

## CHAPTER 37, STORMWATER AND FLOODPLAIN MANAGEMENT

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White text is the adopted Floodplain Ordinance

Gray highlight areas are changes proposed after the August 2012 adoption

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**ARTICLE I. FLOODPLAIN MANAGEMENT—SPECIAL FLOOD HAZARD AREAS**

**DIVISION I. GENERAL.**

**Sec. 37-1. Statutory authorization.**

In A.R.S. § 48-3610, the Arizona State Legislature enabled the City of Scottsdale to adopt regulations in conformance with A.R.S. § 48-3603 designed to promote the public health, safety and general welfare of its citizenry.

**Sec. 37-2. Findings of fact.**

(a) The flood hazard areas of the City are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(b) These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities and, when inadequately anchored, cause damage in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage, also contribute to the flood loss.

**Sec. 37-3. 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:

- (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 areas of special flood hazard;
- (f) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize blight areas caused by flooding;
- (g) Notify potential buyers that property is in an area of special flood hazard;
- (h) Alert those who occupy the areas of special flood hazard to their responsibilities;
- (i) Maintain eligibility for disaster relief.

**Sec. 37-4. Methods of reducing flood losses.**

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

- (a) Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or 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 help accommodate or channel floodwaters;
- (d) Control filling, grading, dredging, and other development which may increase flood damage; and
- (e) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

**Sec. 37-475. Definitions.**

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

*A zone.* See "Special flood hazard area".

*Accessory structure* is a structure, smaller than 500 square feet, used solely for parking no more than two cars and/or limited storage.

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

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

*Area of special flood hazard* means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. These areas are designated as Zone A, AE, AO, AH, and A1-30 on the FIRM and other areas determined by the criteria adopted by the Director of the Arizona Department of Water Resources. See "Special flood hazard area".

*Base flood* is the flood having a one-percent chance of being equaled or exceeded in any given year. This is also called a one-hundred-year flood.

*Base flood depth (BFD)* is the depth shown on the Flood Insurance Rate Map for Flood Hazard Zone AO that indicates the water depth resulting from a base flood.

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

*Basement* is any area of the building having its floor sub-grade - i.e., below ground level - on all sides.

*Building.* See "Structure."

*Building permit* is the city's written authorization for a person to start development. Building permit, for this chapter only, includes permits for using the right-of-way, and excludes mining and drilling permits. Mining and drilling permits are issued by the appropriate county, state and federal authorities.

*Community* means the City of Scottsdale.

*Compensatory storage* means floodwater storage, or other mitigation, provided to compensate for an equal volume of storage lost in a special flood hazard area or local floodplain through fill or other development.

~~*Detention basin* is a hydraulic structure similar to a reservoir that intercepts and retards or detains storm water and is specifically designed to attenuate or dampen peak discharge rates.~~

*Development* is any ~~man-made~~ human-caused change to improved or unimproved real estate, including, but not limited to, buildings or other structures, construction, mining, dredging, filling, grading, paving, excavation, or storage of equipment or materials.

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

~~*Environmentally sensitive lands* means environmentally sensitive lands as defined in Ordinance Numbers 1881 and 1883.~~

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

- (1) The overflow of floodwaters;
- (2) The unusual and rapid accumulation or runoff of surface waters from any source, and/or;
- (3) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood, or by some similarly unusual and unforeseeable event.

*Flood Insurance Rate Map (FIRM)* is the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

*Flood Hazard Zones A, AE, AO, AH, A1-30 and A99* are the areas shown on a FIRM which the Federal Emergency Management Agency has determined will be inundated during a base flood. These areas are called, collectively, "special flood hazard areas."

*Flood Hazard Zone D* is an area shown on a FIRM which has undetermined but possible flooding hazards.

*Flood Hazard Zone E* is an area of special flood-related erosion hazards.

*Flood Insurance Study (FIS)* is the official report provided by the Federal Emergency Management Agency that includes flood profiles, Flood Insurance Rate Maps, and the water surface elevation of the base flood.

*Floodplain Administrator* is the city manager or designee who is authorized by this chapter to administer its provisions.

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

*Floodplain Board* is the City Council of the City at such times as they are engaged in the enforcement of administering and enforcing this article.

*Floodplain management* is 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* are this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

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

*Flood-related erosion* is the collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

*Floodway* is the area 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. Also referred to as "Regulatory Floodway."

*Functionally dependent use* is 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, and does not include long-term storage or related manufacturing facilities.

*Governing body* means the local governing unit, i.e. county or municipality, that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.

*Grading* is any excavation or filling of land or combination thereof.

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

~~*Historic structure* is a structure listed in the National Register of Historic Places, State Inventory of Historic Places, or Scottsdale Historic Register.~~

*Historic structure* is 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.

*Lowest floor* is the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this article.

*Manufactured home* is a structure, transportable in one (1) or more sections, which is built on a permanent chassis and designed to be used 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 (subdivision)* is a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

*Market value.* See FEMA Publication 213 and Section 37-4915(c)(2)(A).

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

~~*Natural areas* are those areas within environmentally sensitive areas which are required to be retained in a natural state, including areas stipulated as such through the zoning process. Special conditions relating to environmentally sensitive lands will apply to such "natural areas."~~

*New construction* is, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after September 21, 1973, March 26, 1971, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after September 21, 1973, March 26, 1971, and includes any subsequent improvements to such structures.

*Obstruction* is, including, but not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

*One-hundred-year flood* or *100-year flood* is the flood having a one percent chance of being equaled or exceeded in any given year. See "Base flood."

*Pending SFHA* is an area having flood and/or flood-related erosion hazards as determined by a FIS for which the city has received notification from FEMA that the FIS represents the best available data as provided by FEMA's Floodplain Management Bulletin 1-98, but a FIRM revision is not complete.

*Person* is an individual or the individual's agent, a firm, partnership, association or corporation, or an agent of the aforementioned groups, or this state or its agencies or political subdivisions.

*Recreational vehicle* is a vehicle which is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projection;
- (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 flood depth (RFD)* is one (1) foot above the ~~depth number on the FIRM base flood depth~~, or two (2) feet above the highest adjacent grade, if no depth number is shown on the FIRM.

*Regulatory Flood Elevation (RFE)* is an elevation one (1) foot above the "base flood elevation" for a watercourse for which the base flood elevation has been determined and shall be determined by the criteria developed by the Director of the Arizona Department of Water Resources for all other watercourses.

*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 structure* is a place of residence and may be a single-family or multifamily dwelling.

~~*Retention basin* is an hydraulic structure similar to a reservoir that intercepts and stores stormwater and is specifically designed to be drained to the underground or to be emptied by evaporation to the atmosphere.~~

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

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

*Special Flood Hazard Area (SFHA)* is an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on a Flood Insurance Rate Map as Zone A, AO, A1-A30, AE, A99 or AH.

*Start of construction* is the date of building permit issuance for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns. Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

*Structure* is a walled and roofed building that is principally above the ground; this includes a gas or liquid storage tank or a manufactured home.

*Substantial damage* is 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* is any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure ~~either~~ 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 "substantial improvement" does not, however, include:

(1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, building, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure 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* is a grant of relief from some of the requirements of this article which permits construction in a manner that would otherwise be prohibited by this article.

*Water surface elevation* is 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 floodplains of coastal or riverine areas.

*Watercourse* means a natural or ~~man-made~~ human-caused lake, river, creek, stream, wash, arroyo, channel, culvert, pipes or any other topographic feature, through, on or over which waters flow or pond at least periodically. Watercourses include specifically designated areas in which substantial flood damage may occur.

#### **Sec. 37-47.16. Lands to which this article applies.**

This article shall apply to all areas of special flood hazards within the corporate limits of the City of Scottsdale.

#### **Sec. 37-48.7. Basis for establishment of special flood hazard areas and regulatory floodways.**

The areas of special flood hazard identified by FEMA in the FIS for the City of Scottsdale, Arizona, Maricopa County, dated September 21, 1973 with accompanying FIRMs for Maricopa County, Arizona, and Incorporated Areas, dated April 15, 1988, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this ordinance. This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the Floodplain Board by the Floodplain Administrator. The Floodplain Board, within its area of jurisdiction, shall delineate (or may, by rule, require developers of land to delineate) for areas where development is ongoing or imminent, and thereafter as development becomes imminent, floodplains consistent with the criteria developed by the Federal Emergency Management Agency and the Director of the Arizona Department of Water Resources. The FIS and FIRM panels are on file at 7447 E. Indian School Road, Scottsdale.

#### **Sec. 37-48.18. Compliance.**

All development of land within SFHAs is subject to the terms of this article and other applicable regulations.

#### **Sec. 37-48.29. Conflict with Scottsdale Revised Code.**

In the case of conflict between this chapter and another provision of the Scottsdale Revised Code, the provision providing the higher standard for protection of the public health, safety and general welfare shall control.

#### **Sec. 37-48.310. 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. Larger floods can and will occur on rare occasions. Flood heights may be increased by ~~man-made~~ human-

caused 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, any officer or employee thereof, the State of Arizona or the Federal Emergency Management Agency, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

### **Sec. 37-18.411. Statutory exceptions.**

~~(a) In accordance with A.R.S. § 48-3609(H), unless expressly provided, this and any regulation adopted pursuant to this article do not affect:~~

~~(1) Existing legal uses of property or the right to continuation of such legal use. However, if a nonconforming use of land or a building or structure is discontinued for twelve months, or destroyed to the extent of 50 percent of its value as determined by a competent appraiser, any further use shall comply with this article and regulations of the city;~~

~~(2) Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984, or any regulations affecting such property takes effect, except that any alteration, addition or repair to a nonconforming building or structure which would result in increasing its flood damage potential by 50 percent or more shall be either floodproofed or elevated to or above the regulatory flood elevation;~~

~~(3) Reasonable repair of structures constructed with the written authorization required by A.R.S. § 48-3613; and~~

~~(4) Facilities constructed or installed pursuant to a Certificate of Environmental Compatibility issued pursuant to A.R.S. Title 40, Chapter 2, Article 6.2.~~

~~(b) Before any authorized construction begins for the exceptions listed below, the responsible person must submit plans for the construction to the Floodplain Board for review and comment. In accordance with A.R.S. § 48-3613, written authorization shall not be required, nor shall the Floodplain Board prohibit:~~

~~(1) The construction of bridges, culverts, dikes and other structures necessary to the construction of public highways, roads and streets intersecting or crossing a watercourse;~~

~~(2) The construction of storage dams for watering livestock or wildlife, structures on banks of a watercourse to prevent erosion of or damage to adjoining land if the structure will not divert, retard or obstruct the natural channel of the watercourse or dams for the conservation of floodwaters as permitted by A.R.S. Title 45, Chapter 6;~~

~~(3) Construction of tailing dams and waste disposal areas for use in connection with mining and metallurgical operations. This paragraph does not exempt those sand and gravel operations that will divert, retard or obstruct the flow of waters in any watercourse from complying with and acquiring authorization from the Floodplain Board pursuant to regulations adopted by the Floodplain Board under this article;~~

~~(4) Other construction upon determination by the Floodplain Board that written authorization is unnecessary;~~

~~(5) Any flood control district, county, city, town or other political subdivision from exercising powers granted to it under A.R.S. Title 48, Chapter 21, Article 1;~~

~~(6) The construction of streams, waterways, lakes and other auxiliary facilities in conjunction with development of public parks and recreation facilities by a public agency or political subdivision; and~~

~~(7) The construction and erection of poles, towers, foundations, support structures, guy wires and other facilities related to power transmission as constructed by any utility whether a public service corporation or a political subdivision.~~

The statutory exceptions in A.R.S. § 48-3609(H) and A.R.S. § 48-3613(B) apply to this chapter.

