

# Article 11: Floodplain Management

## *Section 241: Definitions*

Unless specifically defined below, words or phrases used in this article shall be interpreted so as to give them the same meaning they have in common usage and to give this article its most reasonable application. The following definitions are for the purposes of this Article only.

**100-year Flood:** See "Base Flood."

**Accessory Structure:** Means the same as "Appurtenant Structure."

**Actuarial Rates:** See "Risk Premium Rates."

**Administrator:** The Federal Insurance Administrator.

**Agency:** The Federal Emergency Management Agency (FEMA).

**Agricultural Commodities:** Agricultural products and livestock.

**Agricultural Structure:** Any structure used exclusively in connection with the production, harvesting, storage, drying, or raising of agricultural commodities.

**Appeal:** A request for review of the Floodplain Administrator's interpretation of any provision of this article or a request for a variance.

**Appurtenant Structure:** A structure that is on the same parcel of property as the principle structure to be insured and the use of which is incidental to the use of the principal structure.

**Area of Special Flood Hazard:** The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

**Base Flood:** The flood having a one percent chance of being equaled or exceeded in any given year.

**Basement:** Any area of the structure having its floor subgrade (below ground level) on all sides.

**Building:** See "Structure."

**Chief Executive Officer or Chief Elected Official:** The official of the community who is charged with the authority to implement and administer laws, articles, and regulations for that community.

**Community:** Any State or area or political subdivision thereof, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

**Development:** Any man-made change to improved or unimproved real estate, including but not limited to

buildings or other structures, levees, levee systems, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

**Elevated Building:** For insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

**Eligible Community or Participating Community:** A community for which the Administrator has authorized the sale of flood insurance under the National Flood Insurance Program (NFIP).

**Existing Construction:** For the purposes of determining rates, structures for which the "Start of Construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing Construction" may also be referred to as "Existing Structures."

**Existing Manufactured Home Park or Subdivision:** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the 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 streets, and either final site grading or the pouring of concrete pads).

**Flood or Flooding:** A general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of inland and/or (2) the unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Boundary and Floodway Map (FBFM):** An official map of a community on which the Administrator has delineated both special flood hazard areas and the designated regulatory floodway.

**Flood Elevation Determination:** A determination by the Administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year.

**Flood Elevation Study:** An examination, evaluation and determination of flood hazards.

**Flood Fringe:** The area outside the floodway encroachment lines, but still subject to inundation by the regulatory flood.

**Flood Hazard Boundary Map (FHBM):** An official map of a community, issued by the Administrator, where the boundaries of the flood areas having special flood hazards have been designated as (unnumbered or numbered) A zones.

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

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

**Floodplain or Flood-prone Area:** Any land area susceptible to being inundated by water from any source (*see "flooding"*).

**Floodplain Management:** The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

**Floodplain Management Regulations:** Zoning articles, subdivision regulations, building codes, health regulations, special purpose articles (such as floodplain and grading articles) and other applications of police power. The term describes such state or local regulations, in any combination thereof, that provide standards for the purpose of flood damage prevention and reduction.

**Floodproofing:** Any combination of structural and nonstructural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, or structures and their contents.

**Floodway or 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 one foot.

**Floodway Encroachment Lines:** The lines marking the limits of floodways on Federal, State and local floodplain maps.

**Freeboard:** A factor of safety usually expressed in feet above a flood level for purposes of floodplain 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 bridge openings and the hydrological effect of urbanization of the watershed.

**Functionally Dependent Use:** A use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities and facilities that are necessary for the loading and unloading of cargo or passengers, but does not include long-term storage or related manufacturing facilities.

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

**Historic Structure:** Any structure that is (a) listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (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.

**"Lowest Floor"** means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building's lowest floor, **provided** that such enclosure is not built so as to render the structure in violation of the applicable floodproofing design requirements of this article.

**Manufactured Home:** A structure, transportable in one or more sections, that 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 "Manufactured Home" **does not include** a "Recreational Vehicle."

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

**Map:** The Flood Hazard Boundary Map (FHBM), Flood Insurance Rate Map (FIRM), or the Flood Boundary and Floodway Map (FBFM) for a community issued by the Federal Emergency Management Agency (FEMA).

**Market Value or Fair Market Value:** An estimate of what is fair, economic, just and equitable value under normal local market conditions.

**Mean Sea Level:** For purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

**New Construction:** For the purposes of determining insurance rates, structures for which the "Start of Construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "New Construction" means structures for which the "Start of Construction" commenced on or after the effective date of the floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

**New Manufactured Home Park or Subdivision:** A manufactured home park or subdivision for which the construction of facilities for servicing the lot 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 the effective date of floodplain management regulations adopted by the community.

**(NFIP):** The National Flood Insurance Program (NFIP).

**Participating Community:** Also known as an "Eligible Community," means a community in which the Administrator has authorized the sale of flood insurance.

