ARTICLE 1

Flood Damage Prevention

§24-101 Statutory Authority. Article IX, Section II of the Constitution of the State of Georgia and Section 36-1-20(a) of the Official Code of Georgia Annotated delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of Commissioners of Chatham County, Georgia, does ordain as follows:

§24-102 Findings of Fact.

- 1. The flood hazard areas of Chatham County, Georgia 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 the tax base, all of which adversely affect the public health, safety and general welfare.
- 2. These 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 floodplains causing increases in flood heights and velocities.
- §24-103 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 by provisions designed to:
- 1. Require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;
- 2. 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;
- 3. Control filling, grading, dredging and other development which may increase flood damage or erosion;
- 4. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and
- 5. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters.

§24-104 Objectives. The objectives of this ordinance are:

- 1. To protect human life and health;
- 2. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- 3. 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;

- 4. To minimize expenditure of public money for costly flood control projects;
- 5. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 6. To minimize prolonged business interruptions; and
- 7. To insure that potential homebuyers are notified that property is in a flood area.
- **§24-105** Lands to Which This Ordinance Applies. This Ordinance shall apply to all lands within the unincorporated area of Chatham County, Georgia.
- §24-106 Basis for Establishing the Areas of Special Flood Hazard. The Areas of Special Flood Hazard identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS), dated August 16, 2018, (i.e., most current FIRM map), with accompanying maps and other supporting data and any revision thereto, are adopted by reference and declared a part of this ordinance.

Repository for the Unincorporated Chatham County public inspection of the Flood Insurance Study (FIS), accompanying maps and other supporting data is located at the Department of Engineering, Old County Courthouse, 124 Bull Street, Savannah, GA 31401.

- §24-107 Establishment of Development Permit. A development permit shall be required in conformance with the provisions of this Ordinance prior to the commencement of any development activities. The development permit forms shall be designed by the administrator of this Ordinance. The administrator is responsible for the operation and maintenance of the development permitting process based on the duties and responsibilities of County staff established elsewhere in this Ordinance. A County Building Permit may be utilized as the required development permit or special development permit forms may be created and utilized as determined to be appropriate by the administrator.
- **§24-108** 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, codes and ordinances of Chatham County.
- §24-109 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.
- **§24-110** <u>Interpretation</u>. In the interpretation and application of this ordinance 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.

- §24-111 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; 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 Chatham County, Georgia 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.
- §24-112 Penalties for Violation. Failure to comply with the provisions of this ordinance or with any of its requirements, including conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a violation. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500 or imprisoned for not more than 30 days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent Chatham County from taking such other lawful actions as is necessary to prevent or remedy any violation.
- §24-113 Repeal of Previous Ordinances. The Flood Damage Prevention Ordinance adopted on October 21, 2016 is rescinded in its entirety. All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.
- §24-114 <u>Designation of Ordinance Administrator</u>. The County Engineer is hereby appointed to administer and implement the provisions of this Ordinance with the assistance of the Director of Building Safety and Regulatory Services (BSRS Director) for certain administrative and building inspection services.
- §24-115 Permit Procedures. Prior to submitting an application for a development permit, the applicant must also submit one (1) copy of the plan to the Department of Engineering, Floodplain Management, for review and approval. Application for a Development Permit shall be made through the BSRS Director on forms furnished by the community PRIOR to any development activities, and may include, but not be 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, earthen fill placement, storage of materials or equipment, and drainage facilities. Specifically, the following information is required:

Application Stage.

- a. Elevation in relation to NAVD 1988 (or highest adjacent grade) of the lowest floor or in the case of coastal high hazard areas the lowest horizontal structural member, including basement, of all proposed structures;
- b. Elevation in relation to NAVD 1988 to which any non-residential structure will be flood-proofed;

- c. Design certification from a registered professional engineer or registered architect that all proposed non-residential flood-proofed structures will meet the flood-proofing criteria of Section 24-118(2) and Section 24-120(2);
- d. Design certification from a registered professional engineer or registered architect that any new construction or substantial improvement placed in a Special Flood Hazard Area will meet the Criteria of Section 24-122;
- e. Special Flood Hazard Areas with associated elevations (base flood and finished floor elevations) shall be shown in relation to NAVD on individual lot surveys prepared for deed records for all new construction including substantially improved and damaged structures;
- f. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development, and;
- 2. Construction Stage. For all new construction and substantial improvements of existing structures, the permit holder shall provide to the BSRS Director an as-built certification of the regulatory floor elevation or flood-proofing level immediately after the lowest floor or flood proofing is completed. Where a structure is subject to the provisions applicable to Coastal High Hazards Areas, the certification shall be provided 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 registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or registered architect and certified by same.

