements;

- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under State statutes or County ordinances.

(4) This section is intended to instruct a court or other adjudicatory body on how it must interpret the rest of the ordinance. It is instructive and does not grant other authority.

### **Section 2.10.10 Warning and Disclaimer of Liability**

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or used permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Aiken County Council or by any officer or employee thereof for any flood damages that result from reliance on this or any administrative decision lawfully made hereunder.

### **Section 2.10.11 Keeping of Records**

All records pertaining to the provisions of this Section 2.10 shall be maintained in the office of the Building Official in the County Planning & Development Department and shall be open for public inspection.

### **Section 2.10.12 Definitions**

Unless specifically defined below, words or phrases used in this Section shall be interpreted so as to give them the meaning they have in common usage and to give this Section 2.10 it's most reasonable application.

**Accessory Structure (Appurtenant Structure)** – structures that are 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. Accessory Structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

**Addition to an Existing Building** – any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

**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 ordinance.

**Appeal** – a request for a review of the local Floodplain Administrator's interpretation of any provision of this Section 2.10 or a request for a variance.

**Area of Shallow Flooding** – a designated AO or VO Zone on a community's flood insurance rate map (FIRM) with base flood depths from one (1) to three (3) 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.

**Area of Special Flood Hazard** – the land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year (or subject to a "100-year" flood).

**Base Flood** – the flood having a one (1) percent chance of being equaled or exceeded in any given year; also known as the 100-year flood.

**Basement** – any enclosed area that is below grade on all sides.

**Breakaway Wall** – a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

**Building** – any structure built for support, shelter, or enclosure for any occupancy, storage, or use.

**Building Official** – the Aiken County Building Official.

**Conditional Letter of Map Revision (CLOMR)** – this document is FEMA’s comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The letter does not revise an effective National Flood Insurance Program (NFIP) map. It indicates whether the project, if built as proposed, would be recognized by FEMA.

**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 gas/oil/propane storage facilities.

**Development** – any manmade change to improved or unimproved real estate, including, but not limited to, building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

**Elevated Building** – a non-basement building built to have the lowest floor elevated above the ground level by means of; solid foundation, perimeter walls, pilings, columns, piers, shear walls parallel to the flow of water.

**Executive Order 11988 (Floodplain Management)** – issued by President Carter in 1977, this order requires that no federally assisted activities be conducted in or have the potential to affect identified special flood hazard areas, unless there is no practicable alternative.

**Existing Construction** – any structure for which the “start of construction” commenced before August 26, 1977, the original effective date of this Section 2.10.

**Existing Manufactured Home Park or Subdivision** – 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) was completed before June 27, 1986, the effective date of this Section 2.10.

**Expansion to an Existing Manufactured Home Park or Subdivision** – 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 pads).

**Flood or Flooding** – a general and temporary condition of partial or complete inundation of normally-dry land areas from:

- i. The overflow of inland or tidal waters, and/or
- ii. The unusual and rapid accumulation of runoff of surface waters from any source.

**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.

**Flood Insurance Rate Map (FIRM)** – an official map of a community on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**Flood Insurance Study** – the official report provided by the Federal Emergency Management Agency which contains flood profiles as well as the flood boundary-floodway map and the water surface elevation of the base flood.

**Flood-Resistant Material** – 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 above-grade 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, *Flood Damage-Resistant Materials Requirements*, dated 8/08, and available from the Federal Emergency Management Agency, Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

**Floodplain Administrator** – the person responsible for administering this ordinance. The Aiken County Administrator and/or his designee is assigned this responsibility. The County Administrator assigns this duty to the Floodplain Manager as designated in Section 2.10.13.

**Floodway** – the channel of a river or other watercourse and the adjacent land areas that must be reserved from encroachment in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**Floor** – the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

**Freeboard** – a factor of safety usually expressed in feet above a flood level for purposes of flood plain management. “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 watershed.

**Functionally-dependent Facility** – a use which cannot be used for its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facility that are necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair facilities, but does not include long-term storage or related manufacturing facilities.

**Highest Adjacent Grade** – the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

**Historic Structure** – any structure that is:



1. listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
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;
3. individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  - a. by an approved State program as determined by the Secretary of the Interior; or
  - b. directly by the Secretary of the Interior in States without approved programs.

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 Department of the Interior (DOI). In order for these structures to meet National Flood Insurance Program (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 Department of Interior (DOI) historic structure criteria.