**Person:** Includes any individual or group of individuals, corporation, partnership, association, or any other entity, including Federal, State, and local governments and agencies.

**Principally Above Ground:** That at least 51 percent of the actual cash value of the structure, less land value, is above ground.

**Recreational Vehicle:** A vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (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:** To bring the structure or other development into compliance with Federal, State, or local floodplain management regulations; or, if this is not possible, to reduce the impacts of its noncompliance.

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

**Risk Premium Rates:** Those rates established by the Administrator pursuant to individual community studies and investigations which are undertaken to provide flood insurance in accordance with Section 1307 of the National Flood Disaster Protection Act of 1973 and the accepted actuarial principles. "Risk Premium Rates" include provisions for operating costs and allowances.

**Special Flood Hazard Area:** See "Area of Special Flood Hazard."

**Special Hazard Area:** An area having special flood hazards and shown on an FHBM, FIRM or FBFM as zones (unnumbered or numbered) A and AE.

**Start of Construction:** Includes substantial-improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvements were within 180 days of the permit date. The **actual start** means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, the installation of streets and/or walkways, excavation for a basement, footings, piers, foundations, the erection of temporary forms, nor installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial-improvement, the **actual start of construction** means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**State Coordinating Agency:** That agency of the state government, or other office designated by the governor of the state or by state statute at the request of the Administrator to assist in the implementation of the National Flood Insurance Program (NFIP) in that state.

**Structure:** For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. "Structure" for insurance purposes, means a walled and roofed building, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, as well as a manufactured home on a permanent foundation. For the

latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises.

**Substantial-Damage:** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. The term includes Repetitive Loss buildings (see definition).

For the purposes of this definition, “repair” is considered to occur when the first repair or reconstruction of any wall, ceiling, floor, or other structural part of the building commences.

The term does not apply to:

- a.) Any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely necessary to assure safe living conditions, or
- b.) Any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure”, or
- c.) Any improvement to a building.

**Substantial Improvement:** Any combination of reconstruction, alteration, or improvement to a building, taking place during a ten year period, in which the cumulative percentage of improvement equals or exceeds fifty percent of the current market value of the building. For the purposes of this definition, an improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. This term includes structures, which have incurred “repetitive loss” or “substantial damage”, regardless of the actual repair work done.

The term does not apply to:

- a.) any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely necessary to assure safe living conditions, or
  - b.) Any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.” Or
  - c.) Any building that has been damaged from any source or is categorized as repetitive loss.
- \*\* Recommend development of written and adopted policy and procedure.

**Substantially Improved Existing Manufactured Home Parks or Subdivisions:** 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.

**Variance:** A grant of relief by the community from the terms of a floodplain management regulation. Flood insurance requirements remain in place for any varied use or structure and cannot be varied by the community.

**Violation:** 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, other certifications, or other evidence of compliance required by this article is presumed to be in violation until such time as that documentation is provided.

**Water Surface Elevation:** The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum where specified) of floods of various magnitudes and frequencies in the floodplain.

***Section 242: Statutory Authorization, Findings of Fact, and Purposes***

A. Statutory Authorization: The Legislature of the State of Missouri has in Section 64.170 and Section 64.850 RSMo delegated the responsibility to local governmental units to adopt floodplain management regulations designed to protect the health, safety, and general welfare. Therefore, the County Commission of Franklin County, Missouri ordains as follows:

B. Findings of Fact

1. Flood Losses Resulting from Periodic Inundation: The Special Flood Hazard Areas (SFHA) of Franklin County, Missouri are subject to inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base; all of which adversely affect the public health, safety and general welfare.
2. General Causes of the Flood Losses. These flood losses are caused by:
  - a. The cumulative effect of development in any delineated floodplain causing increases in flood heights and velocities;
  - b. The occupancy of flood hazard areas by uses vulnerable to floods, hazardous to others, inadequately elevated, or otherwise unprotected from flood damages.
3. Methods Used To Analyze Flood Hazards. The Flood Insurance Study (FIS) that is the basis of this article uses a standard engineering method of analyzing flood hazards which consist of a series of interrelated steps.
  - a. Selection of a base flood that is based upon engineering calculations which permit a consideration of such flood factors as its expected frequency of occurrence, the area inundated, and the depth of inundation. The base flood selected for this article is representative of large floods which are characteristic of what can be expected to occur on the particular streams subject to this article. It is in the general order of a flood which could be expected to have a one percent chance of occurrence in any one year as delineated on the Federal Insurance Administrator's FIS, and illustrative materials for Franklin County, Missouri, date September 14, 2018 as amended, and any future revisions thereto.
  - b. Calculation of water surface profiles are based on a standard hydraulic engineering

analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood.

- c. Computation of a floodway required to convey this flood without increasing flood heights more than one (1) foot at any point.
- d. Delineation of floodway encroachment lines within which no development is permitted that would cause any increase in flood height.
- e. Delineation of flood fringe, i.e., that area outside the floodway encroachment lines, but still subject to inundation by the base flood.

