



Floodplain Regulations

for Maricopa County

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FCDMC 2011 Revision

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Table of Contents

ARTICLE ONE. General Provisions

Section 101. Findings of Fact.....	1
Section 102. Statutory Authority	1
Section 103. Statement of Purpose	2
Section 104. Title	2
Section 105. Applicability	3
Section 106. Rules.....	3
Section 107. Construction and Interpretation.....	3
Section 108. Warning and Disclaimer of Liability.....	3
Section 109. Severability	4
Section 110. Effective Date.....	4

ARTICLE TWO. Administration

Section 201. Floodplain Administrator	5
Section 202. Duties of Communities Dependent on the District	7
Section 203. Applicable Boards, Agencies, and Hearing Officer	7
Section 204. Coordination.....	9
Section 205. Definitions.....	9
Section 206. Definitions Pertinent to Inspection and Enforcement	20

ARTICLE THREE. Flood Hazard Boundaries

Section 301. Area of Jurisdiction.....	21
Section 302. Flood Hazards Not Delineated.....	21
Section 303. Basis for Establishing Special Flood Hazard Areas	22
Section 304. Other Flood Hazard Boundaries	22
Section 305. Watercourse Master Plan	22
Section 306. Publication of Flood Hazard Boundaries	23
Section 307. Public Notice	23
Section 308. Determination in Case of Dispute.....	23

ARTICLE FOUR. Floodplain Use Permit, Appeals, and Variances

Section 401. Floodplain Use Permit Required25

Section 402. Permit Fees.....26

Section 403. Application Requirements26

Section 404. Permit Conditions28

Section 405. Elevation and Floodproofing Certificates30

Section 406. Allowed Uses30

Section 407. Exceptions: Review of Plans31

Section 408. Personal Liability32

Section 409. Appeals32

Section 410. Floodplain Variance.....33

Section 411. Recordation and Notification.....34

ARTICLE FIVE. Allowable Development

Section 501. Zone AE Floodway37

Section 502. Zone AE.....38

Section 503. Zone A Non-Alluvial, Zone A Ponding, and Zone A Shallow Flooding38

Section 504. Zone AH Ponding38

Section 505. Zone AO Ponding Area, Zone AO Shallow Flooding, Zone AO Alluvial Fan.....39

Section 506. Zone A Alluvial Fan Administrative Floodway.....39

Section 507. Zone A Alluvial Fan40

Section 508. Other Flood Hazard Zones.....40

ARTICLE SIX. Development Standards

Section 601. General Development Standards.....41

Section 602. AE Floodway46

Section 603. Zone AE.....47

Section 604. Zone A (non-alluvial)48

Section 605. Zone A Ponding.....48

Section 606. Zone A Shallow Flooding.....49

Section 607. Zone AH Ponding49

Section 608. Zone AO Ponding Area.....49

Section 609. Zone AO Shallow Flooding50
Section 610. Zone AO Alluvial Fan.....50
Section 611. Zone A Alluvial Fan High Hazard Area Administrative Floodway50
Section 612. Zone A Alluvial Fan Uncertain Flow Distribution Area Administrative Floodway.....50
Section 613. Zone A Approximate Alluvial Fan Floodway Administrative Floodway51
Section 614. Zone A Alluvial Fan51
Section 615. Development Standards within Other Flood Hazard Areas52

ARTICLE SEVEN. Enforcement

Section 701. Authority53
Section 702. Violation53
Section 703. Enforcement53
Section 704. Service of Notice of Violation.....54
Section 705. Response to the Notice of Violation.....55
Section 706. Hearing Request55
Section 707. Hearing Procedures56
Section 708. Penalties58
Section 709. Abatement.....58

APPENDIX A – Fee Schedule A1

APPENDIX B – Communities Dependent on the District B1

REVISIONS

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ARTICLE ONE

GENERAL PROVISIONS

Section 101. Findings of Fact

It is the finding of the Board of Directors of the Flood Control District of Maricopa County that:

- A.** The flood hazard areas of Maricopa County are subject to periodic inundation that 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 are caused in part by the cumulative effect of obstructions in Special Flood Hazard Areas that increase flood heights and velocities, and when inadequately anchored, cause damage. Uses that are inadequately floodproofed, not elevated or otherwise protected from flood damage also contribute to the flood loss.
- C.** Development within a watercourse or areas designated as Special Flood Hazard Areas or areas with contributing watersheds that have flows greater than 50 cubic feet per second (cfs) during a 100-year flood event, require permitting through judicious floodplain management pursuant to the authority granted in A.R.S. §48-3609(B), so as to not cause obstruction, retardation, or diversion of flows within the area of jurisdiction.

Section 102. Statutory Authority

Arizona Revised Statutes Sections 48-3601 through 48-3650 direct each county Flood Control District Board of Directors to adopt and enforce floodplain regulations consistent with criteria adopted by the Director of Arizona Department of Water Resources. The floodplain regulations adopted by a district are intended to carry out the requirements of the national flood insurance program and any term not otherwise defined in this chapter shall have the meaning set forth in 44 Code of Federal Regulations parts 59 through 78, as effective on January 1, 2005.

A Floodplain Regulation for Maricopa County has been in force since February 25, 1974. Therefore, the Board of Directors of the Flood Control District of Maricopa County, Arizona adopts these Regulations, amending the December 20, 2006 adopted version, continuing the statutory authority vested in the District to regulate development through its Floodplain Administrator.

In accordance with A.R.S. Sections 48-3642 and 48-3644 the District shall publish, or prominently place on the website the ordinances, regulations and substantive policy statements, including a directory of documents, at the office of the District or District website as provided in A.R.S. §48-3647, and documentation of authorization by statute, rule, regulation, ordinance, executive order or delegation agreement.

Section 103. Statement of Purpose

It is the purpose of these Regulations to comply with the directive of A.R.S. §48-3609 and 44 CFR Ch.1. et seq. (pertaining to the National Flood Insurance Program) to promote and protect the health, peace, safety, comfort, convenience, and general welfare of the residents within the jurisdictional area of Maricopa County, Arizona; to minimize public and private losses due to flood conditions in specific areas; and to enable Maricopa County and its residents to participate in the National Flood Insurance Program (NFIP), receive Federal Disaster Assistance, obtain flood insurance and reduce the cost of flood insurance.

It is the intent of the Flood Control District Board of Directors to:

1. Protect the life, health, and property of county residents;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, fiber optics and sewer lines, streets and bridges located in Special Flood Hazard Areas;
6. Help maintain a stable tax base by regulating development of Special Flood Hazard Areas so as to minimize future flood blight areas;
7. Take all reasonable action so that potential buyers have notice that property is in a Special Flood Hazard Area;
8. Take reasonable action so that those who occupy the Special Flood Hazard Areas assume responsibility for their actions;
9. Minimize flood damages and reduce the height and violence of floods that are caused by obstructions restricting the capacity of floodways;
10. Prevent unwise encroachment, building and development within Special Flood Hazard Areas;
11. Reduce the financial burden imposed on the community, its governmental units and its residents when such land is flooded;
12. Protect the natural and beneficial function of the floodplains; and
13. Maintain eligibility for disaster relief.

Section 104. Title

These Regulations, adopted by Resolution FCD 2011R005, shall be known and cited as the Floodplain Regulations for Maricopa County and are hereinafter referred to as “Regulations.”

Section 105. Applicability

These Regulations shall apply to all Special Flood Hazard Areas within the boundaries of Maricopa County except those incorporated cities and towns which have adopted a resolution in accordance with A.R.S. §48-3610. Land areas that are at high risk for flooding are called Special Flood Hazard Areas (SFHAs), or floodplains. These areas are indicated on Flood Insurance Rate Maps (FIRMs). Such areas include all lands located within delineated floodplains and watercourses; areas designated as Special Flood Hazard Areas; and areas with contributing watersheds that have flows greater than 50 cubic feet per second (cfs) during a 100-year flood event that are within the area of jurisdiction of the Flood Control District of Maricopa County.

Section 106. Rules

When not inconsistent with the context, words used in the present tense include the future tense, words in the singular include the plural; words in the plural include the singular. Words or phrases not specifically defined in these Regulations shall be interpreted so as to give them the meaning they have in common usage. The word “shall” is mandatory and the word “may” is permissive. No provision of these Regulations shall be construed to require written authorization for those exceptions set forth in A.R.S. §48-3613(B) nor shall the Board of Directors prohibit said exceptions; however, those exceptions must comply with A.R.S. §48-3613(C), which states, “Before any construction authorized by A.R.S. §48-3613(B) may begin, the person must submit plans for the construction to the Board for review and comment.”

Section 107. Construction and Interpretation

Nothing contained in these Regulations shall be construed to limit or repeal any powers granted to the Flood Control District of Maricopa County under state statute. These Regulations are not intended to repeal, abrogate, or impair any existing applicable requirements under federal, state, city, county, or other special district code, regulation, statute, or ordinance.

Section 108. Warning and Disclaimer of Liability

The degree of flood protection required by these Regulations is considered reasonable for regulatory purposes under 44 C.F.R. Ch. 1, et seq. and is based on scientific and engineering considerations. Compliance with these Regulations does not insure complete protection from flooding and is not to be construed as a warranty. Larger floods can and will occur on rare occasions. Flood height may be increased by man-made or natural causes, such as bridge openings restricted by debris, natural erosion, streambed meander, or man-made obstructions and diversions.

These Regulations are not intended to imply that land outside Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damage. These Regulations shall not create liability on the part of the Flood Control District of Maricopa County, and any officer or employee thereof, Maricopa County and any officer or employee thereof, the State of Arizona, or the Federal Emergency Management Agency for any flood damages that may result from reliance on these Regulations or any administrative decision lawfully made hereunder.

Section 109. Severability

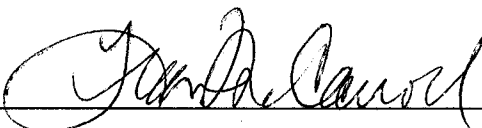
These Regulations and the various parts thereof are hereby declared to be severable. Should any section of these Regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of these Regulations as a whole, or any portion thereof, other than the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

Section 110. Effective Date

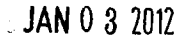
These Regulations as amended are adopted by the Board of Directors of the Flood Control District of Maricopa County, Arizona, this 30th day of NOV. 20 11



Chairman, Board of Directors



Clerk of the Board

 JAN 03 2012

Date

ARTICLE TWO

ADMINISTRATION

Section 201. Floodplain Administrator

A. Designation of the Floodplain Administrator

The Floodplain Administrator as designated by the Board of Directors shall be the Chief Engineer and General Manager of the District who shall administer and enforce these Regulations. The Floodplain Administrator may delegate signature authority to District staff for permitting purposes.

B. Duties and Responsibilities of the Floodplain Administrator

Duties of the Floodplain Administrator shall include, but not be limited to:

1. Permit Review

Review all development permits to determine that:

- a. The permit requirements of these Regulations, applicable statutes, and federal codes have been satisfied;
- b. Applicants have certified that all other required state and federal permits have been obtained [44 C.F.R. Ch. 50, 60.2(a)(1) and (2)];
- c. Structures are reasonably safe from flooding from the one percent (1%) chance flood event;
- 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 these Regulations, “adversely affect” means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point [44 C.F.R. Ch. 1, 60.3(c)(10)].

2. Substantial Improvement and Substantial Damage Procedures

- a. Develop detailed procedures for identifying and administering requirements for substantial improvement and substantial damage, to include defining “Market Value.”
- b. Assure procedures are coordinated with other departments and divisions and implemented by District staff.

3. Use of Other Base Flood Data

When base flood elevation data has not been provided in accordance with Section 303, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer Article Six – Development Standards. Any such information shall be consistent with the requirements of the Federal Emergency Management Agency and the Director of the Arizona Department of Water Resources.

