

# **BALDWIN COUNTY FLOOD DAMAGE PREVENTION ORDINANCE**

**BALDWIN COUNTY COMMISSION**

# **FLOOD DAMAGE PREVENTION ORDINANCE OF BALDWIN COUNTY, ALABAMA**

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| Adopted by the Baldwin County Commission: | January 3, 1978   |
| Amended by the Baldwin County Commission  | February 17, 1987 |
| Amended by the Baldwin County Commission: | April 19, 1994    |
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| Amended by the Baldwin County Commission: | April 21, 2009    |
| Amended by the Baldwin County Commission: | September 7, 2010 |

BALDWIN COUNTY COMMISSION

As of amendments, September 7, 2010

Hon. Frank Burt, District 1  
Hon. David E. Bishop, District 2  
Hon. Wayne Gruenloh, District 3  
Hon. Charles Gruber, District 4

## **Article 1. Statutory Authorization**

The Legislature of the State of Alabama has in Title 11., Chapter 52, Sections 1 through 84, Title 41, Chapter 9, Section 166, and Title 11, Chapter 19, Sections 1 through 24, of the Code of Alabama 1975 authorized local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the County Commission of Baldwin County, Alabama does ordain as follows:

### **Section 1.1 Finding of Fact**

- (a) The flood hazard areas of the County of Baldwin are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of tax base, all of which adversely affect the public health, safety and general welfare.
- (b) The flood losses are caused by the occupancy in flood hazard areas of uses vulnerable to floods, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities.

### **Section 1.2 Statement of Purpose**

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

- (a) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (b) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- (c) Control filling, grading, dredging and other development which may increase flood damage or erosion;

- (d) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;
- (e) Control the alteration of natural flood plains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

### **Section 1.3 Objectives**

The objectives of this ordinance are:

- (a) To protect human life and health;
- (b) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;
- (c) 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 flood blight areas;
- (d) To minimize expenditure of public money for costly flood control projects;
- (e) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (f) To minimize prolonged business interruptions; and,
- (g) To insure that potential home buyers are notified that property is in a flood area.

### **Article 2. Definitions**

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

**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 wall shall be considered “New Construction”.

**Appeal:** Request for a review of the Baldwin County Building Inspection Department’s interpretation of any provisions of this ordinance.

**Area of shallow flooding:** A designated A, AE, AH, AO, V or VE zone on a community’s Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

**Appurtenant Structure:** Means a structure which is on the same parcel of property as the principal structure to be insured and the use if which is incidental to use of the principal structure.

**Area of special flood hazard:** The land in the flood plain within a community subject to a 1% (one) percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency (FEMA), areas of Special Flood Hazard area (SFHA) shall be those designated by the local community and referenced in Article 3, Section 3.2.

**Base Flood:** Means the flood having a 1% chance of being equaled or exceeded in any given year.

**Basement:** Any area of the building having its floor subgrade (below ground level) 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 supporting foundation system.

**Building:** See Structure

**Coastal High Hazard Area:** An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. These areas are designated on a FIRM as Zones V 1-30, VE or V.

**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, drilling operations, and ~~permanent~~ storage of equipment or materials.

**Elevated buildings:** A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, columns ~~or fill~~.

**Existing construction:** Any structure for which the “start of construction” commenced before the effective date of the FIRM or before January 3, 1978, for FIRMs effective before that date.

**Existing Manufactured Home Parks or Subdivisions:** 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 the effective date of floodplain management regulations adopted by a community.

**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 roads, 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:

- (a) The overflow of inland or tidal waters.
- (b) The unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Hazard Boundary Map (FHBM):** An official map of a community, issued by the Federal Insurance Administration (FIA), where the boundaries of the areas of Special Flood Hazard have been designated as Zone A.

