

Chapter 10

FLOOD HAZARD AREAS

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Article I. In General

Sec. 10-1. Adopted.

The Flood Damage Prevention Code for Flood Plain Management in the City of Hattiesburg, a copy of which has this day been exhibited to and approved by the Council of the City of Hattiesburg, Mississippi, be and the same is hereby adopted and declared operative as of the 8th day of May, 1990, and binding within the corporate limits of the City of Hattiesburg, Mississippi, and the police jurisdiction thereof. (Ord. 2345, sec. 1, 5-8-90)

Sec. 10-2. Certification.

The City Clerk of the City of Hattiesburg is hereby authorized, directed and empowered to insert at the appropriate place therein a Certificate to the effect that said Flood Damage Prevention Code are official publications of the City of Hattiesburg, and that said publications in pamphlet form by authority and under direction of the Mayor and the Council of said City of Hattiesburg are to be and become effective as the Flood Damage Prevention Code. (Ord. 2345, sec. 3, 5-8-90)

Sec. 10-3. Statutory authorization.

The Legislature of the State of Mississippi has in Title 17, Chapter 1, Mississippi Code 1972 Annotated delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the governing body of the City of Hattiesburg does hereby adopt the following floodplain management regulations. (Ord. 3028, sec.1, 1-20-09;Ord. 2345, Art. 1, sec. 1, 5-8-90)

Cross references--See Chp 22 - Art. I, Buildings; Chp 23 - Streets and Sidewalks; Chp 26 - Trailers and Mobile Home parks; Chp 13 - Land Development Code

Sec. 10-4. Findings of fact.

- A. The flood hazard areas of the City of Hattiesburg are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- B. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the

occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.(Ord. 3028, sec.2,1-20-09;Ord. 2345, Art. 1, sec. 2, 5-8-90)

Sec. 10-5. Statement of Purpose.

It is the purpose of this code 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:

- A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damage, and;
(Ord. 3028, sec. 3, 1-20-09;Ord. 2345, Art. 1, sec. 3, 5-8-90)

Sec. 10-6. Objectives.

The objectives of this ordinance are:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, street and bridges located in floodplains;
- F. 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;

- G. To ensure that potential homebuyers are notified that property is in a flood area. (Ord. 3028, sec.4,1-20-09;Ord. 2345, Art. 1, sec. 4, 5-8-90)

Sec. 10-6.1 Methods of reducing flood losses.

In order to accomplish its purposes, this ordinance includes methods and provisions for:

- A. Restricting or prohibiting 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;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- E. Preventing or regulating the construction of flood barriers that will unnaturally divert floodwaters or may increase flood hazards in other areas.(Ord. 3028, sec.5, 1-20-09)

Sec. 10-7. Definitions.

A Zone means portions of the SFHA in which the principle source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, floodwaters may move slowly or rapidly, but waves are usually not a significant threat to buildings. Areas of 100-year flood, base flood elevations and flood hazard factors not determined.

Accessory structure (Appurtenant structure) means a structure, which is located on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

AE zone is the Special Flood Hazard Area inundated by the 100-year flood, base flood elevations are determined.

AH zone is an area of 100-year shallow flooding where depths are between 1 and 3 feet (usually shallow ponding), base flood elevations are shown.

AO zone is an area of 100-year shallow flooding where depths are between 1 and 3 feet (usually sheet flow on sloping terrain), flood depths are shown.

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance or a request for a variance.

AR/A1 – A30, AR/AE, AR/AH, AR/AO, and AR/A zones are SFHA's that result from the de-certification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection. After restoration is complete, these areas will still experience residual flooding from other flooding sources.

A99 zone is that part of the SFHA inundated by the 100-year flood to be protected from the 100-year flood by a Federal flood protection system under construction, no base flood elevations are determined.

Area of shallow flooding means a designated AO or AH Zone on the community's Flood Insurance Rate Map (FIRM) with flood depths from one to three 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. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year.

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood").

Base Flood Elevation (BFE) is the elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

Basement means that portion of a building having its floor sub-grade (below ground level) on all sides.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system. This is associated with V Zone construction.

Building see **Structure**.

Community is a political entity that has the authority to adopt and enforce floodplain ordinances

for the area under its jurisdiction.

Community Floodplain Management Map means any map produced by the community utilizing any base flood elevation and floodway data available from a federal, state, or other source.

Community Rating System (CRS) is 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.