**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.

**Limited Storage** – an area used for storage and intended to be limited to incidental items that 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 2.10.18 (4) of this ordinance. If the area is located below the base flood elevation in a V, VE, and V1-V30 zone it must meet the requirements of Section 2.10.15 (3) of this ordinance.

**Lowest Adjacent Grade (LAG)** – is an elevation of the lowest ground surface that touches any deck support, exterior walls of a building or proposed building walls.

**Lowest Floor** – the lowest floor of the lowest enclosed area (including basement). An 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.

**Manufactured Home** – a structure transportable in one (1) 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 also includes park trailers, travel trailers, and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property. The term “manufactured home” does not include a “recreational vehicle”.

**Manufactured Home Park or Subdivision** – a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**Mean Sea Level** – means, for the purpose of this ordinance, the Nations Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, to which the base flood elevations shown on a community's Flood Insurance Rate Maps (FIRM) are shown.

**National Geodetic Vertical Datum (NGVD)** – as corrected in 1929, a vertical control used as a reference for establishing varying elevations within the floodplain. (Refer to “mean sea level,” above).

**New Construction** – any structure for which the “start of construction” commenced after June 27, 1986, the effective date of this Section 2.10.

**New Manufactured Home Park or Subdivision** – 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 on or after June 27, 1986, the effective date of this Section 2.10.

**Recreational Vehicle** – a vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light-duty truck; and (d) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

**Repetitive Loss** – a building covered by a contract for flood insurance that has incurred flood-related damages on 2 occasions during a 10 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% of the market value of the building at the time of each such flood event.

**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.

**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 one hundred eighty (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 street and/or walkways; nor does it include excavation for a basement, 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 a building, whether or not that alteration affects the external dimensions of the building.

**Structure** – a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank that is principally above ground, or other manmade facilities or infrastructures.

**Substantial Damage** – damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (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”.

**Substantial Improvement** – any repairs, reconstruction, rehabilitation, addition, or other improvements of a structure which cost equals or exceeds fifty (50) percent of the market value of the structure before the start of construction of the improvement. In the case of damage, the value of the building prior to the damage occurring. This term includes structures which have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either:

- (a) any project of improvement to a structure required to comply with existing health, sanitary, or safety code specifications which have been identified by the code enforcement official and which are solely necessary to assure safe living conditions or,
- (b) any alteration of historic structure, provided that the alteration will not preclude the structure’s designation as a historic structure.

Permits shall be cumulative for a period of five (5) 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.

**Substantially Improved Existing Manufactured Home Park or Subdivision** – an existing manufactured home park or subdivision where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repairs, reconstruction or improvement commenced.

**Variance** – a grant of relief to a person from the requirements of this Section 2.10 which permits construction in a manner otherwise prohibited by this Section 2.10 where specific enforcement would result in unnecessary hardship. (See Section 2.10.16.)

**Violation** – The failure of a structure or other development to be fully compliant with these regulations.

## **ADMINISTRATION**

### **Section 2.10.13 Designation of Building Official As Floodplain Manager**

The Building Official and/or Designee are designated as the Floodplain Manager to administer and implement the provisions of this Section.

### **Section 2.10.14 Adoption of Letter of Map Revisions (LOMR)**

All LOMRs that are issued in the areas identified in Section 24-2.10.5 of this ordinance are hereby adopted.

### **Section 2.10.15 Permit Procedures**

Application for a Building Permit and/or a Development Permit shall be made to the Building Official and/or Designee on forms furnished by him or her, prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or

proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Floodproofing Certification – 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 the non-residential construction requirements of Section-24-2.10.19.

(2) Certification During Construction – a lowest 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 local floodplain administrator 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 it. Any work done prior to submission of the certification shall be at the permit holder's risk. The local floodplain 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.

(3) As-Built Certification – Upon completion of the development a registered professional engineer, land surveyor or architect, in accordance with SC law, shall certify according to the requirements of Section 2.10.16 that the development is built in accordance with the submitted plans and previous pre-development certifications.

### **Section 2.10.16 Duties and Responsibilities of the Building Official**

A. Duties of the Building Official shall include, but not be limited to:

(1) **Permit Review** – Review all development permits to assure that the requirements of this ordinance have been satisfied.