Any work undertaken prior to submission of these certifications shall be at the permit holder's risk.

The BSRS Director shall review the above referenced certification data submitted. 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.

Upon completion and verification, the BSRS Director shall forward all certifications to the Administrator for archival purposes.

- §24-116 <u>Duties and Responsibilities of the Administrator and the BSRS Director.</u>
 Duties of the BSRS Director shall include, but shall not be limited to, except where noted:
- 1. Review all development permits to assure that the permit requirements of this ordinance have been satisfied.
- 2. Review proposed development to assure that all necessary permits have been received from 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. Require that copies of such permits be

provided and maintained on file.

- 3. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- 4. The Administrator shall hear and decide requests for variances from the requirements of this ordinance.
- 5. When Base Flood Elevation data or floodway data have not been provided in accordance with Section 24-106, then the Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other sources in order to administer the provisions of Section 24-117 and 24-119.
- 6. Review and record the actual elevation in relation to NAVD 1988 (or highest adjacent grade) of the regulatory floor or in the case of coastal high hazard areas the lowest horizontal structural member, including basement, of all new or substantially improved structures in accordance with Section 24-115(2).
- 7. Review and record the actual elevation, in relation to NAVD 1988 to which any new or substantially improved/damaged structures have been flood-proofed, in accordance with Section 24-115(2).
- 8. When flood-proofing is utilized for a structure, the BSRS Director shall obtain certification of design criteria and a completed Floodproofing Certificate from a registered professional engineer or registered architect in accordance with Section 24-115(1)(c) and Section 24-118(2) or Section 24-121(2). Floodproofing for flood insurance rate reduction is only creditable for non-residential structures. A copy of such certification shall be forwarded to the Administrator.
- Obtain design certification and a completed V-Zone Design Certificate along with a completed elevation certificate from a registered professional engineer or registered architect that any new construction or substantial improvement placed in a Coastal High Hazard Area will meet the criteria of Section 24-122(5).
- 10. Make substantial damage determinations following a flood event or any other event that causes damage to structures in flood hazard areas.
- 11. The Administrator shall notify adjacent communities and the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
- 12. For any altered or relocated watercourse, the Administrator shall submit engineering data/analysis within six (6) months to FEMA 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.
- 13. Where interpretation is needed as to the exact location of boundaries of the Areas of Special Flood Hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Administrator 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.
- 14. All records pertaining to the provisions of this ordinance shall be maintained in the office of the Administrator and shall be open for public inspection.
- 15. If a portion of the structure is located in a SFHA, the entire structure shall comply with the requirements of this Ordinance.
- 16. If the structure is located in multiple flood zones and /or BFEs, the entire structure shall comply with the most restrictive requirements of this Ordinance.
- 17. The Administrator shall be authorized to render decisions regarding on-site construction activities involving fill placement and other floodplain management related activities.
- **§24-117** 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 or substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage;
- 4. <u>Elevated Buildings</u> All new construction or substantial improvements of existing structures that contain enclosed areas below the lowest floor that are usable solely for parking of vehicle, building access or storage in an area other than a basement shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of flood water. (NOT APPLICABLE IN COASTAL HIGH HAZARD AREAS)
 - a. Designs for complying with this requirement must either be certified by a professional engineer or registered architect or meet the following minimum criteria:
 - (i) Provide a minimum of two openings, on opposing or adjacent walls, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) The bottom of all openings shall be no higher than *one 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 not to 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.
- c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms, and
- d. The building permit applicant (owner or agent) must sign a "Non-conversion Agreement for Certain Structures in the Floodplain" a document provided by the BSRS Director. The Non-conversion agreement provides the right to the BSRS Director to inspect the enclosed area at any time.
- All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing fixtures, and other service facilities for non-residential structures shall be flood proofed 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. An elevation certificate will be required to verify elevation. 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 discharges 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; and
- 10. Any alteration, repair, reconstruction or improvement to a structure, which is not compliant with the provisions of this ordinance, shall be undertaken only if the non-conformity is not furthered, extended or replaced.
- 11. For repairs, reconstructions, alterations, and/or improvements to an existing structure, the finalization of all work activities shall be signified by the issuance of a Certificate of Completion by BSRS. Issuance of a Certificate of Completion shall demonstrate that the design, specifications and plans for construction are in compliance with this Ordnance.
- 12. In areas-where structural fill is allowed, compaction tests shall be performed as described on the plans or at a minimum of 1 standard compaction test per 1,000 sq. ft. of building pad area with an additional 2-tests taken within the footing.
- 13. Road-side signage shall be posted at subdivision, neighborhoods and/or communities located within Special Flood Hazard Areas to advise visitors and existing residents

