

TUSCALOOSA FLOODPLAIN MANAGEMENT AND FLOOD DAMAGE PREVENTION CODE

Sec. 1. - Statutory authorization.

The Legislature of the State of Alabama has in title 11, chapter 45, sections 1 through 11, chapter 52, sections 1 through 84; and title 41, chapter 9, section 166 of the Code of Alabama, 1975, authorized local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Sec. 2. - Findings of fact.

- (a) The flood hazard areas of Tuscaloosa are subject to periodic inundation which results in hazards to property, health and safety, and may disrupt commerce and governmental services. Also, this inundation can result in extraordinary public expenditures for flood protection and relief and impairment of the tax base which adversely affect the public health, safety and general welfare.

- (b) These potential flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other properties which are inadequately elevated, floodproofed or otherwise protected from flood damage.

Sec. 3. - Statement of purpose.

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

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

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

- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters;
- (4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Sec. 4. - Objectives.

The objectives of this article are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood-control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) 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;
- (6) 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; and
- (7) To ensure that potential home buyers are notified that property is in a flood area.

Sec. 5. - Definitions.

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

A Zone: The Area of Special Flood Hazard without base flood elevations determined.

Accessory Structure (also referred to as appurtenant structures): A structure which is located on the same parcel of property as a principal structure to be insured and the use of which is incidental to the use of the principal structure. They should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. These structures are used solely for parking (two-car detached garages or smaller) or limited storage (small, low cost storage sheds). They are included under the general definition of structure and are consequently subject to all floodplain management regulations pertaining to structures.

Addition (to an existing building): Any improvement that increases the square footage of a structure. These include lateral additions added to the front, side, or rear of a structure, vertical additions added on top of a structure, and enclosures added underneath a structure. NFIP regulations for new construction apply to any addition that is considered a perimeter expansion or enclosure beneath a structure. If it is considered to be a substantial improvement (more than 50% of market value) to a structure, the existing structure will also need to be treated as new construction. Depending on the flood zone and details of the project, the existing building may not have to be elevated. The determining factors are the common wall and what improvements are made to the existing structure. If the common wall is demolished as part of the project, then the entire structure must be elevated. If only a doorway is knocked through it and only minimal finishing is done, then only the addition has to be elevated.

AE Zone: The Area of Special Flood Hazard with base flood elevations determined.

AH Zone: An area of one percent chance of shallow flooding where depths are between one to three feet (usually shallow ponding), with base flood elevations shown.

AO Zone: An area of one percent chance of shallow flooding where depths are between one to three feet (usually sheet flow on sloping terrain), with depth numbers shown.

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

AR/AE, AR/AH, AR/AO, and AR/A Zones: A flood zone that results from the decertification of a previously accredited flood protection system or levee that is in the process of being restored to provide a one percent chance or greater level of flood protection. After restoration is complete, these areas will still experience residual flooding from other flooding sources.

A99 Zone: That part of the special flood hazard area inundated by the one percent annual chance flood to be protected from the one percent chance flood by a Federal flood protection system or levee under construction, no base flood elevations are determined.

Area of shallow flooding: A designated AO Zone on Tuscaloosa's Flood Insurance Rate Map (FIRM) with base flood depths from one to three (3) feet, where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Area of special flood hazard (also see "Special flood hazard area): The land in the floodplain within a community subject to a one per cent 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 in section 6-95(b).

Base flood: The flood having a one per cent chance of being equaled or exceeded in any given year (also referred to as the "one percent chance flood").

Base flood elevation: The computed elevation to which floodwater is anticipated to rise during the base flood. It is also the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. Base Flood Elevations are shown in the FIS and on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1–A30, AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, V1–V30 and VE.

Basement: That portion of a building having its floor subgrade (below ground level) on all sides.

Building (also see Structure): (1) A structure with 2 or more outside rigid walls and a fully secured roof, that is affixed to a permanent site; or (2) a manufactured home (a "manufactured home," also known as a mobile home, is a structure built on a permanent chassis, transported to its site in 1 or more sections, and affixed to a permanent foundation); or (3) a travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

Community: A political entity and/or its authorized agents or representatives that have the authority to adopt and enforce floodplain codes and ordinances for the area under its jurisdiction.

Community Rating System (CRS): A program developed by the Federal Insurance Administration to provide incentives for those communities in the

Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Critical facility (aka, critical action): Facilities for which the effects of even a slight chance of flooding would be too great. The minimum floodplain of concern for critical facilities is the 0.2 percent chance flood level. Critical facilities include, but are not limited to facilities critical to the health and safety of the public such as: emergency operations centers, designated public shelters, schools, nursing homes, hospitals, police, fire and emergency response installations, vital data storage centers, power generation and water and other utilities (including related infrastructure such as principal points of utility systems) and installations which produce, use or store hazardous materials or hazardous waste (as defined under the Clean Water Act and other Federal statutes and regulations).

D Zone: An area in which the flood hazard is undetermined.