Community Flood Hazard Area (CFHA) is an area that has been determined by the Floodplain Administrator (or other delegated, designated, or qualified community official) from available technical studies, historical information, and other available and reliable sources, which may be subject to periodic inundation by floodwaters that can adversely affect the public health, safety and general welfare. This includes areas downstream from dams.

Conditional Letter of Map Revision (CLOMR) is 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 amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to designated public shelters, schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

Dam is 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 one dam.

See also: **High hazard dam, Low hazard dam, and Significant hazard dam.**

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

Elevated building means a non-basement 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 is a certified statement that verifies a building's elevation information.

Emergency Program means the first phase under which a community participates in the NFIP. It is intended to provide a first layer amount of insurance at subsidized rates on all insurable buildings in that community before the effective date of the initial FIRM.

Enclosure Below the Lowest Floor see “Lowest Floor.”

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

Executive Order 11988 (Floodplain Management) issued by President Carter in 1977, this order requires that no federally assisted activities be conducted in or have the potential to affect identified Special Flood Hazard Areas, unless there is no practicable alternative.

Existing Construction any structure for which the “start of construction” commenced before April 2, 1990.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and 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 before April 2, 1990.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Fill means a deposit of earth material placed by artificial means.

Five-Hundred Year Flood means the flood that has a 0.2 percent chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters;
- B. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Boundary and Floodway Map (FBFM) means the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

Flood Hazard Boundary Map (FHBM) means an official map of a community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as Zone A.

Flood Insurance Rate Map (FIRM) means an official map of a community, on which FEMA has

delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) is the official hydraulic & hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FHBM (where applicable) and the water surface elevation of the base flood.

Flood Protection Elevation is the base flood elevation plus one (1) foot of 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.

Floodplain means any land area susceptible to being inundated by flood waters from any source.

Floodplain Administrator is the individual appointed to administer and enforce the floodplain management regulations.

Floodplain management means 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 means this ordinance 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 Certificate is a form used to certify compliance for non-residential structures as an alternative to elevating buildings to or above the BFE.

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

Floodway fringe means that area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.

Freeboard means a factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or

seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Hazard potential means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of a dam or mis-operation of a dam or appurtenances. The hazard potential classification of a dam does not reflect in any way on the current condition of a dam and its appurtenant structures (e.g., safety, structural integrity, flood routing capacity).

High hazard dam means a class of dam in which failure may cause loss of life, serious damage to residential, industrial, or commercial buildings; or damage to, or disruption of, important public utilities or transportation facilities such as major highways or railroads. Dams which meet the statutory thresholds for regulation that are proposed for construction in established or proposed residential, commercial, or industrial areas will be assigned this classification, unless the applicant provides convincing evidence to the contrary. A development permit is required for a building and associated fill downstream from a dam at any location where flooding can be reasonably anticipated from principal or emergency spillway discharges, or from overtopping and failure of the dam.

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

Historic Structure means 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 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 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.

Hydrologic and hydraulic engineering analysis means an analysis performed by a professional engineer, registered in the State of Mississippi, in accordance with standard engineering practices as accepted by FEMA, used to determine flood elevations and / or floodway boundaries.

Increased Cost of Compliance (ICC) means the cost to repair a substantially flood damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. Acceptable mitigation measures are elevation, relocation, demolition, or any combination thereof. All renewal and new business policies with effective dates on or after June 1, 1997, will include ICC coverage.

Letter of Map Amendment (LOMA)

A revision based on technical data showing that a property was incorrectly included in a designated SFHA. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.

Letter of Map Change (LOMC) is 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:

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 LORM, 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.

Letter of Map Revision, Conditional (CLOMR) see Conditional Letter of Map Revision.

Levee means 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 means 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. For a levee system to be recognized, the following criteria must be met. All closure devices or mechanical systems for internal drainage, whether manual or automatic, must be operated in accordance with an officially adopted operation manual (a copy of which must be provided to FEMA by the operator when levee or drainage system recognition is being sought or revised). All operations must be under the jurisdiction of a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the NFIP.

Low hazard dam means a class of dam in which failure would at the most result in damage to agricultural land, farm buildings (excluding residences), or minor roads.

Lowest adjacent grade means the elevation of the sidewalk, patio, deck support, or basement entryway immediately next to the structure and after the completion of construction. It does not include earth that is emplaced 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 means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the non-elevation provisions of this code.