- **§24-118** Specific Standards. In ALL Areas of Special Flood Hazard designated as A1-30, AE, AH, A (with estimated BFE), the following provisions are required:
- 1. New construction and/or substantial improvements Where base flood elevation data are available, new construction and/or substantial improvement of any residential structure or manufactured home shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation. Should solid perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the standards of Section 24-117 (4)(a). The encapsulation of an enclosure area for a residential structure where the air therein is conditioned violates the intent of this ordinance. Equipment nor ductwork is allowed below the base flood elevation plus 3-feet (DBFE).

Non-substantial improvements for structures designated as pre-firm shall be allowed to have the lowest floor elevated to the current finished floor elevation. Non-substantial improvements for post-firm structures built compliant at the time of construction shall be allowed to have the lowest floor of the new construction elevated to the current finished floor elevation. For situations where non-substantial improvement consists of a proposed floor to be constructed below the existing finished floor, such as with a porch or deck that is to be converted into living space, the proposed finished floor must be elevated to at least the existing floor elevation.

All heating and air conditioning equipment and components (including ductwork), all electrical fixtures and devices, ventilation, plumbing fixtures and other service facilities shall be elevated no lower than three feet above the base flood elevation.

For new construction or substantial improvements of existing structures where structural fill is allowed in accordance with Section 24-118, 24-119 and 24-120, fill shall be placed and compacted as specified on the submitted plans and in accordance with Sections 1803.5.8 and 1804.4. of the International Building Code and Section 2.4 of ASCE 24.

- 2. So as not to violate the intent of the substantial damage/substantial improvement (SD/SI) Rule, worksheets shall be completed for all repairs, reconstruction, or alterations of an improvement project. Said worksheet(s) will be made a permanent file documents for future reference to accurately address the 5-year cumulative SD/SI standard. A Certificate of Completion (CC) shall be required at the conclusion of each project.
- 3. New construction and/or substantial improvements Where base flood elevation data are available, new construction and/or substantial improvement of any Non-residential structure or manufactured home shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation. Should solid perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the standards of Section 24-117 (4)(a). New construction and/or the substantial improvement of any structure located in A1-30, 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 no lower than *four feet* 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 registered professional engineer or registered architect shall certify, using the latest version of the Flood-proofing Certificate, FEMA form 086-0-34, 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 official as set forth above and in Section 24-116(6).

- 4. <u>Standards for Manufactured Homes and Recreational Vehicles Where base flood</u> elevation data are available:
 - a. All manufactured homes placed and/or substantially improved on: (1) individual lots or parcels, (2) in new and/or substantially improved manufactured home parks or subdivisions, (3) in expansions to existing manufactured home parks or subdivisions, or (4) on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor including basement, elevated no lower than *one foot* above the base flood elevation.
 - b. Manufactured homes placed and/or substantially improved in either an existing manufactured home park or subdivision may be elevated so that:
 - (i) The lowest floor of the manufactured home is elevated no lower than *one foot* above the level of the base flood elevation, or
 - (ii) The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade, plus 1-foot.
 - c. All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. (ref. Section 24-117(6) above)
 - d. All recreational vehicles placed on sites must either:
 - (i) Be on the site for fewer than 180 consecutive days,
 - (ii) Be fully licensed and ready for highway use, (a recreational vehicle is ready for highway use if it is licensed, 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
 - (iii) The recreational vehicle must meet all the requirements for "New Construction", including the anchoring and elevation requirements of Section 24-118 (3)(a)(c), above.

- 5. Floodway Located within Areas of Special Flood Hazard established in Section 24-106, are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity floodwaters, debris or 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. Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway. Development may be permitted however, provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment shall not result in <u>ANY</u> increase in flood levels or floodway widths during a base flood discharge. A registered professional engineer must provide supporting technical data and certification thereof.
 - b. ONLY if Section 24-118(5.a.) above is satisfied, then any new construction or substantial improvement shall comply with all other applicable flood hazard reduction provisions of Section 24-117 thru Section 24-123.