4. Obtain and Maintain for Public Inspection

- a. The certified regulatory flood elevation required in Section 601;
- b. The floodproofing certification required in Sections 405 and 601(G);
- c. The flood vent certification required in Section 601;
- d. The elevation certification required for additional development standards, including subdivisions, in Section 601;
- e. The floodway encroachment certification required in Section 405;
- f. Records of all variance actions, including justification for their issuance, and report such variances issued as required by the State or the Federal Emergency Management Agency;
- g. Improvement calculations;
- h. Any other documents required by statutes which shall be open to public inspection at the office of the District or the District website.

5. Notification to Other Entities

- a. Whenever a watercourse is to be altered or relocated:
 - 1) Notify adjacent communities and the Arizona Department of Water Resources prior to such alteration or relocation of a watercourse, after assuring that the flood carrying capacity of the altered or relocated portion of said watercourse be maintained, and
 - 2) Submit evidence of such notification to the Federal Emergency Management Agency through appropriate notification means.
- b. Base flood elevation and rate of flow due to physical alterations:
 - 1) 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 the Federal Emergency Management Agency of the changes by submitting technical or scientific data in accordance with Volume 44 Code of Federal Regulations Section 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.
 - 2) 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.

c. Corporate Boundary Changes:

Notify the Federal Emergency Management Agency and the Arizona Department of Water Resources of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

6. Map Determinations

Make interpretations, where needed, as to the exact location of the boundaries of the Special Flood Hazard Areas (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Article Four.

7. Remedial Actions

Take actions on violations of this ordinance as required in Article Seven.

Section 202. Duties of Communities Dependent on the District

Communities in Maricopa County that have elected not to assume floodplain management responsibility as authorized in A.R.S. §48-3610 shall appoint a Community Floodplain Administrator who will be responsible for 1) coordinating with District staff in providing floodplain management responsibility, and 2) verifying that the Community's participation in the National Flood Insurance Program is maintained and remains in good standing through adoption and enforcement of these Regulations.

The Community's Floodplain Administrator shall also be responsible for the following:

1. Keeping and maintaining the most current Flood Insurance Studies and Flood Insurance Map(s) covering their community;
2. Keeping and maintaining at least three (3) copies of the most current Floodplain Development Regulations at the office of the city or town clerk;
3. Keeping and maintaining elevation certificates (or acceptable records of lowest floor elevations) for all structures within the floodplain. Such records shall be retrievable and maintained by the Community in perpetuity; and,
4. Repealing or modifying all existing local ordinances that conflict with these Regulations.

See Appendix B for the communities for which the Flood Control District performs Floodplain Management.

Section 203. Applicable Boards, Agencies, and Hearing Officer

- A. Board of Directors (Board)** – The Board of Directors of the Flood Control District of Maricopa County. The County Board of Supervisors shall serve as the Board of Directors. The Board shall exercise all powers and duties in carrying out its regulatory functions as authorized by A.R.S. §48-3603. The Board, by Resolution FCD 84-7, appoints the Chief Engineer and General Manager of the Flood Control District as the Floodplain Administrator.

The Board of Directors shall adopt rules of procedure consistent with the provisions of these Regulations and applicable statutes for the conduct of Floodplain Review Board business including establishment of a fee schedule to cover administrative costs incurred in the processing of Appeals, Floodplain Use Permits, Floodplain Variances, and plan reviews.

- B.** Flood Control District of Maricopa County (District) – The Flood Control District of Maricopa County was officially organized on August 3, 1959 pursuant to A.R.S. §48-3602 (current). The District performs floodplain management for unincorporated county and the communities as noted in Appendix B.
- C.** Flood Control Advisory Board – A Board of seven members appointed by the Board of Directors. Five members shall be resident taxpayers and qualified electors of the District, at least three of whom shall be residents of the cities in the District. At least one of the Board members who are residents of cities shall be a resident of the largest city in the District.

The city engineer of the largest city in the District and the chief engineer or manager of a major irrigation or agricultural improvement district, or their representatives, shall be ex officio members of the Advisory Board with all rights and privileges granted to other Board members.

- D.** Floodplain Review Board (Board of Review) – Established by the Board of Supervisors pursuant to the authority granted in A.R.S. §48-3612. The Flood Control Advisory Board is appointed by the Board of Directors as the Floodplain Review Board to sit in review and make decisions in accordance with A.R.S. §48-3612. The members of the Floodplain Review Board shall serve without compensation except that their reasonable and necessary expenses incurred on Board business may be reimbursed.

Duties:

1. The Floodplain Review Board shall elect a chairperson and a vice chairperson from among its own members who shall have power to administer oaths and to take evidence.
2. The Floodplain Review Board shall by resolution fix the time and place of its meetings. The meetings shall be open to the public. Minutes of its proceedings and records of its interpretations, appeals, Variances, and other official actions shall be kept and filed in the office of the Flood Control District as a public record.
3. The Floodplain Review Board may prescribe, in connection with the grant of any Variance or appealed use permit, conditions determined necessary to carry out the provisions of these Regulations, state statutes, and any relevant federal codes, regulations, and any court interpretations thereof.

If the Floodplain Review Board has cause to believe, after approval of a Variance, that any stipulations or conditions may have been violated, it may set a hearing for the purpose of determining possible revocation of the Variance for such violation. The Floodplain Review Board may revoke the Variance for finding a violation of the stipulations or conditions, or it may grant a limited time within which to correct the violation in order to avoid revocation of the Variance.

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- E.** Board of Hearing Review (see A.R.S. §48-3615.01(G)(H) and §48-3615.02) – The Board of Directors shall establish a Board of Hearing Review to review decisions of hearing officers that are issued pursuant to section 48-3615.01. The board of hearing review shall consist of one member from each board of directors' district or the board of directors may authorize the citizens' flood control advisory board or the board of review to designate a like number of its members to serve as the board of hearing review.
- F.** Arizona Department of Water Resources (ADWR) – The State agency that coordinates with participating NFIP communities to ensure compliance with Federal and State floodplain management regulations. The Floodplain Management Program is housed at ADWR and is responsible for assisting communities that participate in the NFIP, administers the Community Assistance Program, the Risk MAP (Mapping Assessment and Planning), sets State Standards for floodplain management, and works with local, state and federal entities during times of flood emergencies.
- G.** Federal Emergency Management Agency (FEMA) – The federal agency within the Department of Homeland Security that is tasked with responding to, planning for, recovering from, and mitigating against man-made and natural disasters. FEMA oversees the administration of the National Flood Insurance Program and the designation of areas as flood prone. FEMA oversees the development and publishing of Flood Insurance Rate Maps and Flood Insurance Studies.
- H.** Hearing Officer – The Hearing Officer shall be appointed by the Board of Directors and may be an employee of the District. The individual appointed by the Board shall hear and decide all civil proceedings established in these Regulations. Decisions of the Hearing Officer or by the Board of Hearing Review shall be available to any party to the hearing.

Section 204. Coordination

The Board and the Floodplain Administrator shall coordinate the provisions of these Regulations with all other interested and affected political subdivisions, federal and state agencies, as required by A.R.S. §48-3609 and §48-3610.

Section 205. Definitions

In these Regulations, unless the context requires otherwise, the following words shall be used as set forth in this Section:

Accessory Structure: A structure which is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. Examples include: detached garage, storage shed, gazebos, open shade structures, picnic pavilions, boat houses, small pole barns, and similar buildings.

Accessory Structure, low-cost and small: A structure that is less than 120 square feet in size, non-inhabitable, used solely for the parking of no more than two (2) passenger cars or limited storage.

Accessory Use: A use that is incidental and subordinate to the principal use of the parcel of land on which it is located.

Active Alluvial Fan Flooding: A type of flood hazard that occurs only on alluvial fans, characterized by flow path uncertainty so great that this uncertainty cannot be set-aside in realistic assessments of flood risk or in the reliable mitigation of the hazard. An active alluvial fan flooding hazard is indicated by three related criteria: A) Flow path uncertainty below the hydrographic apex; B) Abrupt deposition and ensuing erosion of sediment as a stream or debris flow loses its competence to carry material eroded from a steeper, upstream source area; and C) An environment where the combination of sediment availability, slope, and topography creates a hazardous condition for which elevation on fill will not reliably mitigate the risk.

Administrative Floodway: The Special Flood Hazard Area designated on either the Flood Insurance Rate Maps (FIRM) or flood management maps as areas that are subject to local regulation requirements. These areas may include Active Alluvial Fan Flooding, Alluvial Fan High Hazard Area Flooding, Inactive Alluvial Fan Flooding, and conveyance corridors. These areas are designated as the corridors that must be reserved to maintain the continuity of flow and sediment for the one percent (1%) annual flood event without causing cumulative adverse impact to adjacent properties.

Adverse Impact: Flood hazards resulting from development which diverts, retards, or obstructs the flow of water in any watercourse, threatens public health, safety, or the general welfare pursuant to A.R.S. §48-3609(B)1; fails to protect the site from flood related erosion; and aggravate the existing flood related erosion hazards (CFR Title 44 Part 60 Subpart A Section 60.5); and include the following:

- Any development that may create a loss of life, limb and well-being to any person,
- Any development that may cause a structure to fail, and/or not be able to be used for its intended use including loss of access for maintenance and/or repair,
- Any development that may cause erosion or aggravate existing flood-related erosion on adjacent or nearby property, or
- Until a regulatory floodway is designated, any cumulative effect of the proposed development, when combined with all other development, will not increase the water surface elevation of the base flood more than one (1) foot at any point as stated in 44 C.F.R. Ch. 1, 60.3 (c)(10); or
- Any development that may cause a rise in the Base Flood Elevation by more than one (1) foot.

Aggradation: The deposition of sediment in a watercourse or floodplain.

Alluvial Fan: A sedimentary deposit located at a topographic break such as the base of a mountain front, escarpment, or valley side, that is composed of streamflow and/or debris flow sediments and has the shape of a fan, either fully or partially extended.

Alluvial Fan Flooding: Flooding occurring on the surface of an alluvial fan that originates at the apex and is characterized by high velocity flows, active processes of erosion, sediment transport and deposition, and unpredictable flow paths.

Alluvial Fan High Hazard Area (AFHH): An area of alluvial fan flooding that is reserved to convey and receive sediment and floodwater without altering and thereby increasing the distribution of hazard across the fan to inactive areas and to areas downslope.

Alluvial Fan Uncertain Flow Distribution Area (AFUFD): A transitional area for sheet flooding and channelized flow located below the AFHH area generally becoming more stable and less uncertain with distance from the AFHH area.

Alluvial Fan Zone A (AFZA): An area of alluvial fan flooding characterized by flooding along stable flow paths and sheet flow or sheet flooding. These stable flow paths may still be subject to erosion hazards, channel bed and bank scour, and deposition.

Approximate Alluvial Fan Floodways (AAFF): Major conveyance corridors defined within AFUFD and AFZA areas for unimpeded through flow of floodwater and sediment.

Anticipated Development: Development which might occur consistent with permits, plans, ordinances, zoning, resolutions, or other actions taken by government entities.

Approximate Study: A graphic illustration of a delineation of the floodplain by the Floodplain Administrator made from the most reliable sources available where neither a floodplain nor a floodway has been determined by detailed methodology.

Apex: A point on an alluvial fan below which the flow of the major stream that formed the fan becomes unpredictable and alluvial fan flooding may occur.

Appeal: A request for a review of the Floodplain Administrator's interpretation of any provision of these Regulations; including denial of a permit, results of an inspection, or final decision and order of the Chief Engineer; or any determination made under these Regulations.