Manufactured home means a structure, 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 attached to the required utilities. The term manufactured home does not include a "recreational vehicle."

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

Map Amendment means a change to an effective NFIP map that results in the exclusion from the SFHA or an individual structure or a legally described parcel of land that has been inadvertently included in the SFHA (i.e., no alterations of topography have occurred since the date of the first NFIP map that showed the structure or parcel to be within the SFHA).

Map Panel Number is the four-digit number followed by a letter suffix assigned by FEMA on a flood map. The first four digits represent the map panel, and the letter suffix represents the number of times the map panel has been revised.

Market value means the building value, excluding the land (as agreed between a willing buyer and seller), 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 means, for the purposes of the National Flood Insurance Program, 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.

National Flood Insurance Program (NFIP) is 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 within the floodplain.

New Construction means a structure for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structure and any construction beginning on a new foundation system or construction beginning with existing foundation system and the raising of new walls.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are

to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain regulations adopted by a community.

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

North American Vertical Datum of 1988 is a vertical control 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, channelization, bridge, conduit, 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-Hundred Year Flood (100-Year Flood) is the flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A or V is subject to the 100-year flood. Over the life of a 30-year loan, there is a 26-percent chance of experiencing such a flood with the SFHA.

Participating Community is 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 means construction or substantial improvement that started on or after the effective date of the initial FIRM of the community or after December 31, 1974, whichever is later.

Pre-FIRM Construction means construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

Probation is a means of formally notifying participating communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

Public safety and nuisance, anything which is injurious to 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 means a vehicle that is:

- a.) Built on a single chassis, without permanent foundation;

- b.) 400 square feet or less when measured at the largest horizontal projection;
- c.) Designed to be self-propelled or permanently towable by a light duty truck, (can be hauled or driven and primarily designed as temporary living accommodation for recreational, camping and travel use and including but not limited to travel trailers, truck campers, camping trailers, and self-propelled motor homes); and,
- d.) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regular Program means the phase of the community's participation in the NFIP where more comprehensive floodplain management requirements are imposed and higher amounts of insurance are available based upon risk zones and elevations determined in a FIS.

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

Repair means the reconstruction or renewal of any part of an existing building.

Repetitive Loss 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, equals or exceeds twenty-five percent of the market value of the structure before the damage occurred.

Residential Structure is a building or portion thereof designed or used exclusively for residential occupancy but not including hotels, motels, and motor lodges.

Section 1316 is that section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that 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 that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

Significant hazard dam means a dam assigned the significant hazard potential classification where failure may cause damage to main roads, minor railroads, or cause interruption of use, or service of relatively important public utilities.

Special flood hazard area (SFHA) means 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 Zone A, AE, A1 – A30, AH, AO, AR, V, VE, or V1-V30.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act P. L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction,

or improvement was within 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 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. For 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 means all walled and roofed buildings, including gas or liquid storage tanks and manufactured homes that are principally above ground.

See also: **Accessory structure, Elevated building, Historic structure, New Construction, New manufactured home park or subdivision, Non-Residential, or Residential.**

Subrogation means an action brought by FEMA when flood damages have occurred, flood insurance has been paid, and all or part of the damage can be attributed to acts or omissions by a community or other third party.

Substantial Damage means 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. "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 flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

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."

Substantial Improvement means any combination of repairs, reconstruction, rehabilitation, addition, alteration, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the

improvement. This term includes structures which have incurred “repetitive loss” or “substantial damage,” regardless of the actual repair work performed.

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.

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.”

Substantially improved existing manufactured home parks or subdivisions is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Suspension means the removal of a participating community from the NFIP because the community has not enacted and/or enforced the proper floodplain management regulations required for participation in the NFIP.

Violation means the failure of a structure or other development to be fully compliant with this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Water surface elevation means 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 floodplains of coastal or riverine areas.

X zone means the area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs designate areas subject to inundation by the flood with a 0.2-percent annual probability of being equaled or exceeded (the 500-year flood). Un-shaded X zones designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

X zones (shaded) are areas of 500-year flood, areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile, and areas protected by levees from the base flood.

X zones (un-shaded) are areas determined to be outside the 500-year floodplain.