Dam: Any artificial barrier, including appurtenant works, constructed to impound or divert water, waste water, liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered a dam.

Development: Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, and storage of materials or equipment.

Dry Floodproofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate flood damages to real estate or improved real estate property, water, and sanitary facilities, structures, and their contents. Structures shall be floodproofed with a minimum of two feet above the base flood elevation. Dry floodproofing of a pre-FIRM residential structure that has not been substantially damaged or improved is allowed. Dry floodproofing of a post-FIRM residential building is not allowed. Non-residential structures may be dry floodproofed in all flood zones with the exception of the Coastal High Hazard Area or the Coastal AE Zone.

Elevated building: A nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

Elevation Certificate: A FEMA form used as a certified statement that verifies a building's elevation information.

Encroachment: The advance or infringement of uses, plant growth, fill, excavation, buildings, structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing construction: Any structure for which the "start of construction" commenced before November 1st, 1979. 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 November 1st, 1979.

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 or tidal waters;
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- (3) Mudslides which are proximately caused by flooding as described in part (2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- (4) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually highwater level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in part (1) of this definition.

Flood hazard boundary map (FHBM): An official map of the City of Tuscaloosa, issued by the Federal Insurance Administration, where the boundaries of the areas of special flood hazard have been defined as Zone A.

Flood insurance rate map (FIRM): An official map of the City of Tuscaloosa on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the City of Tuscaloosa.

Flood Insurance Study/ Flood Elevation Study: An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide and/or flood-related erosion hazards.

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

Floodplain management: The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations: This code and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

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

Floodway (Regulatory Floodway): The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Floodway fringe: That area of the special flood hazard area on either side of the regulatory floodway.

Flood Protection Elevation: The base flood elevation plus the community freeboard. In areas where no base flood elevations exist from any authoritative source, the flood protection elevation can be historical flood elevations or base flood elevations determined and/or approved by the floodplain administrator plus freeboard.

Freeboard: A factor of safety usually expressed in feet above the Base Flood Elevation (BFE) for purposes of floodplain management which tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed. Used to determine the level for a building's lowest floor elevation or level of floodproofing required to be in compliance with the community's floodplain management regulations.

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

Hardship (as related to variances of this code): The exceptional difficulty that would result from a failure to grant the requested variance. The floodplain management board of adjustment requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

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

Historic structure: Any structure that is:

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

- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved programs.

Increased cost of compliance: Provides for the payment of a claim to help pay for the cost to comply with state or community floodplain management laws or ordinances from a flood event in which a building has been declared substantially damaged or repetitively damaged. When an insured building is damaged by a flood and the state or community declares the building to be substantially damaged or repetitively damaged, ICC coverage will help pay for the cost to elevate, floodproof, demolish, or relocate the building up to a maximum benefit of thirty thousand dollars (\$30,000.00). This coverage is in addition to the building coverage for the repair of actual physical damages from flood under the SFIP.

Letter of Map Change (LOMC): An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMC's are broken down into the following categories:

- (1) *Letter of Map Amendment (LOMA):* An amendment based on technical data showing that a property was incorrectly included in a designated SFHA, was not elevated by fill (only by a natural grade elevation), and will not be inundated by the one percent chance flood. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.
- (2) *Letter of Map Revision (LOMR):* A revision based on technical data that, usually due to manmade changes, shows changes to flood

zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination concerning whether a structure or parcel has been elevated by fill above the BFE and is, therefore, excluded from the SFHA.

- (3) *Conditional Letter of Map Revision (CLOMR)*: A formal review and comment by FEMA as to whether a proposed project complies with the minimum NFIP floodplain management criteria. A CLOMR does not revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

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

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

Lowest adjacent grade: The point of the ground level immediately next to a building. This may be the sidewalk, patio, deck support, or basement entryway immediately next to the structure after the completion of construction. It does not include earth that is placed for aesthetic or landscape reasons around a foundation wall. It does include natural ground or properly compacted fill that comprises a component of a building's foundation system.

Lowest floor: 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: A building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

Manufactured home park or subdivision: A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

Market value: The property value (as agreed between a willing buyer and seller), excluding the value of land as established by what the local real estate market will bear. Market value can be established by independent certified appraisal; replacement cost depreciated by age of building (Actual Cash Value); or adjusted assessed values.

Mean sea level: The average height of the sea for all stages of the tide. It is used as a reference for establishing the base flood elevations shown on a community's Flood Insurance Rate Map (FIRM). For purposes of this code the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum.

National Flood Insurance Program (NFIP): The federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry.

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

New construction: Any structure (see definition) for which the "start of construction" commenced after November 1st, 1979 and includes any subsequent improvements (including additions) to such structures.

New manufactured home park or subdivision home park or subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after November 1st, 1979.

Non-Residential: Includes but is not limited to; small business concerns, churches, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, and hotels and motels with normal room rentals for less than 6 months duration.

North American Vertical Datum (NAVD) of 1988: A vertical control, corrected in 1988, used as a reference for establishing varying elevations within the floodplain.