**(2) Requirement of Federal and/or State Permits** – Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334.

**(3) Watercourse Alterations –**

a. 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.

b. In addition to the notifications required watercourse alterations per Section 24-2.10.16, 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 maintained. 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 inspections.

c. If the proposed project will modify 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 the start of construction.

d. Within 60 days of completion of an alteration of a watercourse, referenced in the certification requirements of Section 2.10.16, the applicant shall submit as-built certification by a registered professional engineer, to the Federal Emergency Management Agency.

**(4) Floodway Encroachments** – Prevent encroachments within floodways unless the certification and flood hazard reduction provisions of Section 24-2.10.16 are met.

**(5) Adjoining Floodplains** – Cooperate with neighboring communities with respect to the management of adjoining floodplains and/or flood – related erosion areas in order to prevent aggravation of existing hazards.

(6) **Notifying Adjacent Communities** – Notify adjacent communities prior to permitting substantial commercial developments and large subdivisions to be undertaken in areas of special flood hazard and/or flood –related erosion hazards.

(7) **Certification requirements** –

a. Obtain and review actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved structures, in accordance with administrative procedures outlined in Section 24-2.10.15.

b. Obtain the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed, in accordance with the floodproofing certification outline in Section 24-2.10.16.

c. When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the non-residential construction requirements outlined in Section 24-2.10.19 (2)

(8) **Map 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), 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.

(9) **Prevailing Authority** – Where a map boundary showing an area of special food hazard and field elevations disagree, the base flood elevations for flood protection elevations (as found on an elevation profile, floodway data table, etc.) shall prevail. The correct information should be submitted to FEMA as per the map maintenance activity requirements outlined in Section 24-2.10.19 (6).

(10) **Use of Best Available Data** – When base flood elevation data and floodway data has not been provided in accordance with Article I.D. obtain, review, and reasonably utilize best available base available base flood elevation data and floodway data available from a federal, state, or other source, including data developed pursuant to the standards for subdivision proposals outlined in Section 2.10.21, in order to administer the provisions of this ordinance. Data from preliminary, draft, and final Flood Insurance



Studies constitutes best available data from a federal, state, or other source. Data must be developed using hydraulic models meeting the minimum requirement of NFIP approved model. 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.

(11) **Special Flood Hazard Area/Topographic Boundaries Conflict** – When the exact location of boundaries of the areas special flood hazards conflict with the current, natural topography information at the site; the site information takes precedence when the lowest adjacent grade is at or above the BFE, the property owner may apply and be approved for a Letter of Map Amendment (LOMA) by FEMA. The local floodplain administrator in the permit file will maintain a copy of the Letter of Map Amendment issued from FEMA.

(12) **On-Site Inspections** – Make on-site inspections of projects in accordance with the administrative procedures outlined in Section 24-2.10.16 (B).

(13) **Records Maintenance** – Maintain all records pertaining to the administration of this ordinance and make these records available for public inspection.

(14) **Annexations and Detachments** – Notify the South Carolina Department of Natural Resources Land, Water, and Conservation Division, State Coordinator for the National Flood Insurance Program within six (6) months, of any annexations of detachments that include special flood hazard areas.

(15) **Federally Funded Development** – The President issued *Executive Order 11988, Floodplain Management May 1977*. E.O. 11988 directs federal agencies to assert a leadership role in reducing flood losses and losses to environmental values served by floodplains. Proposed developments must go through an eight-step review process. Evidence of compliance with the executive order must be submitted as part of the permit review process.

(16) **Substantial Damage Determination** – Perform an assessment of damage from any origin to the structure using FEMA's Residential Substantial Damage Estimator (RSDE) software to determine if the

damage equals or exceeds 50 percent of the market value of the structure before the damage occurred.

**(17) Substantial Improvement Determinations** – Perform an assessment of permit applications for improvements or repairs to be made to a building or structure that equals or exceeds 50 percent of the market value of the structure before the start of construction. Cost of work counted for determining if and when substantial improvement to a structure occurs 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.

*The market values shall be determined by one of the following methods:*

- a. The current assessed building value as determined by the County’s Assessor’s office or the value of an appraisal performed by a licensed appraiser at the expense of the owner within the past 6 months.
- b. One or more certified appraisals from a registered professional licensed appraiser in accordance with the laws of South Carolina. The appraisal shall indicate actual replacement value of the building or structure in its pre-improvement condition, *less the cost of site improvements and depreciation for functionality and obsolescence.*
- c. Real Estate purchase contract within 6 months prior to the date of the application for a permit.

