

**ORDINANCE NO. 1569**

**AMENDING SECTIONS OF CHAPTER 13, FLOOD DAMAGE PREVENTION  
IN ORDER TO MEET FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)  
MINIMUM REQUIREMENTS AND TO REMAIN COMPLAINT WITH THE  
NATIONAL FLOOD INSURANCE PROGRAM**

**WHEREAS**, on December 7, 2010, the City Commission approved Ordinance No. 1388 updating Chapter 133; and,

**WHEREAS**, City staff has been advised by the National Flood Insurance Program and FEMA that updates are necessary to keep the City in compliance,

**NOW, THEREFORE, BE IT ORDAINED** by the City Commission of the City of Alamogordo that the following sections of Chapter 13, of the Alamogordo Code of Ordinances, are hereby amended as follows.

**ARTICLE 13-01 - IN GENERAL**

13-01-005. - Statutory authorization.

The state legislature has in NMSA 1978, § 3-18-7 delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses, and it is determined to be in the public interest and in the best interest of the health, welfare and morals of the community to establish the flood control damage prevention regulations in this article.

13-01-010. - 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:

- (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 flood plains;
- (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 blight areas; and
- (7) Insure that potential buyers are notified that property is in a flood area.

13-01-020. - Methods of reducing flood losses.

In order to accomplish its purposes, this chapter 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 flood waters;
- (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 flood waters or which may increase flood hazards to other lands.

#### 13-01-030. - Definitions.

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

*Accessory structure, low-cost and small* means a building that is four hundred (400) square feet or less, that has two (2) or more exterior rigid walls and a fully secured roof and that is affixed to a permanent site, including modular buildings, and which has a value less than three thousand dollars (\$3,000.00), that are used for parking of no more than two (2) cars, limited storage of low cost items (items with a value of two hundred fifty dollars (\$250.00) or less) or other ancillary use.

*Anchored* means a series of methods used to secure a structure to its footings or foundation wall so that it will not be displaced by flood or wind forces.

*Appeal* means a request for a review of the flood plain administrator's interpretation of any provision of this chapter or a request for a variance.

*Area of shallow flooding* means a designated AO, AH, or VO zone on a community's flood insurance rate map (FIRM) with a one (1) percent chance or greater annual chance of flooding to an average depth of one (1) to three (3) 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* is the land in the floodplain within a community subject to a one (1) 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—99, VO, V1—V30, VE or V or These areas are designated as Zone A, AO, A1-30, AE, A99, AH or E on the FIRM.

*Base flood* means the flood having a one (1) percent chance of being equaled or exceeded in any given year (also called the "100-year flood").

*Base flood depth (BFD)* means the depth shown on the flood insurance rate map for zone AO that indicates the depth of water above highest adjacent grade resulting from a flood that has a one (1) percent chance of equaling or exceeding that level in any given year.

*Base flood elevation (BFE)* is the elevation shown on the flood insurance rate map (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 (1) percent chance of equaling or exceeding that level in any given year - also called the base flood.

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

*Construction.* See *Development*.

*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.

*Designated floodway.* See *Regulatory floodway*.

*Development* means any man-made 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 non-basement building which has its lowest elevated floor, raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

*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. "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 elevation determination* means a determination of the water surface elevations of the base flood hazards by the floodplain administrator and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide and/or flood-related erosion hazards.

*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.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

*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 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.

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

*Flood proofing* 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.

*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 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.

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

*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, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

*Letter of map amendment (LOMA)* is an amendment to the currently effective FEMA map which establishes that a property is not located in a special flood hazard area. A LOMA is only issued by FEMA.

*Letter of map revision (LOMR)* is an official amendment to the currently effective FEMA map which changes flood zones, delineations, and elevations. A LOMR is only issued by FEMA.

*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 this chapter.

*Manufactured home* means a structure transportable in one (1) 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", except that any recreational vehicle placed on a site for a period exceeding one hundred eighty (180) consecutive days shall be considered a manufactured home for the purposes of this chapter.

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

*Mean sea level* means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, 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.

*Modular building* is a building that is usually transported to its site on a steel frame or special trailer because it does not have a permanent chassis like a manufactured home.

*Natural grade* means the grade unaffected by construction techniques such as fill, landscaping or berming.

*New construction* means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of this chapter, 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 this chapter.

*Non-residential* includes, but is not limited to: small businesses, churches, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, and hotels and motels with normal room rentals for less than six (6) months' duration.

*Recreational vehicle* is a vehicle which is:

- (1) Built on a single chassis;

- (2) Four hundred (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 a temporary living quarters for recreational, camping, travel, or seasonal use.