### **Sec. 37-18.512. Floodplain Board delegation.**

The Floodplain Board hereby delegates to the Floodplain Administrator the administrative duties, restrictions and authority granted to the Floodplain Board under A.R.S. § 48-3609(H) and A.R.S. § 48-3613 referred to in section 37-48.411 above.

**Sec. 37-48.613. Declaration of public nuisance.**

All development located or maintained within any area of special flood hazard after August 8, 1973, in violation of this article, is a public nuisance per se and may be abated, prevented or restrained by action of this city.

**Sec. 37-48.714. Severability.**

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

**Sec. 37-4915. Floodplain Administrator.**

(a) *Designated.* The city manager or designee shall be the Floodplain Administrator.

(b) *Appointed.* The Floodplain Administrator is hereby appointed to administer, implement and enforce this chapter.

(c) *Responsibilities.* It is the responsibility of the Floodplain Administrator or his authorized representative designee to do the following:

(1) Review applications for building permits 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 is reasonably safe from flooding;
- (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 article, "adversely affect" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the BFE more than the designated allowed rise at any point, not to exceed one foot.

(2) (A) Using FEMA Publication 213, "Answers to Questions About Substantially Damaged Buildings," develop detailed procedures for identifying and administering requirements for substantial improvement and substantial damage, to include defining "Market Value," and

(B) Coordinate procedures and implementation with other departments and divisions.

(3) When BFE data is not shown on the FIRM, obtain, review and reasonably utilize any BFE data available from a federal, state or other source, to administer this article. Any such data shall be consistent with FEMA and Arizona Department of Water Resources requirements, and shall be submitted to the Floodplain Board for adoption.

(4) Maintain the following records and, upon request, provide the public with information concerning the content of these records:

- (A) The certified RFE required in section 37-2522.
- (B) The floodproofing certification required in section 37-2623.
- (C) The flood vent certification required in section 37-2724.
- (D) The elevation certification required section 37-3229.
- (E) The floodway encroachment certification required in section 37-3431.
- (F) Records of all variance actions, including justification for their issuance, and report variances issued in required reports submitted to FEMA.
- (G) Improvement calculations.

(5) Whenever a watercourse is to be altered or relocated:

(A) Notify adjacent communities and the Arizona Department of Water Resources prior to such alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency through appropriate notification means; and

(B) Require the flood carrying capacity of the altered or relocated portion of the watercourse to be maintained.

(6) Base flood elevation and rate of flow due to physical alterations:

(A) Base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, the Floodplain Administrator shall notify FEMA 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.

(B) Within one hundred twenty (120) days after completion of construction of any flood control protective works which changes the rate of flow during the flood or the configuration of the floodplain upstream or downstream from or adjacent to the project, the person or agency responsible for installation of the project shall provide to the governing bodies of all jurisdictions affected by the project a new delineation of all floodplains affected by the project. The new delineation shall be done according to the criteria adopted by the Director of the Arizona Department of Water Resources.

(7) Notify FEMA and the Arizona Department of Water Resources of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

(8) Provide FEMA information needed to update the FIRMs and serve as the city's agent for handling revisions of the FIRMs.

(9) Coordinate the provisions of this article with all other interested and affected political subdivisions, federal and state agencies as required by Arizona Revised Statutes sections 48-3609 and 48-3610, and 44 CFR parts 60.2 (e) and 60.3 (b)(6).

(10) Make interpretations where needed as to the exact location of the flood hazard zone boundaries. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as set forth in section 37-101.

(11) Take action on violations of the regulations in this chapter.

~~(12) Submit reports to FEMA.~~

### **Sec. 37-2016. Building permit.**

(a) A building permit shall be obtained before construction or development begins, including placement of manufactured homes, within any SFHA established in section 37-487. Application for a building permit shall be made on forms furnished by the city and may include, but not be limited to, plans to scale showing the nature, location, dimensions and elevation of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required:

(1) Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures. In Flood Hazard Zone AO, elevation of existing highest adjacent natural grade and proposed elevation of lowest floor of all structures;

(2) Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed;

(3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in this article;

(4) For all structures, subdivisions and other development, the BFE or BFD; and

(5) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

**Sec. 37-2417. CLOMC/LOMC requirements.**

(a) A Conditional Letter of Map Change (CLOMC) from FEMA is required for the following proposed developments in an SFHA or pending SFHA:

(1) A ~~proposed major residential~~ subdivision of six or more lots, except within Flood Hazard Zone AO, when grading and flood protection construction is ~~proposed to remove~~ will remove the SFHA from ~~proposed~~ building envelopes for all residential structures;

(2) Any development in the floodway that increases the BFE; and

(3) Any development in the floodplain that increases the BFE more than one (1) foot.

(b) Upon completion of the grading and flood protection features of the development, the developer shall provide the Floodplain Administrator as-built grading plans and other engineering data prepared and signed by an engineer or surveyor, that demonstrate compliance with CLOMC requirements, and this information must be submitted to FEMA to support a LOMC.

(c) A Letter of Map Change (LOMC) from FEMA is required for the following proposed developments in an SFHA or pending SFHA:

(1) A ~~proposed major residential~~ subdivision of six or more lots, except within Flood Hazard Zone AO;

(2) Any development in the floodway that increases the BFE; and

(3) Any development in the floodplain that increases the BFE more than one (1) foot.

(d) Where a LOMC is required for a residential subdivision, the LOMC shall remove the SFHA from proposed building envelopes.

(e) Where a LOMC is required, no permit to construct any structure shall be issued until the city receives a LOMC issued by FEMA.

**Sec. 37-2218. Document requirements.**

Upon completion of the grading and flood protection features of the development, the developer shall provide the Floodplain Administrator as-built grading plans and other engineering data prepared and signed by an engineer or surveyor, which demonstrates compliance with this chapter.

**DIVISION 2. DEVELOPMENT STANDARDS**

**Sec. 37-2320. Anchoring.**

(a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy; and

(b) All manufactured homes shall meet the anchoring standards for manufactured homes below.

**Sec. 37-2421. Construction materials and methods.**

(a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

(b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;

(c) All new construction, substantial improvement 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; and

(d) Within Flood Hazard Zones AH and AO, adequate drainage paths shall be constructed around structures on slopes to guide floodwaters around and away from proposed structures.

**Sec. 37-2522. Lowest floor elevations in residential structures.**

(a) Residential construction, new or substantial improvement, shall have the lowest floor, including basement, together with attendant utility and sanitary facilities:

(1) In Flood Hazard Zone AO, elevated to or above the RFD, or elevated at least two feet above the highest adjacent grade if no depth number is specified.

(2) In Flood Hazard Zone A where a BFE has not been determined, elevated to or above the RFE or elevated in accordance with the criteria developed by the Director of the Arizona Department of Water Resources.

(3) In Flood Hazard Zones AE, AH and A1-30, elevated to or above the RFE.

(4) In Indian Bend Wash, a lowest floor elevation must also be at or above the water surface elevation calculated for floodwater flowing at the rate established by the U.S. Army Corps of Engineers' Indian Bend Wash Project design criteria in the document entitled, in part, General Design Memorandum—Phase I, Plan Formulation for Indian Bend Wash, dated October 1973.

(b) Upon completion of the structure, the elevation of the lowest floor, including basement, and RFE or RFD shall be certified by a registered professional engineer or surveyor, and reviewed by a city inspector. The certification shall be provided to the Floodplain Administrator.

**Sec. 37-2623. Lowest floor elevations and floodproofing in nonresidential structures.**

(a) Nonresidential construction, new or substantial improvement, shall either be elevated to conform with section 37-2522 above, or, together with attendant utility and sanitary facilities, shall:

(1) Be floodproofed below the elevation recommended in section 37-2522 above so that the structure is watertight with walls substantially impermeable to the passage of water;

(2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(3) Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the Floodplain Administrator.

(b) In Indian Bend Wash:

(1) The lowest floor elevation must also be at or above the water surface elevation calculated for floodwater flowing at the rate established by the U.S. Army Corps of Engineers' Indian Bend Wash Project design criteria, in the document entitled, in part, General Design Memorandum—Phase I, Plan Formulation for Indian Bend Wash, dated October 1973; or

(2) Floodproofing must be provided at or above one (1) foot higher than the water surface elevation calculated for floodwater flowing at the rate established by the U.S. Army Corps of Engineers' Indian Bend Wash Project design criteria, in the document entitled, in part, General Design Memorandum—Phase I, Plan Formulation for Indian Bend Wash, dated October 1973.

**Sec. 37-2724. Flood openings.**

(a) All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are used 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) Have a minimum of two openings, on different sides of each enclosed area, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one 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.

#### **Sec. 37-2825. Manufactured homes.**

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

(a) 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 RFE or RFD; and

(b) Be securely anchored to an adequately anchored foundation system 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.

#### **Sec. 37-2926. Garages and accessory structures.**

(a) Attached garages.

(1) A garage attached to a residential structure, constructed with the garage floor below the RFE or RFD, shall be designed with flood openings required above. Areas of the garage below the RFE or RFD shall be constructed with flood-resistant materials.

(2) A garage attached to a nonresidential structure must meet the requirements above or be dry floodproofed.

(b) Detached garages and accessory structures.

(1) A detached garage and accessory structure may be constructed below the RFE or RFD, if the structure is designed and constructed in accordance with the following requirements:

(A) Use of a detached garage or accessory structure must be limited to parking or limited storage;

(B) The portions of the detached garage or accessory structure located below the RFE or RFD shall be constructed with flood-resistant materials;

(C) The detached garage or accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;

(D) Any mechanical and utility equipment in the detached garage or accessory structure shall be elevated or floodproofed to or above the RFE or RFD;

(E) The detached garage or accessory structure must comply with the floodway provisions in section 37-3431; and

(F) The detached garage or accessory structure must be designed with flood openings required in section 37-2724.

(c) Detached garages and accessory structures not meeting the standards above shall be constructed in accordance with all applicable standards in sections 37-2320 through 37-2724.

#### **Sec. 37-3027. 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 SFHAs.

(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.

**Sec. 37-3128. Standards for utilities.**

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

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

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

**Sec. 37-3229. Additional development standards.**

(a) All proposed development shall:

(1) Identify the SFHA and BFE or BFD on plans, and

(2) Identify on the final plans the elevation(s) of the proposed structure(s) and pads. If the site is filled above the BFE or BFD, the final lowest floor and grade elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

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

(c) All development shall provide adequate drainage to reduce exposure to flood hazards.

(d) Development is prohibited if it would create hazards to life or property by increasing the flood potential for any structures on or off the property to be developed. The flood carrying capacity of watercourses shall be maintained.

(e) In floodways, development is permitted only when an engineer certifies, with accompanying documentation and analysis to support the certification, that the development will not increase the BFE. The engineer shall submit a no-rise certificate that shows no increase in the BFE.

