

Chapter 42 FLOODS¹

ARTICLE I. IN GENERAL

Secs. 42-1—42-30. Reserved.

ARTICLE II. FLOOD DAMAGE PREVENTION²

DIVISION 1. GENERALLY

Sec. 42-31. Statutory authorization.

The legislature of the state has, in V.T.C.A., Water Code § 16.3145, delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the city council does hereby ordain this article.

(Code 1983, § 5-120; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-32. Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- (b) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

(Code 1983, § 5-121; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-33. 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:

¹Cross reference(s)—Buildings and building regulations, ch. 10; environment, ch. 34; manufactured homes and trailers, ch. 50; planning and development, ch. 62; streets, sidewalks and other public places, ch. 70; utilities, ch. 82; subdivision and development, app. A; zoning, app. B.

²State law reference(s)—Flood Control and Insurance Act, V.T.C.A., Water Code § 16.311 et seq.

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- (1) Protect human life and health;
 - (2) Minimize expenditure of public money for costly flood control projects;
 - (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - (4) Minimize prolonged business interruptions;
 - (5) 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) Help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas; and
 - (7) Ensure that potential buyers are notified that property is in a flood area.

(Code 1983, § 5-122; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-34. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Adverse impacts means any increase in flood stages, flood velocity, flows, the potential for erosion and sedimentation, degradation of water quality, or increased cost of public services.

Alluvial fan flooding means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

Apex means a point on an alluvial fan or similar land form below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

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

Appeal board means the board of adjustment created in the zoning ordinance number B-582, printed as appendix B to this Code.

Area of shallow flooding means a designated AO or AH zone on a community's flood insurance rate map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard means the land in the floodplain within the community subject to a one percent or greater chance of flooding in any given year. The area may be designated as zone A on the flood hazard boundary map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, zone A usually is refined into zones A, AE, AH, AO, A1 through 99.

Base flood means the flood having a one percent chance of being equalled or exceeded in any given year.

Basement means any area of the building having its floor subgrade (below ground level) on all sides.

City engineer means that person or group of persons or consultants or any employee thereof who has been appointed as city engineer, or authorized designee, in accordance with Ordinance No. C-153 or as such ordinance may be amended.

Critical feature means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Development means any manmade change in improved and unimproved real estate including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Elevated building means a nonbasement building built, in the case of a building in zones A1 through 30, AE, A, A99, AO, AH, B, C, X and D, to have the top of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers) or shear walls parallel to the floor of the water, and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of zones A1 through 30, AE, A, A99, AO, AH, B, C, X, and D, the term "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwater.

Existing construction means, for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. The term "existing construction" may also be referred to as "existing structures."

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.

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).

Flood or flooding means a general and temporary condition or 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 water from any source.

Flood hazard boundary map (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the areas within the boundaries of special flood hazards have been designated as zone A.

Flood insurance rate map (FIRM) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood insurance study means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the flood boundary-floodway map.

Flood protection system means those physical structural works for which funds have been authorized, appropriated and expended, and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths or associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source (see definition of *Flood or flooding*).

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

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway (regulatory floodway) 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 a designated height.

Fully developed shall refer to the discharges calculated by the City's most recent master drainage study models assuming future land use conditions in the watershed.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Habitable floor means any floor usable for the following purposes, which include working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purposes only is not a habitable floor.

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

Historic structure means 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 preliminary 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 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.

Levee means a manmade structure, usually an earthen embankment, designated 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.

Lowest floor means the lowest floor of the lowest enclosed area (including the basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, however, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirement of section 60.3 of the National Flood Insurance Program regulations.

Manufactured home means and shall include mobile homes and HUD code manufactured homes as defined in appendix B, zoning ordinance, section 12, "special definitions and explanations". For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles.

Manufactured home park means a unified development of local manufactured housing spaces arranged on a large tract or site under single ownership, meeting all requirements of chapter 9, manufactured homes and travel trailers, and designed to accommodate manufactured houses for either a temporary or permanent duration.