*Regulatory floodway* is 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.

*Residential* means "of or pertaining to a place of personal residence or to a location for such places, as compared to non-residential".

*Sheet flow area.* See *Area of shallow flooding*.

*Special flood hazard area (SFHA).* See *Area of special flood hazard*.

*Start of construction* includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (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, 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 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 fifty (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 fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term 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 assure safe living conditions; or
- (2) Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places provided that the alteration will not preclude the building's continued designation as a historic building.

*Variance* is a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

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

*Walled and roofed* means a building that has two (2) or more exterior rigid walls and a fully secured roof and that is affixed to a permanent site.

*Water surface elevation* means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, (or other datum, of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

*Zone* is a geographical area shown on a flood hazard boundary map or a flood insurance rate map that reflects the severity or type of flooding in the area.

13-01-040. - Lands to which this chapter applies.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city.

13-01-050. - 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, "The Flood Insurance Study (FIS) for Otero County, New Mexico, and Incorporated Areas," dated December 17, 2010, with accompanying flood insurance rate maps (FIRM) dated December 17, 2010. The FIS, FIRMs and FBFMs are on file at the Alamogordo City Hall.

13-01-070. - Compliance.

All development of land, construction of residential, commercial or industrial structures, or future development within delineated floodplain areas is subject to the terms of this chapter and other applicable regulations.

13-01-080. - 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 regulation conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

13-01-090. - 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.

13-01-100. - 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 manmade 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 city, or any official or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

13-01-110. - Declaration of public nuisance.

Every new structure, building, fill, excavation or development located or maintained within any area of special flood hazard after October 3, 1983 in violation of this chapter is a public nuisance per se and may be abated, prevented or restrained by action of this political subdivision.

13-01-120. - Abatement of violations.

Within thirty (30) days of discovery of a violation of this chapter, the floodplain administrator shall submit a report to the governing body which shall include all information available to the floodplain administrator which is pertinent to said violation. Within thirty (30) days of receipt of this report, the governing body shall either:

- (1) Take any necessary action to effect the abatement of such violation; or
- (2) Issue a variance to this chapter in accordance with the provisions of section 13-02-040 herein; or
- (3) Order the owner of the property upon which the violation exists to provide whatever additional information may be required for their determination. Such information must be provided to the floodplain administrator within thirty (30) days of such order and the floodplain administrator shall submit an amended report to the governing body within twenty (20) days. At the next regularly scheduled public meeting, the governing body shall either order the abatement of said violation or they shall grant a variance in accordance with the provisions of section 13-02-050 herein; or
- (4) Submit to the Federal Emergency Management Agency a declaration for denial of insurance, stating that the property is in violation of a cited state or local law, regulation or ordinance, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended.



13-01-130. - Unlawful acts.

- (a) It is unlawful for any person to divert, retard or obstruct the flow of waters in any watercourse whenever it creates a hazard to life or property without securing the written authorization of the governing body. Where the watercourse is a delineated floodplain, it is unlawful to excavate or build any structure affecting the flow of waters without securing written authorization of the floodplain administrator.
- (b) Any person violating the provisions of this chapter shall be guilty of a misdemeanor.

13-01-140. - Severability.

This chapter and the various parts thereof are hereby declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

ARTICLE 13-02 - ADMINISTRATION

13-02-005. - Establishment of development permit.

A floodplain development permit shall be obtained before construction or development begins, including placement of manufactured homes, within any area of special flood hazard established in section 13-01-050.

Cross reference— Subdivision regulations, ch. 22.

13-02-010. - Designation of the floodplain administrator.

The city engineer, or his/her designated representative, is hereby appointed the floodplain administrator to administer, implement and enforce the provisions of this chapter by granting or denying development permits in accordance with its provisions. Only a person who is certified pursuant to the state-certified flood plain manager program may be designated as a representative of the city engineer.