Zone means 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. Ord. 3028, Art. 2, 1-20-09;Ord. 2345, Art. 1, sec. 5, 5-8-90)

See also: **AE zone, AH zone, AO zone, AR/A1 – A30, AR/AE, AR/AH, AR/AO, and AR/A zones, A99 zone, X zone, X (shaded) zone, and X (un-shaded) zone**

Sec. 10-8. Land to which this code applies.

This ordinance shall apply to all areas of special flood hazard (SFHA) within the jurisdiction of the City of Hattiesburg. (Ord. 3028, 1-20-09;Ord. 2345, Art. 1, sec. 6, 5-8-90)

Sec. 10-9. Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Rate Map (multiple panels numbers) dated March 2, 2010, and other supporting data are adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and / or maps are on file in the Planning Office of the Department of Urban Development, located in the City Hall Building. (Ord. 3049, sec, 1, 1/19/10;Ord. 3028, 1-20-09;Ord. 2345, Art. 1, sec. 7, 5-8-90)

Sec.10-9.1. Use of Preliminary flood hazard data.

When Preliminary Flood Insurance Rate Maps and/or Flood Insurance Studies have been provided by FEMA:

- 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 existing flood hazard data provided from FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.
- B. Upon the issuance of a Letter of Final Determination (LFD) by FEMA, the preliminary flood hazard data shall be used and replace all previously existing flood hazard data provided from FEMA for the purposes of administrating these regulations.(Ord. 3028, 1-20-09)

Sec. 10-10. Establishment of development permit.

A development permit shall be required in conformance with the provision of this ordinance prior to the commencement of any development activities in the areas of special flood hazard.(Ord. 3028, 1-20-09;Ord. 2345, Art. 1, sec. 8, 5-8-90)

Sec. 10-11. Compliance.

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable regulations. (Ord. 3028, 1-20-09;Ord. 2345, Art. 1, sec. 9, 5-8-90)

Sec. 10-12. Abrogation and greater restrictions.

This code is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this code and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. 3028, 1-20-09;Ord. 2345, Art. 1, sec. 10, 5-8-90)

Sec. 10-13. Interpretation and Declaration.

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

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body, and;
- C. Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. 3028, 1-20-09; Ord. 2345, Art. 1, sec. 11, 5-8-90)

Sec. 10-14. Warning and disclaimer of liability.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions.

Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of governing body of the City of Hattiesburg or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.(Ord. 3028, 1-20-09; Ord. 2345, Art. 1, sec. 12, 5-8-90)

Sec. 10-15. Penalties for violation.

Violation of the provisions of this ordinance 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 ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not exceeding one thousand dollars (\$1,000.00) or imprisonment for a term not exceeding ninety (90) days, or by both such fine and imprisonment in the discretion of the municipal judge, and in addition, shall pay all costs and expenses involved in the case. Each day any violation of any provision of this ordinance continues shall be considered a separate offense. Nothing herein contained shall prevent the Floodplain Administrator from taking such other lawful actions as is necessary to prevent or remedy any violation. (Ord. 3028,1-20-09;Ord. 2345, Art. 1, sec. 13, 5-8-90)

Secs. 10-16 --- 10-24. Reserved.

Article II. Administration*

Sec. 10-25. Designation of local administrator.

The governing body of the City of Hattiesburg hereby appoints the Planning Administrator, or their designee, to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator and/or the administrator. (Ord. 3028, 1-20-09; Ord. 2345, Art. 2, sec. 14, 5-8-90)

Sec. 10-26. Permit Procedures.

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

A. Application Stage.

1. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
2. Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;
3. Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the floodproofing criteria in Article 5, Section 2 (B);
4. Description of the extent to which any watercourse will be altered or relocated as result of proposed development, and;

**Cross references--Administration generally, Chapter 2.*

B. Construction Stage:

Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the NGVD elevation of the lowest floor or flood proofed elevation, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

Any work undertaken prior to submission of the certification shall be at the permit holder' risk. (The Floodplain Administrator shall review the lowest floor & flood proofing elevation survey data submitted.) The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.(Ord. 3028, 1-20-09;Ord. 2345, Art. 2, sec. 15, 5-8-90)

Sec. 10-27. POWERS, DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

The Floodplain Administrator and/or staff is hereby authorized and directed to enforce the provisions of this ordinance. The administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose.