Area Drainage Master Study (ADMS): A study to develop hydrology for a watershed, to define watercourses, to identify potential flood problem areas, drainage problems and recommend solutions and standards for sound floodplain and stormwater management. The ADMS will identify alternative solutions to a given flooding or drainage problem.

Area Drainage Master Plan (ADMP): A plan that identifies the preferred alternatives of those identified in an ADMS. An ADMP provides minimum criteria and standards for flood control and drainage relating to land use and development.

Area of Shallow Flooding: An area with flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, the path of flooding is indeterminate, and where ponding may be evident.

Backfill: The placement of fill material within a specified depression, hole or excavation pit below the surrounding adjacent ground level, as a means of improving flood water conveyance.

Basement: The lowest level or story of any area of a building that has its floor sub grade (below ground level) on all sides.

Base Flood or One-Hundred-Year Flood: A flood that has a one percent (1%) chance of being equaled or exceeded in any given one-year period based on the criteria established by ADWR.

Base Flood Elevation (BFE): The water surface elevation produced by a base flood or 100-year flood.

Breakaway Wall: A wall that is not part of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

Building: A structure affixed to the land having a roof supported by columns or walls built for housing, shelter or enclosure of persons, animals, or property of any kind.

Clearing/Grubbing: Removal of vegetation without disturbance of existing land surface contours.

Conveyance Corridor: A land area adjoining a body of water or adjacent to or located partially or wholly within a floodplain which due to the soil instability, is likely to suffer flood related erosion damage. Conveyance corridors are areas that may not be defined by traditional encroachment methods due to directional changes when trying to achieve the increase in base flood of one (1) foot or less.

Community: Any state, area or political subdivision thereof, or any Native American tribe or authorized tribal organization who is charged with the authority to implement and administer laws, ordinances and regulations for that community.

Compensation of Flood Volume Displacement: The replacement of the quantity of stormwater volume below the Base Flood Elevation that would be lost due to import of fill or by development by the proposed project.

Cumulative Substantial Damage: The total of all repairs to a repetitive loss structure shall not cumulatively increase the market value of the structure more than fifty percent (50%) of the market value during the life of the structure. This term does not, however, include either:

Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

Any repair of flood damage to “historic structure,” provided the repair will not preclude the structure’s continued designation as a “historic structure.”

Cumulative Substantial Improvement: Improvements, modifications, or additions to existing buildings are counted cumulatively for at least five (5) years and reconstruction and repairs to damaged buildings are counted cumulatively for at least five (5) years. When the improvements, modifications, additions, reconstruction, or repairs reach the fifty percent (50%) substantial improvement threshold, the structure must be brought into compliance.

Crawl Space: A type of basement in which one cannot stand up; the height may be as little as a foot and the surface is often soil; it is a convenient access to pipes, substructures and a variety of other areas. A crawlspace cannot be used as living space; it may be used as storage.

Degradation: The erosion of sediment in a watercourse or floodplain.

Delineated Floodplain: A graphic illustration of the area susceptible to inundation by a 100-year flood based upon the results of an authorized study that is included on either the Flood Management Maps for Maricopa County or the Flood Insurance Rate Maps, or both.

Delineated Floodplain, Pending: A delineated floodplain identified through a Flood Insurance Study, Area Drainage Master Study or Plan, or other study that has been accepted by the Floodplain Administrator as best available data to use for regulatory purposes, but is not yet shown on the Flood Insurance Rate Maps (FIRM); or when FEMA has issued a Best Available Data (BAD) Letter indication that the delineation will not be shown on the FIRMs, but is to be used for development purposes. Pending floodplain delineations are displayed on the Flood Management Maps.

Development: Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, and storage of materials and equipment located within the Special Flood Hazard Area.

Dwelling: A residential building intended for human habitation.

Enclosure: That portion of a building that is below the residential lowest floor and is above ground.

Encroachment: 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.

Erosion: The process of the gradual wearing away of landmass.

Erosion Hazard Zone: A land area located partially or wholly within a delineated floodplain which due to the soil instability, is likely to suffer flood related erosion damage.

Erosion Setback: The minimum horizontal distance between a structure and a channel bank necessary to protect the structure from flood related erosion damage.

Exempt Use: Any use within the delineated floodplain specifically exempted from these Regulations by applicable law.

Existing Manufactured Home Park or Subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, construction of streets and either final site grading, or the pouring of concrete slabs) was completed before the August 8, 1973 effective date of the floodplain management regulations adopted by the community.

Expansion to an Existing Manufactured Home Park or Subdivision: The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads).

Fill: The placement of fill material at a specified location to bring the ground surface up to a desired elevation.

Fill Material: Natural sand, dirt, soil and rock. For the purposes of floodplain management, fill material may include concrete, cement, soil cement, brick or similar material as approved by the Floodplain Administrator on a case-by-case basis.

Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from: A) the overflow of flood waters; B) the unusual and rapid accumulation or runoff of surface waters from any source; and/or C) 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 an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

Flood Hazard Zone: Any land area located partially or wholly within a delineated floodplain susceptible to flood related damage as designated on the Floodplain Management Maps. Such flood hazard zones may include but are not limited to areas highly susceptible to erosion, stream meander sensitivity, moveable bed, scour, wave action, and subsidence.

Flood Insurance Rate Map (FIRM): An official map on which the Federal Insurance Administration has delineated both the 100-year flood Special Flood Hazard Areas and the risk premium zones applicable to a community.

Flood Insurance Study (FIS): The official report provided by the Federal Insurance Administration. The report includes flood profiles and Base Flood Elevations.

Flood Management Map: An official map, which may be either hard copy or in electronic format, for Maricopa County on which the Floodplain Administrator has delineated floodplains and other flood related flood hazard zones for the purpose of floodplain management.

Floodplain: The area adjoining the channel of a watercourse susceptible to inundation by a base flood including areas where drainage is or may be restricted by man-made structures that have been or may be covered partially or wholly by flood water from the one hundred year flood.

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

Floodplain Regulations: These Regulations and other codes, ordinances, and regulations adopted pursuant to the authority granted in A.R.S. §48-3603 through §48-3628 relating to the use of land and construction within a delineated floodplain and floodway, or other Special Flood Hazard Areas.

Floodplain Use Permit: A permit that must be obtained from the Floodplain Administrator prior to commencement or continuance of any development subject to these Regulations within the area of jurisdiction.

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

Floodway: The channel of a river or other watercourse and the adjacent land areas necessary in order to discharge the 100-year flood without cumulatively increasing the water surface elevation more than one (1) foot.

Floodway Fringe: The areas of a delineated floodplain adjacent to the floodway where encroachment may be permitted.

Functionally Dependent Use: 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.

Grading: Disturbance of existing land contours.

Hazardous Waste: Garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, or other discarded materials, including solid, liquid, semisolid or contained gaseous material, resulting from industrial, commercial, mining, and agricultural

operations or from community activities that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating irreversible illness, or pose a substantial present or potential hazard to human health or the environment if improperly treated, stored, transported, disposed of or otherwise managed, or any waste identified as hazardous pursuant to A.R.S. §49-922.

Hazardous waste does not include solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under 402 of the Federal Water Pollution Control Act (P.L. 92-500; 86 STAT. 816) as amended, or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 (68 STAT. 919), as amended.

Highest Adjacent Finished Grade: The highest finished ground elevation after construction next to the walls of a structure.

Highest Adjacent Natural Grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure (44 CFR 59.1): Any structure that is:

Listed individually in the National Register of Historic Places, a listing maintained by the Department of the Interior, or preliminarily determined by the Secretary of the Interior (Secretary) as meeting the requirements for individual listing on the National Register;

Certified or preliminarily determined by the Secretary 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;

Individually listed on a state inventory of historic places with historic preservation places in states with historic preservation programs which have been approved by the Secretary; or

Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by: A) an approved state program as determined by the Secretary; or B) directly by the Secretary in states without approved programs.

Inactive Alluvial Fan: An alluvial fan where floodwater typically is within incised channels and adjacent stable land.

Landfill: See "Solid Waste Landfill."

Levee: A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

Levee System: A flood protection system that consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest Floor: 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 these Regulations.

Market Value: Market Value is determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation that has accrued since the structure was constructed. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the physical deterioration of the structure and functional obsolescence as approved by the Floodplain Administrator, but shall not include economic or other forms of external obsolescence.

Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

Mean Sea Level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum of 1988 (NAVD) or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Maps are referenced.

Mobile/Manufactured Home: A structure transportable in one or more sections that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "Mobile/Manufactured Home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For flood insurance purposes, the term "Mobile/Manufactured Home" does not include park trailers, travel trailers, and other similar vehicles.

Natural and Beneficial Functions of Floodplains: Includes, but is not limited to the following: natural flood and sediment storage and conveyance, water quality maintenance, groundwater recharge, biological productivity, fish and wildlife habitat, harvest of natural and agricultural products, recreation opportunities, and areas for scientific study and outdoor education.

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

New Manufactured Home Park or Subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the community.

Nonconforming Use: The use of any land, building or permanent structure lawfully existing either on the effective date of the adopted floodplain delineation in which the land, building or permanent structure is located, or August 3, 1984, the effective date of A.R.S. §48-3601 et. seq., whichever is the earlier date.

One-Hundred Year Flood: The flood having a one percent (1%) chance of being equaled or exceeded in any given year. (See Base Flood definition)

Obstruction: Anything in, along, across or projecting into any watercourse that 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, 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.

Person: An individual or his agent, firm, partnership, association, corporation, municipality, or agent of the aforementioned groups, or this State or its agencies or political subdivisions.

Piedmont Assessment Manual: The document developed by the District to aid in the identification and delineation of active and inactive alluvial fan flood hazard areas.

Policies and Standards: The document developed by the District (Drainage Policies and Standards for Maricopa County) to provide technical guidance for application of the Floodplain Regulations and Drainage Regulations for Maricopa County.

Recreation Vehicle: Any vehicle or portable unit designed for living, sleeping, housekeeping or office purposes that is: A) not more than forty (40) feet in length or eight (8) feet in width; B) transportable on its own chassis; C) maintained in a readily transportable condition at all times; and D) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. This definition includes motorized and non-motorized vehicles, travel trailers, camping trailers, but does not include mobile/manufactured homes or buildings as defined by these Regulations.

Regulatory Flood Elevation (RFE): The elevation which is determined by the criteria established in the applicable section of Article Six of these Regulations and is typically a measured amount above the Base Flood Elevation, floodway or flood depth.

Sand and Gravel Mining: Any development that involves the extraction of sand and gravel or other materials from a floodplain.

Shallow Flooding: Area of flooding with average depths of one (1) to three (3) feet.

Solid Waste: Any garbage, trash, rubbish, refuse, sludge from a waste treatment plant, water supply treatment plant or pollution control facility and other discarded material, including solid, liquid, semisolid or contained gaseous material but not including domestic sewage or hazardous waste.

Solid Waste Landfill: Either a public or private facility at which solid waste is placed on or in land for the purpose of long-range storage or disposal. Solid waste landfill does not include a land application unit, surface impoundment, injection well, compost pile or agricultural on-site disposal areas covered under A.R.S. §49-766.

Special Flood Hazard Area: Land in a floodplain subject to a one-percent (1%) or greater chance of flooding in any given year. These areas are designated as Zones A, AO, AE, AH, AR, A99, or Alluvial Fan Zones on the FIRM or Floodplain Management Maps and other areas determined by the criteria adopted by the Director of the Arizona Department of Water Resources. (44 C.F.R. Ch. 1, 59.1 – Definitions)

Start of Construction: Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation.

Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units, or not part of the main structure.

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

State Standards: Documents defining standards for floodplain management as adopted by the Director of the Arizona Department of Water Resources pursuant to A.R.S. §48-3605(A).