C. **Statement of Purpose:** It is the purpose of this article to promote the public health, safety, and general welfare; to minimize those losses described in Section 241, Subsection B, 1; to establish or maintain the community's eligibility for participation in the National Flood Insurance Program (NFIP) as defined in 44 Code of Federal Regulations (CFR) 59.22(a)(3); and to meet the requirements of 44 CFR 60.3(d) by applying the provisions of this article to:

1. Restrict or prohibit uses that are dangerous to health, safety, or property in times of flooding or cause undue increases in flood heights or velocities;
2. Require uses vulnerable to floods, including public facilities that serve such uses, be provided with flood protection at the time of initial construction; and
3. Protect individuals from buying lands that are unsuited for the intended development purposes due to the flood hazard.

***Section 243: General Provisions***

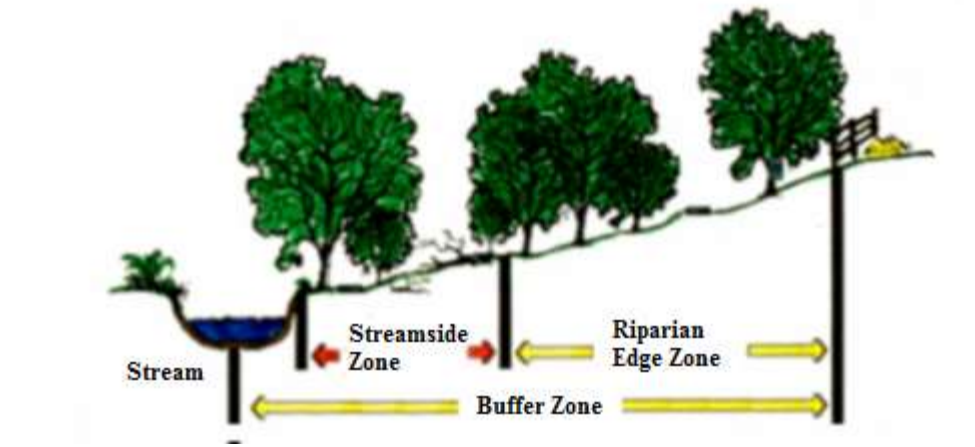
**A. Stream Buffer Requirements:**

1. A stream buffer is an area of land adjacent to streams where vegetation is strongly influenced by the presence of water. Stream buffers play a key role in increasing water quality in associated streams, rivers and lakes.
2. The stream buffers are broken down into two zones: the Stream Side Zone and the Riparian Edge Zone.
  - a. Stream Side Zone is an area within the stream buffer that consists of the stream and the land 25 feet from each edge of the stream. Allowable Uses should minimize disturbance to and impacts on the stream buffer and include:
    - i. Conservation uses, wildlife sanctuaries, nature preserves, forest preserves, fishing areas, and passive areas of parklands.
    - ii. Crossings for foot, bicycle, golf cart, and other similar uses.
    - iii. Unpaved recreational trails and greenways.
    - iv. Roadway crossings, limited to minimum required to provide access for orderly development.



- v. Sanitary sewer line crossings.
  - vi. Other utility crossings, as approved by the Director.
  - vii. Flood control structures and stormwater treatment facilities.
  - viii. Storm sewer pipe discharge.
  - ix. Activities associated with the restoration and enhancement of the Stream Corridor.
  - x. Stream gauging and water quality monitoring.
  - xi. Pump stations and structures required to transport water from the stream.
  - xii. Agricultural uses.
- b. Riparian Edge Zone is the area within the stream buffer that consists of the land from the edge of the Streamside Zone to the boundary of the stream buffer. Allowable Uses should minimize disturbance to and impacts on the stream buffer and include:
- i. All activities allowed in the Streamside Zone.
  - ii. Paved or unpaved recreational trails. Trails must be constructed near natural grade to minimize clearing, filling and grading.
  - iii. Utility installations are allowed only when it is demonstrated installing the utility outside the Stream Corridor is not feasible.
  - iv. Recreational fields, public parklands and golf course fairways may encroach into the stream corridor up to one-quarter of the overall buffer width.
  - v. Agricultural uses.
  - vi. Existing agricultural uses.
  - vii. Other uses approved by the Director of Planning and Zoning that meet the intent of this Section. Allowable uses in the Stream Corridor are limited to low-impact passive uses that require little or no disturbance, grading, clearing, or filling of the existing native vegetation, and are related to recreation, public enjoyment, and protection of the Stream Corridor. These uses may include small non-habitable structures ancillary to the approved use. Examples of these structures include, but are not limited to, decks, gazebos, picnic tables, play equipment, and small concrete slabs built to accommodate such structures. Allowable uses do not include parking facilities.