13-02-020. - 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 chapter.
- (2) Review floodplain development permit applications to determine that:
  - a. The permit requirements of this chapter have been satisfied;
  - b. All other required state and federal permits have been obtained;
  - c. The site will be reasonably safe from flooding; and

- d. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this chapter, "adversely affect" means 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 (1) foot at any point.
- (3) Review all subdivision and other proposed new development, including manufactured home and recreational vehicle parks to determine whether the proposed development site will be reasonably safe from flooding. When the proposed building site is located in the special flood hazard area, all new construction and substantial improvements will meet the applicable standards of this Chapter.
- (4) Make interpretations, where 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).
- (5) Whenever a watercourse is to be altered or relocated:
- a. Notify adjacent communities prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the state coordinating agency which is the New Mexico Department of Homeland Security and Emergency Management (DHSEM);
  - b. Require that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained; and
  - c. when the alteration or relocation of a watercourse causes a rise in the base flood elevation, or inundation of areas not previously in the special flood hazard area, as soon as practicable, but not later than six (6) months after the date such information becomes available, the floodplain administrator shall require those doing the watercourse alteration or relocation to notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data in accordance with Volume 44 Code of Federal Regulations section 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.
- (6) When base flood elevations are not available, 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 this chapter. This information shall be submitted to the city commission for adoption.
- (7) Take actions on violations of this chapter as required in section 13-01-120 herein.
- (8) Notify the Federal Emergency Management Agency of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

13-02-030. - Permit procedures.

- (a) Application for a development permit shall be presented to the floodplain 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 using the same vertical datum as the effective flood insurance rate map (FIRM) for the community and documented on the current form FEMA 81-31, Elevation Certificate. In Zone AO, elevation of existing highest adjacent natural grade and proposed elevation of lowest floor of all structures;
  - (2) Elevation in relation to mean sea level to which any new or substantially improved non-residential structure will be flood-proofed;
  - (3) A certificate from a registered professional engineer or architect, licensed in the state, that the nonresidential flood-proofed structure shall meet the flood-proofing criteria of section 13-03-020(b);
  - (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; and
  - (5) Certification by a registered professional engineer, licensed in the State of New Mexico, that the cumulative effect of proposed development within zones A1—30 and AE on the community's FIRM, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community, along with the technical data to support the certification.
- (b) Approval or denial of a development permit by the floodplain 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.

Cross reference— Buildings and building regulations, ch. 8; civil defense, ch. 10; health and sanitation, ch. 15; planning, ch. 20; trailers, mobile homes and recreational vehicles, ch. 25; water, sewers and sewage disposal, ch. 28; zoning, ch. 29.

## 13-02-040. - Variance procedures.

- (a) Board of appeals.
- (1) The city commission shall hear and render judgment on requests for variances from the requirements of this chapter.
  - (2) The city commission 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 chapter.
  - (3) Any person or persons aggrieved by the decision of the city commission may appeal such decision in the courts of competent jurisdiction.
  - (4) In passing upon such applications, the city commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
    - a. The danger that materials may be swept onto other lands to the injury of others;
    - b. The danger of life and property due to flooding or erosion damage;
    - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
    - d. The importance of the services provided by the proposed facility to the community;
    - e. The necessity to the facility of a waterfront location, where applicable;
    - f. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
    - g. The compatibility of the proposed use with existing and anticipated development;
    - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
    - i. The safety of access to the property in time of flood for ordinary and emergency vehicles;
    - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,
    - k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water system and streets and bridges.
- (b) Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance commensurate with the increased risks.

The floodplain administrator shall maintain a record of all variance actions, including justification for their issuance.

## 13-02-050. - Conditions for variances.

- (a) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (½) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided the relevant factors in section 13-02-030(b) have been fully considered. As the lot size increases beyond the one-half (½) acre, the technical justification required for issuing the variance increases.
- (b) Variances may be issued for the repair or rehabilitation of historical 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
- (c) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (d) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of variances to an elevation requirement, this means the city commission need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposed, but only to that elevation which the city commission believes will both provide relief and preserve the integrity of the local chapter.
- (e) Variances shall only be issued upon
- (1) A showing of good and sufficient cause;
  - (2) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
  - (3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (f) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
- (1) The criteria outlined in this section are met; and
  - (2) 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.
- (g) Upon consideration of the factors noted above and the intent of this chapter, the city commission may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter.

## ARTICLE 13-03 - FLOOD HAZARD REDUCTION PROVISIONS

### 13-03-010. - Standards of construction.

In all areas of special flood hazards the following standards are required:

- (a) Anchoring.

- (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 manufactured homes shall meet the anchoring standards of section 13-03-070.
- (b) Construction materials and methods.
- (1) All new construction or substantial improvements shall be constructed using methods and practices that minimize flood damage;
  - (2) All new construction or substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
  - (3) All new construction and substantial improvements and other proposed new development 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;
  - (4) Within zones AH or AO, adequate drainage paths shall be constructed around structures on slopes to guide floodwaters around and away from proposed structures.
  - (5) When a regulatory floodway has not been designated, construction, substantial improvements, or other development (including fill) shall not be permitted within zones A1—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 one (1) foot at any point within the community.