Structure: Anything affixed to the ground or attached to something located on the ground, including, but not limited to fences, walls, berms, levees, fill, gas or liquid storage tanks, buildings and mobile/manufactured homes as defined by these Regulations, or other features that have the potential to obstruct, divert or retard flood flows.

Substantial Damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred, as determined by a duly licensed appraiser.

Substantial Improvement: Any repair, reconstruction, rehabilitation, addition or other improvement of a structure, the estimated cost of which as determined by a licensed contractor equals or exceeds fifty percent (50%) of the fair market value or the appraised value, whichever may be higher, of the building or structure either: A) before the improvement or rehabilitation is started, or B) if the building or structure has been damaged by any origin and is being restored, before the damage occurred. In the case of structures that have been damaged, the value of the rehabilitation or restoration must include the fair market cost of all material and labor required to return the structure to its pre-damaged condition, regardless of the actual work performed.

“Substantial Improvement” is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building or structure commences, whether or not that alteration affects the external dimensions of the building or structure. The term does not include any project for improvement of a building or structure which has been identified by the local building official to correct violations of existing state and local health, sanitary or safety code requirements; nor does it include any alteration of a building or structure listed on the National Register of Historic Places or State Inventory of Historical Places.

Variance: A grant of relief from the requirements of these Regulations that do not result in danger or damage to persons or property in floodplains in the area of jurisdiction and that permits construction or other uses of property in a manner that would otherwise be prohibited or restricted by these Regulations.

Violation: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications or other evidence of compliance required in these Regulations is presumed to be in violation until such time as that documentation is provided.

Watercourse: A lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Watercourse Master Plan (WCMP): A hydraulic plan for a Watercourse that examines the cumulative impacts of existing development and future encroachment in the floodplain and future development in the watershed on potential flood damages and/or erosion hazards, and establishes technical criteria for subsequent development so as to minimize potential flood damages for all flood events up to and including the 100-year flood.

Zone A: An area with an approximate delineation of a floodplain. Floodway boundaries and Base Flood Elevations have not been determined.

Zone AE: An area with a detailed delineation of a floodplain and in which Base Flood Elevations have been determined. Floodway may be part of the delineation.

Zone AH: An area with flood depths of one (1) to three (3) feet (usually areas of ponding); Base Flood Elevations have been determined.

Zone AO: An area with Flood depths of one (1) to three (3) feet (usually sheet flow on sloping terrain); average flood depths have been determined. For areas of alluvial fan flooding, velocities may have also been determined.

Zone AR: Special Flood Hazard Area formerly protected from the one percent (1%) annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the one percent (1%) annual chance or greater flood.

Zone A99: Area to be protected from one percent (1%) annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

Zone D: Areas in which flood hazards are undetermined, but possible.

Zone X (shaded): Areas of 500-year flood; areas of 100-year flood with average depths of less than one (1) foot or with drainage areas less than one (1) square mile; and areas protected by levees from the 100-year flood.

Zone X (unshaded): Areas to be determined outside the 500-year floodplain.

Section 206. Definitions Pertinent to Inspection and Enforcement

In this Section, unless the context otherwise requires:

Administrative Hearing: A proceeding wherein evidence is taken for the purpose of determining an issue of fact and reaching a decision on the basis of that evidence. This proceeding takes place outside the judicial process and before a Hearing Officer who has the authority to conduct such hearings.

Administrative Search Warrant: An order in writing issued in the name of the State of Arizona, signed by a magistrate, directed to a peace officer, commanding him to accompany an appropriate official to search and inspect property in the interest of the public health, safety or welfare as part of an inspection program authorized by law.

Alleged Violator: Any person as herein defined who allegedly violates any flood control statute, regulation, ordinance, rule or terms and stipulations of a floodplain permit.

Cease and Desist Order: An order from the Floodplain Administrator prohibiting the person or entity to which it is directed from undertaking or continuing a particular activity or course of conduct.

On-Site Representative: A person who is authorized by the regulated person to accompany the District inspector or regulator on the premises.

Other Designated Representative: A person over eighteen years of age, other than an attorney, authorized in writing by the owner or alleged violator to represent them in a public hearing before the Hearing Officer. The written authorization shall be in a form sufficient to satisfy the Hearing Officer that the person has in fact been authorized to act in the owner's or alleged violator's behalf, and that they understand and agree to be bound by actions taken by the designated representative in proceedings before the Hearing Officer.

Peace Officers: Sheriffs of counties, constables, marshals, policemen of cities and towns, commissioned personnel of the Department of Public Safety, or others included in A.R.S. §1-215.28.

Remediation: Returning a site that has been disturbed to an acceptable condition of flow conveyance, erosion control, and environmental compliance by actions of the property owner or their representative.

ARTICLE THREE

FLOOD HAZARD BOUNDARIES

Section 301. Area of Jurisdiction

- A.** For floodplain management purposes and enforcement of these Regulations, area of jurisdiction means the incorporated and unincorporated areas of Maricopa County, including public lands, excluding those incorporated areas of cities or towns that have elected to assume floodplain management powers and duties pursuant to A.R.S. §48-3610.
- B.** Area of jurisdiction for floodplain management under these Regulations includes the following:
 - 1. Watercourses or areas designated as Special Flood Hazard Areas as authorized in A.R.S. §48-3609(A);
 - 2. Areas with contributing watersheds with flows greater than 50 cubic feet per second (cfs) in the unincorporated areas of the county;

Section 302. Flood Hazards Not Delineated

- A.** In areas without delineated flood hazard zones where development is imminent or ongoing, the Floodplain Administrator may require developers of land to delineate floodplains to be administered under these Regulations.
 - 1. For any development, the developer shall delineate the 100-year floodplains and erosion setbacks per Arizona State Standards or other adopted technical standards developed by the District to avoid adverse impacts. Such delineations shall be consistent with criteria established by the Director, Arizona Department of Water Resources, and may be forwarded to the Federal Emergency Management Agency for adoption.
 - 2. Per 44 CFR Ch.1 et seq., if the State of Arizona has not adopted floodplain regulations, any Development on state land shall comply with local regulations.
 - 3. Other sources include, but are not limited to: A) a developer of floodplain property, B) State or County agency, C) any agency which must delineate a floodplain as a result of completion of a flood control structure, or D) the Federal Emergency Management Agency.
 - 4. Such delineations shall be submitted to the Floodplain Administrator to be reviewed for technical adequacy. The Floodplain Administrator may forward such delineations to the Arizona Department of Water Resources and to the Federal Emergency Management Agency with a recommendation for approval or denial.
 - 5. All delineations approved by the Federal Emergency Management Agency are hereby adopted as referenced and shall be included on the Flood Management Maps for Maricopa County.
- B.** The Floodplain Administrator may forward to the Federal Emergency Management Agency other delineations obtained from other sources, provided they are determined to be consistent with criteria established by the Director of the Arizona Department of Water Resources.

Section 303. Basis for Establishing Special Flood Hazard Areas

The Special Flood Hazard Areas identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in scientific and engineering report entitled “The Flood Insurance Study for Maricopa County, dated July 2, 1979,” with accompanying Flood Insurance Rate Maps (FIRMs) and flood boundary and Floodway maps (FBFM), dated July 2, 1979, and all subsequent amendments and/or revisions, including Digital Flood Insurance Rate Maps, are hereby adopted by reference and declared to be a part of these Regulations. This Flood Insurance Study (FIS) and attendant mapping is the area of applicability of these Regulations and may be supplemented by studies for other areas that allow implementation of these Regulations and are recommended to the Board of Directors by the Floodplain Administrator. The Board, within its area of jurisdiction shall delineate or may require developers of land to delineate, as authorized by A.R.S. §48-3609, for areas where development is ongoing or imminent, and thereafter as development becomes imminent, floodplains consistent with the criteria developed by FEMA and the Director of the Arizona Department of Water Resources. The FIS, FIRMs and FBFMs are on file at the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona, 85009.

Section 304. Other Flood Hazard Boundaries

Whenever the Floodplain Administrator determines through a flood hazard study, Watercourse Master Plan, or other flood related study authorized by the Board that a flood related hazard exists due to such factors as high velocity flows, erosion, sediment transport, deposition, unstable soil conditions, unstable flow path, or land subsidence, the Floodplain Administrator shall designate such hazard areas on the Flood Management Maps for Maricopa County. The Floodplain Administrator shall establish technical criteria and enforce rules and regulations for subsequent development that meet criteria adopted by the Director of Arizona Department of Water Resources or as necessary to participate in the Community Rating System and National Flood Insurance Programs. When appropriate these District studies authorized by the Board may be forwarded to the Federal Emergency Management Agency.

Section 305. Watercourse Master Plans

- A. Authorization:** The District, whenever it has completed a Watercourse Master Plan, may submit the plan, including uniform rules for that river or drainage system pursuant to A.R.S. §48-3609.01 to the Board for adoption. If adopted by the Board, the Floodplain Administrator shall enforce the Watercourse Master Plan under these Regulations.
- B. Public Notification:** During the preparation of a Watercourse Master Plan, the owners of record of real property within and immediately contiguous to the watercourse or watercourses included in the planning shall be publicly notified by the Board or its agents so that the owners may have input to the planning process. In addition, the aggregate mining operations recommendation committees organized pursuant to A.R.S. §11-830(D), if any, shall be notified.
- C. Recharge Techniques:** All Watercourse Master Plans shall consider recharge techniques including but not limited to: swales, dry wells, sand tanks and small dams.

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- D. Minimum Standards:** Requirements for a Watercourse Master Plan shall meet the minimum requirements under the National Flood Insurance Program or the criteria adopted by the Director of The Arizona Department of Water Resources. In case of conflict the most stringent requirements shall prevail.

Section 306. Publication of Flood Hazard Boundaries

All flood hazard designations as authorized by these Regulations including but not limited to Erosion Control (Hazard) Zones, Watercourse Master Plans, moveable bed watercourses and other special flood related designations and, including all Zones A, AH, AO, AE, AR, A99, and Alluvial Fan Zones on the Flood Insurance Rate Maps for Maricopa County, Arizona, shall be shown on the official Flood Management Maps for Maricopa County.

For floodplain management purposes, areas that are under current flood hazard study shall be designated by the Floodplain Administrator as pending delineations on the Flood Management Maps for Maricopa County as the best technical data available awaiting final approval of the study by the Federal Emergency Management Agency.

Section 307. Public Notice

Whenever a flood hazard identification study has been authorized by the Board, the District shall publish a notice concerning the intent and scope of the study and notify affected adjacent political jurisdictions. The District shall also mail information concerning the study to affected property owners or hold a public meeting for the affected property owners.

Section 308. Determination in Case of Dispute

If the boundary of any floodplain with a Zone A delineation, floodway, floodway fringe, area of shallow flooding, including ponding areas, alluvial fans, or other flood hazard boundaries is in dispute, the Floodplain Administrator shall determine the boundary using the best technical data available. In cases where a revision of the floodway becomes necessary, the required public notice and public hearing process shall be followed and the necessary information shall be submitted to the Federal Emergency Management Agency.