## Stream Buffer Zones



3. Stream Buffer Setback Requirements
  - a. A stream buffer for a regular stream shall be designated as the area within 100 feet of the top of the stream bank. For the purposes of this section, a regular stream shall be defined as those streams that are identified as perennial streams on the Missouri Interactive Maps listed on the Center for Applied Research Environmental Systems website through the University of Missouri ([www.cares.missouri.edu](http://www.cares.missouri.edu)).
  - b. A stream buffer for a regular stream shall be designated as the area within 50 feet of the top of the stream bank. For the purposes of this section, a regular stream shall be defined as those streams that are identified as intermittent streams on the Missouri Interactive Maps listed on the Center for Applied Research Environmental Systems website through the University of Missouri ([www.cares.missouri.edu](http://www.cares.missouri.edu)).
4. Stream buffers for regular and intermittent streams shall be designated as open space in subdivision in which open space is required. Stream buffers for other streams may also be designated as open space. If streams lie in a subdivision in which open space is not required, stream buffers may be a part of the subdivision lots. All stream buffers shall be labeled on the final subdivision plat.

B. Lands to Which Article Applies: This article shall apply to all lands within the jurisdiction Franklin County, Missouri, identified as numbered and unnumbered A zones, AE zones, on the Flood Insurance Rate Map (FIRM) on Franklin County Index Panel 29071CIND0B date September 14, 2018 as amended, and any future revisions thereto. In all areas covered by this article, no development shall be permitted except through the issuance of a floodplain development permit, granted by the Franklin County Commission or its duly designated representative under such safeguards and restrictions as the Franklin County Commission or the designated representative may reasonably impose for the promotion and maintenance of the general welfare, health of the inhabitants of the community, and as specifically noted Section 244.

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- C. Compliance: No development located within the SFHA of this community shall be located, extended, converted, or structurally altered without full compliance with the terms of this article and all applicable regulations.
- D. Abrogation and Greater Restrictions: It is not intended by this article to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article imposes greater restrictions, the provisions of this article shall prevail. All other ordinances inconsistent with this article are hereby repealed to the extent of the inconsistency only.
- E. Interpretation: In their interpretation and application, the provisions of this article shall be held to be minimum requirements, shall be liberally construed in favor of the governing body, and shall not be deemed a limitation or repeal of any other powers granted by State statutes.
- F. Warning and Disclaimer of Liability: The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions, or the flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This article does not imply that areas outside the floodway and flood fringe or land uses permitted within such areas will be free from flooding or flood damage. This article shall not create a liability on the part of Franklin County, Missouri, any officer or employee thereof, for any flood damages that may result from reliance on this article or any administrative decision lawfully made thereunder.
- G. Severability: If any section, clause, provision, or portion of this article is adjudged unconstitutional or invalid by a court of appropriate jurisdiction, the remainder of this article shall not be affected thereby.

***Section 244: Administration***

- A. Floodplain Development Permit: A floodplain development permit shall be required for all proposed construction or other development, including the placement of manufactured homes, in the areas described in General Provisions C. No person, firm, corporation, or unit of government shall initiate any development or substantial-improvement or cause the same to be done without first obtaining a separate floodplain development permit for each structure or other development.
- B. Designation of Floodplain Administrator: The Zoning Enforcement Officer is hereby appointed to administer and implement the provisions of this article.
- C. Duties and Responsibilities of Floodplain Administrator shall include, but not be limited to:
  - 1. Oversee the administration and the implementation of the provisions of this article, by granting or denying development permit applications in accordance with its provision, where applicable, and
  - 2. Coordinate the activities of the Building Department, the Highway Department, and the Planning and Zoning Department, serving as a single-point of contact with outside public agencies. The Franklin County Planning and Zoning Department will provide standardized forms for use by the other departments. Each of the departments below will maintain their records separately, but in a manner which can be easily and quickly retrieved upon any

unannounced visit by the local, state, or federal administrators and are considered to be open records, available for public review.

3. Review all applications for floodplain development permits to assure that sites are reasonably safe from flooding and that the floodplain development permit requirements of the section have been satisfied.
4. Review of all applications for floodplain development permits for proposed development to assure that all necessary permits have been obtained from Federal, State, or local governmental agency from which prior approval is required by Federal, State, or local law;
5. Review all subdivision proposals and other proposed new development, including manufactured home park or subdivision, to determine whether such proposals will be reasonably safe from flooding;
6. Issue floodplain development permits for all approved applications;
7. Notify adjacent communities and the State of Missouri, State Emergency Management Agency (SEMA) prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA);
8. Ensure that maintenance is provided within the altered or relocated portion of any watercourse so that the flood-carrying capacity is not diminished;
9. Verify and maintain a record of the actual elevation (elevation certificate) (in relation to mean sea level) that the new or substantially improved non-residential structures have been floodproofed,;
10. Verify and maintain a record of the actual elevation (elevation certificate) (in relation to mean sea level) of the lowest floor, including basement, of all new or substantially improved structures,;
11. When floodproofing techniques are utilized for a particular non-residential structure, , Franklin County Planning and Zoning Department shall require certification from a registered professional engineer or architect;
12. When floodproofing is utilized for a particular structure, the Franklin County Planning and Zoning Department shall obtain certification from a registered professional engineer or architect,;
13. Ensure that the Franklin County Planning and Zoning Commission is adequately informed of any proposed developments taking place in a designated floodplain in order to effect any applicable decisions or recommendations during the course of their review.
14. Immediately after a flood, conduct a damage assessment survey to determine the extent of damage for emergency reporting and substantial damage inventory.