Obstruction: Includes but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channel

construction, bridge, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One Percent Flood (aka 100-Year Flood): The flood that has a one percent chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A or V is subject to inundation by the one percent chance flood. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood within the SFHA.

Participating Community: Any community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

Post-FIRM Construction: New construction and substantial improvements for which start of construction occurred after November 1st, 1979.

Pre-FIRM Construction: New construction and substantial improvements for which start of construction occurred on or before November 1st, 1979.

Probation: An action taken by FEMA to formally notify participating communities of the first of the two NFIP sanctions due to their failure to correct violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

Public safety and nuisance: Anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle: A vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred (400) square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck:

- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use; and
- (5) Intended to be on site less than one hundred eighty (180) consecutive days. ;
- (6) Licensed and titled as a recreational vehicle or park model;
- (7) Has no attached deck, porch, or shed: and
- (8) Has quick-disconnect sewage, water, and electrical connectors.

Regular Program: The second phase of the community's participation in the NFIP in which second layer coverage is available based upon risk premium rates only after FEMA has completed a flood risk study for the community.

Regulatory floodway: See Floodway.

Remedy a violation: To bring the structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the code or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

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

Repetitive Loss Property: Any insurable structure for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two of the claims must be more than ten (10) days apart but, within ten years of each other. A repetitive loss property may or may not be currently insured by the NFIP.

Section 1316: No new flood insurance policy or federal disaster assistance shall be provided for any property which the Administrator finds has been declared by a duly constituted State or local zoning authority or other authorized public body, to be in violation of State or local laws, regulations or ordinances which are intended to discourage or otherwise restrict land development or occupancy in floodprone areas. If the structure is made compliant with the

applicable community's floodplain management code or ordinance, then the Section 1316 declaration can be rescinded by the community and flood insurance and disaster assistance eligibility restored.

Severe Repetitive Loss Structure: Any insured property that has met at least one of the following paid flood loss criteria since 1978, regardless of ownership:

- (1) Four or more separate claim payments of more than \$5,000 each (including building and contents payments); or
- (2) Two or more separate claim payments (building payments only) where the total of the payments exceeds the current market value of the property.

In either case, two of the claim payments must have occurred within ten years of each other. Multiple losses at the same location within ten days of each other are counted as one loss, with the payment amounts added together.

Special flood hazard area (SFHA): That portion of the floodplain subject to inundation by the base flood and/or flood-related erosion hazards as shown on a FHBM or FIRM as Zones A, AE, AH, AO, AR, AR/AE, AR/AO, AR/AH, AR/A, A99, or VE.

Start of construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. (NOTE: accessory structures are NOT exempt from any code or ordinance requirements). For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure: A walled and roofed building, including a liquid or gas storage tank, that is principally above ground, as well as a manufactured home.

Substantial damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) per cent of the market value of the structure before the damage occurred. Substantial damage also means 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, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.

Substantial improvement: Any combination of repairs, reconstruction, alteration, or improvements to a building, taking place during a five-year period, in which the cumulative cost equals or exceeds fifty (50) per cent of the market value of the building. The market value of the building should be the appraised value of the building prior to the start of the initial repair or improvement or in the case of damage, the value of the building prior to the damage occurring. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. For the purpose of this definition, "substantial improvement" is considered to occur 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. The term does not, however, include any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions (provided that said code deficiencies were not caused by neglect or lack of maintenance on the part of the current or previous owners).

Substantially improved existing manufactured home parks or subdivision is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds fifty (50) per cent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Suspension: The removal, with or without probation, of a participating community from the NFIP because the community failed to adopt and enforce the compliant floodplain management regulations required for participation in the NFIP.

Variance is a grant of relief from the requirements of this article which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship.

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 in the Code of Federal Regulations (CFR) Sections 44, 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) and corresponding parts of this chapter is presumed to be in violation until such time as that documentation is provided.

Watercourse: Any flowing body of water including a river, creek, stream, or a branch.

Water surface elevation: The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, the North American Vertical Datum (NAVD) of 1988, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Wet floodproofing: A method of construction which allows water to enter a structure in such a way that will minimize damage to the structure and its contents. Wet floodproofing is appropriate for functionally dependent use and uses that facilitate open space use by variance only, structures utilized for parking or limited storage, or when all other techniques are not technically feasible. Wet floodproofing shall not be utilized as a method to satisfy the requirements of this code for bringing substantially damaged or improved structures into compliance. Wet floodproofing is not allowed in lieu of complying with the lowest floor elevation requirements for new residential buildings.

X Zones (shaded): Areas of 0.2 percent chance flood that are outside of the SFHA subject to the one percent chance flood with average depths of less than one foot, or with contributing drainage area less than one square mile, and areas protected by certified levees from the base flood.

X Zones (unshaded): Areas determined to be outside the 0.2 percent chance floodplain.

Zone: A geographical area shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

Sec. 6. - General provisions.