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

1. Review all development permits to assure that the permit requirements of this ordinance have been satisfied;
2. Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
3. Notify adjacent communities, the State NFIP Coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.
4. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
5. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with Article 4, Section 2 (B).
6. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been floodproofed, in accordance with Article 4, Section 2 (B).
7. Review certified plans and specifications for compliance.
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 Article 3, Section 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 Article 5.
10. Provide information, testimony, or other evidence, as needed during variance request hearings.
11. When damage occurs to a building or buildings, the following actions shall be conducted:
 - a. Determine whether damaged structures are located within the Special Flood Hazard Area;
 - b. Conduct damage assessments for those damaged structures located in the SFHA, and;
 - c. Make a reasonable attempt to notify owner(s) of damaged structure(s) of the requirement to obtain a building permit / floodplain development permit prior to repair, rehabilitation, or reconstruction.

B. Right of Entry

1. Whenever necessary to make an inspection to enforce any of the provisions of this ordinance, or whenever the administrator has reasonable cause to believe that there exists in any building or upon any premises any condition or ordinance violation which makes such building, structure or premises unsafe, dangerous or hazardous, the administrator may enter such building, structure or premises at all reasonable times to inspect the same or perform any duty imposed upon the administrator by this ordinance.
2. If such building or premises are occupied, he shall first present proper credentials and request entry. If such building, structure, or premises are unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of such request entry.
3. If entry is refused, the administrator shall have recourse to every remedy provided by law to secure entry.
4. When the administrator shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building, structure, or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the administrator for the purpose of inspection and examination pursuant to this ordinance.

C. Stop Work Orders

1. Upon notice from the administrator, work on any building, structure or premises that is being done contrary to the provisions of this ordinance shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed.

D. Revocation of Permits

1. The administrator may revoke a permit or approval, issued under the provisions of this ordinance, in case there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
2. The administrator may revoke a permit upon determination by the administrator that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this ordinance. (Ord. 3028. 1-20-09; Ord. 2345, Art. 2, sec. 16, 5-8-90)

Sec. 10-28. Designation and duties of appeals board.

- A. The Hattiesburg Planning Commission as established by the governing body of the City of Hattiesburg shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator, or their designee, in the enforcement or administration of this ordinance.
- B. Any person aggrieved by the decision of the Hattiesburg Planning Commission may appeal such decision to the City Council.
- C. Variances from the requirements of this code will not be issued.
- D. Historic Structures

Historic structures are exempted from the substantial improvement requirements if the improvements to a historic structure meet the following three criteria, the buildings will not have to be elevated or flood proofed. It can also retain its pre-FIRM flood insurance rating status.

1. **The building must be a bona-fide “historic structure.”** As followed by definition.
2. **The project must maintain the historic status of the structure.** If the proposed improvements to the structure will result in it being removed from or ineligible for the National Register or federally-certified state or local inventory, then the proposal cannot be granted an exemption from the substantial improvement rule.
 - a. Written review and approval of proposed plans by the local historic preservation board

and/or the Historic Planner, if it is federally-certified, or by the state historic preservation office. If the plans are approved, you can grant the exemption. If no, no exemption can be permitted.

2. **Take all possible flood damage reduction measures.** Even though the exemption to the substantial improvement rule means the building does not have to be elevated to or above BFE, or be renovated with flood-resistant materials that are not historically sensitive, many things can and should be done to reduce the flood damage potential. Examples include:

- Locating mechanical and electrical equipment above the BFE or floodproofing it.
- Elevating the lowest floor of an addition to or above the BFE with the change in floor elevation disguised externally.
- Building the lowest floor of an addition with flood-resistant materials and providing hydrostatic openings.

E. The Floodplain Administrator, or their designee, shall maintain the records of all appeal actions and report any actions to the Federal Insurance Administration upon request. (Ord. 3028, 1-20-09; Ord. 2345, Art. 2, sec. 17, 5-8-90)

Secs. 10-29 --- 10-40. Reserved.

Article III. Provisions for Flood Hazard Reduction

Sec. 10-41. General standards.

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

- A. New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- B. 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;
- C. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- D. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- E. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including ductwork, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding, such facilities shall be located a minimum of one foot (1') above the Base Flood Elevation;

- F. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- G. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- H. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- I. Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this ordinance shall meet the requirements of “new construction” as contained in this ordinance; and,
- J. Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.
- K. New construction and substantial improvement of any building shall have the lowest floor (including basement) elevated in compliance with the Code of Ordinances, specifically Section 22-6, entitled: First Floor Elevation, unless the topography of the property does not allow for strict adherence as determined by the Planning Administrator, or their designee.