## **B. Administrative Procedures**

**(1) Inspection of Work in Progress** – As the work pursuant to a permit progresses, the local floodplain administrator 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 ordinance and the terms of the permit. In exercising this power, the floodplain administrator 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.

**(2) Stop-Work Orders** – Whenever a building or a part thereof is in the process of being constructed, reconstructed, altered, or repaired in violation of this ordinance, the floodplain administrator 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.

(3) **Revocation of Permits** – The local floodplain administrator 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.

(4) **Periodic Inspections** – The local floodplain administrator and each member of his/her 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. **Periodic inspections will be performed when a complaint is received, when construction is in progress without a permit, or when requested by the property owner.**

(5) **Violations to be Corrected** – When the local floodplain Administrator finds violations of applicable state and local laws, it shall be his/her 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. **The owner or occupant of the building violation will receive a 30 day warning to abate the violation.**

(6) **Actions in Event of Failure to Take Corrective Actions:** If the owner of a building or property shall fail to take prompt corrective action, the floodplain administrator shall give him/her written notice, by certified or registered mail to his/her last known address or by personal service, that:

(a) The building or property is in violation of the Flood Damage Prevention Ordinance,

(b) A hearing will be held before the local floodplain administrator 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,

(c) Following the hearing, the local floodplain administrator may issue such order to alter, vacate, or demolish the building; or to remove fill as appears appropriate.

(d) Appeals of the Floodplain Manager's decision shall be made to the Aiken County Board of Appeals.

**(7) Order to Take Corrective Action:** If, upon a hearing held pursuant to the notice prescribed above, the floodplain administrator shall find that the building or development is in violation of the Flood Damage Prevention Ordinance, he/she shall make an order in writing to the owner, requiring the owner to remedy the violation within such period, not less than 60 days, the floodplain administrator may prescribe; provided that where the floodplain administrator 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.

**(8) 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 governing body following an appeal, he shall be guilty of a misdemeanor and shall be punished in the discretion of the court.

**(9) Denial of Flood Insurance Under the NFIP:** If a structure is declared in violation of this ordinance and after all other penalties are exhausted to achieve compliance with this ordinance then the local floodplain administrator shall notify the Federal Emergency Management Agency (FEMA) to initiate a Section 1316 of the National Flood Insurance Act of 1968 action against the structure upon the finding that the violator refuses to bring the violation into compliance with the ordinance. Once a violation has been remedied the local floodplain administrator shall notify FEMA of the remedy and ask that the Section 1316 rescinded.

(10) The following documents are incorporated by reference and may be used by the local floodplain administrator to provide further guidance and interpretation of this ordinance as found on FEMA's website at [www.fema.gov](http://www.fema.gov);

- a) FEMA 55 Coastal Construction Manual
- b) All FEMA Technical Bulletins
- c) All FEMA Floodplain Management Bulletins

- d) FEMA 348 Protecting Building Utilities from Flood Damage
- e) FEMA 499 Home Builder's Guide to Coastal Construction Technical Fact Sheets

### **Section 2.10.17 Variances**

Any person who wishes to make an appeal for a variance from the requirements of this Section 2.10 may apply for such variance to the Board of Appeals in accord with the provisions of Sections 9.3.5 and 10.17 of this Chapter.

#### **1. Establishment of Appeal Board**

The Aiken County Board of Appeals as established by Aiken County Council, shall hear and decide requests for variances from the requirements of this ordinance.

#### **2. Right to Appeal**

Any person aggrieved by the decision of the appeal board or any taxpayer may appeal such decision to the Court.

#### **3. 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.

#### **4. Functionally Dependent Uses**

Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Section are not met, no reasonable alternative exist, and the development is protected by methods that minimize flood damage and create no additional threat to public safety.

#### **5. Agricultural Structures**

Variances may be issued to wet floodproof an agricultural structure provided it is used solely for agricultural purposes. 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 Sub-section 8, in this section, and the following standards. April 2017 83

(a.) Use of the structures 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 corncribs,
- 3) General-purpose barns for the temporary feeding of livestock that are open on at least one side;
- 4) For livestock confinement buildings, poultry houses, dairy operations, and similar livestock operations, variances may not be issued for structures that were substantially damaged. New construction or substantial improvement of such structures must meet the elevation requirements of Section 2.10.16 (7) of this ordinance; and

(b.) The agricultural structure must be built or rebuilt, in the case of an existing building that 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 floatation, 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 2.10.18 (7) of this ordinance.