- (a) *Lands to which this article applies.* This article shall apply to all areas of special flood hazard within the Corporate Limits of the City of Tuscaloosa.

- (b) *Basis for establishing the areas of special flood hazard.* The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS) dated January 16, 2014, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this article.
- (1) When Preliminary Flood Insurance Studies and Flood Insurance Rate Maps have been provided by FEMA to the City of Tuscaloosa:
- a. Prior to the issuance of a Letter of Final Determination (LFD) by FEMA, the use of the preliminary flood hazard data shall only be required where no base flood elevations and/or floodway areas exist or where the preliminary base flood elevations or floodway area exceed the base flood elevations and/or floodway widths in the effective flood hazard data provided by FEMA. Such preliminary data may be subject to revision through valid appeals.
- b. Upon the issuance of a Letter of Final Determination (LFD) by FEMA, the revised flood hazard data shall be used and replace all previously effective flood hazard data provided by FEMA for the purposes of administrating these regulations.
- (2) Where adopted regulatory standards conflict, the more stringent base flood elevation shall prevail. Preliminary FIS data may be subject to change by a valid appeal.
- (c) *Establishment of development permit.* A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities in areas of special flood hazards.
- (d) *Compliance.* No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.

- (e) *Abrogation and greater restrictions.* This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- (f) *Interpretation.* In the interpretation and application of this article all provisions shall be considered as minimum requirements, liberally construed in favor of the governing body, and deemed neither to limit nor repeal any other powers granted under state statutes.
- (g) *Warnings and disclaimer of liability.* The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This article 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 article shall not create liability on the part of the City of Tuscaloosa or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.
- (h) *Penalties for violation.*
 - (1) Notice of Violation. If the Floodplain Administrator determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, or the provisions of this code, he/she shall issue a written notice of violation, by certified return receipt mail, to such applicant or other responsible person. Where the person is engaged in activity covered by this code without having first secured a permit, the notice shall be served on the owner or the responsible person in charge of the activity being conducted on the site. The notice of violation shall contain:
 - a. The name and address of the owner or the applicant or the responsible person;
 - b. The address or other description of the site upon which the violation is occurring;

- c. A statement specifying the nature of the violation;
- d. A description of the remedial measures necessary to bring the action or inaction into compliance with the permit or this code and the date for the completion of such remedial action;
- e. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed, and;
- f. A statement that the determination of violation may be appealed by filing a written notice of appeal within ten (10) days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient).

(2) Additional Enforcement Actions. If the remedial measures described in the Notice of Violation have not been completed by the date set forth for such completion in the Notice of Violation, any one or more of the following enforcement actions may be enacted against the person to whom the Notice of Violation was directed. Before taking any of the following actions or imposing any of the following penalties, the Floodplain Administrator shall first notify the applicant or other responsible person in writing of the intended action. The Floodplain Administrator shall provide reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the Floodplain Administrator may take or impose any one or more of the following enforcement actions or penalties:

- a. Stop Work Order: The Floodplain Administrator may issue a stop work order, which shall be served on the applicant or other responsible person. The stop work order shall remain in effect -until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or

violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.

- b. Withhold or revoke Certificate of Occupancy: The Floodplain Administrator may request the chief building official to refuse to issue and/or revoke a certificate of occupancy for the building or other improvements and/or repairs conducted or being conducted on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein.
- c. Suspension, revocation, or modifications of permit: The Floodplain Administrator may suspend, revoke, or modify the permit authorizing the development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the Floodplain Administrator may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- d. Civil Penalties. Violation of the provision of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, 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 five hundred dollars (\$500.00) or imprisoned for not more than six (6) months, 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 the City of Tuscaloosa from taking such other lawful action as is necessary to prevent or remedy any violation (see section 1-8, City Code of Tuscaloosa).

- e. Section 1316 Declaration: Section 1316 of the National Flood Insurance Act authorizes FEMA to deny flood insurance to a property declared by the State, County, or Municipal government to be in violation of the local floodplain management code or ordinance. A Section 1316 declaration shall be used when all other legal means to remedy a violation have been exhausted and the structure is noncompliant. Once invoked, the property's flood insurance coverage will be terminated and no new or renewal policy can be issued; no flood insurance claim can be paid on any policy on the property, and disaster assistance will be denied.

The declaration must be in writing (letter or citation), from the community to the property owner and the applicable FEMA Regional Office, and must contain the following items:

- i. The name(s) of the property owner(s) and address or legal description of the property sufficient to confirm its identity and location;
- ii. A clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation or ordinance;
- iii. A clear statement that the public body making the declaration has authority to do so and a citation to that authority;
- iv. Evidence that the property owner has been provided notice of the violation and the prospective denial of insurance; and
- v. A clear statement that the declaration is being submitted pursuant to section 1316

of the National Flood Insurance Act of 1968, as amended.

If a structure that has received a Section 1316 declaration is made compliant with the community's floodplain management code or ordinance, then the Section 1316 declaration can be rescinded by the community and flood insurance eligibility restored.

