

CHAPTER 5: FLOOD LOSS CONTROL

Division 5.1: Statutory Authorization, Findings of Fact, Purpose, and Methods

Sec. 5.100 Statutory Authorization

The Legislature of the State of Texas has in the Flood Control Insurance Act, Texas Water Code, Section 16.315, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. These regulations are adopted pursuant thereto.

Sec. 5.101 Findings of Fact

- (a) The flood hazard areas of the City of Sunset Valley 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 hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood proofed or otherwise protected from flood damage.

Sec. 5.102 Statement of Purpose

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

- (a) Protect human life and health;
- (b) Minimize expenditure of public money for costly flood control projects;
- (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (d) Minimize prolonged business interruptions;
- (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in floodplains;
- (f) 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 blight areas; and
- (g) Insure that potential buyers are notified that property is in a flood area.

Sec. 5.103 Methods of Reducing Flood Losses

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

- (a) 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;
- (b) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (c) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
- (d) Control filling, grading, dredging and other development which may increase flood damage;
- (e) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

Division 5.2: General Provisions

Sec. 5.200 Lands to Which this Chapter Applies

This Chapter shall apply to all areas of special flood hazard within the jurisdiction of the City of Sunset Valley.

Sec. 5.201 Basis for Establishing the Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report, entitled "Flood Insurance Study for Travis County and Incorporated areas, Volumes 1 thru 6," dated September 26, 2008 with accompanying Flood Insurance Rate Maps and Flood Boundary-Floodway Maps (FIRM and FBFM) and any revisions thereto, and those areas of special flood hazard identified by the Federal Emergency Management Agency through the National Flood Insurance Program as shown in the Flood Insurance Rate Map 48453C0210E, panel 210 and 255 of 410 dated, September 26, 2008 and any revisions thereto, are hereby adopted by reference and declared to be a part of this Code and are subject to the floodplain management regulations of the City of Sunset Valley as set forth herein.

Sec. 5.202 Establishment of Development Permit

A Development Permit shall be required to ensure conformance with the provisions of this Chapter. This system will consist of a city-wide application review procedure and the issuance of permits only for those developments located within the identified flood hazard areas. Developments located outside of identified flood hazard areas will be issued a Development Permit Exemption Certificate stating that the proposed development is not located within an identified flood hazard area and that the construction standards required in this Chapter are not applicable to the proposed development.

Sec. 5.203 Compliance

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

Sec. 5.204 Abrogation and Greater Restrictions

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

Sec. 5.205 Interpretation

In the interpretation and application of this Chapter, all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the City; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

Sec. 5.206 Warning and Disclaimer of Liability

The degree of flood protection required by this Chapter 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 man-made or natural causes. This Chapter 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 Chapter 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 Chapter or any administrative decision lawfully made thereunder.

Sec. 5.207 Development Permit Application Form, Development Permit Form and Development Permit Exemption Certificate

The Development Permit Application Form, Development Permit Form and Development Permit Exemption Certificate Form which shall be used to implement this Chapter are available at the City's municipal office. The City of Sunset Valley may promulgate any additional forms as may be necessary for the implementation of this Chapter.

Sec. 5.208 Establishment of Fees

The Sunset Valley City Council shall establish fees commensurate with the service rendered by the City.

Division 5.3: Administration and Procedures

Sec. 5.300 Designation of the Floodplain Administrator

The Mayor, City Administrator or his/her designee is hereby appointed the Floodplain Administrator (Administrator) to administer and implement the provisions of this Chapter and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to flood plain management.

Sec. 5.301 Duties & Responsibilities of the Administrator

Duties and responsibilities of the Administrator shall include, but not be limited to, the following:

- (a) Maintain and hold open for public inspection all records pertaining to the provisions of this Chapter.
- (b) Review permit application to determine whether proposed building sites will be reasonably safe from flooding.
- (c) Review, approve or deny all applications for development permits required by adoption of this Chapter.
- (d) Review permits for proposed development to assure 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. 1334) from which prior approval is required.
- (e) 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 Administrator shall make the necessary interpretation.
- (f) Notify, in riverine situations, adjacent communities and the State Coordinating Agency, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (g) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (h) When base flood elevation data has not been provided in accordance with Section 5.302, the 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 this Chapter.
- (i) When a regulatory floodway has not been designated, the Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A 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 community.