11.12

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15. Coordinate with the Building Department to ensure that the permit requirements of these regulations have been satisfied.
  2. Duties of the **Franklin County Highway Department** shall include, but not be limited to:
    - a. Ensure the design of all new or substantially improved county roads and bridges meet the provisions of this regulation, to include certification by a registered professional engineer that no-rise in the base flood will occur;
    - b. Ensure that all rivers, streams, and creeks from which sand and gravel are extracted and from which the County obtains material for its roads is from a facility which has proper floodplain development permits from the County and appropriate state and federal agencies prior to purchase. All extraction facilities since 1984 must have a valid no-rise certificate filed with the County;
- D. Application for Floodplain Development Permit: To obtain a floodplain development permit, the applicant shall first file an application in writing on a form furnished for that purpose. Every floodplain development permit application shall:
1. Describe the land on which the proposed work is to be done by lot, block and tract, house and street address, or similar description that will readily identify and specifically locate the proposed structure or work;
  2. Identify and describe the work to be covered by the floodplain development permit;
  3. Indicate the use or occupancy for which the proposed work is intended;
  4. Indicate the assessed value of the structure and the fair market value of the improvement;
  5. Specify whether development is located in designated flood fringe or floodway;
  6. Identify the existing base flood elevation and the elevation of the proposed development;
  7. Give such other information as reasonably may be required by the Zoning Enforcement Officer;
  8. Be accompanied by plans and specifications for proposed construction, including a plot plan for the subject property;
  9. Be signed by the permittee or his authorized agent who may be required to submit evidence to indicate such authority; and
  10. Be accompanied by any local, State and Federal permits, if applicable.

***Section 245: Provisions for Flood Hazard Reduction***

A. General Standards

1. No permit for floodplain development shall be granted for new construction, substantial improvements, and other improvements, including the placement of manufactured homes,

within the SFHA unless the conditions of this section satisfied.

2. All areas identified as unnumbered A zones on the FIRM are subject to inundation of the one percent (1%) annual chance flood; however, the base flood elevation is not provided. Development within unnumbered A Zones is subject to all provisions of this article. If Flood Insurance Study data are not available, the Franklin County shall require, review, and reasonably utilize any base flood elevation or floodway data currently available from Federal, State, or other sources.
3. Until a floodway is designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within the SFHA on the FIRM unless it is determined by an engineering flood study or an engineering certification based on reliable data acceptable to the Floodplain Administrator that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the wet surface elevation of the base flood more than one foot at any point within the community.
4. All new construction, subdivision proposals, substantial-improvements, prefabricated structures, placement of manufactured homes), and other developments shall require:
  - a. Design or adequate anchorage to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
  - b. Construction with materials resistant to flood damage;
  - c. Utilization of methods and practices that minimize flood damages;
  - d. All electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
  - e. New or replacement water supply systems and/or sanitary sewage systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems be located so as to avoid impairment or contamination; and
  - f. Subdivision proposals and other proposed new development, including manufactured home park or subdivisions, located within the SFHA are required to assure that:
    - a. All such proposals are consistent with the need to minimize flood damage;
    - b. All public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
    - c. Adequate drainage is provided so as to reduce exposure to flood hazards; and
    - d. All proposals for development, including proposals for manufactured home

park or subdivisions, of five (5) acres or fifty (50) lots, whichever is lesser, include within such proposals base flood elevation data.