(f) In flood fringes where the Floodplain Administrator has designated an allowed rise in the water surface elevation less than one (1) foot, development is permitted only when an engineer certifies that the cumulative effect of the development, combined with existing and anticipated development, will not increase the water surface elevation more than the allowed rise.

(g) The owner of development in SFHAs that are subject to ponding shall provide compensatory storage.

**Sec. 37-3330. Standards for recreational vehicles.**

All recreational vehicles placed on site shall:

(a) Be on site for fewer than 180 consecutive days; or

(b) Be fully licensed and ready for highway use. 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; or

(c) Apply for a building permit, to meet the elevation and anchoring requirements for manufactured homes.

**Sec. 37-31. General documentation requirements.**

If compensatory storage is proposed to satisfy the requirements of section 37-29, the owner shall provide volumetric calculations demonstrating compensatory storage.

**Sec. 37-3432. Floodways.**

Floodways are located within some SFHAs established in section 37-487. They are extremely hazardous due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential.

(a) Encroachment, including fill, new construction, substantial improvements and other development in floodways is prohibited, unless a registered professional engineer certifies that the encroachment shall not increase flood levels during a base flood.

(b) If a registered professional engineer certifies that the development shall not increase flood levels during a base flood, the development shall comply with all applicable flood hazard reduction provisions of this chapter.

**Sec. 37-42. Prohibited development.**

~~A development is prohibited if it would create hazards to life or property by increasing the potential for flooding either on the property to be developed or on adjacent property or to any other property. Further: A watercourse may not be altered. Alteration within the meaning of this section includes, but is not limited to, encroachments, fill, new construction, substantial improvements to existing developments, and other construction, within a watercourse. A watercourse may be altered if a professional engineer certifies that the alterations do not increase the flood levels, and will not increase flooding hazards within, upstream or downstream of the altered portion of the watercourse.~~

**Sec. 37-43. Development requirements to be met for permit issuance.**

~~Prior to the issuance of a permit by the city for development on private property or for work in the public rights-of-way, the applicant for the permit shall furnish the Floodplain Administrator and Building Official information as required to determine that all proposed building sites will be reasonably safe from flooding and sufficient data to enable the city staff to determine that the proposed work is not of such a scope that it would be prohibited in accordance with subsections (a) and (b) of this section. Reports, construction plans, and other data submitted in support of an application for a permit shall comply with the following criteria:~~

~~(a) *Drainage reports.* When a drainage report is required, it must be prepared and sealed by a civil engineer registered as a professional engineer in the state and it must be prepared in accordance with the criteria established by the city. The purpose of the report is to analyze the effect that a proposed development would have upon the rainfall runoff in the vicinity of the development, to provide data to show that the development is designed to be protected from flooding, to provide data to show that the development is to be designed to minimize flooding and to provide data supporting the design of facilities to be constructed for the management of rainfall runoff. Each drainage report must consider rainfall runoff from storms with a return frequency up to and including a one-hundred-year storm. The complexity of the report depends upon the nature of the development and the site on which the development will occur. A drainage report shall be submitted by an applicant requesting one of the following:~~

~~(1) Approval of a subdivision plat, condominium, townhouse, or minor subdivision.~~

~~(2) A permit for grading, unless the requirement is waived by the Floodplain Administrator and Building Official.~~

~~(3) A permit to construct right-of-way improvements.~~

~~(4) A permit to construct any structure, except that a report will not be required if the structure is to be an individual single-family residential structure to be built without a basement outside of a SFHA and to be located at a site which the Floodplain Administrator has determined will not be in the vicinity of a watercourse in which the flow of rainfall runoff might be hazardous to the structure or its occupants.~~

~~(b) *Drainage characteristics.* Rainfall runoff from storms of all return frequencies should enter and depart from property after its development in substantially the same manner as under pre-development conditions. Any proposals to modify drainage characteristics must be fully justified by engineering data which shall demonstrate to the Floodplain Administrator that hazards to life and property will not be increased by the proposed modifications. As a minimum, drainage and flood control easements will be dedicated to the city to the extent of the estimated base flood for all watercourses having a capacity of twenty-five (25) cubic feet per second or greater, and the development shall be responsible for the maintenance of the watercourse. Exceptions to this regulation will be for environmentally sensitive lands covered under section 37-43(n) and other areas covered by master drainage plans, council stipulations or other provisions of this chapter that demonstrate that the standards established by this section are met. Any proposed modification must be compatible with environmentally sensitive lands criteria.~~

~~(c) *Street crossings at natural or man-made drainage channels.*~~

~~(1) The crossing structure requirements listed herein will normally apply; however, the engineer may depart from these requirements if he can demonstrate to the Floodplain Administrator's satisfaction that they are inappropriate because of the type of development or the nature of the terrain or because the requirements violate environmentally sensitive land ordinances. In extreme cases it may be necessary to allow for the entire channel flow to pass over the road.~~

~~(A) Local and minor collector streets shall have a culvert or bridge which is capable of carrying all of the peak flow of runoff from a ten-year-frequency storm beneath the roadway and which is also capable of carrying enough of the peak flow of runoff from a twenty-five-year frequency storm beneath the road so that the portion of the flow over the road is no more than six (6) inches deep.~~

~~(B) Major collector and major or minor arterial streets shall have a culvert or bridge which is capable of carrying all of the peak flow of runoff from a fifty-year-frequency storm beneath the roadway and which is also capable of carrying enough of the peak flow of runoff from a one-hundred-year-frequency storm so that the portion of the flow over the road is no more than six (6) inches deep.~~

~~(C) Watercourse crossings for roads shall be designed so that all lots and structures within a development will be accessible from the boundary of that development by at least one (1) route during the period of peak flow of runoff from a base flood. The boundary shall include any adjacent street or streets. Accessibility will be considered to exist if it can be demonstrated by the engineer that at the time of the peak flow the depth of flow over the road will be no greater than one (1) foot.~~

~~(2) Regardless of the size of the culvert or bridge, the street crossing should be designed to convey the one-year storm runoff flow under and/or over the road to the area downstream of the crossing to which the flow would have gone in the absence of the street crossing. The construction of a channel crossing must not cause the diversion of drainage flows except when that diversion is part of an approved plan for modification of drainage patterns.~~

~~(d) *Streets as water carriers.* It is expected that streets will carry water from adjacent property and from local areas, but they are not to be used as major water carriers in lieu of natural washes or man-made channels. The maximum depth for water flowing in any street shall be eight (8) inches during the peak runoff from a base flood. The above requirements imply that in some cases water may flow deeper than a normal vertical curb height and may flow for a short distance over sidewalk or other back-of-curb areas, but the flow of the water shall always be confined to the road right-of-way or to drainage easements. Particular care must be taken in street sag locations to insure that these requirements are met. Catch basins, scuppers, or~~

~~similar facilities, together with the necessary channels, must be provided at appropriate locations to remove water flowing in the streets so as not to exceed the above described depth limit.~~

~~(e) Design procedures and criteria. The design procedures and criteria to be used shall be in accordance with those prepared and published by the city.~~

~~(f) Lowest floor elevations in residential structures.~~

~~(1) Outside SFHAs, a new residential structure shall be constructed according to one (1) of the two (2) following requirements:~~

~~(A) The lowest floor shall be constructed at or above the BFE.~~

~~(B) The lowest floor may be constructed below the BFE, but floodproofing shall be provided for the structure to or above the RFE.~~

~~(2) Outside SFHAs, for single-family residential structures built without a basement and located at a site which the Floodplain Administrator has determined will not be in the vicinity of a watercourse in which the flow of rainfall runoff might be hazardous to the structure or its occupants, the elevation of the lowest floor may be established by one (1) of the following methods:~~

~~(A) If the structure is to be located in Flood Hazard Zone D or X, the lowest floor may be set at an elevation which is fourteen (14) inches above the highest adjacent grade.~~

~~(B) The floor elevation(s) chosen for the residence may be indicated on a topographic plan of the building site parcel which shows the construction pad site and any grading proposed on the parcel. This plan must be prepared and sealed by a civil engineer or architect registered as a professional engineer or architect in the state. The floor elevation(s) indicated on the plan are to be elevations certified by the engineer sufficiently high to provide protection during the base flood. This method may be appropriate for residences to be built in environmentally sensitive areas and where the floor levels are stepped to conform with natural grade conditions.~~

~~(3) Outside SFHAs, a depressed floor area does not have to be considered as the lowest floor if there is no door opening directly to the outside which could admit flood water into the depressed floor area and if the depressed area walls and floor are sealed to prevent the infiltration of water into the depressed area.~~

~~(g) Lowest floor elevations in nonresidential structures. Outside SFHAs, a new nonresidential structure or the substantial improvement of an existing nonresidential structure shall be constructed according to one (1) of the two (2) following requirements:~~

~~a. The lowest floor shall be constructed at an elevation which is at or above the BFE.~~

~~b. The lowest floor may be constructed below the elevation of the BFE but floodproofing shall be provided for the structure to an elevation which is at least as high as the BFE.~~

~~The new installation of a manufactured home or the replacement of an existing manufactured home outside SFHAs must be done in a manner that assures that the manufactured home is anchored to the earth so as to prevent flotation, collapse or lateral movement in the event of flooding.~~

~~(i) Reference to regulatory base flood water surface elevations on development plans. The grading and drainage plans for any development adjacent to a regulatory floodway and the grading and drainage plans for any development which proposes to modify an existing regulatory floodway as a part of the development must indicate the BFE.~~

~~(j) Information pertaining to flood protection to be placed on building plans. The following subsections describe requirements for information which shall be placed on building~~

plans for both residential and nonresidential structures. Depending upon the type of structure and its location, one (1) or more of the subsections will apply:-

~~(1) The proposed elevation of the lowest floor must be shown, regardless of the type of structure or its location.~~

~~(2) If the structure is to be floodproofed, the elevation to which the floodproofing will be provided must be shown.~~

~~(k) *Minimizing potential for flood damage.* Within any area of the city where the Floodplain Administrator determines that the land is subject to flooding, all development, including substantial improvements to structures, must meet the following requirements:-~~

~~(1) All structures shall be anchored to their foundations to prevent flotation, collapse, or lateral movement.~~

~~(2) Building construction materials and utility system equipment shall be resistant to flood damage.~~

~~(3) The construction methods and practices shall be those which minimize flood damage.~~

~~(4) Multiple occupancy developments such as subdivisions, shopping centers, etc. shall have their public utility systems such as sewer, water, gas and electrical lines and their associated facilities located and constructed in a manner to minimize or eliminate the potential for flood damage. The developments must be constructed with drainage systems which will minimize the exposure to flood damage.~~

~~(5) New and replacement water supply systems shall be designed and constructed to minimize or eliminate infiltration of floodwater into the systems.~~

~~(6) New and replacement sanitary sewage systems shall be designed and constructed to minimize or eliminate infiltration of floodwaters into the systems and the discharge of sewage into the floodwaters.~~