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ARTICLE FOUR

FLOODPLAIN USE PERMIT, APPEALS, AND VARIANCES

Section 401. Floodplain Use Permit Required

- A.** A person shall not engage in any development which will divert, retard, or obstruct the flow of water in any watercourse and threaten public health or safety or the general welfare without securing written authorization from the Board or its designee. Where the watercourse is a delineated floodplain, no development shall take place in the floodplain without written authorization from the Board. Written authorization from the Board is established herein as the Floodplain Use Permit signed by the Floodplain Administrator. If the watercourse is not delineated, delineation may be required pursuant to Article Three, and once delineated, a Floodplain Use Permit shall be required prior to development.
- B.** Applications shall be submitted in accordance with the current District requirements or if applicable community formats and include the information as set forth in this Article.
- C.** The applicant shall submit any information that the Floodplain Administrator considers necessary to ensure that the development specified in the application complies with relevant statutes, rules, regulations, ordinances, executive orders or delegation agreements. The applicant may also be required to provide certification that all requirements of the Floodplain Use Permit have been met [44 C.F.R. Ch. 1, 60.3(a)(2)].
- D.** Renewal of a Floodplain Use Permit for Extraction of Sand and Gravel or Other Materials: The permittee may submit an application for the renewal of a Floodplain Use Permit. The application must be submitted prior to the expiration date of the permit with sufficient time to allow for the review and approval of the permit. Failure to submit an application for the renewal of the permit before the expiration date shall cause the permit to expire and operations within the floodplain to cease and require that a permittee obtain a new permit.
- E.** Voluntary Limited Suspension of a Floodplain Use Permit for Extraction of Sand and Gravel or Other Materials: The permittee may request a suspension of a Floodplain Use Permit for the extraction of sand and gravel or other materials by submitting a written request to the Floodplain Administrator that contains the following information:
1. The facility location and permit number for which a suspension is being requested,
 2. The effective date and time frame of the suspension,
 3. A statement of the reason or reasons for the suspension, and
 4. Current facility contact information to be maintained with the Floodplain Administrator.

If the permittee is in compliance with the current permit, the Floodplain Administrator shall issue a suspension of the existing permit for a period not-to-exceed five (5) years during a single suspension period or not-to-exceed a total of five (5) years during multiple suspension periods. The expiration date for any permit suspended under this Section shall be extended by the total time period(s) of the suspension(s).

While a Floodplain Use Permit for the extraction of sand and gravel or other materials is suspended, the permittee is required to maintain existing erosion controls; and to make repairs to the property necessitated by flood events as required by permit or agency directive. All mining, processing of material, material handling, grading, or any other activities not expressly authorized by the Floodplain Administrator within the floodplain shall cease during the suspension period(s). The suspension of the Floodplain Use Permit for the extraction of sand and gravel or other materials does not limit the permittee's right to maintain or remove equipment or impact any other operations that take place entirely outside of the floodplain.

While a Floodplain Use Permit for the extraction of sand and gravel or other materials within the floodplain is suspended, the Floodplain Administrator may inspect the permitted property to ensure compliance with this Section.

The permit may be reactivated by the permittee by submitting a written notification to the Floodplain Administrator fifteen (15) days prior to the resumption of operations to allow the Floodplain Administrator time to inspect the site to verify compliance with the permit. At the end of the suspension period or upon reactivation of the permit, the Floodplain Administrator will issue a new permit with a revised renewal date reflecting the extension of the time associated with suspension period.

Section 402. Permit Fees

The Board has adopted a fee schedule pursuant to A.R.S. §48-3603(E) for review of permit applications and variances from or interpretations of these Regulations. No permit shall be processed, and no permit shall be considered to be issued, until all applicable fees have been paid pursuant to these Regulations. The Fee Schedule is adopted by Resolution to be a part of these Regulations as Appendix A.

Section 403. Application Requirements

- A.** Applications for a Floodplain Use Permit, except for extraction of sand and gravel or other material, shall include:
1. A completed application form in accordance with the current District requirements or if applicable community formats signed by the property owner or their designated agent, contractor or consultant.
 2. A signed and notarized Property Owner Authorization form if the owner wishes to grant an agent, contractor or consultant authority to make decisions on their behalf;
 3. A signed Warning and Disclaimer of Liability form;
 4. Plans drawn to scale showing the nature, location, dimensions and elevation of the property, existing or proposed structures, fill, storage of materials, floodplains, and drainage facilities.
 5. Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all existing and proposed structures. In Zone AO the elevation of existing highest adjacent natural grade and proposed elevation of lowest floor of all structures;

6. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed;
7. Base Flood Elevation and Regulatory Flood Elevation data for subdivision proposals or other development greater than fifty (50) lots or five (5) acres;
8. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
9. All information required as set forth in Article Six – Development Standards.

B. Extraction of Sand and Gravel or Other Materials

1. Applications for a Floodplain Use Permit for the extraction of sand and gravel or other materials shall include the following:
 - a. A completed Floodplain Use Permit application form;
 - b. A signed and notarized authorization if the applicant wishes to grant an agent, contractor or consultant authority to make decisions on their behalf;
 - c. A signed acknowledgement from the property owner that a Floodplain Use Permit is being sought and, if applicable, designation of an operator authorized to mine the property;
 - d. A signed Warning and Disclaimer of Liability form;
 - e. A plan of development for the extraction of sand and gravel or other materials, which shall contain the following:
 - 1) Administrative information that includes parcel data, site map(s), and appropriate contact information;
 - 2) A mining plan that shows the extent and depth of the area(s) to be excavated along with appropriate benchmarks, elevations and phases;
 - 3) A report of the engineering practices and design(s) that demonstrate there will be no adverse impacts to structures or surrounding properties from all flows up to and including the 100-year flood;
 - 4) A description of all other uses associated with the mining operation, such as but not limited to, processing of material, batch plants, concrete plants, storage areas, access roads; and
 - 5) A floodplain closure plan which causes the land to be, when the approved use is terminated, in such a condition as to maintain stability of the floodplain, to prevent flood related erosion or to not aggravate existing flood related erosion and to prevent adverse impacts to the structures or the property by appropriate means to protect from all flows up to and including the 100-year flood. The plan may require financial assurances for performance of closure as may be authorized by statute.
2. A renewal of an existing approved Floodplain Use Permit for the extraction of sand and gravel or other materials shall be issued with only an administrative completeness review provided that the development has been done in accordance with the approved plan of

development, the approved plan of development has not been modified, no flood related changes in river morphology have occurred and there is no imminent or apparent danger to structures, life or property.

The following must be submitted for the renewal application:

- a. An application for renewal,
 - b. The applicable fee,
 - c. A signed Warning and Disclaimer of Liability form,
 - d. Five copies of the previously approved plan of development,
 - e. A letter signed by the property owner or an authorized representative of record that the mining operation is in compliance with all the conditions of the original permit, and
 - f. A signed and sealed letter from a registered professional engineer that floodplain conditions are substantially unchanged since the original permit was approved.
3. For extraction of sand and gravel or other materials the Floodplain Administrator may issue a permit of short duration for an applicant participation in an ongoing application process.

Section 404. Permit Conditions

- A. Issuance of a Floodplain Use Permit, except for extraction of sand and gravel or other material, shall include the following conditions:
 1. The Floodplain Administrator shall advise the applicant the issuance of a Floodplain Use Permit does not negate requirements to obtain all necessary permits from those governmental agencies from which approval is required by Federal or State law and the applicant may be required to show copies of those required permits.
 2. The applicant may be required to execute deed restrictions or easements running with the land or to post performance bonds, assurances or other security to guarantee the performance of the conditions and restrictions imposed.
 3. The Floodplain Use Permit is subject to review, suspension, and revocation for 1) any substantial deviation from the approved plan, or 2) for any violation of these Regulations, or 3) for any stipulation or other terms and agreements made a part of the Floodplain Use Permit not complied with.
 4. The Floodplain Administrator may place a time limit and any other conditions or restrictions as part of the Floodplain Use Permit consistent with the authority of the Administrator as set forth in these Regulations.
 5. The Floodplain Use Permit will automatically expire if start of construction has not commenced within one (1) year of permit issuance unless an extension has been requested in writing and a written extension is issued by the Floodplain Administrator.
 6. Approval of any map revision request (CLOMR) requiring Community Acknowledgement or Community Overview and Concurrence by FEMA may be declared null and void as determined by the Floodplain Administrator if there is a lapse of time of five (5) years or conditions have changed for the proposed development.

B. Extraction of Sand and Gravel or Other Materials

Issuance of a Floodplain Use Permit for extraction of sand and gravel or other material shall include the following conditions:

1. The Plan of development is subject to post-flood review and possible modification if necessary due to flood related changes in river morphology.
2. The operator of an active sand and gravel extraction operation permitted under these Regulations shall maintain a copy on site of the permit along with an approved Plan of development bearing the approval of the Floodplain Administrator. Failure to maintain a copy on site of the approved Floodplain Use Permit and Plan of development shall be a violation of these Regulations, subject to revocation of the Floodplain Use Permit pursuant to this Section and a fine pursuant to Section 708 of these Regulations.
3. A Floodplain Use Permit for the extraction of sand and gravel or other materials shall not exceed a five (5) year duration unless suspended pursuant to Section 404(B)7 and may be issued for a lesser duration of time as determined by the Floodplain Administrator.
4. The Floodplain Administrator may issue a permit of short duration for an applicant participating in an ongoing application process.
5. Any request for a major or minor change to an approved Floodplain Use Permit for the extraction of sand and gravel or other materials including an approved Plan of development shall require an application to amend the permit.
6. The Floodplain Administrator shall advise the applicant that the issuance of a floodplain use permit does not negate any requirements to obtain all permits from those governmental agencies from which approval is required by Federal or State law.

C. Permit Inspections are required as part of a Floodplain Use Permit and will be conducted in accordance with all statutory requirements.

1. All permitted work shall be inspected in accordance with the specific requirements of the permit stipulations in addition to any in-progress or follow up inspections as may be deemed necessary by the applicant and District inspection staff during the course of construction.
2. Sites permitted for the extraction of sand and gravel or other materials shall be inspected every six (6) months to verify that the plan of development is followed and no violations of these Regulations, applicable laws, or permit conditions exist.
3. Re-inspection of sites permitted for the extraction of sand and gravel or other materials shall be conducted within thirty (30) days after the date set forth in the notice of violation to verify the correction of an alleged violation, or for cease and desist order, within ten (10) days after the notice of violation is served.

D. Permit Timeframes

1. Timeframes for Floodplain Use Permit application completeness and substantive review shall be in accordance with A.R.S. §48-3645.

2. The applicant must submit all items required for the review and approval of a Floodplain Use Permit. If the Floodplain Administrator requests relevant items missing from the application that are necessary for the review and approval of a Floodplain Use Permit the applicant shall submit all requested items for review of the permit application to proceed.
3. The Floodplain Use Permit application shall automatically expire at one (1) year of the notice of request for additional information if no response has been received from an applicant.

Submittal after the year shall be treated as a new application and subject to all submittal requirements and fees. If the applicant is unable to meet this timeframe a request for extension shall be requested in writing and a written extension may be authorized by the Floodplain Administrator.

- E. The rights and responsibilities under a Floodplain Use Permit for any development including extraction of sand and gravel or other materials are non-delegable and cannot be transferred without the written authorization of the Floodplain Administrator.

Section 405. Elevation and Floodproofing Certificates

- A. After obtaining a Floodplain Use Permit and prior to Final Inspection, a complete, correct, and current FEMA Elevation Certificate form prepared by an Arizona Registered Professional Engineer or Land Surveyor shall be submitted to the Floodplain Administrator prior to occupancy or use of any building within a Special Flood Hazard Area designated on the Flood Management Maps, except those uses exempted by applicable law. The required elevation certificate within a Zone AO may be completed by District staff as approved by the Floodplain Administrator.
- B. A complete, correct, and current FEMA Floodproofing Certificate form prepared by an Arizona Registered Civil Engineer shall be submitted for any development that has not been elevated up to the Regulatory Flood Elevation as approved by the Floodplain Administrator.
- C. Encroachment Certification: Any development in a floodway must be reviewed to determine if the development will increase flood heights. An engineering analysis must be conducted before a permit may be issued. A record of the results of this analysis shall be part of the permit file, which may be in the form of a No-rise Certification for Floodways. This No-rise Certification must be supported by technical data and signed by a registered professional engineer. The supporting technical data should be based on the standard step-backwater computer model used to develop the 100-year floodway shown on the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM).
- D. The Floodplain Administrator shall maintain a record of all Elevation and Floodproofing Certificates and may record such certification with the office of the Maricopa County Recorder in a manner so that it appears in the chain of title of the affected parcel of land.