- e. Proposed development that alters the floodplain shall require an engineering study to determine floodway. Documentation of the changes as determined by the engineering study to the floodplain/floodway boundaries shall be submitted to FEMA as the appropriate LOMC prior to this signing of the final plat or prior to the final release of guarantee for the development.
  - f. Floodplain development permits shall be required on all development including structures in an altered floodplain/floodway until FEMA has approved a LOMR-F removing the development/structure from the floodplain/floodway.
5. Storage, material, and equipment
- a. The storage or processing of materials within the SFHA that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal, or plant life is prohibited unless such materials are stored and secured above the base flood elevation.
  - b. Storage of other material or equipment may be allowed if not subject to major damage by floods, if firmly anchored to prevent flotation or if readily removable from the area with the time available after a flood warning.
6. Agricultural Structures: Structures used solely for agricultural purposes in connection with the production, harvesting, storage, drying, or raising of agricultural commodities, including the raising of livestock, may be constructed at-grade and wet-floodproofed provided there is no human habitation or occupancy of the structure; the structure is of single-wall design; there is no permanent retail, wholesale, or manufacturing use included in the structure; a variance has been granted from the floodplain management requirements of this article; and a floodplain development permit has been issued.
7. Accessory Structures: Structures used solely for parking and limited storage purposes, not attached to any other structure on the site, of limited investment value, and not larger than 400 square feet, may be constructed at-grade and wet-floodproofed provided there is no human habitation or occupancy of the structure; the structure is of single-wall design; a variance has been granted from the standard floodplain management requirements of this article; and a floodplain development permit has been issued.
8. Critical Facilities
- a. All new or substantially improved critical nonresidential facilities including, but not limited, to governmental buildings, police stations, fire stations, hospitals, orphanages, penal institutions, communication centers, water and sewer pumping stations, water and sewer treatment facilities, transportation maintenance facilities, places of public assembly, emergency aviation facilities, and schools shall be elevated above the two-tenths (0.2%) annual chance flood (500-year flood) level or together with attendant utility and sanitary facilities, be floodproofed so that below the 500-year flood level

the structure is water tight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Administration, Section D.

- b. All critical facilities shall have access routes that are above the elevation of the two tenths (0.2%) annual chance flood (500-year flood) level.
- c. No critical facilities shall be constructed in any designated floodway.

9. Hazardous Materials: All hazardous material storage and handling sites shall be located out of the SFHA.

10. Nonconforming Use

- a. A structure, or the use of a structure or premises that was lawful before the passage or amendment of the article, but which is not in conformity with the provisions of this article, may be continued subject to the following conditions:
  - i. If such structure, use, or utility service is discontinued for three hundred and sixty five (365) consecutive days, any future use of the building shall conform to this article.
  - ii. If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than 50 percent of the pre-damaged market value of the structure. This limitation does not include the cost of any alteration to comply with existing state or local health, sanitary, building, safety codes, regulations or the cost of any alteration of a structure listed on the National Register of Historic Places, the State Inventory of Historic Places, or local inventory of historic places upon determination.

11. Cumulative Improvement: A structure may be improved (remodeled or enlarged) without conforming to current requirements for elevation so long as the cumulative value of all work done within the last five calendar years does not exceed 50 percent of the structure's current market value. If the cumulative value of the improvement exceeds 50 percent of the structure's current market value, the structure must be brought into compliance with Provisions of Flood Hazard Reduction, Section B(1) which requires elevation of residential structures to or above the base flood elevation or the elevation/floodproofing of non-residential structures to or above the base flood elevation.

B. Specific Standards

- 1. In all areas identified as SFHA, where base flood elevation data have been provided, as set forth in Provisions of Flood Hazard Reduction, Section A(2), the following provision are required:
  - a. Residential Construction:  
New construction or substantial-improvement of any residential structures, including



manufactured homes , shall have the lowest floor, including basement, elevated two (2) feet above base flood elevation.

b. Non-Residential Construction:

New construction or substantial-improvement of any commercial, industrial, or other non-residential structures, including manufactured homes , shall have the lowest floor, including basement, elevated two (2) feet above the base flood elevation or, together with attendant utility and sanitary facilities, be floodproofed so that below the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator or responsible department as set forth in Administration, Section (D).

c. Require, for all new construction and substantial-improvements, that fully enclosed areas below lowest floor used solely for parking of vehicles, building access, or storage in an area other than a basement and that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria.

- i. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided; and
- ii. The bottom of all opening shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

C. Manufactured Homes

1. All manufactured homes to be placed within the SFHA, on Franklin County's FIRM shall be required to be installed using methods and practices that minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist 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.
2. Manufactured homes that are placed or substantially improved within the SFHA on Franklin County's FIRM at any of the following on sites:
  - a. Outside of manufactured home park or subdivision;
  - b. In a new manufacture home park or subdivision;
  - c. In an expansion to and existing manufactured home park or subdivision; or

- d. In an existing manufacture home park or subdivision on which a manufactured home has incurred substantial-damage as the result of a flood.

shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or at two (2) feet above the base flood elevation and be securely attached to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within the SFHA on the Franklin County's FIRM, that are not subject to the provisions of General Provisions, Section (C) of this article, shall be elevated so that either:
  - a. The lowest floor of the manufacture home is two (2) feet above the base flood level; or
  - b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade and be securely attached to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

D. Areas of Shallow Flooding (AO and AH Zones)

1. Located within the SFHA as described in General Provisions, Section (C) are areas designated as AO zones. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable a indeterminate. The following provisions apply:
  - a. AO Zones
    - i. All new construction and substantial-improvements of residential structures, including manufactured homes , shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on Franklin County's FIRM (at least one foot if no depth number is specified).
    - ii. All new construction and substantial-improvements of any commercial, industrial, or other non-residential structures, including manufactured homes , shall have the lowest floor including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on Franklin County's FIRM (at least one foot if no depth number is specified) or together with attendant utilities and sanitary facilities be completely floodproofed to that so that the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
    - iii. Adequate drainage paths shall be required around structures on slopes, in order to guide flood waters around and away from proposed structures.
  - b. AH Zones
    - i. The specific standards for all the SFHA where base flood elevation has been

provided shall be required as set forth in Provisions for Flood Hazard Reduction, Section B.