Sec. 5.302 Permit Procedures

- (a) A completed Development Permit Application Form must be submitted to the City Administrator prior to the start of construction of development within the corporate limits of the City of Sunset Valley, Texas.
- (b) The Administrator will review all Applications to determine whether such construction or other development is proposed within the identified flood hazard areas of the City of Sunset Valley. If a proposed development is not within the identified flood hazard area, then the Administrator will issue a Development Permit Exemption Certificate to the applicant.

- (c) Application for a Development Permit shall be presented to the Administrator on forms furnished by him/her 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, 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 this Chapter;
 - (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.
- (d) Approval or denial of a Development Permit by the Administrator shall be based on all of the provisions of this Chapter 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 flood waters 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.

Sec. 5.303 Variance Procedures

- (a) The Appeal Board which consists of the Sunset Valley City Council shall hear and render judgment on requests for variances from the requirements of this Chapter.
- (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 Administrator in the enforcement or administration of this Chapter.
- (c) Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision to the courts of competent jurisdiction.
- (d) The 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 Recorded Texas Historic Landmarks, without regard to the procedures set forth in the remainder of this Chapter.
- (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 this Chapter 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 Chapter, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Chapter.
- (h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) 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, (i) showing a good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and (iii) 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, code provisions, 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 the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

- (j) Variances may be issued by the City of Sunset Valley for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in Section 5.302(d)(1-10) are met, and (ii) 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.

Division 5.4: Provisions for Flood Hazard Reduction

Sec. 5.400 General Standards

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

- (a) 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;
- (b) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (c) All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- (d) 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;
- (e) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (f) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
- (g) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

Sec. 5.401 Specific Standards

In all areas of special flood hazard where base flood elevation data has been provided as set forth in (i) Chapter 5, section 5.201, (ii) Chapter 5, section 5.301(h), or (iii) Chapter 5,, section 5.402(c), the following provisions are required:

- (a) **Residential Construction** - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to a minimum of one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Administrator that the standard of this subsection is satisfied.
- (b) **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or 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 Administrator.
- (c) **Enclosure** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of 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:
 - (1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (2) The bottom of all openings shall be no higher than one foot above grade.
 - (3) Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exist of floodwaters.
- (d) **Recreational Vehicles** - Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, and (ii) be fully licensed and ready for highway use, and (iii) meet the permit requirements of Section 5.302 (a), and the elevation and anchoring requirements for "manufactured homes" in paragraph (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.

Sec. 5.402 Standards for Subdivision Proposals

- (a) All subdivision proposals shall be consistent with Findings, Purposes and Methods of Reducing Flood Losses upon which these regulations are based.
- (b) All proposals for the development of subdivisions shall meet Development Permit requirements of Chapter 5, Section 5.202; Chapter 5, Section 5.302; and Division 5.4.

- (c) Base flood elevation data shall be generated for subdivision proposals and other proposed development which are greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Chapter 5, Section 5.201 or Chapter 5, Section 5.301(h).
- (d) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

Sec. 5.403 Standards for Areas of Shallow Flooding (AO/AH Zones)

Located within the areas of special flood hazard established in Chapter 5, Section 5.201 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 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:

- (a) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above 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).
- (b) All new construction and substantial improvements of nonresidential structures:
 - (1) have the lowest floor (including basement) elevated above 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,
 - (2) 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.
- (c) A registered professional engineer or architect shall submit a certification to the Administrator that the standards of this section are satisfied.
- (d) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

Sec. 5.404 Floodways

Floodways - located within areas of special flood hazard established in Section 5.201 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:

- (a) 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.

- (b) If Section 5.404 (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Division 5.4.
- (c) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program 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** completes all of the provisions required by Section 65.12.

Sec. 5.405 Nuisance

Any construction, modification, improvement, land cut or fill violation of this Chapter is hereby declared a public nuisance and the continuation of such activity may be enjoined by a court of competent jurisdiction.

Sec 5.406 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 Chapter.

Sec 5.407 COMPLIANCE REQUIRED

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Chapter and other applicable regulations.