New construction and substantial improvements built on fill shall be constructed on the properly designed and compacted fill in accordance with the 2003 International Building Code, as amended, Section 1803.5, entitled: Compacted fill material, and shall have appropriate protection from erosion and scour. (Ord. 3028, 1-20-09; Ord. 2345, Art. 3, sec. 18, 5-8-90)

**Cross reference-- see Chapter 13- Land Development Code*

Sec. 10-42. Specific standards.

In all areas of the floodplain, floodway, and special hazard areas where base flood elevation data have been provided as set forth in Article 2, sec. 10-9 or Article 4, sec. 10-27 (B), the following provisions are required:

**Cross references—Standard Building Codes(First Floor elevation), Chapter 22-6 (Ord. 3023, sec. 1, 11-18-08).*

- A. Residential Construction. New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than one foot (1’) above the 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 Article 5, Section 2 (C).

- B. Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to no lower than one foot (1') above the level of the base flood elevation. Buildings located in all A-Zones may be flood-proofed in lieu of being elevated provided that all areas of the building below the BFE (plus any community free board) elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Article 4, Section 2 (A) and 2 (B).
- C. Elevated Buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevations shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
1. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - a. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - b. The bottom of all openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade);
 - c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions;
 - d. Limited in use to parking, storage, and building access; and,
 - e. Limited to less than 300 square feet.
 2. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
 3. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
 4. Property owners shall be required to execute a floodplain 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 not violate the requirements of this Article 5, Section 2 (C).

- D. Detached storage buildings, shed, or other like accessory improvements, excluding detached garages, carports, and boat houses are used primarily for parking and storage of vehicles, and will be allowed up to no more than 300 square feet of unfinished, non-partitioned and enclosed storage space. Such storage space shall not be used for human habitation and shall be limited to storage of items that can withstand exposure to the elements and have low flood damage potential. The storage space shall be constructed of flood resistant or breakaway materials, and equipment and service utilities, such as electrical outlets, shall be limited to essential lighting and other incidental uses, and must be elevated or floodproofed. Openings to preclude hydrostatic loading and allow ventilation as provided in Article 5 Section 2 (C). shall also be required. These accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- E. Accessory improvements and other apparent structures shall be firmly anchored to prevent flotation that may result in damage to other structures.
- F. Property owners shall be required to execute and record with the structure's deed a non-conversion agreement declaring that the area below the lowest floor, or the detached accessory building shall not be improved, finished or otherwise converted; the community will have the right to inspect the enclosed area at any time.
- G. Standards for Manufactured Homes and Recreational Vehicles.
 - 1. All manufactured homes placed, or substantially improved, on individual lots or parcels, in existing manufactured home parks or subdivisions, in expansions to existing manufactured home parks or subdivisions, in new manufactured home parks or subdivisions or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.

Manufactured homes must be:

 - a. Elevated on a permanent foundation, and
 - b. Have its lowest floor elevated no lower than one foot (1') above the level of the base flood elevation, and
 - c. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - 2. All recreational vehicles placed on sites must either:
 - a. Be on site for fewer than 180 consecutive days, or

- b. Be fully licensed and ready for highway use, or
- c. Must meet all the requirements for new construction, including anchoring and elevation requirements of this Article 5, Section 2 (G) 1) (a) and (c), above.

A recreational vehicle is ready for highway use if it is licensed and insured in accordance with the State of Mississippi motor vehicle regulations, 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. All recreational vehicles, which are not self-propelled, must comply with FEMA Technical Bulletin “Guidelines for the Placement of Temporary Structures in Special Flood Hazard Areas.”

- d. All above ground gas or liquid storage tanks shall be anchored to prevent flotation or lateral movement.

H. Floodways. Located within the areas of special flood hazard adopted by reference in Article 3, Section 2, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and has erosion potential, the following provisions shall apply:

1. Encroachments, including fill, new construction, substantial improvements, and other development, are prohibited.
2. The placement of manufactured homes (mobile homes) is prohibited.
3. Development or land disturbing activity shall not be permitted within the boundaries of the regulatory floodway unless the potential effect of such on flood heights is fully offset by accompanying improvements which have been approved by appropriate Federal, State, and local authorities.
4. Permissible uses within the floodway may include: general farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife, and related uses. Also lawns, gardens, play areas, picnic grounds, and hiking and horseback riding trails are acceptable uses, provided that they do not employ structures or fill. Substantial development of a permissible use may require certification (with supporting technical data) by a registered professional engineer demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge. The uses in this subsection are permissible only if and to the extent that they do not cause any increase in base flood elevations. (Ord. 3028,1-20-09;Ord. 2345, Art. 3, sec. 19, 5-8-90)

Sec. 10-43. Standards for streams without established base flood elevations and/or floodways.