- (3) Administrative appeal. Any person receiving a Notice of Violation may appeal the determination of the Floodplain Administrator, including but not limited to the issuance of a stop work order, the assessment of an administratively-imposed monetary penalty, the suspension, revocation, modification, or grant with condition of a permit by the community upon finding that the holder is in violation of permit conditions, or that the holder is in violation of any applicable ordinance or any of the community's rules and regulations, or the issuance of a notice of bond forfeiture.

The Notice of Appeal must be in writing and must be received within ten (10) days from the date of the Notice of Violation. A hearing on the appeal shall take place within thirty days from the date of receipt of the Notice of Appeal by the Floodplain Administrator.

- (4) All appeals shall be heard and decided by the floodplain management board of adjustment, which shall be the City Council. The floodplain management board of adjustment shall have the power to affirm, modify, or reject the original penalty, including the right to increase or decrease the amount of any monetary penalty and the right to add or delete remedial actions required for correction of the violation and compliance with the community's flood damage prevention code, and any other applicable local, state, or federal requirements. The decision of the floodplain management board of adjustment shall be final.

Sec. 7. - Administration.

- (a) *Designation of Floodplain Administrator.* Except as otherwise specified herein, the provisions of this article shall be administered by the city engineer or his/her designated

representative. The office of urban development, department of infrastructure and public services, and all other appropriate departments and officials of the city shall, within the limits of their competence and jurisdictional responsibilities, aid in the enforcement hereof.

- (b) *Permit procedures.* No property owner, contractor, or other person shall carry out any development activities within an area of special flood hazards without having first submitted, and received approval of, a site development plan, as required by Ordinance No. 7075 creating article XII of the Code of Tuscaloosa regarding land development activities (referred to hereafter in this article as an application for a development permit). Application shall be made to the city engineer, on forms furnished by him/her, and may include, but not be limited to, the following: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following procedures and information are required for all projects in the Special Flood Hazard Areas within the Corporate Limits of the City of Tuscaloosa:

(1) *Application stage.*

Plot plans are to include:

- a. The Base Flood Elevation (BFE) where provided as set forth in section 6(b); or section 8(c)
- b. Boundary of the Special Flood Hazard Area and floodway(s) as delineated on the FIRM or other flood map as determined in section 6(b);
- c. Flood zone designation of the proposed development area as determined on the FIRM or other flood map as determined in section 6(b);
- d. Elevation in relation to mean sea level (or highest adjacent grade) of the regulatory lowest floor level, including basement, of all proposed structures;
- e. Elevation in relation to mean sea level to which any non-residential structure will be flood proofed;

- f. Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria of section 8(b)(2);
- g. A Foundation Plan, drawn to scale, that shall include details of the proposed foundation system to ensure all provisions of this code are met. These details include, but are not limited to, the proposed method of elevation (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls) and description of any flood openings required in accordance with sections 8(b)(1) and (b)(3) when solid foundation perimeter walls are used.
- h. Usage details of any enclosed areas below the lowest floor shall be described.
- i. Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
- j. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development including current and proposed locations of the watercourse. An engineering report shall be provided on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream. The affected properties shall be depicted on a map or on the plot plan.
- k. Certification of the plot plan by a licensed professional engineer or surveyor in the State of Alabama is required.

(2) *Construction stage.*

For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the regulatory floor elevation or flood-proofing level using appropriate FEMA elevation or floodproofing certificate immediately after the lowest floor or flood proofing is completed.

- a. When floodproofing is utilized for non-residential structures, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
- b. Any work undertaken prior to submission of these certifications shall be at the permit holder's risk.
- c. The Floodplain Administrator 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.
- d. The Floodplain Administrator shall make periodic inspections of projects during construction throughout the Special Flood Hazard Areas within the jurisdiction of the community to ensure that the work is being done according to the provisions of the local code and the terms of the permit. Members of his or her inspections/engineering department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- e. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the

requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.

- f. In any lot or lots/areas that will be or have been removed from the special flood hazard area utilizing a Letter of Map Revision Based on Fill (LOMR-F), the top of fill level must meet the community's freeboard elevation at that location. If the top of fill level is below the freeboard elevation, all new structures, additions to existing buildings or substantial improvement must meet the required community freeboard elevation.

(3) *Finished Construction.*

Upon completion of construction, a FEMA elevation certificate (FEMA Form 81-31), which depicts all finished construction elevations, is required to be submitted to the Floodplain Administrator prior to issuance of a Certificate of Occupancy.

- a. If the project includes a floodproofing measure, a FEMA floodproofing certificate is required to be submitted by the permit holder to the Floodplain Administrator.
- b. The Floodplain Administrator shall review the certificate(s) data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance.
- c. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.
- d. Documentation regarding completion and compliance with the requirements stated in the permit application and with Section 7b(1) of this code shall be provided to the local Floodplain Administrator at the completion of construction or records shall be maintained throughout the Construction Stage by inspectors for the Floodplain

Administrator. Failure to provide the required documentation shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

- e. All records that pertain to the administration of this code shall be maintained and made available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.