- ii. Adequate drainage paths shall be required around structures on slopes, in order to guide flood waters around and away from proposed structures.

#### E. Floodway

Located within areas of special flood hazard established in General Provisions, Section (C), are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters that carry debris and potential projectiles, the following provisions shall apply:

1. Franklin County 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 (1) foot at any point.
2. Franklin County shall prohibit any encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
3. If Provisions for Flood Hazard Reductions, Section E(2) is satisfied, all new construction and substantial-improvements shall comply with all applicable flood hazard reduction provisions of this article.
4. In unnumbered A zones, the community shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from Federal, State, or other sources as set forth in Provisions for Flood Hazard Reduction, Section A(2).

#### F. Recreational Vehicles

Require that recreational vehicles placed on sites within the SFHA on Franklin County's FIRM either:

1. Be on the site for fewer than 180 consecutive days, and be fully licensed and ready for highway use<sup>1</sup>; or
2. Meet the permitting, elevating, and the anchoring requirements for manufactures homes of this article.

#### ***Section 246: Floodplain Management Appeals***

- A. Establishment of Appeal Board: The Board of Zoning Adjustment, as established by the Franklin County Commission, shall hear and decide appeals and requests for variances from the floodplain management requirements of this article.

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<sup>1</sup>A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.

- B. Responsibility of Appeal Board: Where an application for a floodplain development permit is denied by the Floodplain Administrator the applicant may apply for such floodplain development permit directly to the Appeal Board, as defined in Section 245, Subsection A. The Board of Zoning Adjustment shall hear and decide appeals when it is alleged that there is an error in any requirement, decision, or determination made by the Zoning Enforcement Officer in the enforcement or administration sections of this article.
- C. Further Appeals: Any person aggrieved by the decision of the Board of Zoning Adjustment or any taxpayer may appeal such decision to the Circuit Court of Franklin County as provided in RSMo 89.110.
- D. Floodplain Management Variance Criteria: In passing upon such applications for variances, the Board of Zoning Adjustment shall consider all technical data and evaluations, all relevant factors, standards specified in other sections of this article, and the following criteria:
  1. The danger to life and property due to flood damage;
  2. The danger that materials may be swept onto other lands to the injury of others;
  3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  4. The importance of the services provided by the proposed facility to the community;
  5. The necessity to the facility of a waterfront location, where applicable;
  6. The availability of alternative locations, not subject to flood damage, for the proposed use;
  7. The compatibility of the proposed use with existing and anticipated development;
  8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
  9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  10. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters, if applicable, expected at the site; and,
  11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems; streets; and bridges.

***Section 247: Penalties for Violation***

- A. Violation of the provisions of this article or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with granting of variances) shall constitute a misdemeanor. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$ 100.00, 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 Franklin County Unincorporated, or other appropriate authority from taking such other lawful action as is necessary to prevent or remedy any violation.

- B. Any act constituting a violation of the provisions of these regulations or a failure to comply with its requirements, including violations of any conditions and safeguards established in connection with the grants of variances or conditional use permits, shall also subject the offender(s) to the penalties set forth in Subsection A.
- C. These regulations may also be enforced by any appropriate civil action, including injunctions.
- D. Each day a violation continues shall be deemed a separate offense.
- E. Any one, all, or any combination of the foregoing may be used to enforce the provisions of these regulations.

***Section 248: Amendments***

The regulations, restrictions, and boundaries set forth in this article may from time to time be amended, supplemented, changed, or repealed to reflect any and all changes in the National Flood Disaster Protection Act of 1973, provided, however, that no such action may be taken until after a public hearing in relation thereto, at which parties of interest and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in a newspaper of general circulation in Franklin County. At least 20 days shall elapse between the date of this publication and the public hearing. A copy of such amendments will be provided to the Region VII office of the Federal Emergency Management Agency (FEMA). The regulations of this article are in compliance with the National Flood Insurance Program (NFIP) regulations.

***Section 249: Floodplain Management Variance***

A. Conditions for Approving Floodplain Management Variances:

1. Generally, variances may be issued for new construction and substantial-improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items 2 through 6 below have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
2. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places, the State Inventory of Historic Places, or local inventory of historic places upon determination provided the proposed activity will not preclude the structures continued historic designation.
3. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

5. Variances shall only be issued upon (a) a showing of good and sufficient cause, (b) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or articles.
6. A community shall notify the applicant in writing over the signature of a community official that (1) 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 (2) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with the record of all variance actions as required by this article.