§24-119 <u>Building Standards for Streams without Established Base Flood Elevations</u> and/or Floodways (A-ZONES).

Located within the Areas of Special Flood Hazard established in Section 24-106, where streams exist but no base flood data have been provided (A-Zones), OR where base flood data have been provided but a Floodway has not been delineated, the following provisions apply:

- 1. When base flood elevation data or floodway data have not been provided in accordance with Section 24-106, then the County Engineer shall obtain, review, and reasonably utilize any scientific or historic base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 24-117 thru Section 24-123. ONLY if data are not available from these sources, then the following provisions (2&3) shall apply:
- 2. No encroachments, including structures or fill material, shall be located within an area equal to the width of the stream or twenty-five feet, whichever is greater, measured from the top of the stream bank, unless certification by a 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.
- 3. 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 *four feet* above the highest adjacent grade at the building site. (NOTE: Require the lowest floor to be elevated *one foot* above the estimated base flood elevation in A-Zone areas where a Limited Detail Study has been completed). Openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of Section 24-117(4) "Elevated Buildings".

- a. All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be elevated no less than *four feet* above the highest adjacent grade at the building site.
- b. The BSRS Director shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

§24-120 Standards for Areas of Special Flood Hazard (Zones AE) Where Streams with Established Base Flood Elevation Without Designated Floodways.

Located within the Areas of Special Flood Hazard established in Section 24-106, where streams with base flood elevations are provided but no floodways have been designated, (Zones AE) the following provisions apply:

- 1. No encroachments, including fill material, new structures or substantial improvements shall be located in areas of special flood hazard, unless any fill material or portion of any other improvement placed inside a special flood hazard area (SFHA) below base flood elevation meet the following criteria:
 - a. Shall be mitigated on site or on an adjacent site that will be deed-restricted by an equal or greater volume of excavated material. The mitigated excavation must be connected to the SFHA at an elevation below the 100 year floodplain elevation. Proposed fill placement as well as an as-built certification of cut/fill volumes shall be provided by a registered engineer or land surveyor. Minimal fill may be allowed on projects with parcels less than one acre without providing equivalent mitigation. For this instance, volumes less than 10 cubic yards will be considered minimal fill; or
 - b. Certification 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. The engineering certification shall be based on approved modeling methods to support technical data that conforms to standard hydraulic engineering principles as described in the Chatham County Engineering Policy. In cases where the approved fill elevation by a flood study is less than the BFE, onsite mitigation activities may be required; or
 - c. When utilizing an elevated foundation system supported by piles, post or piers, a minimum quantity of fill material is allowed to create positive drainage away from the structure and toward the nearest outfall. The quantity of soil required is to be demonstrated on a lot grading plan submitted at the time of development permit application and prepared in accordance with the Chatham County Engineering Policy. The plan shall be approved by the Administrator prior to issuance of the development permit.
 - 2. New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevations established in accordance with Section 24-118. All heating and air conditioning equipment and components (including ductwork), all

electrical fixtures and devices, ventilation, plumbing fixtures and other service facilities shall be elevated no lower than *three feet* above the base flood elevation.

- 3. Prior to issuance of the Certificate of Occupancy, a registered professional engineer or licensed surveyor shall demonstrate that the design, specifications and plans for construction are in compliance with the provisions contained in Sections 24-120(1) and (2) herein.
- 4. Upon achieving the maximum fill placement allowed for any parcel, as defined in Section 24-120 1, during any development phase, additional fill placement is not allowed for the subject parcel until a period of 5-years has lapsed and is limited to a volume of 10 yd³ per 5-year cycle.
- 5. No fill shall be placed within the SFHA without the approval of a submitted development plan or receiving written permission from the Department of Engineering, Floodplain Management.

§24-121 Standards for Areas of Shallow Flooding (AO Zones).

Areas of Special Flood Hazard established in Section 24-106, may include designated "AO" shallow flooding areas. These areas have base flood depths of *one* to three feet (1'-3') above ground, with no clearly defined channel. The following provisions apply:

- (1) All new construction and substantial improvements of residential and non-residential structures shall have the lowest floor, including basement, elevated to at least one-foot above as high as the flood depth number specified (in feet) 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 *three feet* above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 24-117(4), "Elevated Buildings".
- (2) The Administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.
 - New construction and the substantial improvement of a non-residential structure 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 the specified flood level in Section 24-121, plus *one foot*, 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 the effect of buoyancy. A registered professional engineer or registered 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 official as set forth above and as required in Section 24-115(1)(c) and Section 24-115(2). An O&M plan shall be submitted to assure continued viability of the floodproofing measures.
- (3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

§24-122 Coastal High Hazard Areas (VE-Zones and Coastal A (LiMWA)).