Section 406. Allowed Uses

In accordance with A.R.S. §48-3609(H), unless expressly provided, nothing in these Regulations shall affect the uses of property described below.

1. Existing legal uses of property or the right to continuation of such legal uses. However, if a legal nonconforming use of land, or a building or structure is discontinued for twelve consecutive months or destroyed to the extent of fifty percent (50%) of its market value, as determined by a competent appraiser, any further use shall comply with these Regulations.
2. Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984, or on the date any regulations affecting such property take effect, except that any alteration, addition, rehabilitation or repair to a legal nonconforming building or structure regardless of the cost of the work performed as determined by a licensed contractor which would result in increasing its flood damage potential by fifty percent (50%) or more of the value of such building or structure prior to alteration, addition, rehabilitation or repair, as determined by a competent appraiser shall be either floodproofed or elevated to or above the Regulatory Flood Elevation. On February 25, 1974, the Maricopa County Board of Directors and the Board of Supervisors adopted the 1974 Floodplain Regulations for unincorporated areas of Maricopa County with certain amendments recommended by the Planning and Zoning Director and the sand and gravel industry's suggested revisions to be effective on that day. This is the date used for purposes of establishing existing legal nonconforming use on all properties. The Floodplain Regulations have been subsequently revised and amended in response to changes in the State Statutes and Code of Federal Regulations pertaining to the National Flood Insurance Program.
3. Reasonable repair of structures constructed with the written authorization required by A.R.S. §48-3613.
4. Facilities constructed or installed pursuant to a certificate of environmental compatibility issued pursuant to Title 40, Chapter 2, Article 6.2 of the Arizona Revised Statutes.

Section 407. Exceptions: Review of Plans

In accordance with A.R.S. §48-3613(B), written authorization is not required for nor shall the Board prohibit the following development in a watercourse. Before any construction may begin, the person must submit plans for construction to the Board for review and comment.

Exceptions to these Regulations are as set out in A.R.S. §48-3613(B) & (C) and noted below.

1. Construction of bridges, culverts, dikes and other structures necessary to the construction of public highways, roads, and streets intersecting or crossing a watercourse.
2. Construction of dams for the conservation of flood waters as permitted by Title 45, Chapter 6 of the Arizona Revised Statutes and construction of storage dams for watering livestock or wildlife and structures on the 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.
3. Construction of tailing dams and waste disposal areas used in connection with mining and metallurgical operations. This paragraph does not exempt those sand and gravel operations that may divert, retard or obstruct the flow of waters in a watercourse from complying with and acquiring authorization pursuant to these Regulations.

4. Other construction upon determination by the 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. 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.
7. 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.

Section 408. Personal Liability

The exceptions contained in Section 407 do not relieve any person from liability if that person's actions cause flood damage to any other person or property.

Section 409. Appeals

- A. Appeals may be taken to the Floodplain Review Board pursuant to A.R.S. §48-3612(B) and A.R.S. §48-3642 by any person who feels that there is error or doubt in the interpretation of these Regulations, which includes denial of permits and final decisions of inspections, or that due to unusual circumstances attaching to his property an unnecessary hardship is being inflicted on him. The appeal shall state whether it is a plea for an interpretation or a variance and the grounds for the appeal.
- B. Appeals of any decision of the Floodplain Administrator to the Floodplain Review Board shall be filed with the Floodplain Administrator within thirty (30) calendar days of the receipt of notice of the decision to be appealed, or sixty (60) calendar days from the date of the decision whichever is earlier. The notice of appeal shall be in writing on a form provided by the Floodplain Administrator and specify the grounds for appeal.
- C. During the pendency of an appeal all existing floodplain delineations shall remain in effect. All other matters regarding the proceeding shall be stayed during its pendency unless the Administrator certifies to the Floodplain Review Board that by reason of facts surrounding the application the stay would, in his or her opinion, cause imminent peril to life or property.
- D. The Floodplain Review Board shall fix a time for hearing the appeal and give notice to the parties in interest and to the public as set forth herein. The Floodplain Review Board shall hear and decide the appeal within a reasonable time.
- E. Property shall be posted pursuant to procedures adopted by the Floodplain Review Board.
- F. Any person aggrieved by a decision of the Floodplain Review Board may, within thirty (30) days of such decision, appeal to the Board of Directors by filing a written notice of appeal with the Clerk of the Board on a form provided by the Floodplain Administrator. Said notice shall specify the grounds of the appeal. The Board of Directors shall conduct the appeal under such rules of procedure, as they shall adopt.

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- G.** Any person aggrieved by a decision of the Board of Directors may file a special action in Superior Court of the State of Arizona to determine if an abuse of discretion by the Board of Directors, the Floodplain Review Board or the Floodplain Administrator may have occurred.
- H.** Failure to appeal the Floodplain Administrator's order pursuant to a variance to the Floodplain Review Board within the time period set forth in these Regulations, shall render the order of the Floodplain Administrator final and enforceable.

Section 410. Floodplain Variance

- A.** Generally, Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, provided the procedures of Articles One and Six of these Regulations have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing variances increases.
- 1.** Variances may be issued for the repair, rehabilitation, or restoration of structures listed in the National Register of Historic Places or the State Inventory of Historic Places, upon a determination that the proposed repair or rehabilitation will not preclude the structures' continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
 - 2.** Variances shall only be issued upon showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 205 of this ordinance in the definition of "Functionally Dependent Use."
- B.** Conditions for the issuance of a Variance:
- 1.** A Variance for relief from these Regulations may be issued by the Floodplain Administrator, Floodplain Review Board, or affirmed by the Board of Directors when development does not result in danger or damage to persons or property in floodplains and all of the following criteria are met:
 - a.** That no increase in the Base Flood Elevation would result and that no increase in flood levels within any designated floodway during the base flood discharge would result;
 - b.** That 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 jurisdictional floodplain;
 - c.** That the Variance does not constitute a grant of special privileges inconsistent with the limitations on similar property in the jurisdictional floodplain;
 - d.** That the Variance requested is the minimum necessary, considering the flood hazard, to afford relief;
 - e.** That there is a showing of good and sufficient cause;
 - f.** That a determination that failure to grant the Variance would result in exceptional hardship to the applicant;

zone, a notice of such determination may be recorded with the office of the Maricopa County Recorder in a manner so that it appears in the chain of title of the affected parcel of land. The Floodplain Administrator may also record the Floodplain Use Permit.

C. Recordation of Floodplain Violations

The Floodplain Administrator may cause to have recorded any notice of violation or non-compliance issued pursuant to Section 702.

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ARTICLE FIVE

ALLOWABLE DEVELOPMENT

Section 501. Zone AE Floodway

(Reference Article Six, Section 602 for applicable Development Standards.)

A. A Floodplain Use Permit may be granted for any of the following allowed Development within Zone AE Floodway:

1. Accessory residential uses including, but not limited to, lawns, gardens, parking areas, and play areas.
2. Agricultural uses including, but not limited to, general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, sod farming, and wild crop harvesting.
3. Drive-in theaters, roadside stands, signs, and billboards.
4. Fencing that is open or breakaway to allow for conveyance.
5. Industrial-commercial development including, but not limited to, loading areas, airport landing strips, and parking areas.
6. Marinas, boat rentals, docks, piers and wharves.
7. Operations for extraction of sand and gravel and other materials.
8. Private and public recreational development including, but not limited to, golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, parks, wildlife and nature preserves, game farms, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails.
9. Privately owned and maintained dikes and culverts.
10. Railroads, privately owned and maintained streets, bridges, utility transmission lines, and pipelines.
11. Cell tower projects, if no increase in the Base Flood Elevation would result and no increase in flood levels within the designated floodway during the base flood discharge would result.
12. Stockyards, corrals, and shade structures.

B. Prohibited or Conditioned Uses

1. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited.
2. Storage of other material or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

Section 502. Zone AE

(Reference Article Six, Sections 601 and 603 for applicable Development Standards.)

Within Zone AE, a Floodplain Use Permit may be granted for any of the following:

1. Any development permitted in Section 501.
2. Structures and buildings, including dwellings and mobile/manufactured homes, additions, improvements, recreational vehicles, and other residential development.
3. New and replacement water supply systems, water treatment and sewage collection and disposal systems provided that they are designed to prevent or minimize floodwater contamination during the base flood.
4. New and replacement sanitary sewage systems, provided that they are designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, unless otherwise allowed by a permit in conformance with the Federal Water Pollution Control Act.
5. Septic systems and solid waste landfills, whether public or privately owned, provided that they are located in such a way as to avoid impairment to them or contamination from them during flooding and provided that no part of a solid waste landfill is within one-half mile of a 100-year floodplain that has 100-year year flows in excess of twenty-five thousand (25,000) cubic feet per second as determined by the Federal Emergency Management Agency.
6. Any other development which will not be subject to substantial flood damage and will not cause a hazard to life or property or to the public. These may include uses that can be readily removed from delineated floodplain areas during times of flooding.

Section 503. Zone A Non-Alluvial, Zone A Ponding, and Zone A Shallow Flooding

(Reference Article Six, Sections 601, 604, 605, or 606 for corresponding applicable Development Standards.)

Any development permitted in Sections 501 and 502 that will not increase the threat of flooding to surrounding property, and any other development not specifically named in Sections 501 or 502 provided the applicant submits an analysis of the Zone A Floodplain consistent with Article Six. Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit and may be forwarded to the Federal Emergency Management Agency as described in Article Three, Section 303.

Section 504. Zone AH Ponding

(Reference Article Six, Sections 601 and 607 for applicable Development Standards.)

Any development permitted in Sections 501 and 502 that will not increase the threat of flooding to surrounding property, and any other development not specifically named in Sections 501 or 502 provided the applicant submits an analysis of the Zone AH Floodplain consistent with Article Six.

Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit and may be forwarded to the Federal Emergency Management Agency in the manner described in Article Three, Section 303.

Section 505. Zone AO Ponding Area, Zone AO Shallow Flooding, Zone AO Alluvial Fan

(Reference Article Six, Sections 601, 608, 609, or 610 for corresponding applicable Development Standards.)

Any development permitted in Sections 501 and 502 that will not increase the threat of flooding to surrounding property, and any other development not specifically named in Sections 501 or 502 provided the applicant submits an analysis of the Zone AO Floodplain consistent with Article Six. Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit and may be forwarded to the Federal Emergency Management Agency in the manner described in Article Three, Section 303.

Section 506. Zone A Alluvial Fan Administrative Floodway

(These include Zone A Alluvial Fan High Hazard Area Administrative Floodway, Zone A Alluvial Fan Uncertain Flow Distribution Area Administrative Floodway, and Zone A Approximate Alluvial Fan Administrative Floodway)

(Reference Article Six, Sections 602, 611, 612 or 613 for corresponding applicable Development Standards.)

- A.** Within Zone A Alluvial Fan Administrative Floodway a Floodplain Use Permit may be granted for any of the following:
1. Accessory residential uses including, but not limited to, lawns, gardens, parking areas and play areas.
 2. Agricultural uses including, but not limited to, general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, sod farming, and wild crop harvesting.
 3. Drive-in theaters, roadside stands, signs, and billboards.
 4. Fencing that is open or breakaway to allow for conveyance.
 5. Industrial-commercial development including, but not limited to, loading areas, airport landing strips, and parking areas.
 6. Marinas, boat rentals, docks, piers, and wharves.
 7. Operations for extraction of sand and gravel and other materials.
 8. Private and public recreational uses including, but not limited to, golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, parks, wildlife and nature preserves, game farms, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails.
 9. Privately owned and maintained dikes and culverts.