Manufactured home subdivision means a unified development of manufactured housing sites on lots platted for such purposes, which lots may be sold to the owners of manufactured houses situated thereof, meeting the area and yard requirements of the zoning ordinance and designed to accommodate manufactured houses on a permanent basis.

Mean sea level means, for 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 are referenced.

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

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 management regulations adopted by a community.

Recreational vehicles means a vehicle which is built on a single chassis; 400 square feet or less when measured at the largest horizontal projections; designed to be self-propelled or permanently towable by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act, Pub. L. 97-348), includes substantial improvement and means the date of the building permit (or first building permit for a succession of building permits) was issued, provided that the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the 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 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 structure. For a substantial improvement, the actual

start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, including a gas or liquid storage tank, that is principally aboveground, as well as a manufactured home.

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 improvement means any repair, reconstruction or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before "start of construction" of the improvement. This includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to ensure safe living conditions; or
- (2) Alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Any building permit issued that causes the total cumulative value of all improvements to exceed 50 percent of the market value of the structure prior to the issuance of the first building permit will be classified as a substantial improvement.

Variance means a grant of relief to a person from the requirements of this article when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this article. (For full requirements see section 60.6 of the National Flood Insurance Program regulations.)

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in section 60.3(b)(5), (c)(4), (c)(10), or (d)(3), (NFIP regulations) is presumed to be in violation until such time as that documentation is provided.

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.

(Code 1983, § 5-124; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-502, § I, 8-22-1991; Ord. No. B-533, § 1, 10-28-1993; Ord. No. B-559, § I, 8-10-1995; Ord. No. B-559(A1008), §§ I, II, 10-23-2008)

Cross reference(s)—Definitions generally, § 1-3.

Sec. 42-35. Penalties for violation of article.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this article and other applicable regulations. Violation of the provisions of this article by failure to comply with any of its requirements (including violations or conditions and safeguards established in connection with conditions) 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 \$500.00 for each violation, and in addition shall pay all costs and expenses involved in the case. Each day that a violation is permitted to exist shall constitute a separate offense. Nothing herein contained shall prevent the city from taking other lawful action as is necessary to prevent or remedy any violation.

(Code 1983, § 5-141; Ord. No. B-398, § 1, 9-26-1985; Ord. No. B-432, § 4, 5-14-1987; Ord. No. B-559(A1008), § III, 10-23-2008)

Sec. 42-36. Methods of reducing flood losses.

In order to accomplish its purposes, this article uses the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases 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 filing, grading, dredging and other development which may increase flood damage;
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

(Code 1983, § 5-123; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-37. Lands to which this article applies.

The article shall apply to all areas of special flood hazard within the jurisdiction of the city.

(Code 1983, § 5-125; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-38. Compliance with article provisions.

No structure or land shall hereafter be located, altered or have its use changed without full compliance with the terms of this article and other applicable regulations.

(Code 1983, § 5-128; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-39. 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.

(Code 1983, § 5-129; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-40. Interpretation of article provisions.

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

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(Code 1983, § 5-130; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-41. Warning 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. On rare occasions greater floods can and will occur and flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazards 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 community or any official or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Code 1983, § 5-131; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-42. Basis for establishing areas of special flood hazard; maps.

~~The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the current scientific and engineering reports entitled, "The Flood Insurance Study (FIS) for Johnson County and Incorporated Areas," dated January 6, 1999 with accompanying flood insurance rate maps (FIRM) dated January 6, 1999~~

The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, "Flood Insurance Study (FIS) for Johnson and Tarrant Counties, Texas and Incorporated Areas," dated September 21, 2023, with accompanying Flood Insurance Rate Maps (FIRM) dated September 21, 2023 and with accompanying flood insurance rate maps (FIRM) dated ~~August 2, 1995~~ September 21, 2023 and any revisions thereto are hereby adopted by reference and declared to be a part of this article. The City's most recent master drainage study models and the resulting floodplain areas are adopted for the purposes of regulating adverse impacts and establishing fully developed flood elevations.