- 1) Any mechanical, electrical, or other utility equipment must be located above the base flood elevation (BFE) so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions in accordance with Section 2.10.19 of this ordinance.

2) The agricultural structure must be compliant with the floodway encroachment provisions of Section 2.10.19 (8) of this ordinance.

3) Major equipment, machinery, or other contents must be protected. Such protection may include protective watertight floodproofed areas within the

building, the use of equipment hoist for readily elevation 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.

## 6. Considerations

In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, 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 street 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.

## 7. 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.

## 8. Floodways

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result unless a CLOMR is obtained prior to issuance of this variance. In order to ensure the project is built in compliance with the CLOMR for which the variance is granted the applicant must provide a bond for 100% of the cost to perform the development.

## 9. Conditions

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

(a) Variances may not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.

(b) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.



(c) Variances shall only be issued upon a showing of good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship, and 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 ordinances.

(d) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation (BFE) 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. Such notification shall be maintained with a record of all variance actions.

(e) The local floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) upon request.

(f) Variances shall not be issued for unpermitted development or other development that is not in compliance with the provisions of this ordinance. Violations must be corrected in accordance with Section 2.10.16 (A) of this ordinance.

## **PROVISIONS FOR FLOOD HAZARD REDUCTION**

### **Section 2.10.18 General Standards**

Development may not occur in the Special Flood Hazard Area (SFHA) 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 SFHA and that encroachments onto the SFHA are minimized.

In all areas of special flood hazard the following provisions are required:

1) Anchoring – All new construction and substantial improvements shall be anchored to prevent flotation, collapse **and lateral movement of the structure.**

2) Flood Resistant Materials and Equipment – All new construction and substantial improvements shall be constructed with flood resistant materials

and utility equipment resistant to flood damage in accordance with Technical Bulletin 2, *Flood Damage – Resistant Materials Requirements*, dated 8/08, and available from the Federal Emergency Management Agency.

3) Minimize Flood Damage – All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.

4) Critical Development – shall be elevated to the 500 year flood elevation or be elevated to the highest known historical flood elevation (where records are available), whichever is greater. If no data exists establishing the 500 year flood elevation or the highest known historical flood elevation, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates 500 year flood elevation data.

5) Utilities – Electrical, heating, ventilation, plumbing, 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 the base flood plus one foot.

6) Water Supply Systems – All new and replacement water supply system shall be designed to minimize or eliminate infiltration of flood waters into the system.

7) Sanitary Sewage System – New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

8) Gas Or Liquid Storage Tanks – All gas or liquid storage tanks, either located above ground or buried, shall be anchored to prevent floatation and lateral movement resulting from hydrodynamic and hydrostatic loads.

9) Alteration, Repair, Reconstruction, or Improvements – Any alteration, repair, reconstruction, or improvements to a structure that is in compliance with the provisions of this ordinance, shall meet the requirements of “new

Construction” as contained in this ordinance. This includes post – FIRM development and structures.

10) Non-Conforming Buildings or Uses – Non-conforming buildings or uses may not be enlarged, replaced, or rebuilt unless such enlargement or reconstruction is accomplished in conformance with the provisions of this ordinance. Provided, however, nothing in this ordinance shall prevent the repair, reconstruction, or replacement of an existing building or structure located totally or partially within the floodway, provided that 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 ordinance.

11) American with Disabilities Act (ADA) – A building must meet the specific standards for floodplain construction outlined in Section 24-2.10.19, as well as any applicable ADAR requirements. The ADA is not justification for issuing a variance or otherwise waiving these requirements. Also, the cost of improvements required to meet the ADA provisions shall be included in the costs of the improvements for calculating substantial improvements.

### **Section 2.10.19 Specific Standards**

In all areas of special flood hazard where base-flood elevation data has been provided, as set forth in Section 2.10.4 or in Section 2.10.15(H), the following provisions are required:

1. **Residential Construction.** New construction and substantial improvement of any residential structure (including manufactured homes) shall have the lowest floor, including basement, elevated no lower than one (1) foot above the base- flood elevation (one hundred-year flood elevation). Should solid foundation perimeter walls be used to elevate a structure, flood openings sufficient to facilitate the unimpeded movements of flood waters shall be provided.