**Flood Insurance Rate Map (FIRM):** An official map of the community, on which the FIA has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

**Flood Insurance Study:** An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

**Floodplain:** Any land area susceptible to being inundated by water from any source.

**Flood-proofing:** Means any combination of structural and 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.

**Floodway (Regulatory 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 a designated height.

**Freeboard:** Means 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 the watershed.

**Floor:** Means the top surface of enclosed area in a building (including basement), i.e., top of slab in concrete 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.

**Functionally dependent facility:** A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

**Highest adjacent grade:** The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

**Historical structure:** Any structure that is:

- (a) Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) 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;
- (c) 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;

- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either;
  - (1). By an approved state program as determined by the Secretary of the Interior, or
  - (2). Directly by the Secretary of the Interior in states without approved programs.

**Levee:** A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

**Levee system:** A flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

**Lowest floor:** The lowest floor of the lowest enclosed area (including basements). 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 enclosure is not built so as to render the structure in violation of other provisions of this ordinance. In V-zones the regulatory reference level is the lowest horizontal structural member.

**Mangrove stand:** An assemblage of mangrove trees which are mostly low trees noted for copious development of interlacing adventitious roots above the ground and which contain one or more of the following species: Black mangrove (Avicennia Nitida); Red mangrove (Rhizophora Mangle); White mangrove (Languncularia Racemosa); and Buttonwood (Conocarpus Erecta).

**Manufactured home:** A structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

**Mean sea level:** The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929 or other datum.

**National Geodetic Vertical Datum (NGVD):** As corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

**New construction:** Any structure (see definition) of which the "start of construction" commenced after January 20, 1978, and includes any subsequent improvements to the structure.

**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 January 20, 1978.

**Primary Frontal Dunes:** Means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

**Repetitive loss:** Flood-related damages sustained by a structure on two (2) separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damages occurred.

**Recreational vehicle:** A vehicle which is:

- (a). Built on a single chassis;
- (b). Four hundred (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.

**Remedy A Violation:** Means to bring the structure or other development into compliance with State or Local flood plain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or other deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

**Sand dunes:** Naturally occurring accumulations of sand in ridges or mounds landward of the beach. Prohibits man-made alteration of sand dunes and mangrove stands within Zones V1-30, VE, and V on the community's FIRM which would increase potential flood damages.

**Section 1316:** No new flood insurance shall be provided for any property which the Administrator finds has been declared by a duly constituted State or Local Zoning Authority or other authorized public body, to be in violation of State or Local laws, regulations or ordinances which are intended to discourage or otherwise restrict land development or occupancy in flood prone areas.

**Start of Construction:** The date building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of the structure such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation, and includes the placement of a manufactured home on a foundation. (Permanent construction does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation of a basement, footings, piers and foundations or the erection of temporary forms; nor does it include the installation on the property of buildings appurtenant to the permitted structure, such as garages or sheds not occupied as dwelling units or part of the main building). (NOTE: Accessory structures are NOT exempt from any ordinance requirements). 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.

**Substantial damage:** Damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed fifty (50%) of the market value of the structure before the damage occurred. Substantial damage also means flood-related damages sustained by a structure on two (2) separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damages occurred.

**Substantial improvement:** Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "repetitive loss" or "substantial damage", regardless of the actual repair work performed.

**Substantially improved existing manufactured home parks or subdivision:** Where repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty percent (50%) of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

**Variance:** A grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance. Granting of a variance must be consistent with CFR 44, Granting of Variances and Exceptions.

**Violation:** Means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance is presumed to be in violation until such time as that documentation is provided.

### **Article 3. General Provisions**

#### **Section 3.1 Land to which this Ordinance applies:**

This ordinance shall apply to all areas of special flood hazards within the permitting jurisdiction of unincorporated areas of Baldwin County, Alabama.

#### **Section 3.2 Basis for Area of Special Flood Hazard**

The areas of Special Flood Hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS), dated January 12, 1973, with accompanying maps and other supporting data and any revision thereto, are adopted by reference and declared a part of this ordinance.