~~(l) *Storm water storage facilities.*~~

~~(1) Except as noted below, development of all land within the city must include provisions for the management of stormwater runoff from the property which is to be developed. This management shall consist of constructing storm water storage facilities, which includes detention basins. Stormwater storage facilities will provide reduced peak rates of outlet flow from the developed property onto downstream property in comparison to the peak rates of runoff flow from the same property under natural conditions with no development. As a minimum, all development will make provisions to store runoff from rainfall events up to and including the one hundred-year two-hour duration event. If a suitable outlet for a detention basin is not available, or if engineering analysis indicates that available outlet systems would be overtaxed by a detention basin outflow, or groundwater recharge is indicated by an approved master groundwater recharge plan a retention basin shall be constructed in lieu of a detention basin. The requirement for construction of a detention system or a retention basin and/or other types of stormwater storage facilities may be waived in the following cases:~~

~~(A) The runoff has been included in a storage facility at another location.~~

~~(B) An application for a building permit to construct a single-family residential structure.~~

~~(C) Development adjacent to a regulatory floodway or a watercourse which has been determined by the Floodplain Administrator using engineering analyses provided by the development to have been designed and constructed to handle the additional runoff flow without increasing the potential for flood damage on any other downstream property.~~

~~(D) Development of a parcel under one-half acre in an area where it can be demonstrated by engineering analyses that no significant increase in the potential for flood damage will be created by the development.~~

~~If storage is waived, the development shall be required to contribute to the cost of drainage works on the basis of runoff contribution.~~

~~(2) Stormwater storage facilities shall be designed and constructed according to the procedures and criteria established by the city including the following:~~

~~(A) The extent of the area to be used to estimate development storage requirements is the entire proposed development including: streets, alleys, easements and rights-of-way, and one-half or other fractional parts of streets, alleys, easements and rights-of-way.~~

~~(B) If possible, storage facilities are to be located so they can intercept the flow from the entire development;~~

~~(C) If portions of the area cannot drain to a primary storage facility then additional facilities are to be added for these areas as approved by the Floodplain Administrator;~~

~~(D) Individual lot facilities are prohibited except when a clear unobstructed access from a public rights-of-way, for maintenance purposes, is conveyed by dedication or easement to the city;~~

~~(E) No stormwater storage facility shall detain or retain standing water longer than thirty-six (36) hours if the basin has not been designed and constructed to be a permanent body of water with appropriate health, safety, and water quality measures for such a body of water.~~

~~(3) Stormwater storage facilities are to be drained by either controlled bleed-off, discharge pump and, in limited cases, by infiltration or dry well or injection wells. Controlled bleed-off or pumping to a recognized watercourse is the preferred method. Methods which discharge stored stormwater to the underground must be in accordance with the approved groundwater master plan and subject to approval by the Floodplain Administrator. In addition, the development must provide the Floodplain Administrator with the state and federal permits required to discharge stormwaters to the underground prior to the issuance of any other building permit.~~

~~(4) Stormwater storage facilities shall be maintained so as not to cause or contribute to the creation of a public nuisance. At a minimum, maintenance shall include the removal of all debris and sediment from stormwater storage facilities immediately following a storm event.~~

~~(m) *Parking in flood hazard areas.* Parking areas shall be permitted within regulatory floodways and special flood hazard areas provided that there will be no overnight parking, that there will be no unattended vehicle(s), and that there will be no obstruction to the natural flow of water.~~

~~(1) Overnight parking shall be considered to exist when a vehicle is left unattended during the hours from sunset to sunrise.~~

~~(2) "Unattended" shall mean that the owner or authorized driver cannot reasonably be expected to be available to remove the vehicle before flooding occurs. Whenever parking is permitted within regulatory floodways and special flood hazard areas, warning signs shall be posted by the parking area owner to indicate that the parking area is subject to flooding.~~

~~(n) *Special considerations in environmentally sensitive land areas.*~~

~~(1) Existing watercourses with a capacity of fifty (50) cubic feet per second or greater, disregarding any estimated peak discharge values, shall be maintained in their natural state unless it is determined that alterations are required to meet other provisions of this ordinance.~~

~~(2) A drainage and flood control easement will be dedicated to the city which encompasses the area required to convey the base flood in the watercourse described in section 37-43(n)(1).~~

~~(3) Road-wash crossings may disrupt the natural channel beyond the right-of-way limits if engineering investigations determine the need, and are approved by the Floodplain Administrator.~~

~~(4) Stormwater storage facilities may not be required in areas zoned for environmentally sensitive development if the city staff determines that such facilities cannot be built without conflicting with the city's environmentally sensitive lands ordinance requirements. If on-site stormwater storage facilities requirements are waived, the development will be required to contribute to the cost of drainage works at another location on the basis of runoff contribution.~~

~~(5) All drainage structures and detention facilities shall be constructed in such a manner as to minimize the impact on the natural environment, promote recharge when in conformance with the approved groundwater recharge master plan and, when finished, shall be revegetated to be compatible with nearby natural areas.~~

~~(o) Conformance with state law. No construction within the limits outlined in this article shall be permitted which would violate prevailing water law of the state, whether statutory or by the courts of this state.~~

**Sec. 37-44. Requirement for certifications and required permits.**

~~Prior to start of construction the developer must submit evidence to the Building Official that necessary state and federal permits have been obtained.~~

**Sec. 37-45. Declaration of public nuisance.**

~~All development in violation of this article, is a public nuisance per se and may be abated, prevented or restrained.~~

**ARTICLE II. STORMWATER REGULATION.**

**Sec. 37-33. Purpose.**

The purpose of this article is to establish requirements and regulations for the use and development of property that will minimize the occurrence of losses, hazards and conditions adversely affecting the public health, safety and general welfare that might result from flooding.

**Sec. 37-4034. Applicability.**

This article shall apply to all land within the corporate limits of the City of Scottsdale.

**Sec. 37-35. General drainage goals.**

Stormwater runoff should enter and depart from property after its development in substantially the same manner as under pre-development conditions. Any proposal to modify drainage characteristics must be fully justified by engineering data to demonstrate that hazards to life and property will not be increased by the proposed modifications.

**Sec. 37-36. General development standards.**

(a) Development is prohibited if it would create hazards to life or property by increasing the flood potential on or off the property to be developed. The flood carrying capacity of watercourses shall be maintained.

(b) So long as development meets the standards in (a) above, and applicable standards in this chapter, it is permitted in local floodplains when an engineer certifies that the development does not increase the BFE at or beyond the property line.

(c) The owner of development in local floodplains that are subject to ponding shall provide compensatory storage.

**Sec. 37-4137. Definitions.**

In addition to the definitions below, the following definitions set forth in section 37-475 above apply to this article: *accessory structure, basement, building permit, compensatory storage, development, flood or flooding, Floodplain Administrator, Floodplain Board, floodproofing, grading, highest adjacent grade, historic structure, lowest floor, manufactured*

*home, obstruction, residential structure, start of construction, structure, substantial damage, substantial improvement and watercourse.*

*Attendant utilities* are the following equipment that directly serves a structure: water heaters and electrical, heating, ventilation, plumbing and air conditioning equipment.

*Base flood elevation (BFE)*, means outside SFHAs, is the water surface elevation resulting from a base flood, as approved by the Floodplain Administrator based on using best available data, outside SFHAs.

*Depressed floor area* is a portion of the first floor of a residential structure, such as a sunken living room or a conversation pit, which is lower than the surrounding floor area, and which has no floor-level access to areas outside the structure. (This is not a multilevel first floor which is stepped to conform to site slope conditions).

*Design Standards and Policies Manual (DSPM)* is the document detailing the city's specific requirements to address drainage, flooding and stormwater quality, including procedures, policies, forms, document standards, design standards and construction standards to help administer this chapter, among other purposes.

*Engineer* is a professional engineer registered as a civil engineer in Arizona. This definition applies to this chapter.

*Environmentally Sensitive Lands Ordinance (ESLO)* is the ordinance creating an overlay district in the city Zoning Ordinance that addresses environmentally sensitive lands.

*Floodplain* is any property susceptible to being inundated by stormwater during a base flood.

~~*Floodplain Board* is the city council of the city at such times as they are engaged in the enforcement of this article.~~

*Local floodplain* is a floodplain outside a special flood hazard area that is subject to local regulation.

~~*Lowest floor* is the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this article.~~

*Regulatory flood elevation (RFE)* is:

(1) An elevation one foot above the base flood elevation for watercourses where the base flood elevation has been determined, and

(2) The elevation approved by the Floodplain Administrator for watercourses where the base flood elevation has not been determined.

*Right-of-way* is land which by deed, conveyance, agreement, easement, dedication, usage or process of law is reserved for or dedicated to the general public for street, highway, alley, public utility, trail, path, sidewalk or drainage purposes.

*Stormwater Quality Coordinator* means the person designated by the city manager to administer this chapter's provisions regarding stormwater quality, or that person's successor or designee.

*Stormwater storage facility* is any facility intended to control, store or release stormwater, including detention and retention basins, and the drainage systems related to such facilities.

*Surveyor* is a professional land surveyor registered in Arizona. This definition applies to this chapter.

*Transportation Director* is the person supervising the city department dedicated to transportation issues, or that person's successor or designee.

*Unattended* means a vehicle cannot reasonably be expected to be removed before flooding occurs.

## **Sec. 37-38. Drainage reports and plans.**

(a) The Floodplain Administrator may require a drainage report and plan before any permit is issued, if a development may increase the potential for flooding which adversely affects the public health, safety or general welfare.

(b) The drainage report and plan shall be prepared by an engineer in conformance with the requirements set forth in the DSPM.

(c) The drainage report and plan, and related construction documents, are subject to the Floodplain Administrator's review and approval before any required permit is issued.

#### **Sec. 37-39. Drainage easements.**

(a) For post-development conditions, drainage easement(s) over the following features shall be dedicated to the city:

(1) Watercourses, except those regulated by ESLO, with a base flood peak discharge rate of 25 cfs or greater;

(2) Watercourses regulated by ESLO, with a base flood peak discharge rate of 50 cfs or greater; and

(3) Stormwater storage facilities as set forth in the DSPM.

(b) In addition, access easements shall be dedicated from the right-of-way to access the drainage easements.

(c) The easements shall be in a form satisfactory to the city.

(d) Unless otherwise indicated on the document dedicating the drainage easement, the property owner is responsible for maintaining the drainage easement.

(e) Except for routine maintenance as set forth in the DSPM, work and encroachments in a drainage easement dedicated to the city require the same permits as work and encroachments in the public right-of-way. The procedure and terms for permits to work in the right-of-way (PWRs) and permits for private improvements in the right-of-way (PIRs), issued under Chapter 47 of the Scottsdale Revised Code, apply to permits issued for drainage easements.

(f) An owner of property subject to a drainage easement may apply to have all or a portion of the easement released by the city. Procedures to apply for a release are set forth in the DSPM.

(g) When an application for a release is complete, the city staff shall review the application. City staff may determine that retaining the easement is in best interest of the city, and may not grant the release. City staff may impose reasonable conditions on the release. Once all conditions have been satisfied, as determined by city staff, city staff shall grant the release.

#### **Sec. 37-40. Drainage requirements for streets.**

(a) Drainage designs for streets shall meet the requirements set forth in the DSPM.

(b) However, the Transportation Director may allow exceptions to the requirements of the DSPM if, based on a traffic study acceptable to the Transportation Director, an engineer demonstrates to the Floodplain Administrator's satisfaction that the alternate design will not violate any other provision of this chapter or increase the risk of structural flooding.