(Code 1983, § 5-126; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-437, § 1, 8-13-1987; Ord. No. B-502, § I, 8-22-1991; Ord. No. B-521, § 1, 1-28-1993; Ord. No. B-537, § 1, 12-2-1993; Ord. No. B-559, § I, 8-10-1995; Ord. No. B-559(A1008), § IV, 10-23-2008)

~~Sec. 42-43. Letters of map revision.~~

~~The following letters of map revision (LOMR) to the maps listed in section 42-42 has been approved by the Federal Emergency Management Agency removing the listed properties from the regulatory floodway and is attached as Exhibit A and adopted by the city:~~

~~(1)—LOMR Date: December 2, 1993.~~

~~National Flood Insurance Program Map Number Revised: 48251C, Panel 0029H, dated November 3, 1993.~~

~~Property description: Lot 4, Block 47, Summercrest Addition, Phase V.~~

~~Street address: 555 S.W. Rand Drive.~~

~~Flooding source: Little Booger Creek.~~

~~(2)—LOMR Date: November 23, 1994.~~

~~National Flood Insurance Program Map Numbers revised: 48251C, Panel 0029H, dated November 3, 1993.~~

Property description: Lot 1, 2, 3, and a portion of lot 5, Block 47, Summercrest Addition, Phase V. The legal description of the portion of lot 5 reference is as follows:

All of said lot 5 except the following portion:

Beginning at the south corner of said Lot 5; thence N 44°51'50" W along the southwesterly line of said Lot 5, 36.7 feet to a point for corner; thence N 82°10'45" E, 35.24 feet to a point for corner; thence 36°47'17" E, 18.39 feet to a point for corner; thence N 60°04'58" E, 21.83 feet to a point for corner; thence S 64°58'20" E, 11.78 feet to a point for corner in the southeasterly line of said Lot 5; thence S 43°58'37" W, 71.48 feet to the point of beginning.

Street address: On S.W. Rand Drive: 543 (Lot 1), 547 (Lot 2), 551 (Lot 3), and 559 (Lot 5).

Flooding source: Little Booger Creek.

(Code 1983, § 5-126.1; Ord. No. B-538, § 1, 1-13-1994; Ord. No. B-546, § 1, 11-17-1994; Ord. No. B-547, § 1, 1-26-1995)

Secs. 42-44—42-60. Reserved.

DIVISION 2. ADMINISTRATION³

Sec. 42-61. Floodplain administrator.

- (a) *Designation.* The city engineer is hereby appointed the floodplain administrator to administer and implement the provisions of this article and other appropriate sections of 44 CFR (National Flood Insurance Program regulations pertaining to floodplain management).
- (b) *Duties and responsibilities.* Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:
 - (1) Maintain and hold open for public inspection all records pertaining to the provisions of this article.
 - (2) Review permit application to determine whether proposed building site will be reasonably safe from flooding.
 - (3) Review, approve or deny all applications for development permits required by adoption of this article.
 - (4) Review permits for proposed development to ensure that all necessary permits have been obtained from those federal, state or local governmental agencies (including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1334) from which prior approval is required.
 - (5) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (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.
 - (6) Notify, in riverine situations, adjacent communities and the state coordinating agency which is the state water development board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

³Cross reference(s)—Administration, ch. 2.