(c) *Duties and responsibilities of the Floodplain Administrator.* Duties of the Floodplain Administrator shall include, but not be limited to:

- (1) Review all development permits to assure that the permit requirements of this article have been satisfied; and assure that development sites are reasonably safe from flooding.
- (2) Review copies of all necessary permits 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. Maintain such permits permanently with floodplain development permit file.
- (3) Notify adjacent communities and the Alabama 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), and the Alabama Department of Economic and Community Affairs/Office of Water Resources/NFIP State Coordinator's Office.
- (4) For any altered or relocated watercourse, submit engineering data/analysis within six (6) months to FEMA and State 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.
- (5) Verify and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the regulatory floor level (including basement) of all new construction or substantially improved structures, in accordance with section 7(b)(2).
- (6) Verify and record the actual elevation in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with section 7(b)(2).

- (7) When flood-proofing is utilized for a structure, the Floodplain Administrator shall obtain certification of design criteria from a registered professional engineer or architect, in accordance with section 8(b)(2).
 - (8) 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 Floodplain Administrator shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
 - (9) When base flood elevation data or floodway data have not been provided in accordance with section 6(b), then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of section 8.
 - (10) All records pertaining to the provisions of this code shall be maintained in the office of the Floodplain Administrator and shall be open for public inspection.
 - (11) In addition, the Floodplain Administrator and his or her designated staff is hereby authorized and directed to enforce the provisions of this code. The Administrator is further authorized to render interpretations of this code, which are consistent with its spirit and purpose.
- (d) *Variance procedures:*
- (1) City council, sitting as the floodplain management board of adjustment, shall hear and decide appeals and requests for variances from the requirements of this article.
 - (2) The floodplain management board of adjustment shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this code.
 - (3) Variances may be issued for the repair or rehabilitation of historic structures (see definition) 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.

- (4) In reviewing requests for variance, the floodplain management board of adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:
- a. 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, the development is protected by methods that minimize flood damage during the base flood, and it creates no additional threats to public safety.
 - b. Variances shall not be issued within any designated floodway if ANY increase in flood levels during the base flood discharge would result.
 - c. The evaluation must be based on the characteristics unique to that property and not be shared by adjacent parcels. The characteristics must pertain to the land itself, not to the structure, its inhabitants, or its owners.
 - d. Variances should never be granted for multiple lots, phases of subdivisions, or entire subdivisions.
 - e. The danger of life and property due to flooding or erosion damage including materials that may be swept onto other lands to the injury of others.
 - f. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner and the community.
 - g. The safety of access to the property during flood conditions for daily traffic and emergency vehicles.
 - h. The importance of the services provided by the proposed facility to the community.
 - i. The necessity of the facility to be at a waterfront location, where applicable.

- j. The compatibility of the proposed use with existing and anticipated development based on the community's comprehensive plan for that area.
- k. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
- l. The costs associated with providing governmental services to the development during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and community infrastructure such as streets, bridges, and culverts.

Upon consideration of factors listed above, and the purpose of this code, the floodplain management board of adjustment may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this article.

- (5) Conditions for variances. The provisions of this Code 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.
 - a. A variance 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, in conformance with the procedures of sections 7(d)(5)c,d, (6)a and (6)b of this Code.
 - b. In the instance of a Historic Structure, a determination is required that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - c. Variances shall only be issued upon:
 - 1. A showing of good and sufficient cause:
 - 2. A determination that failure to grant the variance would result in exceptional hardship, and;

3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - d. A variance shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - e. Variances shall not be issued “after the fact.”
- (6) Variance notification and records.
 - a. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the issuance of such a variance could:
 1. Result in rate increases in the hundreds and possibly thousands of dollars annually depending on structure and site-specific conditions; and
 2. Increase the risk to life and property resulting from construction below the base flood level.
 - b. The Floodplain Administrator shall maintain the records of all appeal actions and variance actions, including justification for their issuance. Report any variances to the Federal Emergency Management Agency Region 4 and the Alabama Department of Economic and Community Affairs/Office of Water Resources upon request.
 - c. A copy of the notice shall be recorded by the Floodplain Administrator in the Tuscaloosa County Probate Records office and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.
- (7) Any person seeking a variance as hereinabove provided shall make application in writing to the city engineer or his/her designated representative stating the variance requested and the reasons and justifications therefore. The city engineer or his/her

designated representative shall promptly review the application for completeness and, when complete, shall request the City Council of Tuscaloosa to set a date for hearing. The applicant shall be notified of the hearing date by the city engineer or his/her designated representative, which hearing date shall be set as soon as practicable and within ten (10) days from receipt of the completed application unless good cause is shown for delay. The council, sitting as the floodplain management board of adjustment, shall rule on the request as promptly as practicable after having heard and considered all facts bearing on the justification therefore.

Sec. 8. - Provisions for flood hazard reduction.