#### **Sec. 37-41. Erosion setbacks.**

The Floodplain Administrator shall require erosion setbacks where erosion has the potential to adversely affect the public health, safety and general welfare. Erosion hazards shall be addressed as set forth in the DSPM.

#### **Sec. 37-42. General construction requirements.**

(a) Development proposed in local floodplains shall be designed and constructed to meet the requirements set forth in this chapter and the DSPM.

(1) All structures shall be anchored to their foundations to prevent flotation, collapse, or lateral movement.

(2) Building construction materials and utility system equipment shall be resistant to flood damage.

(3) The construction methods and practices shall minimize exposure to potential flood damage.

(4) All attendant utilities shall be designed and/or located to prevent water from entering or accumulating within the components during flooding.

(5) All water heaters, heating and air conditioning units, and electrical junction and circuit breaker boxes shall be elevated above the RFE.

(6) All other utility systems, including sewer, water, gas and electrical lines and their associated facilities shall be located and constructed to minimize or eliminate exposure to potential flood damage.

(7) Stormwater management facilities shall be constructed to minimize exposure to potential flood damage.

(b) To measure the height of required construction or floodproofing, the BFE shall be determined as set forth in the DSPM.

(c) All new structures and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) that are used solely for vehicle parking, building access or storage, and 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. There shall be at least two openings, on different sides of each enclosed area, with a total net area of at least one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. If it is not feasible or desirable to meet the opening criteria stated above, an engineer may design and certify other methods to automatically equalize hydrostatic flood forces on exterior walls.

(d) Adequate drainage paths shall be constructed to guide floodwaters around and away from the structures.

#### **Sec. 37-43. New structures—lowest floor elevations.**

(a) In local floodplains, the lowest floor of a new structure shall be at or above the RFE.

(b) In areas outside of floodplains, a new structure shall be constructed as follows:

(1) If the structure is in Flood Hazard Zone D or X, the lowest floor shall be at least fourteen (14) inches above the highest adjacent grade, or

(2) The structure shall be constructed in conformance with a plan prepared and certified by an engineer showing that elevations are sufficiently high to provide protection from a base flood.

(c) In local floodplains, a depressed floor area shall not be considered as the lowest floor if:

(1) There is no door opening directly to the outside which could admit flood water into the depressed floor area, and

(2) The depressed area walls and floor are sealed to prevent the infiltration of water into the depressed area.

#### **Sec. 37-44. New nonresidential structures—lowest floor elevations and floodproofing.**

(a) New nonresidential structures shall meet or exceed the standards set forth for all new structures, or may be floodproofed as set forth in this section.

(b) In local floodplains, the lowest floor elevation of a new nonresidential structure may be below the BFE, but floodproofing shall be provided to the RFE and certified by an engineer to satisfy the standards of this section. Such certification shall be provided to the Floodplain Administrator.

(c) To meet floodproofing requirements, a structure must be watertight, with walls that are substantially impermeable to the passage of stormwater. Structural components shall have the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.

**Sec. 37-45. Improvements to structures—lowest floor elevations.**

(a) In local floodplains, all improvements shall meet or exceed the standards set forth in this chapter for new structures or new nonresidential structures (as applicable).

(b) All improvements to a structure that has suffered substantial damage shall meet or exceed the standards set forth in this chapter for new structures or new nonresidential structures (as applicable).

**Sec. 37-46. Manufactured homes—elevation regulations.**

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

(a) Elevated so that the bottom of the structural frame or the lowest point of any attendant utilities, whichever is lower, is at or above the RFE, and

(b) Securely anchored to a foundation system 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.

**Sec. 37-47. Garages and accessory structures.**

(a) *Attached garages.*

(1) A garage attached to a residential structure, constructed with the garage floor below the RFE, shall be designed with flood openings required above. Areas of the garage below the RFE shall be constructed with flood-resistant materials.

(2) A garage attached to a nonresidential structure must meet the requirements above or be dry floodproofed.

(b) *Detached garages and accessory structures.* A detached garage and accessory structure may be constructed below the RFE, if the structure is designed and constructed in accordance with the following requirements:

(1) Use of a detached garage or accessory structure must be limited to parking or limited storage;

(2) The portions of the detached garage or accessory structure located below the RFE shall be constructed with flood-resistant materials;

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

(4) Any mechanical and utility equipment in the detached garage or accessory structure shall be elevated or floodproofed to or above the RFE; and

(5) The detached garage or accessory structure must be designed with flood openings required in section 37-24.

(c) Detached garages and accessory structures not meeting the standards above shall be constructed in accordance with all applicable standards in sections 37-20 through 37-24.

**Sec. 37-48. General documentation requirements.**

(a) Appropriate permits are required for all development.

(b) In areas outside of floodplains, the documentation for a new structure with its lowest floor less than fourteen (14) inches above the highest adjacent grade shall be prepared and certified by an engineer showing that elevations are sufficiently high to provide protection from a base flood.

(c) Documentation for development within or contiguous to all floodplains shall show the BFE.

(d) If compensatory storage is proposed to satisfy the requirements of section 37-36, the owner shall provide volumetric calculations demonstrating compensatory storage.

(e) Before final inspection, the developer shall provide the city as-built plans certified by an engineer demonstrating that the stormwater storage facility was constructed and volume requirements were met in conformance with approved plans.

**Sec. 37-49. General stormwater storage and stormwater management facility requirements.**

(a) The owner, at its expense, shall provide the stormwater storage and stormwater management facilities required for all development, including residential land divisions, except as provided in this article.

(b) Additional stormwater storage is not required where stormwater storage facilities already serve the development in conformance to standards set forth in this chapter and the DSPM at the time an owner applies for a permit for proposed development.

(c) A stormwater storage facility is required for constructing an individual single-family residential structure only if:

(1) The structure is located in a minor subdivision recorded after October 1, 2007, and

(2) No stormwater storage facility has been constructed for the minor subdivision.

**Sec. 37-50. Specific stormwater storage and stormwater management facility requirements.**

(a) *Generally.* Stormwater storage facilities shall be constructed to store runoff from at least a 100-year, 2-hour storm event, except as provided in this article. The developer may apply this standard to any property.

(b) *Volume calculation.* Calculations for the volume of storage are set forth in the DSPM.

(c) *Redevelopment.* On property subject to redevelopment:

(1) No additional stormwater storage is required, if redeveloping the property does not increase the existing base flood peak discharge rate from the property.

(2) The required stormwater storage volume is reduced, if redeveloping the property would increase the existing base flood peak discharge rate from the property. In this case, the stormwater storage volume required is calculated based on: (A) the volume to store runoff from a 100-year, 2-hour storm event after the redevelopment, minus (B) the volume to store runoff from a 100-year, 2-hour storm event immediately before the redevelopment.

(d) *ESLO.* On property entirely subject to ESLO (outside the McDowell Sonoran Preserve):

(1) No stormwater storage facility is required, if developing the property does not increase the existing base flood peak discharge rate from the property.

(2) The required stormwater storage volume is reduced, if developing the property would increase the existing peak discharge rate from the property. In this case, the stormwater storage volume required shall limit the post-development peak discharge rate to the pre-development peak discharge rate, based on 10- and 100-year storm events.

(e) *McDowell Sonoran Preserve.* In the McDowell Sonoran Preserve, the owner of any development is not required to construct stormwater storage facilities unless such facilities are necessary to mitigate the adverse impact from any increase in flooding potential.

**Sec. 37-51. Waivers of stormwater storage requirements—general.**

(a) Full or partial waivers may be granted from the requirement to construct stormwater storage facilities under limited circumstances.

(b) *First flush.* No waiver shall be granted for stormwater storage volume required to hold runoff from the first one-half inch of precipitation unless the owner provides other stormwater controls, to the satisfaction of the Stormwater Quality Coordinator.

(c) *Full waivers.* A waiver shall be granted if:

(1) The runoff from the development has no additional adverse impact on other property, and

(2) The development meets one of the following criteria:

(A) The property is smaller than one-half acre.

(B) The property is located entirely in the hillside landform, as defined in the city Zoning Ordinance.

(C) The property is located entirely in the upper desert landform, as defined in the city Zoning Ordinance, with a slope greater than five (5) percent.

(D) The only viable locations on the property for stormwater storage facilities require blasting.

(E) The developer submits engineering analysis, subject to the Floodplain Administrator approval, showing that capacity exists to convey the increased runoff resulting from not providing full stormwater storage.

(d) *Partial waivers for hillside and upper desert landforms.* Unless other waiver criteria apply, a waiver shall be granted for development (that has no additional adverse impact on other property) only for portions of the property that are in:

(1) The hillside landform, or

(2) The upper desert landform with a slope greater than five (5) percent.

(e) *Partial waivers for other property.* A partial waiver shall be granted if the development only meets one of the criteria set forth in subsection (b)(2) above for full waivers. If a partial waiver is granted, the stormwater storage volume required shall limit the post-development peak discharge rate to the pre-development peak discharge rate, based on 10- and 100-year storm events.

(f) *Waivers for stormwater storage facilities that create adverse impacts.* In unusual cases where constructing stormwater storage facilities may have an adverse impact on other property, a full or partial waiver may be granted if the developer submits engineering analysis, subject to the Floodplain Administrator's approval, providing stormwater management mitigation so that runoff increased as a result of the development has no additional adverse impact on other property.

(g) A waiver approval does not relieve the developer of liability in the event of flood damage.

### **Sec. 37-52. Fees in lieu of stormwater storage.**

(a) If the stormwater storage requirement is fully or partially waived, a contribution to the cost of stormwater management (in-lieu fee) shall be required as shown on the fee schedule.

(b) If a waiver of stormwater storage is granted, any in-lieu fee shall be reduced by the value of:

(1) Any previous in-lieu fee payment(s) for the development.

(2) In-kind stormwater management facilities constructed to provide a public stormwater management benefit. The Floodplain Administrator shall determine whether a public stormwater benefit has been provided, based on the following factors:

(A) The nature and extent of the in-kind stormwater management facilities providing the public benefit,

(B) The increased cost to the development to provide the public stormwater management benefit, and

(C) The benefit and/or savings to the city of the stormwater management facilities.

(c) The rate of the in-lieu fee shall be set forth in the fee schedule.

(d) The contribution shall be paid when a building permit for the development is issued.

**Sec. 37-53. Stormwater storage facility design requirements.**

Stormwater storage facilities shall be designed and constructed in conformance with the DSPM.

**Sec. 37-54. Watercourse and stormwater storage facility maintenance.**

(a) Watercourses and stormwater storage facilities shall be maintained as set forth in the DSPM to avoid:

- (1) Water standing longer than thirty-six (36) hours;
- (2) Water becoming foul, malodorous, or subject to infestation, pollution or stagnation;
- (3) Becoming a violation of any federal, state or local law, rule or regulation; or
- (4) Becoming blight or a public nuisance as defined in this chapter or Chapter 18 of the Scottsdale Revised Code.

(b) At a minimum, maintenance shall include:

- (1) Regular maintenance to sustain the flow characteristics and capacities of watercourses and stormwater storage facilities.
- (2) Annual inspection and removal of all obstructions from watercourses and stormwater storage facilities that significantly interfere with the function of the watercourses and facilities, including debris, overgrown vegetation and sediment, and
- (3) Following a storm, immediate inspection and removal of all debris and sediment from watercourses and stormwater storage facilities that significantly interfere with the function of the watercourses and facilities.