2. **Nonresidential Construction.** New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall have the lowest floor, elevated no lower than plus one foot above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, flood openings sufficient to automatically equalize hydrostatic flood forces shall be provided in accordance with the elevated

buildings requirements in Section 2.10.19 (3). No basements are permitted. Structures located in “A” zones may be flood-proofed in lieu of elevation provided that all areas of the structure below the required elevation are watertight with walls substantially 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 certification shall be provided to the Building Official as set forth in Section 2.10.15. A variance may be considered for wet-floodproofing agricultural structures in accordance with the criteria outlined in Section 2.10.17 (4) of this ordinance. Agricultural structures not meeting the criteria of Section 2.10.17 (4) must meet the non-residential construction standards and all other applicable provisions of this ordinance. Structures that are floodproofed are required to have an approved maintenance plan with an annual exercise. The local floodplain administrator must approve the maintenance plan and notification of the annual exercise shall be provided to it.

### **3. Elevated Buildings.**

New construction and substantial improvements of elevated buildings that include fully-enclosed areas below the lowest floor 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 designated to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

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 (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding. April 2017 91
- b) The bottom of all openings shall be no higher than one (1) foot above the higher of the interior or exterior grade immediately under the opening.
- c) Only the portions of openings that are below the base flood elevation (BFE) can be counted towards the required net open area.
- d) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

- e) 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 the least on side of the building.
- f) Hazardous Velocities – Hydrodynamic pressure must be considered in the design of any foundation system where velocity waters or the potential for debris flow exist. If flood velocities are excessive (greater than 5 feet per second), foundation systems other than solid foundations walls should be considered so that obstructions to damaging flood flows are minimized.
- g) Enclosures Below Lowest Floor
  - i. 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).
  - ii. The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, must be void of utilities except for essential lighting as required for safety, and cannot be temperature controlled.
  - iii. One wet location switch and/or outlet connect to a ground fault interrupt breaker may be installed below the required April 2017 92 lowest floor elevation specified in the specific standards outlined in Section 2.10.19.
  - iv. All construction materials below the required lowest floor elevation specified in the specific standards outlined in Section 2.10.19 should be of flood resistant materials.

#### **4. Standards for Manufactured Homes and Recreational Vehicles.**

- a) All manufactured homes placed, or substantially improved, on individual lots or parcels in expansions to existing manufactured home parks or subdivisions, or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.
- b) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
  - 1. Manufactured homes that are to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the provisions for residential construction in Section 2.10.19 of this ordinance must be elevated so that the lowest floor of the manufactured home is elevated no lower than plus one foot than above base flood elevation, and be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement.

2. Manufactured homes shall be anchored to prevent floatation, collapse, and lateral movement. For the purpose of this requirement, manufactured homes must be anchored to resist flotation, collapse, and lateral movement in accordance with Section 10-29-10 of the *South Carolina Manufactured Housing Board Regulations*, as amended. Additionally, when the elevation requirement would be met by an elevation of the chassis 26 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above 36 inches in height an engineering certification is required.

3. 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 filled with and approved by the local floodplain administrator and the local Emergency Preparedness Coordinator.

**5. All recreational vehicles placed on sites must either:**

a) Be fully licensed and ready for highway use; or meet the development permit and certification requirements of Section 2.10.15 general standards outlined in Section 2.10.18.

b) On site for fewer than 180 consecutive days.

c) A recreational vehicle is ready for highway use if it is:

i. On wheels or jacking system

ii. Attached to the site only by quick-disconnect type of utilities and security devices; and

iii. Has no permanently attached additions.

**6. Map Maintenance Activities-** The National Flood Insurance Program (NFIP) requires flood data to be reviewed and approved by FEMA. This ensures that flood maps, studies and other data identified in Article I.D. accurately represent flooding conditions so appropriate floodplain management criteria are based on current data. The following map maintenance activities are identified:

a) Requirement to Submit New Technical Data

(1) For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical or scientific data reflecting such changes be submitted to FEMA as soon as practicable, but no later than six months of the date such information becomes available. These development proposals included but not limited

- i. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;
- ii. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area;
- iii. Alternation of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and
- iv. Subdivision or large scale development proposals requiring the establishment of base flood elevations in accordance with Section 2.10.22.

(2) It is the responsibility of the applicant to have technical data, required in accordance with Section 2.10.19, prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision, and submitted to FEMA. Submittal and processing fees for these map revisions shall also be the responsibility of the applicant.

