

Chapter 50 FLOODS¹

ARTICLE I. IN GENERAL

Secs. 50-1—50-30. Reserved.

ARTICLE II. FLOOD DAMAGE PREVENTION

DIVISION 1. GENERALLY

Sec. 50-31. Statutory authorization.

The legislature of the state has in the Flood Control Insurance Act, Texas Water Code § 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the city council does ordain as follows.

(Code 2005, § 50-31; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-32. Findings of fact.

- (a) The drainage ways, creeks, and 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.
- (c) Land development can cause large quantities of soil to be displaced and transported to downstream locations. Erosion can contaminate water supplies and resources. A buildup of sediment degrades water quality, damages or destroys valuable environmental resources and clogs watercourses, which can cause flooding, thereby damaging public and private lands and property.
- (d) Creeks and floodplain areas are valuable resources deserving protection in that they provide recreational opportunities, improve the aesthetics of the community, convey storm water runoff and filter some water quality pollutants.

(Code 2005, § 50-32; Ord. No. 2014-20 , § 3, 6-10-2014)

¹State law reference(s)—Flood Control and Insurance Act, Texas Water Code § 16.311 et seq.; authorizing municipalities to take all necessary and reasonable actions to comply with the requirements and criteria of the National Flood Insurance Program, Texas Water Code § 16.315.

Sec. 50-33. 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:

- (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 flood-prone areas in such a manner as to minimize future flood-prone areas; and
- (7) Ensure that potential buyers are notified that property is in a flood area.
- (8) Preserve the natural conditions of creeks and floodplain areas that are valuable resources deserving protection in that they provide recreational opportunities, improve the aesthetics of the community, convey storm water runoff and filter some water quality pollutants.
- (9) Minimize development in floodplains to preserve the natural beauty and aesthetics of the community;
- (10) Control and manage storm water runoff, the sediment load and pollutant load from points and surfaces within developments; and
- (11) Establish a reasonable standard of design for development to minimize potential flood and erosion damage;

(Code 2005, § 50-33; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-34. 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 that 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 conveyance of floodwaters;
- (4) Control filling, 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 2005, § 50-34)

Secs. 50-35—50-55. Reserved.

DIVISION 2. DEFINITIONS

Sec. 50-56. Definitions.

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

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 landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

Appurtenant structure means a structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

Area of future conditions flood hazard means the land area that would be inundated by the one-percent-annual chance (100-year) flood based on future conditions hydrology.

Area of shallow flooding means a designated AO, AH, AR/AO, AR/AH, or VO 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 (SFHA) means the land in the floodplain within a 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 rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE or V.

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

Base flood elevation (BFE) means the elevation shown on the FIRM and found in the accompanying flood insurance study (FIS) for Zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a one percent chance of equaling or exceeding that level in any given year—also called the base flood.

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

Breakaway wall means a wall that is not part of the structural support of a 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 supporting foundation system.

Conditional Letter of Map Revision (CLOMR) is an application consisting of the elements required by the Federal Emergency Management Agency for prior approval of a project in a special flood hazard area.

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 to 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, for insurance purposes, means a non-basement building, which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns and is 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.

Existing construction, for the purposes of determining rates, means 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).

Federal Emergency Management Agency (FEMA) is the federal agency charged with review and approval of projects in special flood hazard areas.

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

- (1) The overflow of inland or tidal waters; or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood elevation study means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

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

Flood insurance study (FIS). See Flood elevation study.

Floodplain or *flood-prone area* means any land area susceptible to being inundated by water from any source (See *Flooding*).

Floodplain Administrator is the official designated by the City Manager to be responsible for fulfilling the duties and responsibilities defined in this Ordinance in Division 4. Administration under Sec. 50-106.

Floodplain Development Permit means a permit form produced by the local government agency that is required to be approved prior to construction or development within or adjacent to any Special Flood Hazard Area (SFHA).

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

Floodplain management regulations 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 "floodplain management regulations" describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

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 area within a community subject to a special flood hazard and the extent of the depths of 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.

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

Floodway. See *Regulatory floodway*.