(c) Unless otherwise agreed by the city, the property owner is responsible for maintaining watercourses and stormwater storage facilities.

(d) Maintenance of a watercourse regulated by ESLO is subject to city approval.

**Sec. 37-55. Parking in floodplains.**

(a) Parking lots are permitted within floodplains if there are no vehicles left unattended from sunset to sunrise and there is no obstruction to the natural flow of stormwater.

(b) The owner of a parking lot in a floodplain shall post warning signs to indicate that the parking lot is subject to flooding.

**Sec. 37-56. Alternative stormwater management measures.**

The Floodplain Administrator may allow alternative stormwater management measures, including, but not limited to, pervious pavement, vegetative roofs, stormwater harvesting, LEED design strategies, and other low impact development options to manage stormwater. These measures may be instead of some or all stormwater storage.

**Sec. 37-57. Payback agreements.**

(a) A payback agreement with the city is available for non-residential, multi-family and mixed-use developments, and developments subject to a land division, if the stormwater management facilities subject to the payback agreement provide a public stormwater management benefit.

(b) The Floodplain Administrator shall determine whether a public stormwater benefit has been provided, based on the following factors:

- (1) The nature and extent of the in-kind stormwater management facilities providing the public benefit,

(2) The increased cost to the development to provide the public stormwater management benefit, and

(3) The benefit and/or savings to the city of the stormwater management facilities.

(c) Within sixty (60) days after the city has accepted the public improvements to serve any privately-owned property, a person desiring a payback agreement with the city shall submit the following to the Floodplain Administrator.

(1) A copy of the city's letter of acceptance stating that the public improvements conform to the approved plans and specifications.

(2) A half-size copy of the approved as-built construction drawings indicating the public improvements installed.

(3) Receipts identifying all expenses, and proof that payment was made.

(4) A diagram of properties benefiting from the public improvements, including the assessor's parcel numbers and frontage lengths.

(d) Payback agreements shall:

(1) State the expense of public improvements installed;

(2) Include a diagram of the properties benefited and reimbursement to be collected from each property;

(3) State the reimbursement from each property benefited, including the interest rate and the maximum reimbursement; and

(4) State to whom reimbursements shall be made.

(e) All expenses are subject to review for reasonableness based on current circumstances. The Floodplain Administrator's determination as to the amount to be reimbursed through the payback agreement is final.

(f) The reimbursement from each property shall be based on the runoff contributed by each property or such other equitable method of spreading the expenses as the circumstances may dictate, as determined by the Floodplain Administrator. The determination as to each reimbursement is final.

(g) A payback agreement shall run for a payback period of thirty (30) years after the letter of acceptance date. At the end of the thirty (30) year period, the agreement shall terminate, including all benefits and rights under the agreement.

(h) Reimbursements shall include a simple interest rate of one-half (1/2) percent per month, or any portion thereof, from the date the payback agreement is recorded.

(i) Before the city executes the payback agreement, the applicant shall pay the city's cost of administering the payback agreement. This administrative charge shall be five (5) percent of the total expenses of the public improvements benefiting properties other than the applicant's property, with a maximum administrative charge of ten thousand dollars (\$10,000.00). Administrative charges will be distributed equitably among the properties benefited.

(j) Upon receipt of the administrative charge and execution of the payback agreement, the city shall record the agreement with the Maricopa County Recorder as to each property that is subject to the agreement, together with a notice of payback. Once all reimbursements are made or the payback period has elapsed, the city will record a release with the Maricopa County Recorder.

(k) The city shall establish a separate account for the collection and payment of reimbursements. Reimbursements collected shall be paid in accordance with the terms of the agreement within ninety (90) days of receipt by the city.

### **Sec. 37-58. In lieu payments.**

(a) Instead of requiring construction of stormwater management facilities, the city may accept a payment in lieu of construction when the city determines such action is appropriate,

based on the following considerations regarding whether the proposed stormwater management facilities:

- (1) Will not connect to existing stormwater management facilities,
  - (2) Will be difficult to maintain to city standards,
  - (3) Will not match the improvement standards of existing stormwater management facilities,
  - (4) Will not conform to applicable drainage plans,
  - (5) Will be more efficiently built by the city, and/or
  - (6) Are timed to discourage orderly, sequential development.
- (b) Payment shall be based on the owner's public improvement plans and current city capital expenses of public improvements, as approved by the Floodplain Administrator. The determinations as to the acceptance and amount of payment are final. The city shall establish a separate account for the in lieu payments, which will be applied to stormwater management facilities.
- (c) The in lieu payment is due before any permit is issued for development of the property.

#### **Sec. 37-59. In lieu construction.**

(a) Instead of requiring on-site construction of stormwater management facilities, the city may accept construction of off-site stormwater management facilities, when the city determines such action is appropriate. The Floodplain Administrator's determination of whether to accept in lieu construction shall be based on the following considerations:

- (1) Existing and planned stormwater management facilities,
  - (2) Priorities in strategic planning for orderly, sequential development,
  - (3) Conformance with applicable drainage plans, and
  - (4) Benefit to the community and benefit to properties served.
- (b) The value of stormwater management facilities constructed shall be substantially equal to the value of the on-site stormwater management facilities that would have been required. The value shall be based on the owner's public improvement plans and current city capital expenses of public improvements, as approved by the Floodplain Administrator. The determinations as to the acceptance and value of construction are final.

### **ARTICLE III. STORMWATER QUALITY**

#### **Sec. 37-60. Purposes.**

The purposes of this article are:

- (1) To regulate pollutants and activities that result in the contribution of pollutants into the municipal separate storm sewer system (MS4) to comply with the city's MS4 permit.
- (2) To prohibit illicit connections and illicit discharges to the MS4; and
- (3) To carry out inspection, monitoring and other procedures necessary to provide for compliance with this chapter.

#### **Sec. 37-61. Definitions.**

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

*Arizona Pollutant Discharge Elimination System permit (AZPDES permit)* means an authorization from the Arizona Department of Environmental Quality to discharge to the MS4 or from the MS4 to waters of the United States.

*Best management practices* means schedules of activities, prohibitions of practices, structural and nonstructural controls, operational and maintenance procedures, and other management practices to prevent or reduce pollution of waters of the United States.

*City's MS4 permit* means the city's authorization from the Arizona Department of Environmental Quality or the United States Environmental Protection Agency to discharge from a municipal separate storm sewer system to waters of the United States.

*Illicit connection* means a drain or conveyance that allows an illicit discharge.

*Illicit discharge* means the introduction of a pollutant to a MS4 that is not:

- (1) Entirely stormwater;
- (2) Permitted under a AZPDES permit or NPDES permit; or
- (3) From emergency fire fighting activities.

*Inspector* means the person designated by the Floodplain Administrator or Stormwater Quality Coordinator, or designee, with the duty and power to inspect and monitor property, take samples, and take other actions to enforce this chapter.

*Municipal separate storm sewer system (MS4)* means the city-owned man-made system used for collecting and/or conveying only stormwater, including city streets with drainage systems, catch basins, curbs, gutters, ditches, channels, and storm drains.

*National Pollutant Discharge Elimination System permit (NPDES permit)* means an authorization from the United States Environmental Protection Agency to discharge to the MS4 or from the MS4 to waters of the United States.

*Pollutant* means:

- (1) Fluids, fuels, paints, varnishes, solvents, detergents;
- (2) Contaminants, toxic wastes, toxic pollutants, chemicals, chemical wastes, petroleum products, biological materials, pathogens, radioactive materials, pesticides, herbicides, fertilizers and other agricultural chemicals;
- (3) Garbage, trash, animal wastes, sewage, solid wastes, waste materials, wrecked or discarded objects and equipment, dissolved and particulate metals, raw or finished materials;
- (4) Dredged spoil, rock, sand, dirt, ashes, incinerator residue, slag, sludge, munitions, and mining, industrial, municipal, agricultural, medical and yard wastes;
- (5) Heat, or
- (6) Any other liquid, solid, gaseous or hazardous substances.

*Right-of-way* means land which by deed, conveyance, agreement, easement, dedication, usage or process of law is reserved for or dedicated to the general public for street, highway, alley, public utility, trail, path, sidewalk or drainage purposes.

*Spill* means any release, leak, emission, escape or disposal of a pollutant which may contact stormwater.

*Stormwater* means stormwater runoff, snow melt runoff, and surface runoff and drainage.

*Stormwater controls* means schedules of activities, prohibitions of practices, structural and nonstructural controls, operational and maintenance procedures, and other management practices to prevent or reduce pollution of waters of the United States.

*Stormwater Manager* means the person who manages the city's floodplain and stormwater program, or the Stormwater Manager's successor or designee.

*Stormwater Quality Coordinator* means the person designated by the city manager to administer this chapter's provisions regarding stormwater quality, or that person's successor or designee.

*Waters of the United States* means those waters defined in the Code of Federal Regulations, Title 40 Section 122.2.

### **Sec. 37-62. Warning and disclaimer of liability.**

The city does not assume any other person's duties regarding stormwater quality arising under the common law or any other applicable law. Unless otherwise required by law, the Stormwater Quality Coordinator's activities authorized by this chapter are permissive only.

**Sec. 37-63. Stormwater Quality Coordinator.**

- (a) The Stormwater Quality Coordinator shall:
  - (1) Implement the city’s MS4 permit requirements;
  - (2) Prohibit illicit discharges and illicit connections;
  - (3) Enforce stormwater controls to minimize the contribution of pollutants to the MS4 by stormwater associated with construction and industrial activities;
  - (4) Enforce stormwater controls to prevent, contain and manage the introduction of spills into the MS4;
  - (5) Regulate the use of the MS4; and
  - (6) Administer and enforce this chapter’s requirements for stormwater quality.
- (b) The Stormwater Quality Coordinator has the authority to:
  - (1) Inspect property, including construction and industrial activities;
  - (2) Establish requirements for post-construction stormwater controls; and
  - (3) Issue regulations to monitor and control stormwater quality.

**Sec. 37-64. Responsibility for spills.**

- (a) A person responsible for addressing a spill shall immediately take action to contain the spill.
- (b) A person required to report a spill to governmental authorities under the following laws and regulations shall also notify the city fire department and Stormwater Quality Coordinator by phone of any spill within twenty-four (24) hours of the report:
  - (1) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);
  - (2) Emergency Planning and Community Right-to-Know Act (EPCRA), including Toxic Chemical Release;
  - (3) Resource Conservation and Recovery Act (RCRA);
  - (4) Code of Federal Regulations for oil and hazardous substance spills; and
  - (5) All other laws requiring notification of spills.
- (c) The person responsible for addressing the spill shall remediate the spill.
- (d) The person responsible for addressing the spill is also responsible for any fines or penalties imposed on the city resulting from the spill.

**Sec. 37-65. Additional treatment requirements.**

The Stormwater Quality Coordinator may require a facility that handles petroleum, oil, grease, or other pollutants with the potential to significantly impair stormwater quality by substantial exposure to stormwater to:

- (1) Provide and maintain stormwater controls; and
- (2) Keep appropriate records regarding the stormwater controls.