- (a) *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) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
 - (3) New construction and substantial improvements of existing structures shall be constructed with materials and utility equipment resistant to flood damage.
 - (4) New construction and substantial improvements of existing structures shall be constructed by methods and practices that minimize flood damage:
 - a. All subdivision proposals shall be consistent with the need to minimize flood damage;
 - b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (5) All electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within components during conditions for flooding.
 - (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
 - (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
 - (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
 - (9) Proposed new construction and substantial improvements that are partially located in an area of special flood hazard shall have the entire structure meet the standards for new construction.
 - (10) Any alteration, repair, reconstruction or improvements to a structure which is not in compliance with the provisions of this code, shall be undertaken only if said nonconformity is not furthered, extended, or replaced.
 - (11) Proposed new construction and substantial improvements that are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations shall have the entire structure meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.
 - (12) Require copies of all necessary permits 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. Maintain such permits be on file.

(b) *Specific standards.* In all areas of special flood hazard where base flood elevation data have been provided, as set forth in section 6(b), the following provisions are required:

(1) *Residential and Non-Residential structures.* New construction and substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, elevated no lower than two (2) feet above base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of section 8(b)(3).

(2) *Non-Residential structures.* New construction or substantial improvement of any non-residential 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 two (2) 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 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 in section 7(c)(7).

Dry floodproofing is allowed only where flood velocities are less than or equal to five feet per second. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. A Flood Emergency Operation Plan and an Inspection and Maintenance Plan must be provided by the design professional for the building. Such certification shall be provided to the Floodplain Administrator.

(3) *Enclosures for elevated buildings.* New construction and substantial improvements of existing structures that include any fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall

be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of flood waters.

- a. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 1. Provide a minimum of two (2) openings having a total net area of not less than one square inch for every square foot enclosed area subject to flooding (if a structure has more than one enclosed area below the base flood elevation, each shall have openings on exterior walls);
 2. The bottom of all openings shall be no higher than one foot above grade; and
 3. Openings may be equipped with screens, louvers, valves or other coverings and devices provided they permit the automatic flow of floodwaters in both directions.
- b. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairways or elevator);
- c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms. All interior walls, ceilings and floors below the base flood elevation shall be unfinished and/or constructed of flood resistant materials.
- d. Mechanical, electrical or plumbing devices shall not be installed below the Base Flood Elevation. The interior portion of such enclosed area(s) shall be void of utilities except for essential lighting and power as required.

- e. Property owners shall be required, prior to issuance of a Certificate of Occupancy, to execute a flood openings/venting affidavit acknowledging that all openings will be maintained as flood vents, and that the elimination or alteration of the openings in any way will violate the requirements for enclosures below the base flood elevation. Periodic inspections will be conducted by the Floodplain Administrator to ensure compliance.

- f. Property owners shall agree, certify, and declare to the following conditions and restrictions placed on the affected property as a condition for granting a permit. A binding agreement, referred to as a Non-conversion Agreement, is required to be executed and recorded with the Deed. It shall obligate the Owner to the following terms and conditions:
 - 1. That the enclosed area(s) shall remain fully compliant with all parts of the section Enclosures for Elevated Buildings of this Ordinance unless otherwise modified to be fully compliant with the applicable sections of the Flood Damage Prevention Ordinance in effect at the time of conversion.

 - 2. A duly appointed representative of the City of Tuscaloosa is authorized to enter the property for the purpose of inspecting the exterior and interior of the enclosed area to verify compliance with the Agreement and Permit.

 - 3. The City of Tuscaloosa may take any appropriate legal action to correct any violation pertaining to the Agreement and the subject Permit.

(4) *Standards for manufactured homes and recreational vehicles:*

- a. All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks

or subdivisions, in substantially improved manufactured home parks or subdivisions, or in new manufactured home parks or subdivisions must meet all the requirements for new construction, including elevation and anchoring.

b. All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:

1. The lowest floor of the manufactured home is elevated no lower than two (2) feet above the level of the base flood elevation; or
2. Where no Base Flood Elevation exists, the manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength and no more than a maximum of sixty (60) inches in height above grade to meet the standards of section 8(d)(5).
3. The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
4. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of subsections (b)(4)b.1. and 3. above.

c. All recreational vehicles placed on sites must either:

1. Be on the site for fewer than 180 consecutive days, fully licensed and 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

2. The recreational vehicle must meet all the requirements for new construction, including anchoring and elevation requirements of subsections (4)a. or b. 1. and 3. above.
- (5) Require, until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the City of Tuscaloosa FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (6) *Accessory Structures (also referred to as appurtenant structures)* – This provision generally applies to new and substantially improved accessory structures. When an accessory structure complies with all other provisions of this code (including floodway encroachment), represents a minimal investment (less than \$500), and meets the requirements outlined below, these structures may be wet-floodproofed and do not have to be elevated or dry floodproofed.