Located within the areas of special flood hazard established in Section 24-106, are areas designated as Coastal High Hazard Areas (V-Zones) and Coastal A zones or Limits of Moderate Wave Action (LiMWA). These areas have special flood hazards associated with wave action and storm surge; therefore, the following provisions shall apply:

- 1. All new construction and substantial improvements of existing structures shall be located a minimum of twenty-five feet landward of the reach of mean high tide. Note that other State or County development requirements may require increased distances;
- 2. All new construction and substantial improvements of existing structures, with the exception of freestanding accessory and appurtenant structures, shall be elevated on piles, columns, or shear walls parallel to the flow of water so that the bottom of the lowest supporting horizontal structural member (excluding pilings or columns) is located no lower than *three feet* above the base flood elevation level. All space below the lowest horizontal supporting member shall remain free of obstruction or constructed with non-supporting breakaway walls, open wood lattice work or decorative screening only and must be designed to wash away in the event of abnormal wave action and in accordance with Section 24-122(6) below;
- 3. All new construction and substantial improvements of existing structures shall be securely anchored on pilings, columns, or shear walls;
- 4. Wood framed construction shall not be allowed as a structure's foundation system below the BFE, plus *3-feet*. Pressure treated timber pilings are allowed to support habitual living space above an enclosure;
- 5. All pile and column foundations and the structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the combined effects of wind and water loads acting simultaneously on <u>ALL</u> building components, both (non-structural and structural). Water loading values shall equal or exceed those of the base flood. Wind loading values shall be in accordance with the most current edition of the International Building Code;
- 6. A Georgia registered professional engineer or registered architect shall certify, utilizing a V Zone Certificate and Elevation Certificate, that the design, specifications and plans for construction are in compliance with the provisions contained in Section 24-122 (1)(2)(3) & (5) herein;
- 7. All space below the lowest horizontal supporting member must remain free of obstruction. Breakaway walls, open wood lattice work or decorative screening may be permitted and must be designed to wash away in the event of abnormal wave action without causing structural damage to the supporting foundation or elevated portion of the structure. The following design specifications are allowed:
 - a. No solid walls shall be allowed;
 - b. Material shall consist of open wood lattice or insect screening only;

- c. If aesthetic open wood lattice work or screening is utilized, any such enclosed space shall not be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
- d. The enclosure must not exceed 299 square feet.
- e. Structures located within the VE-Zone that are impacted by the Coastal A Zone, see LiMWA, shall have hydrostatic flood venting in compliance to Section 24-117 4a. in addition to breakaway walls.
- f. The placement of concrete for parking vehicles, building access and storage underneath the structure is allowed. The concrete shall not exceed a thickness of 4-inches and shall be composed of a low-strength concrete design mix that is unreinforced and frangible (not exceeding a 2,500 psi mix design) placed in maximum 3-foot square sections. The concrete shall not to be allowed to bond or adhere to the supporting members of structure and is to be placed on natural subgrade or non-compacted fill.
- g. The installation of an elevator may significantly impact flood insurance rates. The installation must meet the criteria of this Section. The amount of the flood insurance rate loading depends on the actual square footage of the enclosure/shaft, value of the machinery/equipment and the elevation of the enclosure and machinery/equipment relative to the BFE. Other codes may apply.
- 8. Prior to construction, plans for any structures having breakaway walls, open wood latticework or decorative screening must be submitted to the BSRS Director for approval. Garage doors installed within breakaway wall systems must have specific design criteria justifying their function;
- 9. Any alteration, repair, reconstruction or improvement to any structure shall not enclose the space below the lowest floor except as provided in this Section;
- 10. There shall be no fill used as structural support or to elevate areas used for septic tank drain fields. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will not exceed a maximum two 2-feet in depth at any point across the site and will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. Landscape fill is not intended to elevate the entire site. Landscape fill shall comply as defined with the definition of Section 24-125. The County Engineer shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
 - a. Particle composition of fill material does not have a tendency for excessive natural compaction;
 - b. Volume and distribution of fill will not cause wave defection to adjacent properties; and