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 "functionally dependent use" 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.

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 the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory or 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, 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 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 basement). An unfinished or flood-resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of section 60.3 of the National Flood Insurance Program regulations.

Manufactured home means a structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected 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.

Mean sea level, for purposes of the National Flood Insurance Program, means the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

New construction, for the purpose of determining insurance rates, means 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, the term "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 vehicle means a vehicle which is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projections;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Special flood hazard area. See *Area of special flood hazard*.

Start of construction, except for new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348), means substantial improvement and means the date the building permit was issued, provided 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.

Storm drainage design manual, an administrative manual approved and amended by the City Manager or his designee that provides direction for design of storm drainage facilities, provides minimum requirements for detailed flood studies, and for development within floodplains.

Structure, for floodplain management purposes, means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, 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 reconstruction, rehabilitation, addition, 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. The term "substantial improvement" includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term "substantial improvement" does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions; or
- (2) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a historic structure.

Variance means a grant of relief by a community from the terms of a floodplain management regulation. (For full requirements, see **CFR 44** 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), (d)(3), (e)(2), (e)(4), or (e)(5) of the National Flood Insurance Program regulations is presumed to be in violation until such time as that documentation is provided.

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

(Code 2005, § 50-56; Ord. No. 2014-20 , § 3, 6-10-2014)

Secs. 50-57—50-77. Reserved.

DIVISION 3. GENERAL PROVISIONS

Sec. 50-78. Lands to which this article applies.

This division shall apply to all areas of special flood hazard, **or areas that will impact areas of special flood hazard as determined by FEMA and the City Floodplain Administrator**, within the jurisdiction of the City.

(Code 2005, § 50-78; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-79. Basis for establishing the areas of special flood hazard.

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 City of Wylie, TX and Incorporated Areas, dated Effective November 21, 2024, with accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) dated November 21, 2024, and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance.

(Code 2005, § 50-79; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-80. Establishment of development permit.

A floodplain development permit is available from the City's website under the "Engineering" tab shall be required to ensure conformance with the provisions of this division.

(Code 2005, § 50-80; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-81. Compliance.

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

(Code 2005, § 50-81; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-82. Abrogation and greater restrictions.

This division is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this division and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 2005, § 50-82; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-83. Interpretation.

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

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

(Code 2005, § 50-83; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-84. Warning and disclaimer of liability.

The degree of flood protection required by this division is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions, greater floods can and will occur and flood heights may be increased by manmade or natural causes. This division 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 division shall not create liability on the part of the city or any official or employee thereof for any flood damages that result from reliance on this division or any administrative decision lawfully made hereunder.

(Code 2005, § 50-84; Ord. No. 2014-20 , § 3, 6-10-2014)

Secs. 50-85—50-105. Reserved

DIVISION 4. ADMINISTRATION

Sec. 50-106. Designation of the floodplain administrator.

The **City Engineer or the City Manager's designated representative** is hereby appointed the floodplain administrator to administer and implement the provisions of this division and other appropriate sections of 44 CFR (Emergency Management and Assistance—National Flood Insurance Program Regulations) pertaining to floodplain management.

(Code 2005, § 50-106; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-107. Duties and responsibilities of the floodplain administrator.

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 division.
- (2) Review permit application to determine whether to ensure that the proposed building site project, including the placement of manufactured homes, will be reasonably safe from flooding.
- (3) Review, approve or deny all applications for development permits required by adoption of this division.
- (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 U.S.C. 1344) from which prior approval is required.
- (5) Make the necessary interpretation 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).
- (6) Notify, in riverine situations, adjacent communities and the state coordinating agency, which is the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ), prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (7) Ensure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (8) When base flood elevation data has not been provided in accordance with section 50-79, 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 division 5 of this article.
- (9)
 - a. When a regulatory floodway has not been designated, must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the city'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 one foot at any point within the city.
 - b. Under the provisions of 44 CFR chapter 1, section 65.12 of the National Flood Insurance Program regulations, the city may approve certain development in Zones A1-30, AE, AH, on the city's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the city first completes all of the provisions required by section 65.12.