#### B. Conditions for Approving Variances for Agricultural Structures:

Any variance granted for an agricultural structure shall be decided individually based on a case by case analysis of the building's unique circumstances. Variances granted shall meet the following conditions as well as those criteria and conditions set forth in Article 5, Sections D and E of this article.

In order to minimize flood damages during the 100-year flood and the threat to public health and safety, the following conditions shall be included for any variance issued for agricultural structures that are constructed at-grade and wet-floodproofed.

1. All agricultural structures considered for a variance from the floodplain management regulations of this article shall demonstrate that the varied structure is located in wide, expansive floodplain areas and no other alternate location outside of the special flood hazard area exists for the agricultural structure. Residential structures, such as farm houses, cannot be considered agricultural structures.
2. Use of the varied structures must be limited to agricultural purposes in zone A only as identified on the community's Flood Insurance Rate Map (FIRM).
3. For any new or substantially damaged agricultural structures, the exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the base flood elevation, must be built with flood-resistant materials in accordance with Article 4, Section A (4)(b) of this article.
4. The agricultural structures must be adequately anchored to prevent flotation, collapse, or lateral movement of the structures in accordance with Article 4, Section A (4)(a) of this article. All of the building's structural components must be capable of resisting specific flood-related forces including hydrostatic, buoyancy, and hydrodynamic and debris impact forces.
5. Any mechanical, electrical, or other utility equipment must be located above the base flood elevation or floodproofed so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions in accordance with Article 4, Section A (4)(d) of this article.
6. The agricultural structures must meet all National Flood Insurance Program (NFIP) opening requirements. The NFIP requires that enclosure or foundation walls, subject to the 100-year

flood, contain openings that will permit the automatic entry and exit of floodwaters in accordance with Article 4, Section B (1)(c) of this article.

7. The agricultural structures must comply with the floodplain management floodway encroachment provisions of Article 4, Section D(2) of this article. No variances may be issued for agricultural structures within any designated floodway, if any increase in flood levels would result during the 100-year flood.
8. Major equipment, machinery, or other contents must be protected from any flood damage.
9. No disaster relief assistance under any program administered by any Federal agency shall be paid for any repair or restoration costs of the agricultural structures.
10. A community shall notify the applicant in writing over the signature of a community official that (1) 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 (2) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with the record of all variance actions as required by this article.
11. Wet-floodproofing construction techniques must be reviewed and approved by the community and a registered professional engineer or architect prior to the issuance of any floodplain development permit for construction.

C. Conditions for Approving Variances for Accessory Structures:

Any variance granted for an accessory structure shall be decided individually based on a case by case analysis of the building's unique circumstances. Variances granted shall meet the following conditions as well as those criteria and conditions set forth in Article 5, Sections D and E of this article.

In order to minimize flood damages during the 100-year flood and the threat to public health and safety, the following conditions shall be included for any variance issued for accessory structures that are constructed at-grade and wet-floodproofed.

1. Use of the accessory structures must be solely for parking and limited storage purposes in zone A only as identified on the community's Flood Insurance Rate Map (FIRM).
2. For any new or substantially damaged accessory structures, the exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the base flood elevation, must be built with flood-resistant materials in accordance with Article 4, Section A (4)(b) of this article.
3. The accessory structures must be adequately anchored to prevent flotation, collapse, or lateral movement of the structure in accordance with Article 4, Section A (4)(a) of this article. All of the building's structural components must be capable of resisting specific flood-related forces including hydrostatic, buoyancy, and hydrodynamic and debris impact forces.
4. Any mechanical, electrical, or other utility equipment must be located above the base flood elevation or floodproofed so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions in accordance with Article 4, Section A (4)(d) of this article.

5. The accessory structures must meet all National Flood Insurance Program (NFIP) opening requirements. The NFIP requires that enclosure or foundation walls, subject to the 100-year flood, contain openings that will permit the automatic entry and exit of floodwaters in accordance with Article 4, Section B (1)(c) of this article.
6. The accessory structures must comply with the floodplain management floodway encroachment provisions of Article 4, Section D(2) of this article. No variances may be issued for accessory structures within any designated floodway, if any increase in flood levels would result during the 100-year flood.
7. Equipment, machinery, or other contents must be protected from any flood damage.
8. No disaster relief assistance under any program administered by any Federal agency shall be paid for any repair or restoration costs of the accessory structures.
9. A community shall notify the applicant in writing over the signature of a community official that (1) 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 (2) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with the record of all variance actions as required by this article.
10. Wet-floodproofing construction techniques must be reviewed and approved by the community and registered professional engineer or architect prior to the issuance of any floodplain development permit for construction.

***Sections 250 thru 260: Reserved***