- c. Slope of fill will not cause wave run-up or ramping;
- d. An As-built plan set is required to verify in-place depths.
- 11. There shall be no alteration of sand dunes or mangrove stands, which would increase potential flood damage; and
- 12. The installation of a sea wall shall not exceed 18-inches in height above existing grades at the marsh line within VE-Zones and it must be demonstrated through engineering analysis that the proposed wall will not induce wave deflection action onto adjacent property thus causing damages; and
- 13. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Section 24-118(3) are met.
- 14. All recreational vehicles placed on sites must either:
 - (i) Be on the site for fewer than 180 consecutive days,
 - (ii) Be fully licensed and ready for highway use, (a recreational vehicle is ready for highway use if it is licensed, 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
 - (iii) The recreational vehicle must meet all the requirements for "New Construction", as stipulated by this Section, including the anchoring and elevation requirements of Section 24-118 (3)(a)(c), above.
- 15. Freestanding accessory and appurtenant structures such as detached garages, storage sheds, warehouse buildings, etc., shall be allowed to be constructed slab-on-grade and flood-proofed or constructed with flood resistant materials to the BFE plus 3-feet of freeboard. Structures located within the V Zone and Coastal A Zones (see LiMWA), shall have hydrostatic flood venting in compliance to Section 24-117 4.a. in addition to engineered breakaway walls. The interior portions of such enclosed areas shall not be partitioned or finished into separate rooms. A maximum enclosure limit shall not apply. A Non-conversion Agreement must be signed to comply with the requirements of Section 24-117 4.d.

§24-123 <u>Standards for Subdivisions.</u>

- 1. In addition to meeting all requirements of the Chatham County Storm Water Management Ordinance, all subdivision and/or development proposals shall be consistent with the need to minimize flood damage;
- 2. All subdivision and/or development proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

- 3. All subdivision and/or development proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;
- 4. For subdivisions and/or developments greater than fifty (50) lots or five (5) acres, whichever is less, base flood elevation data shall be provided for subdivision and all other proposed development, including manufactured home parks and subdivisions. After all required construction permitting is obtained, any changes or revisions to the flood data adopted herein and shown on the FIRM shall be submitted by the developer's engineer to FEMA for review as a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Amendment (CLOMA), whichever is applicable. Upon completion of the project, the developer is responsible for submitting the "as-built" data to FEMA in order to obtain the final LOMR. The developer's engineer shall additionally provide the County with all digital data needed to update local versions of the DFIRM.
- 5. All subdivision plats shall delineate all flood zones as determined from information provided in Section 24-106, to include using the same datum, all Letter of Map Amendments, and designed finished floors, garages and carports.

§24-124 <u>Variance Procedures</u>.

- 1. The Administrator shall hear and decide requests for variances from the requirements of this ordinance.
- 2. The Chatham County Board of Commissioners shall hear and decide requests for appeals of variance decisions made by the Administrator.
- 3. The Board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Administrator in the enforcement or administration of this ordinance.
- 4. Any person aggrieved by decisions of the Chatham County Board of Commissioners may appeal such decision to Superior Court as provided in O.C.G.A. § 15-6-8.
- 5. 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 a Historic Structure and the variance is the minimum to preserve the historic character and design of the structure.
- 6. Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this Article 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.
- 7. Variances shall not be issued in an attempt to correct an oversight or construction error following the issuance of a building permit.
- 8. Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.

- 9. In reviewing such requests, the Administrator shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this ordinance.
- 10. Conditions for Variances:
 - a. A variance shall be issued ONLY 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. The provisions of this Ordinance are minimum standards for flood loss reduction; therefore any deviation from the standards must be weighed carefully. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and, in the instance of a Historic Structure, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - c. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the cost of flood insurance will be commensurate with the increased risk to life and property resulting from the reduced lowest floor elevation.
 - d. Every applicant to whom a variance is granted from the elevation requirements for the lowest floor elevation is required to have such variance noted on the deed and the plat to the deed for the property on which the structure is, or is to be, located. Such notation shall read as follows:

A lowest floor elevation variance of feet has been
approved by the Chatham County Commission for a structure
located on this property. The structure is identified as a (Note:
SELECT ONE) single-family, duplex of multi-family
dwelling, or commercial building) located at
It should be noted that such variance may significantly
increase the flood insurance premiums for this property, as
well as increase the likelihood of flood damage to the structure
and its contents. Said variance was issued upon petition of the
property owner and was issued with the owner's full
knowledge of the consequences to the present and future
owners which may result therefrom.