#### **Section 3.3 Establishment of a Development Permit to begin Construction**

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

#### **Section 3.4 Compliance**

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

#### **Section 3.5 Abrogation and Greater Restrictions**

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

### **Section 3.6 Interpretations**

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

- (a) considered as minimum requirements;
- (b) liberally construed in favor of the governing body; and
- (c) deemed neither to limit nor repeal any other powers granted under state statutes.

### **Section 3.7 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 consideration. Larger floods can and will occur; flood heights may be increased by man-made or natural causes. This ordinance 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 ordinance shall not create liability on the part of the Baldwin County, Alabama, or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

### **Section 3.8 Penalties for Violations and Fines**

**Persons in Violation.** Any person who, or firm or corporation which, (a) violates any provision of the Baldwin County Flood Damage Prevention Ordinance or (b) erects, repairs, alters, constructs or reconstructs any building structure on land or water in violation of the Baldwin County Flood Damage Prevention Ordinance shall be in violation.

**Fines.** Any person who, or firm or corporation which, violates any of the Baldwin County Flood Damage Prevention Ordinance shall be fined not more than \$150.00 for each separate violation, plus all costs of court, with each day such violation continues constituting a separate violation. The fines provided for herein shall commence and accrue upon the violation of the Baldwin County Flood Damage Prevention Ordinance and/or posting of a notice of violation and/or the continuation of work following issuance of a stop work order. Said fines shall continue to accrue until paid, but shall not accrue during the pendency of a properly filed appeal to the Baldwin County Flood Damage Prevention Ordinance Board of Adjustment or court of competent jurisdiction.

### **Section 3.9 Additional Freeboard**

Require an additional **freeboard of 3 foot** elevation to the current adopted **FEMA FIRM** (Flood Insurance Rate Maps), panel numbers as follows:

|             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|
| <b>860L</b> | <b>865L</b> | <b>870L</b> | <b>953L</b> | <b>954L</b> |
| <b>955L</b> | <b>958L</b> | <b>959L</b> | <b>960L</b> | <b>961L</b> |
| <b>962L</b> | <b>966L</b> | <b>980L</b> |             |             |

## **Article 4 Administration**

### **Section 4.1 Designation of Baldwin County Building Official**

The Baldwin County Building Official is hereby appointed to administer and implement the provisions of this ordinance.

### **Section 4.2 Permit Procedures**

Application for a Development Permit shall be made to the Baldwin County Building Official on forms furnished by the Building Inspection Department to any development activities, and may include but shall not limited to the following: Plans in duplicate drawn to scale showing the elevations of the area in question and the nature, location, dimensions of existing or proposed structures, fill placement, storage of materials or equipment, and drainage facilities. Specifically, the following information is required:

- (1) Application Stage
  - (a). Elevation in relation to mean sea level (or highest adjacent grade) of the lowest regulatory floor level, including basement, of all proposed structures;
  - (b). Elevation in relation to mean sea level to which any nonresidential structure will be flood-proofed;
  - (c). Design certification from a registered, State of Alabama licensed professional engineer or architect that any proposed nonresidential flood-proofed structure will meet the flood proofing criteria in Article 5, 5.4 (b);
  - (d). Design certification from a registered, State of Alabama licensed professional engineer or architect that any new construction or substantial improvement placed in a Coastal High Hazard Area will meet the criteria of Article 5, Section 5.5 (b), (c), (d);
  - (e). Description of the extent to which any water course will be altered or relocated as a result of a proposed development.

## (2) Construction Stage

For all new construction and substantial improvements, the permit holder shall provide to the Building Official a regulatory floor elevation or flood-proofing level using appropriate FEMA elevation or flood-proofing certificate immediately after the lowest floor or flood-proofing is completed. Where a structure is subject to the provisions applicable to Coastal High Hazard Areas, after placement of the lowest horizontal structural members, any regulatory floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a State of Alabama registered land surveyor or professional engineer and certified by the same. When flood-proofing is utilized for nonresidential structures, said certification shall be prepared by or under the direct supervision of a State of Alabama licensed professional engineer or architect and certified by the same.