(3) The local floodplain administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

- i. Proposed floodway encroachments that increase the base flood elevation; and

- ii. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

- iii. Floodplain development permits issued by the local floodplain administrator

shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to Section 2.10.19. April 2017 95

- b) Right to Submit New Technical Data – The floodplain administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the local jurisdiction and may be submitted at any time.

## **7. Accessory Structures.**

An accessory structure or garage, the size of which is greater than 200 square feet, must comply with the elevated structure requirements of Sections 2.10.19(3). When accessory structures 200 square feet or less are to be placed in the floodplain, the following criteria shall be met:

a. Accessory structures shall not be used for any uses other than the parking of vehicles and storage.

b. Accessory structures shall be designed to have low flood damage potential.

c. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters. Accessory structures shall be firmly anchored to prevent flotation, collapse, or lateral movement of the structure.

Service facilities such as electrical and heating equipment shall be installed in accordance with Section 2.10.18(5).

d. Openings to relieve hydrostatic pressure during a flood shall be provided below base flood elevation in conformance with Section 2.10.19.

## **8. Floodways.**

Located within areas of special flood hazard established in Section 2.10.5 are areas designated as floodways. Since the floodway may be an extremely hazardous area due to the velocity of flood waters which carry debris and potential projectiles, and has erosion potential, the following provisions shall apply within designated floodway areas:

(A) No encroachments, including fill, new construction, substantial improvements, additions and other developments shall be permitted unless:

i. 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 local floodplain administrator.

ii. A Conditional Letter of Map revision (CLOMR) has been approved by FEMA. A Letter of Map Revision must be obtained upon completion of the proposed development.



(B) If Section 2.10.19 (A) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 2.10.19.

(C) 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 the Section 2.10.19(3) and the encroachment standards of Section 2.10.19(A) are met.

(D) 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. Also, lawns, gardens, play areas, picnic grounds, and hiking and horseback riding trails are acceptable uses, provided that 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 or changes to the floodway configuration.

#### **2.10.20 Fill**

Fill is discouraged because storage capacity is removed from areas of special flood hazard. 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 (1) 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 special-flood-hazard areas:

1. Fill may not be placed in the floodway unless it is certified in accordance with Section 2.10.18(G)(i).
2. Fill may not be placed in wetlands without the required State and Federal permits.
3. Fill must consist of soil and rock materials only. Dredged material may be used as fill only upon certification of suitability by a registered professional geotechnical engineer. Landfills, rubble fills, dumps, and sanitary landfills are not permitted in the areas of special flood hazard.

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.
6. The use of fill shall not increase flooding or cause drainage problems on neighboring properties.
7. Will meet the requirements of FEMA Technical Bulletin 10-1, *ensuring that structures built on fill in or near special flood hazard areas are reasonably safe from flooding.*

#### **Section 2.10.21 Standards for Streams Without Established Base Flood Elevations and/or Floodways.**

Within the areas of special flood hazard established in Section 2.10.5, are small streams where no base-flood data has been provided and where no floodways have been identified. The following provisions apply within such areas:

- 1) In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision proposals and other proposed developments containing at least 50 lots or 5 acres, whichever is less.
- 2) 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.
- 3) If Subsection 2.10.21 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 ordinance provisions of Section 2.1.18 & Section 2.10.19 and shall

be elevated or floodproofed in accordance with elevations established in accordance with Section 2.10.19.

4) Data from preliminary, draft, and final Flood Insurance Studies constitutes best available data. Refer to FEMA Floodplain Management Technical Bulletin I-98 *Use of Flood Insurance Study (FIS) Data as 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.

5) When base flood elevation (BFE) data is not available from a Federal, State, or other source, the following methods may be used to determine a BFE. For further information regarding the methods for determining BFE's listed below, refer to FEMA's manual *Managing Floodplain Development in Approximate Zone A Areas*:

a. Contour Interpolation

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

ii. Add one-half of the contour interval of the topographic map that is used to the BFE.

b. Data Extrapolation – A BFE can be determined if a site within 500 feet upstream of a reach for which a 100-year profile has been computed by detailed methods, and the floodplain and channel bottom slope characteristic are relatively similar to the downstream reaches. No hydraulic structures shall be present.

c. Hydrologic and Hydraulic Calculations- Perform hydrologic and hydraulic calculations to determine BFE's using FEMA approved methods and software.