Located within the areas of special flood hazard established in Article 3, Section 2, where flood sources exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:

- A. When base flood elevation data or floodway data have not been provided in Accordance with Article 3, Section B, then the local 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 Article 5. If data is not available from outside sources, then the following provisions [(B), (C) and (D)] shall apply.
- B. In special flood hazard areas with base flood elevations (Zones AE and A1-30) but without floodways, no encroachments, including fill material or structures, shall be permitted unless certification by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. The engineering certification must be supported by technical data that conforms to standard hydraulic engineering principles.
- C. No encroachments, including fill material or structures, shall be located within the buffer distances outlined in the Land Development Code, specifically Section 79.14, entitled: Buffers.
- D. When base flood elevation data or floodway data are not available in accordance with Article 3, Section 2, in Special Flood Hazard Areas without Base Flood Elevation Data, new construction or substantial improvements of structures shall be elevated or floodproofed to elevations adopted / established by the community. 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 Article 5 of this ordinance. The reference for this action is to be FEMA 265 “Managing Floodplain Development in Approximate Zone A Areas: A Guide for Obtaining and Developing Base Flood Elevation”, dated July 1995. (Ord. 3028, 1-20-09;Ord. 2345, Art. 3, sec. 20, 5-8-90)

Sec. 10-44. Standards for subdivision proposals.

- A. All subdivision proposals shall be consistent with the need to minimize flood damage;
- B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;

- D. Base flood elevation data shall be provided for all new subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than five (5) lots or one and one-half (1.5) acres, whichever is the lesser.
- E. Where only a small portion of the subdivision lot or lots is in a designated Zone A Special Flood Hazard Area inundated by 100-year flood with no base flood elevations determined and there is sufficient ground slope on the site to avoid possible flooding of structures in Zone X areas determined to be outside 500 year floodplain. The Floodplain Administrator may waive the requirement for a study to determine the base flood elevations.
- F. In order for the Floodplain Administrator to consider waiving the requirement of Section 4 (D) the applicant must provide an accurate topographic data and map for the lot or lots in question certified by a licensed land surveyor and/or professional civil engineer indicating sufficient detail to allow a thorough review by the Floodplain Administrator.
- G. Each proposed parcel must have a designated buildable pad or site above the 100-year flood plain. The distance of the buildable pad or site above the 100-year flood plain shall depend on the slope of the ground and in accordance with the following table:

Distance in feet from Zone A 100 year floodplain	Minimum Slope from Zone A – 100 year flood plain to ground level at pad
20	5%
30	3.33%
40	2.50%
50	2.0%
60	1.67%
70	1.43%
80	1.25%
90	1.11%
100	1.0%

Residential or non-residential structures lowest floor elevation also must be elevated 1.5 feet above the ground level on the buildable pad or site.

- H. If a waiver is granted for Section 4 (D) the subdivider/applicant must comply with the following:
 1. File restrictive covenants on the lot or lots prohibiting construction within the designated special flood hazard area inundated by the 100-year flood and requirement for elevated lowest floor elevation.
 2. Place a statement on the face of the plat prohibiting construction in the designated area of special flood hazard inundated by the 100-year flood.

- I. Notice must be sent to the State NFIP Coordinator indicating that a waiver has been granted for Section **10-44D** providing written details of the waiver for any waiver granted by the Floodplain Administrator.
 - 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.
 - E. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured (mobile) home parks and subdivisions) which is greater than the lesser of fifteen (15) lots or one and one half (1.5) acres. (Ord. 3028, 1-20-09; Ord. 2345, Art. 3, sec. 21, 5-8-90)

Sec.10-44.1 Critical Facilities.

Construction of new or substantially improved critical facilities shall be located outside the limits of the special flood hazard area (SFHA) (100-year floodplain) and the 500-year floodplain.

Sec. 10-45. REPEALED (Ord. 3028, 1-20-09)

Sec. 10-46. REPEALED (Ord. 3028, 1-20-09).