Accessory structures include, but are not limited to, residential structures such as detached garages, storage sheds for garden tools or woodworking, gazebos, picnic pavilions, small pole barns, and similar buildings. The following provisions apply to accessory structures built below the base flood elevation:

- a. A permit shall be required prior to construction or installation.
- b. Must be low value (less than \$500) and not be used for human habitation.
- c. Use must be restricted to parking of personal vehicles or limited storage (low-cost items that

cannot be conveniently stored in the principal structure).

- d. Must be designed with an unfinished interior and constructed with flood damage-resistant materials below the BFE.
- e. Must be adequately anchored to prevent flotation, collapse, or lateral movement.
- f. Must have adequate flood openings and be designed to otherwise have low flood damage potential.
- g. Shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- h. Any mechanical and other utility equipment in the structure must be elevated to or above the BFE or must be floodproofed.

(c) *Floodways.* Located within areas of special flood hazard established in section 6(b) are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and has 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:

- (1) The community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one foot at any point;
- (2) Prohibit encroachments, including fill, new construction, substantial improvements or other development unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood

discharge; A registered professional engineer must provide supporting technical data and certification thereof;

- (3) Encroachments may be permitted within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional letter of map revision (CLOMR) and floodway revision, fulfills the requirements for such revisions as established under the provisions of § 65.12, and receives the approval of FEMA;
 - (4) Only if subsection (c)(1) through (3) above are satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of section 8.
- (d) *Building standards for streams without established base elevations and/or floodways (Approximate A-Zones).* For development located within the areas of special flood hazard established in section 6(b) when streams exist but where no base flood data has been provided (Approximate A-Zones), the following provisions apply:
- (1) Base flood elevation data shall be provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty (50) lots or five (5) acres, whichever is the lesser.
 - (2) When base flood elevation data or floodway data have not been provided in accordance with section 6(b) then the Floodplain Administrator 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 8. ONLY if data are not available from these sources, then section 8(d)(5) and (6) shall apply.
 - (3) 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.

- (4) All development in Zone A must meet the requirements of section 8(a) and (b)(1) through b(4).
- (5) In special flood hazard areas without base flood elevation data, new construction and substantial improvements of existing structures shall have the lowest floor (for the lowest enclosed area; including basement) elevated no less than four (4) feet above the highest adjacent grade.
- (6) In the absence of a base flood elevation, a manufactured home must also meet the elevation requirements of section 8(b)(4)b.2 in that the structure must be elevated to a maximum of 60 inches (5 feet).
- (7) Openings sufficient to facilitate automatic equalization of flood water hydrostatic forces on exterior walls shall be provided in accordance with standards of section 8(b)(3).a. The Floodplain Administrator shall certify the lowest floor elevation level and the record shall become a permanent part of the permit file.

(e) *Standards for subdivision proposals:*

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (2) All subdivision 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 proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty (50) lots or five (5) acres.
- (5) All subdivision and other development proposals which involve disturbing more than 10,000 square feet of land

shall include a stormwater management plan which is designed to limit peak runoff from the site to predevelopment levels for the one, ten, and 100-year rainfall event. These plans shall be designed to limit adverse impacts to downstream channels and floodplains. Single residential lots involving less than one acre of land disturbance are not subject to this regulation.

- (6) All preliminary plans for platted subdivisions shall identify the flood hazard area and the elevation of the base flood.
- (7) All final subdivision plats will provide the boundary of the special flood hazard area, the floodway boundary, and the base flood elevations.

(f) *Standards for areas of shallow flooding (AO zones).* Located within the areas of special flood hazard established in section 6(b) are areas designated "AO" shallow flooding areas. These areas have base flood depths of one to three (3) feet, where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM) plus one foot of freeboard. If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3) 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 8(b)(3), "Enclosures for Elevated Buildings".

The Floodplain Administrator shall certify the lowest elevation level and the record shall become a permanent part of the permit file.

- (2) 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 8(f)(1) or three (3) feet (if no depth number is specified), 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 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 7(b)(1)(c) and (2).

(3) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(g) *Critical facilities.* Construction of new and substantially improved critical facilities shall be located outside the limits of the special flood hazard area (one percent annual chance floodplain). Construction of new critical facilities shall be permissible within the SFHA only if no feasible alternative site is available and access to the facilities remains available during a 0.2 percent chance flood.

(1) Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the base flood elevation at the site (or to the 0.2 percent chance flood elevation whichever is greater).

(2) Floodproofing and sealing measures must be implemented to ensure that any and all on-site toxic substances will not be displaced by or released into floodwaters.

(3) Multiple access routes, elevated to or above the 0.2 percent flood elevation, shall be provided to all critical facilities to the maximum extent possible.

(4) Critical facilities must be protected to or above the 0.2 percent chance flood and must remain operable during such an event.

a. The community's flood response plan must list facilities considered critical in a flood.

- b. Other facilities in low risk flood zones that may also be needed to support flood response efforts must be included on the critical facility list.
- (5) The use of any structure shall not be changed to a critical facility, where such a change in use will render the new critical facility out of conformance with this section.

Sec. 9.—Severability

If any section, clause, sentence, or phrase of this Code 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 the Code.