10. Railroads, privately owned and maintained streets, bridges, utility transmission lines and pipelines.
11. Cell tower projects, if no increase in the Base Flood Elevation would result and no increase in flood levels within the designated floodway during the base flood discharge would result.
12. Stockyards, corrals, and shade structures.

B. Prohibited or Conditioned Uses

1. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited.
2. Storage of other material or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

Section 507. Zone A Alluvial Fan

(Reference Article Six, Sections 601 and 614 for applicable Development Standards.)

Any development permitted in Sections 501 and 502 that will not increase the threat of flooding to surrounding property. Any other development not specifically named in Sections 501 or 502 provided the applicant submits an analysis of the Zone A floodplain consistent with Article Six. Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit and may be forwarded to the Federal Emergency Management Agency in the manner described in Article Three, Section 303.

Section 508. Other Flood Hazard Zones

(Reference Article Six, Sections 601 and 615 for applicable Development Standards.)

This article regulates development located in Flood Hazard Zones designated by the Floodplain Administrator not specifically regulated elsewhere in these Regulations including but not limited to erosion hazard zones, Watercourse Master Plans, Area Drainage Master Plans, moveable bed watercourses, and other special flood related designations determined based upon authorized studies. Additional criteria include:

1. New development and substantial improvement to existing development shall require a Floodplain Use Permit and are subject to the provisions of Article Four. Issuance of a Floodplain Use Permit does not exempt the holder of the Floodplain Use Permit from any additional requirements necessary to obtain flood insurance.
2. Development for which a Floodplain Use Permit may be granted are: development permitted elsewhere in these Regulations provided the applicant submits technical information which demonstrates that neither the development nor the specific flood hazard will be adversely affected by such development.

ARTICLE SIX

DEVELOPMENT STANDARDS

Section 601. General Development Standards

(Applicable to all Allowable Development as identified in Article Five, except Sections 501 and 506)

When a Floodplain Use Permit is required pursuant to Section 401, these Development Standards shall apply in all Special Flood Hazard Areas except Zone AE Floodway and Alluvial Fan Administrative Floodway. See additional requirements for specific Flood Hazard Zones in Sections 602 through 618. All standards should be read and applied pertinent to development proposed.

A. General

1. Residential homes with a basement are not permitted within the 100-year floodplain.
2. New construction or substantial improvement to any existing structure shall be constructed with methods that minimize flood damage with materials and utilities resistant to flood damage.
3. Dwellings other than mobile/manufactured homes shall have the lowest floor elevated and all utilities, including ductwork, shall be floodproofed up to or above the Regulatory Flood Elevation. See Section 601(G)2.
4. 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.
5. In order to control erosion and preserve the natural and beneficial functions of the floodplain, removal of vegetation shall be the minimum necessary for the development.
6. Adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures are required.
7. For buildings elevated greater than five (5) feet, enclosures, including breakaway walls, below the Base Flood Elevation are prohibited. Screening and open latticework is not considered an enclosure. Applicant must sign a non-conversion agreement, agreeing not to enclose the area for habitable use.
8. All new construction and substantial improvements that fully enclose areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement, and 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. The applicant shall provide a Flood Proofing Certificate by an Arizona Registered Professional Engineer certifying that the flood proofing requirements have been met, or the design shall meet the provisions of Section 601(A)9.
9. Buildings other than dwellings or any type of residence may have the lowest floor below the Regulatory Flood Elevation provided that all of the following conditions are met:
 - a. They shall be watertight with walls substantially impermeable to the passage of water; and

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- b. Structural components and utilities, including ductwork shall have the capacity of resisting the effects associated with a base flood; and
 - c. Designs for meeting these criteria shall be certified on a Flood Proofing Certificate by an Arizona Registered Professional Engineer or the design must meet or exceed the following minimum criteria:

A minimum of two (2) openings, on at least two (2) sides, having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above finished grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they allow the automatic entry and exit of floodwaters.

- 10. Storage containers (i.e., shipping containers) designed to be watertight with walls substantially impermeable to the passage of water and the capacity of resisting the effects associated with a base flood shall not be required to have openings as required in Section 601(A)9. Anchoring may be required.
- 11. When the improvements, modifications, additions, reconstruction or repairs reach the fifty percent (50%) substantial improvement threshold, then the entire structure must be brought into compliance. The value of the improvements, modifications, reconstruction, repair or additions is counted cumulatively for five (5) years to determine whether the substantial improvement threshold has been met.
- 12. For all new construction and substantial improvements, the building material below the Regulatory Flood Elevation shall be of flood resistant material. Flood-resistant materials include any building product capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage. Prolonged contact means at least 72 hours, and significant damage is any damage requiring more than low-cost cosmetic repair (such as painting). Additional information can be found in FEMA Technical Bulletins. Materials include, but are not limited to the following:
 - a. Concrete, concrete block, or glazed brick;
 - b. Clay, concrete, or ceramic tile;
 - c. Galvanized or stainless steel nails;
 - d. Indoor-outdoor carpeting with synthetic backing (not fastened down);
 - e. Vinyl, terrazzo, rubber, or vinyl floor covering with waterproof adhesives;
 - f. Metal doors and window frames;
 - g. Polyester-epoxy paint;
 - h. Stone, slate, or cast stone;
 - i. Mastic, silicone, or polyurethane formed-in-place flooring. Styrofoam insulation;
 - j. Water resistant glue;
 - k. Pressure treated (.40 CCA minimum) or naturally decay-resistant lumber, marine grade plywood.

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13. All recreation vehicles in accordance with 44 CFR 60.3(C)(14) placed on site will either:
- a. Be on-site for fewer than 180 consecutive days, and be fully licensed and ready for highway use. A recreation vehicle is ready for highway use if it is on 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
 - b. Meet the permit requirements of Article Four of these Regulations and the elevation and anchoring requirements for manufactured homes in Section 601.

B. Mobile/Manufactured Homes

1. Mobile/manufactured homes including permanently placed recreation vehicles and modular buildings shall be elevated so that the bottom of the structural frame is at or above the Regulatory Flood Elevation and is anchored to prevent flotation, collapse or movement. Methods of anchoring may include, but not be limited to, use of over the top or frame ties to ground or foundation anchors. Specific requirements shall be as follows:
 - a. Over the top or frame ties shall be provided at each of the four corners of the mobile/manufactured home, with additional ties on each side at intermediate locations;
 - b. Mobile/manufactured homes more than fifty (50) feet long require one (1) additional tie per side;
 - c. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds;
 - d. Adequate surface drainage and access for a hauler are provided;
 - e. If the mobile/manufactured home is elevated on piers, setbacks shall be sufficient to permit steps; pier foundations shall be placed in stable soil no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level. A scour analysis may be required when elevating on piers;
 - f. Any additions to the mobile/manufactured home shall be similarly anchored; and
 - g. Attached appliances and all utilities, including ductwork, shall be either elevated or floodproofed up to the Regulatory Flood Elevation.

The above requirements do not apply to units in storage, and may be waived by the Floodplain Administrator on a case by case basis for units placed for less than 180 consecutive days that are properly licensed and ready for highway use, or are on jacks or wheels with quick disconnect of utilities and have no permanently attached additions.

2. For all mobile/manufactured home parks and mobile/manufactured home subdivisions, an evacuation plan indicating alternate vehicular access and escape routes shall be filed with the Maricopa County Department of Emergency Management.
3. A mobile home located in a floodplain prior to August 3, 1985 may be replaced by another mobile home if:
 - a. The mobile home to be replaced was not damaged by a flood to more than fifty per cent of its value before the flood.

4. Fill material for purposes other than solid waste landfills shall not include solid waste, wood, or other buoyant materials nor hazardous, toxic or deleterious material and shall be protected as needed against scour and erosion by riprap or other protective measures as approved by the Floodplain Administrator.

E. Garages and Low Cost Accessory Structures

1. Attached Garages

- a. A garage attached to a residential structure, constructed with the garage floor slab below the regulatory flood elevation, must be designed to allow for the automatic entry and exit of floodwaters. Areas of the garage below the Regulatory Flood Elevation must be constructed with flood resistant materials.
- b. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed as required in Section 601(A)9.
- c. Applicable Standards in Section 601(A) and (B) shall apply to attached garages.

2. Detached Garages and Accessory Structures

- a. An accessory structure used solely for parking (2-car detached garages or smaller) or limited storage (small, low-cost sheds) may be constructed such that its floor is below the regulatory flood elevation, provided the structure is designed and constructed in accordance with the following requirements:
 - 1) Use of the accessory structure must be limited to parking or limited storage;
 - 2) The portions of the accessory structure located below the Regulatory Flood Elevation must be built using flood-resistant materials as identified in 601(A)12;
 - 3) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;
 - 4) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the Regulatory Flood Elevation;
 - 5) The accessory structure must comply with floodplain encroachment provisions in these Regulations; and
 - 6) The accessory structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with Section 601(A)9.
- b. Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in these Regulations.

F. Landfills / Extraction of Sand and Gravel and Other Materials

1. Permitted landfills shall be protected against scour, erosion and contamination by and contamination of the 100-year flood event.
2. Extraction of sand and gravel and other materials operations shall meet the requirements of this Article where applicable.

G. Other Requirements

1. Issuance of a Floodplain Use Permit does not exempt the holder of the Floodplain Use Permit from any additional requirements necessary to obtain flood insurance.
2. The applicant shall provide an Elevation and/or Flood Proofing Certificate prepared by an Arizona Registered Professional Engineer or Land Surveyor to the Floodplain Administrator certifying that the elevation or flood proofing requirement has been met when required. A separate certificate of the appropriate type shall be furnished for each building.
3. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive, or could be injurious to human, animal or plant life is prohibited.
4. Storage of other material or equipment may be allowed if approved by the Floodplain Administrator if it will not be subject to major damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

Section 602. AE Floodway

(Applicable to Article Five, Section 501 Allowable Development)

A. General Requirements

Standards in addition to Section 601 for development in AE Floodway are:

1. Any development in a floodway must be reviewed to determine if the project will increase flood heights. An engineering analysis must be conducted before a permit can be issued. A record of the results of this analysis shall be part of the permit file, which can be in the form of a No-rise Certification as required by Section 405(C).
2. Regulatory Flood Elevation is one (1) foot above the floodway elevation or one (1) foot above the Base Flood Elevation, whichever is higher.
3. Septic systems, whether public or privately owned, shall not be located wholly or partially within a floodway.
4. In accordance with A.R.S. §49-772(A)(2) solid waste landfills or any part of such facility, whether public or privately owned, shall not be located wholly or partially within a floodway or within one-half mile of a one-hundred year floodplain that has one hundred year flows in excess of twenty-five thousand (25,000) cubic feet per second, as determined by the Federal Emergency Management Agency. A.R.S. §49-772(C) applies to non-FEMA Floodplains.
5. Any fill material proposed in the floodway must be shown by the applicant to have no detrimental effect. The amount of fill material shall not be greater than is necessary to achieve the purpose for which it is intended as demonstrated by a plan submitted by the applicant indicating the uses to which the filled land will be put, the final dimensions, and the extent of the proposed fill material.

Such fill material shall not include junk, trash, tires, garbage, wood or other buoyant materials, or hazardous, toxic or deleterious materials, and shall be protected against scour and erosion.