**Any work undertaken prior to submission of all necessary Federal, State and Local permits shall be at the permit holder's risk.**

The Building Official shall review the above referenced submitted certification data. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being allowed to proceed. Failure to submit certification or failure to make said corrections required hereby shall be cause to issue a stop work order for the project.

### **Section 4.3 Duties and responsibilities of the Baldwin County Building Official**

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

- (a). Review all development permits to assure that the permit requirements of this ordinance have been satisfied; and, assure that sites are reasonably safe from flooding.
- (b). Review proposed permit application to assure that all necessary permits have been received from governmental agencies from which approval is required by Federal and State law, including Section 404.
- (c). When base flood elevation data or floodway data have not been provided in accordance with Section 3.2, the Building Official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal or State agency of other sources in order to administer the provisions of Article 5.
- (d). Verify and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the regulatory floor level, including basement,

of all new construction or substantially improved structures in accordance with Section 4.2 (2).

- (e). Verify and record the actual elevation, in relation to mean sea level, to which any new or substantially improved structures have been flood-proofed, in accordance with Article 5, Section 5.4 (b).
- (f). When flood-proofing is utilized for a structure, the Building Official shall obtain certification of design criteria from a State of Alabama registered professional engineer or architect in accordance with Article 4.2 (1),(b), and/or Section 5.4 B.
- (g). Obtain design certification from a State of Alabama registered professional engineer or architect that any new construction or substantial improvement placed in a Coastal High Hazard Area will meet the criteria in Section 5.5.
- (h). Notify adjacent communities and the Alabama Department of Economic & Community Affairs, Office of Water Resources, NFIP State Coordinator's office prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA) and the Alabama Emergency Management Agency (AEMA).
- (i). For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA and ADECA/OWA/NFIP to ensure accuracy of community flood maps through the Letter of Map Revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.
- (j). Where interpretation is needed as to the exact location boundaries of the areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Building Official shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this ordinance.
- (k). All records pertaining to the provisions of this ordinance shall be maintained in the office of the Building Official and shall be open for public inspection.

## **Article 5. Provisions of Flood Hazard Reduction**

### **Section 5.1 General Standards**

In all areas of Special Flood Hazard, the following provisions are required:

- (1). New construction and substantial improvements of existing structures shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2). New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage;
- (3). New construction and substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage.
- (4). Elevated Buildings

All new construction or substantial improvements of existing structures that include ANY fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on Exterior walls by allowing for the automatic entry and exit of flood waters.

- (a). Designs for complying with this requirement must either be certified by a State of Alabama professional engineer or architect or meet the following minimum criteria:
  - (i). 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;
  - (ii). The bottom of all openings shall be no higher than one (1) foot above grade; and
  - (iii). Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.
- (b). So as to not violate the “Lowest Floor” criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and

- (c). The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
- (5). All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, 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.
- (6). Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- (7). New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (8). New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
- (9). On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (10). Any alteration, repair, reconstruction or improvement to a structure which is not in compliance with the provisions of this ordinance shall be undertaken only if the nonconformity is not furthered, extended or replaced.

## **Section 5.2 Specific Standards**

In all areas of Special Flood Hazards where base flood elevations data have been provided, the following provisions are required:

### **(1). Residential and non-residential construction**

New construction or substantial improvement of any structure (or manufactured home) shall have the lowest floor, including basement, elevated no lower than the base flood elevation as shown on the most current FEMA flood maps.

### **(2). Nonresidential Construction**

New construction or the substantial improvement of any nonresidential structure located in AE, or AH zones may be flood-proofed in lieu of

elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to one (1) foot above the base flood elevation, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A State of Alabama registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the Building Official as set forth above and in Section 4.3 (F). Flood proofing is not allowed within any “V” FEMA flood zone.