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- (7) Ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.
 - (8) When the base flood elevation data has not been provided in accordance with section 42-42, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of sections 42-91—42-95.
 - (9) When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1 through 30 and AE on the community's 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 **0.00-feet ~~one-foot~~** at any point within the community. **Any deviation from this standard shall be approved by the Floodplain Administrator.**
 - (10) Under the provisions of 44 CFR chapter 1, section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision through FEMA.
 - (11) **All new construction, substantial improvements, or other developments shall be evaluated for adverse impacts to flood conditions in accordance with the standards described in the then currently adopted City of Burleson Design Criteria Manual and may require mitigation.**
 - (12) **For all floodplains, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within the floodplain, unless it is demonstrated that the effect of the proposed development will not increase the base flood elevation or the fully developed water surface elevation more than 0.0 feet without approval of the City.**

(Code 1983, § 5-133; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-559, § I, 8-10-1995; Ord. No. B-559(A1008), §§ V, VI, 10-23-2008)

Sec. 42-62. Establishment of development permit.

A development permit shall be required to ensure conformance with the provisions of this article.

(Code 1983, § 5-127; Ord. No. B-432, § 1, 5-14-1987)

Sec. 42-63. Permit procedures.

- (a) Application for a development permit shall be presented to the floodplain administrator on forms furnished by him and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures or improvements, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:
 - (1) Elevation (in relation to mean sea level), of the lowest floor (including the basement) of all new and substantially improved structures;
 - (2) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;

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- (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 42-92(2);
 - (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
 - (5) Maintain a record of all such information in accordance with section 42-61(b)(1).
- (b) Approval or denial of a development permit by the floodplain administrator shall be based on all of the provisions of this article and the following relevant factors:
- (1) The danger to life and property due to flooding or erosion damage;
 - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (3) The danger that materials may be swept onto other lands to the injury of others;
 - (4) The compatibility of the proposed use with existing and anticipated development;
 - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
 - (7) 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;
 - (8) The necessity to the facility of a waterfront location, where applicable;
 - (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - (10) The relationship of the proposed use to the comprehensive plan for that area.

(Code 1983, § 5-134; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-502, § I, 8-22-1991)

Sec. 42-64. Variance procedures.

- (a) The appeal board shall hear and render judgment on requests for variances from the requirements of this article.
- (b) The appeal board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision or determination made by the floodplain administrator in the enforcement of administration of this article.
- (c) Any person or persons aggrieved by the decision of the appeal board may appeal such decision in the courts of competent jurisdiction.
- (d) The floodplain administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this article.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base

flood level, providing the relevant factors in section 42-63(b) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

- (g) Upon consideration of the factors noted above and the intent of this article, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article (section 42-33).
- (h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (j) Prerequisites for granting variances:
 - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (2) Variances shall only be issued upon:
 - a. Showing a good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - (3) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (k) Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that criteria outlined in subsections (a)—(i) of this section are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(Code 1983, § 5-135; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-502, § I, 8-22-1991; Ord. No. B-559, § I, 8-10-1995; Ord. No. B-559(A1008), § VII, 10-23-2008)

Secs. 42-65—42-90. Reserved.

DIVISION 3. FLOOD HAZARD REDUCTION

Sec. 42-91. General standards.

In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

- (1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

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- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
 - (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage.
 - (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
 - (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters.
 - (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding i.e., waste disposal systems shall not be located within a floodplain; floodway area.

(Code 1983, § 5-136; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-502, § I, 8-22-1991)

Sec. 42-92. Specific standards.

In all of special flood hazards where base flood elevation data has been provided as set forth in sections 42-37, 42-61(8), or 42-93(d), the following provisions are required:

- (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floors (including the basement) elevated to at least three feet above the base flood elevation as designated in the FIRM or two feet above the ultimate (fully-developed) water surface elevation as determined by a flood study prepared by a licensed engineer, ~~whichever is higher~~. A licensed professional engineer or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection is satisfied.
- (2) *Nonresidential construction.* New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including the basement) elevated to at least three feet above the base flood elevation as designated in the FIRM or two feet above the ultimate (fully-developed) water surface elevation as determined by a flood study prepared by a licensed engineer, ~~whichever is higher~~. In the alternative, the building, together with attendant utility and sanitary facilities, may be designed so that below the base flood level, plus three feet, the structure is watertight with walls substantially impermeable to the passage of water with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A licensed professional engineer or architect shall develop and/or review structural design, specifications and plans for the construction and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.
- (3) *Enclosures.* New construction and substantial improvements, with fully enclosed area below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this

requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

- a. A minimum of two openings on separate walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (4) *Manufactured homes.*
- a. Require that all manufactured homes to be placed within zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
 - b. Require that manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on the community's FIRM on sites outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to at least one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - c. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision within zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of this subsection (4) of this section be elevated so that either:
 1. The lowest floor of the manufactured home is at least three feet above the base flood elevation as designated in the FIRM or two feet above the ultimate (fully-developed) water surface elevation as determined by a flood study prepared by a licensed engineer, ~~whichever is higher~~. A licensed professional engineer or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection is satisfied.
 2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (5) *Recreational vehicles.* Require that recreational vehicles placed on sites within zones A1-30, AH and AE on the community's FIRM either be on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use, or meet the permit requirements of section 42-63(a), and the elevation and anchoring requirements for "manufactured homes" in subsection (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions.

(Code 1983, § 5-137; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-502, § I, 8-22-1991; Ord. No. B-559, § I, 8-10-1995; Ord. No. B-559(A1008), § VIII, 10-23-2008)

Sec. 42-93. Standards for subdivision proposals.

- (a) All subdivision proposals, including manufactured home parks and subdivisions, shall be consistent with sections 42-32, 42-33 and 42-36.
- (b) All proposals for the development of subdivisions, including manufactured home parks and subdivisions, shall meet development permit requirements of section 42-61—42-63 and the provisions of sections 42-91—42-95.
- (c) Base flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks if not otherwise provided pursuant to section 42-42 or section 42-61(b)(8).
- (d) All subdivision proposals, including manufactured home parks and subdivisions, shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals, including manufactured home parks and subdivisions, shall have public utilities and facilities such as sewer, gas electrical and water systems located and constructed to minimize or eliminate flood damage.

(Code 1983, § 5-138; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-559(A1008), § IX, 10-23-2008)

Sec. 42-94. Standards for areas of shallow flooding (AO/AH zones).

Located within the areas of special flood hazard established in section 42-42 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures have the lowest floor (including the basement) elevated above the highest adjacent grade at least as high as the depth number plus three feet as specified in feet on the FIRM or at least two feet above the ultimate (fully-developed) water surface elevation as determined by a licensed engineer, ~~whichever is higher~~. This requirement will also apply to manufactured homes.
- (2) All new construction and substantial improvements of nonresidential structures shall:
 - a. Have the lowest floor (including the basement) elevated above the highest adjacent grade at least as high as the depth number, plus three feet, as specified on the FIRM or at least two feet above the water surface elevation as determined by a licensed engineer, whichever is higher.
 - b. Together with attendant utility and sanitary facilities, be designed so that the structure is watertight with walls substantially impermeable to the passage of water to an elevation three feet above the depth number as designated in the FIRM or two feet above the ultimate (fully-developed) water surface elevation as determined by a flood study prepared by a licensed engineer, ~~whichever is higher~~. The structural components shall have the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this article, as proposed in section 42-63(a)(1), are satisfied.
- (4) Require within zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(Code 1983, § 5-139; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-559(A1008), § X, 10-23-2008)

Sec. 42-95. Floodways.

Located within areas of special flood hazard established in section 42-42 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 erosion potential, the following provisions shall apply:

- (1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- (2) If subsection (1) of this section is satisfied, all new construction and substantial improvement shall comply with all applicable flood hazard reduction provisions of this division.
- (3) Under the provisions of 44 CFR chapter 1, section 65.12 of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revisions through FEMA.

(Code 1983, § 5-140; Ord. No. B-432, § 1, 5-14-1987; Ord. No. B-559, § I, 8-10-1995)

Sec. 42-96. Severability.

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