13-03-020. - Elevation and floodproofing.

- (a) Located within the areas of special flood hazards where base flood elevation data has been provided (AE/AH zones), the following provisions apply:
- (1) Residential Construction - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevation to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in 13-02-030 (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 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 (floodproofed). A registered professional engineer or architect shall develop and/or review structural design, specification, 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.

(b) Located within the areas of special flood hazard established in 13-01-050 are areas designated as shallow flooding (AO/AH Zones). These areas have special flood hazards associated with flood depths of 1 to 3 feet where a clearly defined channel does not exist, where the path of 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 to or above the base flood elevation or the highest adjacent grade at least as high as the depth number in feet on the community's FIRM (at least three (3) feet if no depth number is specified), or

(2) All new construction and substantial improvements of non-residential structures;

(a) Have the lowest floor (including basement) elevated to or above the base flood elevation or the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) 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, 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 (floodproofed).

(c) A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in 13-03-020 (c) 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.

#### 13-03-030. - Flood openings.

All new construction and substantial improvements, with fully enclosed areas below the lowest floor (excluding basements), that are usable solely for parking of vehicles, building access or storage, 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 floodwater. Designs for meeting this requirement must meet or exceed the following criteria:

(1) A minimum of two (2) openings, on different sides of each enclosed area, having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers,

valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater; or

(2) If it is not feasible or desirable to meet the openings criteria stated above, a registered engineer or architect may design and certify the openings.

13-03-040. - Detached garages and accessory structures.

(a) "Accessory structure" used solely for parking (two-car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in section 13-01-040 030, may be constructed such that its floor is below the regulatory flood elevation, provided the structure is designed and constructed in accordance with the following requirements:

(1) Use of the accessory structure must be limited to parking or limited storage;

(2) The portions of the accessory structure located below the regulatory flood elevation must be built using flood-resistant materials;

(3) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;

(4) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the regulatory flood elevation;

(5) The accessory structure must comply with floodplain encroachment provisions in section 13-03-090; and

(b) The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Section 13-03-030

(c) Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in section 13-03-010.

13-03-050. - Standards for storage of materials and equipment.

(a) The storage or processing of materials that could be injurious to human, animal or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

(b) Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning

13-03-060. - Standards for utilities.

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(b) All 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,

(c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(d) Waste disposal systems shall not be installed wholly or partially in a regulatory floodway.



**13-03-070. - Manufactured homes.**

All manufactured homes that are placed on site or substantially improved shall:

- (1) Be elevated so that the bottom of the structural frame or the lowest point of any attached appliances, whichever is lower, is at or above the regulatory flood elevation;
- (2) Be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not to be 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; and
- (3) Meet the standards in section 13-03-010.

**13-03-080. - Standards for recreational vehicles.**

All recreational vehicles placed on site shall:

- (1) Be on the site for fewer than one hundred eighty (180) consecutive days; or
- (2) Be fully licensed and ready for highway use; or
- (3) Meet the permit requirements of subsection 13-02-030(a), and the elevation and anchoring requirements for "manufactured homes" in subsection 13-03-010(a) ~~070~~ 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.

**13-03-090. - Floodways.**

Located within areas of special flood hazard established in section 13-01-050 are areas such as arroyos and other channels which may be 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 developments, unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.
- (2) If section 13-03-090(1), above, is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of sections 13-03-020 and 13-03-010 provisions for flood hazard reduction.

**13-03-100. - Standards for subdivision proposals.**

- (a) All new subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions), shall:
  - (1) Identify the area of the special flood hazard area and the elevation of the base flood
  - (2) Identify on the final plans the elevation(s) of the proposed structure(s) and pads. If the site is filled above the base flood elevation, the final lowest floor and

grade elevations shall be certified by a registered professional engineer or surveyor and provided to the floodplain administrator.

(3) All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals and other proposed development shall provide adequate drainage to reduce exposure to flood hazards.

(d) Base flood elevation data shall be generated for subdivision proposals and other proposed development, including the placement of manufactured home parks and subdivisions, which are greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to other sections of this ordinance.

DONE this 13 day of June, 2018.

CITY OF ALAMOGORDO, NEW MEXICO  
a New Mexico municipal corporation

By: *Richard A. Boss*  
Richard A. Boss, Mayor



ATTEST:

*Rachel Hughs*  
Rachel Hughs, City Clerk

APPROVED AS TO FORM:

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First publication approval: 5/8/2018  
First publication: 5/12/2018  
Final publication approval: 6/12/2018  
Final publication: 6/17/2018  
Effective date: 6/22/2018