**ARTICLE IV. ENFORCEMENT**

**Sec. 37-70. Inspections, monitoring, surveillance and related compliance actions.**

- (a) To determine and enforce compliance with stormwater and floodplain management regulations under articles I and II, an inspector may:
  - (1) Inspect structures and property; and
  - (2) Examine records concerning stormwater and floodplain management, including applicable permits.
- (b) To determine and enforce compliance with stormwater quality regulations under article III, an inspector may:
  - (1) Inspect structures and property;
  - (2) Conduct monitoring and surveillance activities;

- (3) Collect and analyze samples of products, stormwater, pollutants; environmental media and other potential sources of pollutants;
- (4) Install and require the installation of stormwater monitoring equipment; and
- (5) Examine records concerning stormwater and pollutants, including applicable permits.

(c) The following authority applies to all inspections under this chapter:

(1) Unscreened structure exteriors and property may be inspected at any time with or without the presence of the owner or occupant in conformance with legal requirements governing administrative inspections of structures and property.

(2) Except in a situation presenting an imminent hazard to life, health or public safety, inspections shall be conducted during the normal business hours of the city, pursuant to:

(A) The owner's or occupant's consent, or

(B) A court order or administrative search warrant.

(3) If an owner refuses to allow an inspection of an area where the owner has a reasonable expectation of privacy, the city may apply for and obtain an administrative search warrant or other court order allowing inspection.

(d) Nothing in this section shall be construed to prohibit an inspector from entering a structure or property with or without a court order in a situation presenting an imminent hazard to life, health or public safety.

#### **Sec. 37-71. Enforcement—civil.**

In addition to enforcement authorized below, a Scottsdale police officer, Scottsdale Fire Department officer, the city attorney, Floodplain Administrator, Stormwater Quality Coordinator, or an inspector, may bring civil complaints under this chapter.

#### **Sec. 37-72. Enforcement—injunctive relief.**

In addition to enforcement authorized below, the city attorney may bring actions for injunctive relief in Superior Court to enforce this chapter.

#### **Sec. 37-73. Enforcement--criminal.**

A Scottsdale police officer or the city attorney may bring criminal complaints under this chapter.

#### **Sec. 37-74. Enforcement—emergency.**

A Scottsdale police officer, Scottsdale Fire Department officer, the Floodplain Administrator, Stormwater Quality Coordinator, or an inspector, may take emergency action to avoid or mitigate the following circumstances that present an imminent hazard to life, health or public safety:

(a) Watercourse obstructions, flooding and other drainage conditions, and

(b) Spills and other occurrences where pollutants may significantly affect stormwater quality.

#### **Sec. 37-75. Enforcement—notices of violation.**

~~(a) Except for criminal enforcement under section 37-73 and emergency enforcement under section 37-74, any~~ Any person authorized to bring a civil complaint shall first ~~may~~ issue a notice of violation specifying actions to be taken and the time in which actions are to be taken to avoid a civil complaint or city abatement and restoration at the responsible person's expense.

(b) A notice of violation regarding stormwater quality may require the person responsible to:

(1) Sample, monitor and analyze potential sources of pollutants and affected property;

- (2) Report potential sources of pollutants;
- (3) Install stormwater monitoring equipment;
- (4) Eliminate illicit connections or illicit discharges;
- (5) Cease violating discharges, practices, or operations;
- (6) Abate or remediate spills;
- (7) Correct records systems; and
- (8) Implement best management practices and/or stormwater controls.

**Sec. 37-76. Jurisdiction and procedure of city court.**

(a) The city court has jurisdiction over all civil and criminal complaints, abatements and emergency abatements to enforce this chapter. A judge or court hearing officer may adjudicate civil complaints, abatements and emergency abatements.

(b) The city court may order abatements or emergency abatements on a petition from the city attorney, as requested by the city incidental to a civil or criminal complaint, or as requested under state law.

**Sec. 37-77. Violations.**

**(a) Stormwater and floodplain management violations:**

(1) No owner of any structure subject to the requirements of this chapter shall fail to comply with those requirements.

(2) Except as permitted in the Scottsdale Revised Code, no person shall obstruct, divert or reduce the capacity of a watercourse by any means, including development, grading, dumping, filling or landscaping.

(3) No person shall increase the potential of flooding, by any means, including development, grading, dumping, filling or landscaping, or storing materials and equipment.

(4) No person shall allow vegetation or an accumulation of vegetative debris, other debris, sedimentation or erosion to (A) obstruct, divert or reduce the capacity of a watercourse, or (B) increase the potential of flooding.

(5) No person shall allow or cause lateral migration of a watercourse bank to create a hazard to life, health or public safety.

(6) No person shall fail to conform to an approved drainage plan.

(7) No person shall damage or interfere with any watercourse, stormwater storage facility or stormwater management measure so as to impair its stormwater management function.

**(b) Stormwater quality violations:**

(1) No person shall discharge or cause to be discharged any pollutant or waters containing any pollutant that may reasonably be expected to cause or contribute to a violation of the city's MS4 permit.

(2) No person shall discharge or cause to be discharged any pollutant or waters containing any pollutant that may reasonably be expected to cause or contribute to damage to a watercourse.

(3) No person shall discharge or cause to be discharged water from a pool or spa into the right-of-way or a watercourse.

(4) No person shall release or cause to be released an illicit discharge.

(5) No person shall establish or cause to be established an illicit connection.

(6) No person shall fail to report a spill as required under section 37-64.

(7) No person shall fail to contain or remediate a spill.

**(c) General violations:**

(1) No person shall interfere with or prevent any city agent from enforcing this chapter, including conducting inspections, taking samples and abating violations.

(2) No person shall knowingly make a false statement, or knowingly mislead a city agent investigating or abating a violation of this chapter.

(3) No person shall violate this chapter, or any rules or regulations set forth to administer this chapter when such rules or regulations create a duty or enact a prohibition.

~~(f) A violation of any subsection (a) through (n) of this section is also deemed a public nuisance.~~

#### **Sec. 37-78. Presumption.**

A development without an elevation certificate, when required, or other documentation of compliance with article I, is presumed to be in violation of article I until such documentation is provided.

#### **Sec. 37-79. Defense, indemnification and continuing liability.**

A person is responsible for all liability imposed by law arising out of or related to violations of this chapter. If any claim of liability is made against the city, its officers or employees, the person violating this chapter shall defend, indemnify and hold them harmless from such claim. Transferring property does not relieve the transferor of responsibility for violations on the property that occurred before the transfer.

#### **Sec. 37-80. Civil penalties.**

The fine for a defendant's first violation of this chapter shall be at least two hundred fifty dollars (\$250.00) per violation. The fine for a defendant's second or subsequent violation of this chapter within two (2) years of the date of the first violation shall be at least five hundred dollars (\$500.00) per violation. The court shall also impose all other fees and surcharges applicable under state statutes and chapter 9 of the Scottsdale Revised Code.

#### **Sec. 37-81. Criminal penalties.**

~~A second violation of this chapter within two (2) years of the date of the first violation may be prosecuted as a class 1 misdemeanor.~~

(a) The following violations may be prosecuted as class 1 misdemeanors:

(1) A second violation of this chapter within two (2) years of the date of the first violation.

(2) A violation considered an emergency under section 37-74.

(3) A violation that warrants increased penalties because of its significant, deleterious impact on property or on the public health, safety or general welfare.

(b) The fine for a defendant's first violation imposed under this section shall be at least five hundred dollars (\$500.00) per violation. The fine for a defendant's second or subsequent violation imposed under this section within two (2) years of the date of the first violation shall be at least one thousand dollars (\$1,000.00) per violation. The court shall also impose all other fees and surcharges applicable under state statutes and chapter 9 of the Scottsdale Revised Code.

#### **Sec. 37-82. Restitution.**

In addition to the penalties imposed herein, the court shall impose restitution as part of its sentence for:

(1) All costs associated with the city's abatement of a violation, restoration of the property and enforcement of this chapter, and

(2) Any fines or penalties imposed on the city resulting from the violation.

#### **Sec. 37-83. Notice to abate.**

(a) The city may require abatement of violations of this chapter by issuing a notice to abate to the owner, the owner's authorized agent or the owner's statutory agent, and the occupant or lessee.

(b) The city may also issue a notice to any other person responsible for the violation.

(c) The notice to abate shall be in writing and shall set forth:

(1) The identification of the property where the violation is located, by the street address, Assessor Parcel Number or by book, map and parcel number.

(2) A statement of the violation(s), and a detailed description of the violation(s) to be abated.

(3) The date by which the violation must be abated and the property restored, which date shall not be less than ten (10) days from service of the notice, unless the abatement is pursued as an emergency abatement under this chapter.

(4) The estimated cost of abatement and restoration by the city if the violation is not abated.

(5) If the violation(s) is not abated by the date specified for abatement, the city may abate the violation(s) and restore the property, assess the person responsible for the violation the cost of abatement and restoration, and record a lien on the property for the assessment.

#### **Sec. 37-84. City authority to abate and assess costs of abatement and restoration.**

If the violation is not abated by the date specified for the abatement, the city may:

(1) Abate the violation(s),

(2) Restore the property subject to the abatement,

(3) Assess the person responsible the cost of abatement and restoration, and

(4) Record a lien on the property for the assessment.

#### **Sec. 37-85. Service of notice to abate.**

(a) The notice to abate shall be served on the owner, the owner's authorized agent or the owner's statutory agent, and the occupant or lessee by either of the following methods:

(1) By hand delivering a copy of the notice to abate, or

(2) By mailing a copy of the notice to abate, by regular and certified mail, to the address on record at the Maricopa County assessor's office.

(b) The notice to abate may be served as set forth above on any other person responsible for the violation.

(c) The notice to abate is deemed served on the date it is hand delivered or, if mailed, on the date it is deposited in the United States mail.

#### **Sec. 37-86. Service of petition to abate.**

The service of a petition to abate shall generally comply with Rule 4 of the Arizona Rules of Civil Procedure. However, the court may, upon the city attorney's request and a finding of good cause, allow notice to be posted in a conspicuous place on the property where the violation is located.

#### **Sec. 37-87. Procedure for non-emergency abatement petitions filed in city court.**

(a) At the hearing on the petition to abate, the city and defendant(s) have an opportunity to be heard and present evidence. The rules of evidence do not apply to these hearings, but the court may regulate evidence to conduct the hearings efficiently. The court's determination of a violation shall be based on a preponderance of the evidence.

(b) The court may order abatement of the violation(s) and restoration of the property. If a defendant fails to appear for a hearing, the court shall enter a default judgment against the

defendant and order abatement of the violation. If the city fails to appear for a hearing, the court shall dismiss the petition without prejudice.

(c) Upon finding that abatement and restoration is appropriate, the court shall also review the estimated cost of abatement and restoration. If the cost of abatement and restoration permitted by the court's order is not paid, then the city may record a lien on the property for the assessment.

**Sec. 37-88. City assessment for abatement; lien.**

(a) After abatement and restoration, the city shall prepare a statement of the cost of abating the violation and restoring the property, plus twenty-five (25) percent of such cost, and the recording fee.

(b) The statement shall be mailed to the owner, the owner's statutory agent, the occupant and lessee at the address used to serve the notice to abate. The statement may be mailed to any person responsible for the violation at the address used to serve the notice to abate.