### **(3). Standards for Manufactured Homes and Recreational Vehicles**

Where base flood elevation data is available:

- (a). All manufactured homes placed on/or substantially improved:
  - (i). On individual lots or parcels, or
  - (ii) In new or substantially improved manufactured home parks or subdivisions, or
  - (iii) in expansions to existing manufactured home parks or subdivisions, or
  - (iv) on a site in an existing manufactured home park or subdivisionWhere a manufactured home has incurred “substantial damage” as the result of a flood, must have the lowest floor, including the basement, elevated to or above base flood elevation, or
- (b). Manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated:
  - (i). The lowest floor of the manufactured home is elevated to the base flood elevation or the lowest horizontal structural member is to base flood elevation in VE zones.
  - (ii) In “A” zones the finished floor must be at or above the base flood elevation.
  - (iii) In “V” zones the lowest horizontal structural member must be at or above base flood elevation.
- (c). All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (Refer to Section 3 (a) above)
- (d). All recreational vehicles placed on sites must either:

- (i). Be on the site for fewer than 180 consecutive days, fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions; or
- (ii). The recreational vehicle must meet all the requirements for New Construction, including the anchoring and elevation requirements of Section 5.2 (1).

#### **(4) Floodway**

Areas designated as Floodways are those located within areas of Special Flood Hazard established in Section 3.2. A floodway may be an extremely hazardous area due to velocity flood waters, debris and erosion potential. In addition, the area must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

- (a). The community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one foot at any point.
- (b). Encroachments are prohibited, including fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrological and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in any increase in flood levels or floodway widths during a base flood discharge. A State of Alabama registered professional engineering must provide supporting technical data and certification thereof.
- (c). Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted with Zone A 1-30 and AE on the FIRM, unless it is demonstrated 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 unincorporated area of Baldwin County.

- (d.) Only if Article 5, Section 5.2 (4) (a) is satisfied, then any new construction or substantial improvements shall comply with all other applicable flood hazard reduction provisions of Article 5.

### **Section 5.3 Building Standards for Streams without Established Base Flood elevations and/or Floodway (A zones)**

Located within areas of Special Flood Hazard established in Section 3, where streams exist but no base flood data has been provided ( A zones), OR where base flood data has been provided but a floodway has not been delineated, the following provisions shall apply:

- (a). When base flood elevation data or floodway data have not been provided in accordance with Section 3, then the Building Official shall obtain, review, and reasonably utilize any scientific or historic base flood elevation and floodway data available from a Federal, State, or other sources, in order to administer the provisions of Article 5. ONLY if data are not available from these sources, then the following provisions shall apply.
- b). No encroachment, including structures or fill material, shall be located within an area equal to the width of the stream or twenty-five (25) feet, whichever is greater, measured from the top of the stream bank, unless certification from a State of Alabama registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (c). In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three (3) feet above the highest adjacent grade at the building site. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with the standards Article 5, Section 5.1 (4) (a) “elevated Buildings”. The Building Official shall certify the lowest floor elevation and the record shall become a permanent part of the permit file.

### **Section 5.4 Standards for Areas of Shallow Flooding (AO zones)**

Areas of Special Flood Hazard established in Section 3.2 may include designed “AO” shallow flooding areas. These areas have base flood depths of one (1) to three (3) feet above ground with no clearly defined channel. The following provisions apply:

- (a). All new construction and substantial improvements of residential and non residential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map (FIRM) above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Article 5, Section 4, “Elevated Buildings”. The Building Official shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
- (b). New construction and substantial improvement of a nonresidential structure may be flood-proofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designated to be water tight to the specified FIRM flood level plus two (2) feet above highest adjacent grade, with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A State of Alabama registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the Building Official as set forth above and as required in Article 4, Section 4.2 (1), (c).
- (c). Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

### **Section 5.5 Coastal High Hazard Areas (V zones)**

Located within the areas of Special Flood Hazard established in Article 3, Section 3.2 are areas designated as Coastal High Hazard Areas (V zones). These areas have special flood hazards associated with wave action and storm surge; therefore, the following provisions shall apply:

- (a). Provide that all new construction within Zone V1-30, VE and V on the community’s FIRM is located landward of the reach of mean high tide;
- (b). All new construction and substantial improvements of existing structures shall be elevated on piers, columns, or shear walls parallel to the flow of water so that the bottom of the lowest horizontal structural member (excluding pilings or columns) is located no lower than the base flood elevation. Breakaway walls must be designed by a State of Alabama registered professional engineer or architect. All space below the lowest supporting member shall remain free of obstruction. Open lattice work or

decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action.