(Code 2005, § 50-107)

Sec. 50-108. Permit procedures

- (a) Application for a floodplain 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, 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 basement) of all new and substantially improved structures;
 - (2) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
 - (3) A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 50-132(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) The location and elevation of the base flood for both existing conditions, proposed conditions and fully developed conditions. The location and elevation of the existing conditions base flood may be based on the City's FIRMs for areas that have been studied in detail and no floodplain alteration is proposed. Both the existing and fully developed base flood location and elevation shall be based on a detailed study as part of an application for a CLOMR where no detailed study of the floodplain exists and where floodplain alterations are proposed unless otherwise stated in writing by the Floodplain Administrator.
 - (6) A CLOMR or at a minimum a detailed engineering report shall be prepared in accordance with the requirements of the Storm Drainage Design Manual for all subdivisions and new construction in floodplains and said report shall be reviewed and approved by the Floodplain Administrator.
 - (7) Maintain a record of all such information in accordance with section 50-107(1);
- (b) Approval or denial of a floodplain development permit by the floodplain administrator shall be based on all of the provisions of this division 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.
- (c) No application for a floodplain development permit shall be reviewed which is not complete and accompanied by payment of the floodplain development permit fees if a fee is established as established.

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- (d) The floodplain development permit shall automatically expire after the expiration of one (1) year from the date of the permit unless development has commenced.
 - (e) Permits required to be obtained from all State and Federal regulatory bodies with jurisdiction in such matters, including 404 Permits, Nationwide and Individual permits from the Corps of Engineers shall be obtained prior to the issuance of the floodplain development permit.

(Code 2005, § 50-108)

Sec. 50-109. Variance procedures

- (a) The city board of adjustment and appeals shall hear and render judgment on requests for variances from the requirements of this section.
- (b) The city board of adjustment and appeals 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 or administration of this division.
- (c) Any person or persons aggrieved by the decision of the city board of adjustment and appeals may appeal such a 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 division.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in section 50-108(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 division, the city board of adjustment and appeals may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this article.
- (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 continued 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: showing a good and sufficient cause; a determination that failure to grant the variance would result in exceptional hardship to the applicant; and 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 application to which 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 the city for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria outlined in section 50-109(a)—(i) 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.
- (l) Variances and appeals can only be considered upon submittal of an appeal letter or request for variance to the Floodplain Administrator.
 - (1) Applicants may be required to submit additional information which the Floodplain Administrator may deem necessary to review the appeal or request for variance.
 - (2) Each appeal or request for variance shall be accompanied by an appeal/variance review fee if established by the City Council, payable to the City, no party of which shall be refundable, unless the appeal or request for variance is withdrawn by the applicant prior to the Floodplain Administrator's review of the appeal or request, in which case the fee shall be refunded to the applicant.
 - (3) Upon receipt of the appeal or request for variance, the Floodplain Administrator shall review and determine compliance with the provisions of this ordinance and applicable policies.
- (m) Prior to the request being considered, the variance review fee and, at minimum, the detailed engineering study or CLOMR information as required by the Storm Drainage Design Manual shall be provided to the Floodplain Administrator for review and recommendations.

(Ord. No. 2014-20 , § 3, 6-10-2014)

Secs. 50-110—50-130. Reserved.

DIVISION 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 50-131. 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;
- (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 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;

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- (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; and
 - (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
 - (8) All new construction and improvements to existing construction of storm sewers, culverts, channels, creeks and drainage courses shall be designed to convey the fully developed base flood of the area contributing to the facility with at least one foot of freeboard.
 - (9) All new developments shall utilize regional detention and retention facilities as directed by the Floodplain Administrator to help collect silt from storm water runoff and to minimize increases in flood elevations from development and increased runoff.
 - (10) Preserve the existing conveyance capacity of floodplains and allow no rise in water surface elevation and no increase in channel velocities as a result of a floodplain development project. A rise of less than six (6) inches may be allowed if it is demonstrated to only impact the subject development tract and that the principle of equal conveyance reduction has been applied.
 - (11) Floodplains may be reclaimed provided they are 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 City, during the occurrence of the base flood discharge and FEMA has approved a Conditional Letter of Map Revision (CLOMR). In addition, development shall not reduce total valley storage for all special flood hazard areas on the City's FIRMs. The only exception that will be considered is an increase confined to being within the limits of the property that is proposed for reclamation, and such rise will be limited to a maximum of six (6) inches within the subject tract, as described in Sec. 50-107.(9).