- A copy of the deed shall be filed by the Owner with the County Engineer within two weeks of receipt of formal notification of approval of a variance by Chatham County.
- e. The County Engineer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- 11. Upon consideration of the factors listed above and the purposes of this ordinance, the Chatham County Board of Commissioners may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- §24-125 <u>Definitions</u>. 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 it's most reasonable application.
- 1. <u>Accessory Structure</u> means a structure having minimal value and used for parking, storage and other non-habitable uses, such as garages, carports, storage sheds, pole barns, hay sheds and the like.
- 2. <u>Addition (to an existing building)</u> means 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 two-hour or greater firewall. Any walled and roofed addition, which is connected by a two-hour or greater firewall or is separated by an independent perimeter load-bearing wall, shall be considered "New Construction".
- 3. Appeal means a request for a review of the Administrators' interpretation of any provision of this ordinance or variance decision.
- 4. <u>Appurtenant structure</u> Under the *National Flood Insurance Program*, a structure which is on the same parcel of property as the principal *structure* to be insured and the use of which is incidental to the use of the principal *structure*.
- 5. Area of shallow flooding means a designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
- 6. Area of special flood hazard is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. In the absence of official designation by the Federal Emergency Management Agency, Areas of Special Flood Hazard shall be those designated by the local community and referenced Section 24-106.
- 7. <u>Base flood, or 100-year flood</u>, means the flood having a one percent chance of being equaled or exceeded in any given year.
- 8. <u>Base Flood Elevation (BFE)</u> The elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.

- 9. <u>Basement</u> means that portion of a building having its floor sub grade (below ground level) on all sides.
- 10. <u>Breakaway Wall</u> means 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.
- 11. Building see structure definition.
- 12. <u>Coastal High Hazard Area</u> means 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. The coastal high hazard area is identified as Zone V/VE on Flood Insurance Rate Maps (FIRMs).
- 13. Critical Facility means the facilities identified below:
 - a. Structures or facilities that produce, process or distribute highly volatile, flammable, explosive, toxic, or water-reactive materials;
 - b. Hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events;
 - c. Emergency operation centers or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and generating plants, and other principal points of utility lines.
 - d. Generating plants, and other principal points of utility lines.
- 14. <u>Development</u> means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, and storage of materials or equipment.
- 15. <u>Elevated building</u> means a non-basement building built to have the lowest floor of the lowest enclosed area elevated above the ground level by means of fill, solid foundation perimeter walls, breakaway walls, pilings, columns, piers, or shear walls adequately anchored so as not to impair the structural integrity of the building during a base flood event.
- 16. Elevation Certificate documents a structure's elevation. This certificate verifies the elevation of the lowest floor of your house relative to the ground. It is especially important if your house/building is in a FEMA high-risk flood zone (AE and/or VE zones). An elevation certificate is required with all new construction where a foundation system is required, including additions and renovation, and mobile home setups.

- 17. <u>Existing construction</u> means for the purposes of determining rates, structures for which the "start of construction" commenced before August 1, 1980.
- 18. Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and final site grading or the pouring of concrete pads) is completed before August 1, 1980.
- 19. Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed, including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.
- 20. <u>Flood or flooding</u> means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - a. the overflow of inland or tidal waters; or
 - b. the unusual and rapid accumulation or runoff of surface waters from any source.
- 21. <u>Flood Hazard Boundary Map (FHBM)</u> means an official map of a community, issued by the Federal Insurance Administration, where the boundaries of areas of special flood hazard have been defined as Zone A.
- 22. <u>Flood Insurance Rate Map (FIRM)</u> means an official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.
- 23. <u>Flood Insurance Study</u> the official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles and water surface elevations of the base flood.
- 24. Floodplain means any land area susceptible to flooding.
- 25. 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.
- 26. <u>Flood-proofing Certificate</u> The National Flood Insurance Program (NFIP) Flood-proofing Certificate (FEMA form 086-0-34) is the form to be used to certify a flood-proofing design for non-residential buildings that are permitted as an alternative to elevating to or above the Base Flood Elevation (BFE).
- 27. <u>Floodway</u> means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than the base flood elevation.