(c) The cost of the abatement and restoration shall be paid to the city within fifteen (15) days after the mailing of the statement. Thereafter, the cost of abatement and restoration shall accrue interest at the legal rate of interest until paid.

(d) The city may record a lien on the property for the assessment. The recorded assessment is prima facie evidence of the truth of all matters recited in the assessment and the regularity of all proceedings before the recordation.

**~~Sec. 37-89. Abatement by other persons.~~**

~~In addition to penalties or remedies otherwise provided by law, the state, a political subdivision or a person who may be damaged or has been damaged by the unauthorized diversion, retardation or obstruction of a watercourse may commence, maintain and prosecute any appropriate action or pursue any remedy to enjoin, abate or otherwise prevent any person from violating or continuing to violate article I of this chapter, or regulations adopted pursuant to article I of this chapter. If a person is found to be in violation of article I, the court shall require the violator to either comply with article I or remove the obstruction and restore the watercourse to its original state. The court may also award such monetary damages as are appropriate to the injured parties resulting from the violation, including reasonable costs and attorney fees.~~

**Sec. 37-9089. Emergency abatement—with or without court approval.**

(a) If a violation of this chapter presents an imminent hazard to life, health or public safety, the city shall attempt to notify the owner and, if known, the occupant, lessee or person responsible for the violation to abate the violation immediately.

(b) A notice for emergency abatement may be written, oral or electronic. A written notice shall be served by hand delivery or prominently posting the notice on the property or site of the violation.

(c) The city may abate the violation and restore the property,

(1) Whether or not the notice is received, and

(2) Whether or not the recipient appeals the notice.

(d) Whenever practicable, the city shall seek a court order to abate.

(e) City abatement for stormwater quality compliance includes suspending access to the MS4 and taking other actions necessary to minimize damage to the MS4 or waters of the United States.

(f) After abatement and restoration, the city shall follow the procedures above for assessment.

**Sec. 37-9190. Inadequate abatement; notice to FEMA.**

If the owner or the city is unable to abate the violation(s) of article I to avoid the flood hazard, the city shall send to FEMA a denial of insurance declaration, stating that the property remains in violation of article I, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended.

**ARTICLE V. INTERPRETATIONS, APPEALS AND VARIANCES—FLOODPLAIN  
MANAGEMENT AND STORMWATER REGULATION  
DIVISION I. SPECIAL FLOOD HAZARD AREAS.**

**Sec. 37-100. Interpretation of SFHA provisions.**

(a) The provisions in article I regulating SFHAs 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 law.

(b) A request for an interpretation under this section shall be in writing on the city form and submitted to the Floodplain Administrator. Before responding, the Floodplain Administrator may ask for additional information. ~~The Floodplain Administrator shall respond to the request in writing within forty five (45) days after the date of the request, or within forty five (45) days after receiving the additional information, whichever is later.~~

(c) Only the lot owner may appeal the Floodplain Administrator's interpretation of the provisions protecting SFHAs.

(d) Enforcement disputes are not subject to this section.

**Sec. 37-101. Appeal of Floodplain Administrator's interpretation of SFHA provisions.**

(a) The Floodplain Board shall hear and decide appeals from the Floodplain Administrator's interpretation of the SFHA provisions of article I if there is:

(1) A dispute regarding the words, phrases or sections of the SFHA provisions,

or

(2) Doubt regarding the location of a floodway or floodplain.

(b) Enforcement disputes are not appealable under this section.

(c) Only the lot owner may appeal the Floodplain Administrator's interpretation of the SFHA provisions of article I as applicable to the lot.

(d) To appeal, the lot owner shall file the appeal in writing on the city form with the Floodplain Administrator within thirty (30) days after the date of the Floodplain Administrator's interpretation.

~~(e) After receipt of the appeal, the Floodplain Administrator shall prepare a report for the Floodplain Board. The Floodplain Board shall consider the appeal within ninety (90) days of the Floodplain Administrator's receiving the appeal. The Floodplain Board may establish rules for its consideration of an interpretation appeal.~~

~~(f) An appeal stays any further proceedings except for an emergency abatement until the appeal is decided. The Floodplain Board's decision is final.~~

**Sec. 37-102. Variances from floodplain management regulations regarding SFHAs.**

(a) *Floodplain Board authority.* The Floodplain Board shall hear and decide requests for variances from the floodplain management regulations regarding SFHAs.

(b) *Nature of a variance.* The Floodplain Board may grant a variance from the floodplain management regulations protecting SFHAs. A variance may only be granted to a lot with physical characteristics so unusual that complying with the regulations of ~~these sections~~ article I would create an exceptional hardship to the applicant or surrounding lot owners. Economic hardship, inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of neighbors do not create an exceptional hardship. The characteristic must be unique to the lot, such as size, shape, topography, location or surroundings. The unique

characteristic must pertain to the lot itself, not to any structures, their inhabitants or lot owners. The duty of the City to protect citizens from flooding is so compelling that variances are strictly limited.

(c) *Lot size considerations for a variance.* Generally, a variance is only available 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 with lowest floors constructed below the BFE, if the procedures of sections 37-2016 through 2237-18, and the standards of sections 37-2320 through 37-3431 have been fully considered. Deviations from this lot size limit may be considered by the Floodplain Board. However, as the lot size is increased beyond one-half acre, the technical justifications required for a variance must be more detailed and comprehensive.

(d) *How to apply for a variance.*

~~(1) Within thirty (30) days after the Floodplain Administrator's determination of the regulations protecting SFHAs, as applied to a lot, the lot owner may apply for a variance. The application shall be in writing, on the form provided by the city, and submitted to the Floodplain Administrator.~~

~~(2) Administrative timeframe: within fifteen (15) days after receiving the application, the Floodplain Administrator shall determine whether the application is administratively complete, and notify the applicant.~~

~~(3) Substantive timeframe: within forty-five (45) days after the Floodplain Administrator notifies the applicant that the application is administratively complete, the Floodplain Administrator shall complete the substantive review of the application and prepare a report for the Floodplain Board.~~

~~(4) Overall timeframe: within ninety (90) days after receiving an application under this article, the Floodplain Board shall consider the application. The Floodplain Board may establish rules for its consideration of a variance application.~~

~~(5) An application is deemed withdrawn if, within sixty (60) days after the date of the notice of administrative completion, the applicant does not supply the requested information or provide justification for delay. On receipt of justification, the Floodplain Administrator shall allow the applicant thirty (30) additional days to provide the requested information before deeming the application withdrawn.~~

~~(6) Except as otherwise provided, the timeframes in this section shall be extended and suspended as provided by state law.~~

(e) *Considerations for variances.* In considering variances, the Floodplain Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this articles I and V, and:

(1) The danger that materials may be swept onto other lands to the injury of others;

(2) The danger of life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(4) The importance of the services provided by the proposed facility to the community;

(5) The necessity to the facility of a waterfront location, where applicable;

(6) The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;

(7) The compatibility of the proposed use with existing and anticipated development;

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

(9) The safety of access to the property in time of flood for ordinary and emergency vehicles;

(10) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,

(11) 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.

(f) *Limitations on granting a variance.* Except for historic structures and functionally dependent uses addressed below, the Floodplain Board may grant a variance if all the following conditions exist:

(1) A good and sufficient cause for the variance exists, as set forth in subsection (b) above.

(2) Failure to grant the variance would result in exceptional hardship to the applicant.

(3) Variances may be granted only if special circumstances, such as size, shape, topography, location or surroundings of the property, would cause the strict application of the regulations to deprive the property of privileges enjoyed by similar property in the floodplain.

(4) The variance will not cause: increased BFEs (including but not limited to, floodways) or BFDs, danger or damage to other persons or property, threats to public safety, nuisances, fraud or victimization of the public, or conflict with other laws or ordinances.

(5) The variance is the minimum necessary to afford relief for the applicant.

(6) A variance is subject to conditions to ensure that the variance does not constitute a grant of special privileges inconsistent with the limitations on similar property in the floodplain.

(7) The variance preserves the general intent and purposes of ~~this~~ **articles I and V.**

(g) *Limitations on granting a variance for historic structures.* The Floodplain Board may grant a variance for an historic structure if all the following conditions exist:

(1) The structure is listed in the National Register of Historic Places, State Inventory of Historic Places, or Scottsdale Historic Register.

(2) The proposed rehabilitation or repair will not preclude the structure's continued designation as an historic structure.

(3) The variance is the minimum necessary to preserve the structure's historic character and design.

(h) *Limitations on granting a variance for functionally dependent uses.* The Floodplain Board may grant a variance for functionally dependent use if all the following conditions exist:

(1) The proposed use is a functionally dependent use.

(2) The proposed use meets the criteria in (f) above.

(3) 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.

(i) *Conditions:* The Floodplain Board may attach conditions to a variance to preserve the general intent and purposes of ~~this~~ **articles I and V.**

(j) *Notice:*

(1) Construction of a lowest floor below the BFE or BFD may result in increased premium rates for flood insurance.

(2) Construction below the BFE or BFD may increase risks to life and property.

(3) The variance may make the lot ineligible for state land exchange.

## **DIVISION II. STORMWATER REGULATION.**

**Sec. 37-105. Floodplain Administrators' interpretations of Article II, Stormwater Regulation.**

(a) This section does not apply to interpretations concerning Article I, Article III, or enforcement disputes.

(b) Only the lot owner may request a review of the Floodplain Administrator's interpretation of Article II, Stormwater Regulation provisions' applicability to a lot.

(c) Upon a lot owner's written application, the Floodplain Administrator may interpret the provisions of this chapter, other than those specified in (a), to allow modifications of requirements.

(d) To allow a modification, the Floodplain Administrator must find:

(1) The lot owner's individual circumstances make the strict application of this chapter impractical;

(2) The modification does not adversely affect the public health, safety and general welfare;

(3) The design, methodology or construction techniques to be substituted is at least the equivalent of the design, methodology or construction techniques specified in this chapter for quality, effectiveness, durability, maintenance and safety; and

(4) The modification is in compliance with the intent and purpose of this chapter.

(e) A request for an interpretation under this section shall be in writing on the city form and submitted to the Floodplain Administrator. Before responding, the Floodplain Administrator may ask for additional information.

**Sec. 37-106. Appeal of Floodplain Administrator's interpretation of Article II, Stormwater Regulation.**

(a) The Floodplain Board shall hear and decide appeals from the Floodplain Administrator's interpretation of the provisions of this chapter (other than those specified in (b) below) when a lot owner claims the Floodplain Administrator made an error in administering this chapter.

(b) Interpretations concerning Article I, Article III, and enforcement disputes are not appealable under this section.

(c) Only a lot owner may appeal the Floodplain Administrator's interpretation other than those specified in (b) above.

(d) To appeal, the lot owner shall file the appeal in writing on the city form with the Floodplain Administrator within thirty (30) days after the date of the Floodplain Administrator's interpretation.

(e) The Floodplain Board may resolve an appeal in favor of an appellant only if the following conditions are met.

(1) The owner's individual circumstances make the strict application of this chapter impractical;

(2) The modification does not adversely affect the public health, safety and general welfare;

(3) The design, methodology or construction techniques to be substituted is at least the equivalent of the design, methodology or construction techniques specified in this chapter for quality, effectiveness, durability, maintenance and safety; and

(4) The modification is in compliance with the intent and purpose of this chapter.