Standards for Streams with Established Base Flood Elevations but without Floodways – Along rivers and streams where Base Flood Elevation (BFE) data is provided by no floodway is identified for a Special Flood Hazard Area on the FIRM or in the FIS.

i. No encroachments including fill, new construction, substantial improvements, or other development shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

6) Subdivision proposals and other developments shall also comply with all of the other applicable provisions of this Chapter, and shall meet the

requirement to submit technical data to FEMA in Section 2.10.19 when a hydrologic and hydraulic analysis is completed that generates base flood elevation.

### **Section 2.10.22 Standards for Subdivision Proposals and Other Development**

1. All subdivision proposals and other proposed new development shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations.
2. All subdivision proposals and other proposed new development 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.
3. All subdivision proposals and other proposed new development shall have adequate drainage provided to reduce exposure to flood damage.
4. Base-flood elevation data shall be provided by the applicant for subdivision proposals and other proposed developments which are greater than the lesser of fifty (50) lots or five (5) acres.

### **Section 2.10.23 Standards for Areas of Shallow Flooding (AO Zones)**

Located within the areas of special flood hazard established in Section 2.10.5 are areas designated as shallow flooding areas. The following provisions apply within such areas:

- 1) All new construction and substantial improvements of residential structures shall have the lowest floor, elevated to at least as high as number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3) feet above the highest adjacent grade; or
- 2) All new construction and substantial improvements of nonresidential structures shall:
  - a. have the lowest floor, including basement, 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, including basement, shall be elevated at least three (3) feet above the highest adjacent grade; or

b. together with attendant utility and sanitary facilities, be completely flood-proofed to or above the level described in Subsection (i) immediately above so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as state in Section 2.10.16.

3) All structures on slopes must have drainage paths around them to guide water away from the structures.

### **Section 2.10.24 Standards for All Site Design and Development Within Flood Hazard Overlay District**

All standards prescribed in this Section 2.10 shall apply to all site design and development hereafter undertaken within the Flood District. The Flood District corresponds to special flood hazard areas officially designated on the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency and dated June 19, 2012, as revised.

1. Indication of special flood hazard areas. Plats of development lying in a special-flood-hazard area shall have such areas clearly delineated on the plat by indication of the topographic contour line corresponding to the 100-year flood elevation shown on official county floodplain maps and/or on maps prepared by the Federal Emergency Management Agency.

2. Flood-hazard design standards. Engineering plans and specifications shall be submitted showing that adequate design has been incorporated to assure to the maximum extent possible that:

a. water supply systems will be constructed to minimize or eliminate infiltration by floodwaters;<sup>April 2017 102</sup>

b. wastewater disposal systems, including septic tanks, will be constructed to preclude infiltration by floodwaters; and

c. types of and construction of fill materials used for building foundations are such so as to minimize settlement, slope erosion, siltation, and facilities drainage of potential surrounding floodwaters.

3. Protective deed restrictions required. Covenant or deed restrictions shall be placed in the deeds for all lots in a development lying within a special flood hazard area stipulating to the owner that:

a. construction of a structure on any lot lying within a special flood hazard area shall have the lowest floor, including basement, elevated no lower than one (1) foot above the base flood elevation (100-year flood elevation) as designated on official County floodplain maps and/or maps prepared by the Federal Emergency Management Agency; and that

b. all other requirements of Aiken County Building Codes relating to construction in special flood hazard areas must be met.

4. Disclosure statements required. On all plats of development for which lots, sites, or structures lying within special-flood-hazard areas are to be sold or leased, the following statement shall be clearly affixed to the plat(s) and readily visible: "The areas indicated on this plat as special-flood-hazard areas have been identified as having at least a one (1) percent chance of being flooded in any given year by rising waters. Local regulations require that certain flood hazard protective measures be incorporated in the design and construction of structures in these designated areas. Reference shall be made to the covenants and deed restrictions of this development and the requirements of the Aiken County Building Codes." "In addition, Federal or State law may require mandatory purchase of flood insurance as a prerequisite to mortgage financing in these designated special-flood-hazard areas."

"Aiken County originally adopted the Flood Insurance Program by Ordinance No. 86-6-47."

All provisions in other County Ordinances in conflict with this Ordinance are hereby repealed.

If any provisions of this Ordinance or if the application thereof to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application and to this end, the provisions of this Ordinance are severable.

This Ordinance shall become effective on May 23, 2012.