- (i). Design safe loading resistance of each breakaway wall shall not be less than 10 or more than 20 pounds per square foot; or,
  - (ii). If more than 20 pounds per square foot a State of Alabama registered professional engineer or architect shall certify that the design wall collapse would result from a water load less than that which would occur during the base flood event and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components during the base flood event. Maximum wind and water loading values to be used in this determination shall each have one percent (1%) chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- (c). All new construction or substantial improvements of existing structures shall be securely anchored on pilings, columns or shear walls;
  - (d). All pile and column foundations and the structures attached thereto shall be anchored to resist floatation, collapse, and lateral movement due to the combined effects of wind and water loads acting simultaneously on ALL building components, both nonstructural and structural.
  - (e). A State of Alabama registered engineer or architect shall certify that the design, specifications and plans for construction are in full compliance with the provisions of this ordinance.
  - (f). There shall be no fill material used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The Building Official shall approve design plans for landscaping/aesthetic fill only after applicant has provided an analysis by a registered State of Alabama engineer or architect and/or soil scientist which demonstrates the following factors have been fully considered:
    - (i). Particle composition of fill material does not have a tendency for excessive natural compacting;
    - (ii). Volume and distribution of fill will not cause wave deflection to adjacent properties; and,
    - (iii). Slope of fill will not cause wave run-up or ramping.

- (g). There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.
- (h). Any alteration, repair, reconstruction, or substantial improvement to a structure shall not enclose the space below the lowest supporting members, except with breakaway walls.
- (i). The placement of a manufactured home or mobile home within a V or VE zone shall meet the requirements of Article 5, Section 5.5.

### **Section 5.6 Standards for Subdivisions**

- (a). All subdivision proposals shall be consistent with the need to minimize flood damage;
- (b). All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (c). All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;
- (d). Base flood elevation data shall be provided for subdivision proposals and all other proposed development including manufactured home parks and subdivisions greater than fifty (50) lots or five (5) acres, whichever is less.

### **Article 6 Variance Procedures**

- (1). The Building Inspection Department Board of Adjustments as established by the County Commission shall hear and decide requests for appeals or variances from the requirements of this ordinance.
- (2). The Board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Building Official in the enforcement or administration of this ordinance.
- (3). Any person aggrieved by the decision of the Board of Adjustments may appeal such decision to the Circuit Court.
- (4). Variances may be issued for the repair or rehabilitation of Historic Structures upon a determination that the proposed repair or rehabilitation

will not preclude the structure's continued designation as an Historic Structure and the variance is the minimum to preserve the historic character and design of the structure.

- (5). Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Section are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.
- (6). Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.
- (7). In reviewing such requests, the Building Inspection Department Board of Adjustments shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.
- (8). **Conditions for variances:**
  - (A). A variance shall only be issued when there is:
    - (i). A finding of good and sufficient cause,
    - (ii). A determination that failure to grant the variance would result in exceptional hardship; and,
    - (iii). 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.
  - (B). A community shall notify the applicant in writing over the signature of the Building Official that (i) the issuance of a variance to construct a structure below base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.
  - (C). The Building Official shall maintain the records of all appeal actions and report any variances to the Federal and State Emergency Management Agencies upon request.

## **Section 7 Severability**

If any section, clause, sentence, or phrase of this ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, than said holding shall in no way effect the validity of the remaining portions of this ordinance.

Adopted on January 3, 1978

BY: ALTON WHITE  
Chairman

Certified by: DAVID C. WOOD  
Administrator