(Code 2005, § 50-131; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-132. Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 50-79, 50-107(8), or 50-133(c), the following provisions are required:

- (1) *Residential construction.* New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated at least two feet above the base flood elevation. A registered professional engineer or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection as proposed in section 50-108(a)(1), 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 basement) elevated at least two feet above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall 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 areas 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 the city'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 city'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 at least two feet 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 with Zones A1-30, AH and AE on the city's FIRM that are not subject to the provisions of subsection (4) of this section be elevated so that either:
 1. The lowest floor of the manufactured home is at least two feet above the base flood elevation; or
 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 city's FIRM either be on the site for fewer than 180 consecutive days, or be fully licensed and ready for highway use, or meet the permit requirements of section 50-108(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 2005, § 50-132; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-133. Standards for subdivision proposals.

- (a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with sections 50-32, 50-33, and 50-34.

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- (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet floodplain development permit requirements of sections 50-80 and 50-108 and the provisions of this division.
 - (c) Base flood elevation data **and fully developed base flood elevation data** shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than **twenty five (25) lots or three (3) acres**, whichever is lesser, if not otherwise provided pursuant to section 50-79 or 50-107(8).
 - (d) **Base flood elevation data, with the establishment of a floodway, shall be generated by a detailed engineering study or CLOMR as determined by the Floodplain Administrator for all Zone A areas, or within one hundred (100) feet of the outlines of Zone A areas, and other streams not mapped by FEMA, or indicated on the community's FIRM.**
 - (e) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
 - (f) All subdivision proposals, including the placement of 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 2005, § 50-133; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-134. Standards for areas of shallow flooding (AO/AH Zones).

Located within the areas of special flood hazard established in section 50-79 are areas designated as shallow flooding. These areas have special flood hazards associated with flood depths 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; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated at least two feet above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two feet if no depth number is specified).
- (2) All new construction and substantial improvements of non-residential structures:
 - a. Have the lowest floor (including basement) elevated at least two feet above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the city's FIRM (at least two feet if no depth number is specified); or
 - b. Together with attendant utility and sanitary facilities, be designed so that below the base specified flood depth in an AO Zone, or below the base flood elevation in an AH Zone, level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
- (3) A registered professional engineer or architect shall submit a certification to the floodplain administrator that the standards of this section, as proposed in section 50-108 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 2005, § 50-134; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-135. Floodways.

Floodways, located within areas of special flood hazard established in section 50-79, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters 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 city during the occurrence of the base flood discharge **and FEMA has approved a Conditional Letter of Map Revision.**
- (2) If section 50-135(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this division 5.
- (3) Under the provisions of 44 CFR chapter 1, section 65.12, of the National Flood Insurance Program Regulation, the city may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the city first completes all the provisions required by section 65.12.

(Code 2005, § 50-135; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-136. Noncompliance.

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.

(Code 2005, § 50-136; Ord. No. 2014-20 , § 3, 6-10-2014)

Sec. 50-137. Permitted Floodplain Uses.

To minimize possible losses of life and property, the following uses and structures are permitted in a floodplain area *and other similar uses as approved by the Floodplain Administrator*, provided they are also permitted in the underlying zoning district;

- (1) Farm or ranch;
- (2) Public park or playground, and golf course, if provided with controlled access during time of flood;
- (3) Parking lots designed in accordance with this ordinance.
- (4) Radio, television or microwave tower and amateur communications tower protected from flood damage and with a conditional use permit.
- (5) Open private recreation clubs or areas and private centers without exterior walls are permitted in floodplain areas. Private and public facilities listed above with enclosed walls that would incur damage are not permitted in floodplain areas.