- 28. <u>Functionally Dependent Use</u> means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
- 29. <u>Highest adjacent grade</u> means the highest natural elevation of the ground surface, prior to construction, adjacent to the proposed foundation of a building.
- 30. Historic Structure means any structure that is;
 - a. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) 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 and determined as eligible by 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 and determined as eligible by communities with historic preservation programs that have been certified either:
 - (i) By an approved state program as determined by the Secretary of the Interior, or
 - (ii) Directly by the Secretary of the Interior in states without approved programs.
- 31. <u>Landscape fill</u> is defined as a non-compacted, loosely placed material often containing substantial organic content such as to promote the growth and survival of plantings, sod or other greenscape installations. Compaction in this scenario will be defined as a mechanical process by which the porosity of a given material is decreased or the density of the given material is increased. Compaction of landscape fill within V-Zones and Coastal A Zones (see LiMWA) is not allowed.
- 32. <u>LiMWA</u> is the Limit of Moderate Wave Action or Landward limit of waves 1.5 to 3.0 feet in height within the AE flood zone. The LiMWA determines the landward limit of the Coastal A Zone (CAZ).
- 33. Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, 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 code.

- Manufactured home means a building, transportable in one or more sections, 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 180 consecutive days or longer and intended to be improved property.
- 35. <u>Manufactured home park or subdivision</u> means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- Mean Sea Level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 (NAVD88), to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- 37. <u>Marsh line</u> means the Delineated jurisdictional boundary as defined by the Coastal Marshlands Protection Act (OCGA 12-5-280).
- 38. <u>National Geodetic Vertical Datum (NGVD)</u> as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain. NGVD was replaced by the North American Vertical Datum of 1988.
- 39. New construction means structures for which the "start of construction" commenced after August 1, 1980 and includes any subsequent improvements to such structures.
- 40. New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after August 1, 1980 [i.e., the effective date of the first floodplain management regulations adopted by a community].
- 41. North American Vertical Datum (NAVD) has replaced the National Geodetic Vertical Datum of 1929 in existing and future FEMA Flood Modernization Maps.
- 42. <u>Post-firm structure</u> is a structure permitted and/or built after Chatham County's initial FIRM date of August 1, 1980.
- 43. <u>Pre-firm structure</u> is a structure permitted and/or built before Chatham County's initial FIRM date of August 1, 1980.
- 44. Recreational vehicle means 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.
- 45. Start of construction means the date the development permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 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 for a basement, footings, piers or 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 structure. (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.
- 46. <u>Structure</u> means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank.
- 47. <u>Structural fill</u> is defined as a screened earthen material used to create a strong, stable base. It is typically compacted to support structures such as buildings, bridges, roads and concrete pads to include driveways, sidewalk, etc. Structural fill is not allowed within VE flood zones or Coastal A Zones (LiMWA).
- 48. <u>Subdivision</u> means the division of a single lot into two or more lots for the purpose of sale or development.
- 49. <u>Substantial damage</u> means 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) percent of the market value of the structure before the damage occurred. Also see definition #48 below.
- 50. Substantial improvement means any combination of repairs, reconstruction, alteration, or improvements to a structure that require a permit from the Department of Building Safety and Regulatory Services, taking place during a 5-year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. NOTE: The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures, which have incurred "substantial damage", regardless of the actual amount of repair work performed. The term does not, however, include either:
 - a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been

identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or

b. Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as an"historic structure".

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the structure commences, whether or not that alteration affects the external dimensions of the structure.

- 51. <u>Substantially improved existing manufactured home parks or subdivisions</u> is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.
- 52. V Zone Certificate The National Flood Insurance Program (NFIP) regulations require coastal communities to ensure that buildings built in V Zones are anchored to resist wind and water loads acting simultaneously. Buildings in V Zones are subject to a greater hazard than buildings built in other types of floodplains. Not only do they have to be elevated above the Base Flood Elevation (BFE), they must be protected from the impact of waves, hurricane-force winds and erosion. A registered professional engineer or architect must certify that the design and planned methods of construction meet NFIP requirements. The community must maintain a copy of this certification in the permit file for all structures built or substantially improved in the V Zone. If breakaway walls are used to enclose areas below the building that exceed a design safe loading resistance of 20 pounds per square feet, those walls must also be certified by the registered professional engineer or architect.
- 53. <u>Variance</u> is a grant of relief from the requirements of this ordinance, which permits construction in a manner otherwise prohibited by this ordinance
- 54. <u>Violation</u> means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, or other certifications, or other evidence of compliance required by this ordinance is presumed to be in violation until such time as that documentation is provided.

§24-126 Severability.

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

Ordinance adopted on September 24, 2001.

CHATHAM COUNTY, GEORGIA

By, Chester Ellis, Chairman

*Chatham County Board of Commissioners

Janice Bocook, Clerk
Chatham County Board of Commissioners