6. Structures and development permitted within the floodway shall not include buildings and shall have a low flood damage potential, shall be located so as to minimize obstruction to flood flows with any utilities floodproofed, and shall not be designed or utilized for human habitation.
7. The processing or the outside storage of materials and equipment may be permitted if flooding would cause minimal damage to the material or equipment and such material or equipment is either non-buoyant or firmly anchored or located so as to prevent flotation or is maintained in a readily transportable condition so as to be readily removed from the area within the time available after flood warning.
8. In order to control erosion and preserve the natural and beneficial functions of the floodplain, removal of vegetation shall be the minimum necessary for development.

B. Mining/Extraction of Sand and Gravel and Other Materials in AE Floodway

1. The applicant shall show that excavations will not have a cumulative adverse impact and not be of such depth, width, length, or location as to divert, retard, or obstruct flood water and present a hazard to life, property, or the watercourse in which they are located, and that they will comply with any applicable Watercourse Master Plan adopted by the Board of Directors.
2. Excavations shall not be permitted so close to any floodway crossings, utility structures or facilities as to cause or have the potential to cause an adverse impact on such crossings, utilities or similar facilities.
3. No stockpiling of tailings, overburden or sand and gravel which may obstruct, divert, retard or disrupt the continuity of the natural flow of water shall be permitted, unless otherwise required by state or federal regulations and approved by the Floodplain Administrator.
4. In order to control erosion and preserve the natural and beneficial functions of the floodplain, removal of vegetation shall be the minimum necessary for the development, and in accordance with the approved plan of development.
5. Erosion setbacks and erosion hazard zones within the 100-year floodplain shall meet the State of Arizona State Standards or minimum technical standards determined by the Floodplain Administrator to prevent adverse impacts to structures or property.

Section 603. Zone AE

(Applicable to Article Five, Section 502 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Standards in Zone AE are:

1. The Regulatory Flood Elevation is two (2) feet above the Base Flood Elevation if no floodway has been delineated. If a floodway has been delineated then the Regulatory Flood Elevation is one (1) foot above the floodway elevation or one (1) foot above the Base Flood Elevation, whichever is higher.
2. For Elevation Certificate purposes, the adjacent grade in an AE Zone is finished grade.

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3. A Floodplain Use Permit for the extraction of sand and gravel or other materials within Zone AE shall be granted under the same conditions as Section 602. The following additional conditions are:
 - a. Dikes or levees are permitted provided it can be shown by the applicant that such dikes or levees will not adversely affect structures, road or utility crossings, easements, or right-of-way or other public or private property, and will not cause erosion or diversion of flood flows onto property outside the delineated floodplain, and will not create a danger to life or property.
 - b. The stockpiling and processing of material may be permitted by the Floodplain Administrator.

Section 604. Zone A (non-alluvial)

(Applicable to Article Five, Section 503 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Standards for Zone A are:

1. The Regulatory Flood Elevation is two (2) feet above the community determined Base Flood Elevation. The Elevation Certificate specifies that when a BFE cannot be determined and an RFE based on flood depth is used then the structure must comply with these Regulations.
2. For Elevation Certificates, the adjacent grade is natural grade, unless a datum Base Flood Elevation is determined, then the adjacent grade is finished grade.
3. Extraction of sand and gravel and other materials operations shall meet the Development Standards of Section 602 or Section 603, whichever is applicable. The applicant for a sand and gravel permit in Zone A shall delineate the floodway portion of the floodplain.

Section 605. Zone A Ponding

(Applicable to Article Five, Section 503 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional requirements for Zone A Ponding Area are:

1. The Regulatory Flood Elevation is one (1) foot above the height of the effective outfall or the height of the feature causing the ponding.
2. For Elevation Certificate purposes, the adjacent grade is finished grade.
3. Any volume displacement shall be equally compensated for from within the same ponding area.
4. The effective lateral conveyance shall be preserved.
5. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 606. Zone A Shallow Flooding

(Applicable to Article Five, Section 503 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional standards for Zone A Area of Shallow Flooding are:

1. The Regulatory Flood Elevation is two (2) feet above the community determined Base Flood Elevation.
2. For Elevation Certificate purposes, adjacent grade is natural grade.
3. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 607. Zone AH Ponding

(Applicable to Article Five, Section 504 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Development Standards for Zone AH Ponding are:

1. The Regulatory Flood Elevation is one (1) foot above the Base Flood Elevation.
2. For Elevation Certificate purposes, the adjacent grade is finished grade.
3. Any volume displacement shall be equally compensated for from within the same Ponding Area.
4. The effective lateral conveyance shall be preserved.
5. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 608. Zone AO Ponding Area

(Applicable to Article Five, Section 505 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Development Standards for Zone AO are:

1. The Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.
3. Any volume displacement shall be equally compensated for from within the same Ponding Area.
4. The effective lateral conveyance shall be preserved.
5. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 609. Zone AO Shallow Flooding

(Applicable to Article Five, Section 505 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Development Standards for Zone AO are:

1. The Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.
3. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 610. Zone AO Alluvial Fan

(Applicable to Article Five, Section 505 Allowable Development)

Development shall meet Section 601 General Development Standards. Additional Development Standards for Zone AO are:

1. The Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.
3. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 611. Zone A Alluvial Fan High Hazard Area Administrative Floodway

(Applicable to Article Five, Section 506 Allowable Development)

Development within an Alluvial Fan High Hazard Area, as determined using the Piedmont Assessment Manual shall be regulated in a manner similar to a Floodway as described in Article Six, Sections 602 of these Regulations. Additional Development Standards for Zone A Alluvial Fan High Hazard Area Administrative Floodway are:

Only major engineering measures as outlined in the Piedmont Manual may be used to mitigate the alluvial fan flood hazard in these areas.

Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 612. Zone A Alluvial Fan Uncertain Flow Distribution Area Administrative Floodway

(Applicable to Article Five, Section 506 Allowable Development)

Development within an Alluvial Fan Uncertain Flow Distribution Area as determined using the Piedmont Assessment Manual shall be regulated in a manner similar to a floodway as described in Article Six, Sections 602 of these Regulations. Additional Development Standards for Zone A Alluvial Fan Uncertain Flow distribution Administrative Floodway are:

Only major engineering measures as outlined in the Piedmont Manual may be used to mitigate the alluvial fan flood hazard in these areas.

Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 613. Zone A Approximate Alluvial Fan Floodway Administrative Floodway

(Applicable to Article Five, Section 506 Allowable Development)

Development within an Alluvial Fan Floodway as determined using the Piedmont Assessment Manual shall be regulated in a manner similar to a floodway as described in Article Six, Sections 602 of these Regulations. Additional Development Standards for Zone A Approximate Alluvial Fan Floodway Administrative Floodway are:

Only major engineering measures as outlined in the Piedmont Manual may be used to mitigate the Alluvial Fan flood hazard in these areas.

Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 614. Zone A Alluvial Fan

(Applicable to Article Five, Section 507 Allowable Development)

Development within an Alluvial Fan Zone A as determined using the Piedmont Assessment Manual Development may require an engineered plan.

Development shall meet Section 601 Development Standards. Additional Standards for Zone A Alluvial Fan are:

1. The Regulatory Flood Elevation is two (2) feet above Base Flood Elevation.
2. For Elevation Certificate purposes, the adjacent grade is natural grade unless a datum Base Flood Elevation is determined; then the adjacent grade is finished grade.
3. When development plans propose structures located in the proximity of a wash or with an area of significant sheet flow depth, the applicant shall submit a plan of development prepared by an Arizona Registered Engineer. The plan shall include engineering analysis to mitigate all hazards associated with alluvial fan flooding including inundation, ground erosion, scour around structures, aggradation and degradation. The plan shall also include building pad and lowest floor elevations. The plan shall be consistent with ADWR State Standards.
4. Development requirements in these areas shall include:
 - a. Detailed site topography;
 - b. Identification of lowest floor elevations in relation to flood elevation/depth;
 - c. Identification of all washes through the site including ingress and egress locations;

- d. Identification of provisions to maintain all natural and improved drainage or flood conveyance systems with minimal disruption of the water/sediment system;
 - e. Fill pads that may be impacted by runoff shall be protected against scour and erosion.
5. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

Section 615. Development Standards within Other Flood Hazard Areas

(Applicable to Article Five, Section 508 Allowable Development)

1. Standards adopted for development contained in a Watercourse Master Plan, Area Drainage Master Plan or other hydrologically or hydraulically oriented master plan shall be consistent with sound floodplain management practices and these Regulations.
2. The applicant for any proposed development may be required to provide against encroachment into or protection from the delineated flood hazard.
3. The placement of fill material or extraction of materials may require the Floodplain Administrator's approval of plans prepared by an Arizona Registered Professional Engineer.
4. The standards, provisions, criteria and requirements for development in Flood Hazard Zones imposed by an authorized master plan shall meet or exceed the requirements of these Regulations.
5. In areas where floodways have not been defined using traditional equal conveyance encroachment methods, the Floodplain Administrator may require that the Regulatory Flood Elevation be two (2) feet above the Base Flood Elevation.
6. Extraction of sand and gravel and other materials operations shall meet the Development Standards of this Section if applicable.

ARTICLE SEVEN

ENFORCEMENT

Section 701. Authority

This Section authorizes and specifies the enforcement procedures and establishes the penalties and remedies available for violations to enforce the provisions of these Regulations and to implement the violation, enforcement, and penalty provisions authorized pursuant to A.R.S. §§48-3603(D), 48-3609, 48-3613, 48-3614, 48-3615, 48-3615.01, 48-3622, 48-3626.

Section 702. Violation

A. The following acts constitutes a violation of these Regulations:

1. Engaging in any development or to divert, retard or obstruct the flow of waters in a watercourse if it creates a hazard to life or property without securing a Floodplain Use Permit from the Board of the Flood Control District. Where the watercourse is a delineated floodplain it is unlawful to engage in any development affecting the flow of waters without securing a Floodplain Use Permit from the Board of the Flood Control District.
2. Violating any other statutes, regulations, ordinances or rules governing floodplains including: A) the Floodplain Regulations for Maricopa County, B) the Drainage Policies and Standards for Maricopa County, Arizona, and C) any other rules or ordinances adopted pursuant to authority granted to the Flood Control District under state statute.
3. Engaging in any development that is not in compliance with an active Floodplain Use Permit.
4. Damaging or interfering with a facility that is owned, operated or otherwise under the jurisdiction of the Flood Control District without written authorization from the Board of the Flood Control District.
5. It is a civil offense for any person to violate any regulations, ordinances, or rules of the Flood Control District punishable in accordance with A.R.S. §48-3615(C).

B. Violators of any provision of these Regulations shall be notified by the Floodplain Administrator, or his designee, who shall state the nature of the violation and order corrective action.

C. Failure to comply with ordered corrective action may result in submission of a declaration for denial of flood insurance for otherwise insurable structures to the Administrator of the Federal Insurance Administration pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended (codified at 42 U.S.C §4023).

Section 703. Enforcement

A. Pursuant to regulations, ordinances, rules and technical standards as adopted from time to time by the Board of the Flood Control District, the Floodplain Administrator shall:

1. Conduct inspections to determine if violations of its regulations, ordinances, rules or permit conditions exist.
 - a. The Floodplain Administrator and its agents may have reasonable access for inspection pursuant to written authorization under A.R.S. §48-3609(K) or the terms of a Floodplain Use Permit. If no written authorization has been issued, the Floodplain Administrator may inspect during regular business hours, or in the case of emergency, at any time.
 - b. If the Floodplain Administrator and its agents are denied reasonable access for inspection, the Chief Engineer of the District may apply for an administrative search warrant to be served by a certified peace officer.
 2. If a violation of the District regulations, ordinances, rules, or permit conditions (referenced as stipulations as part of the permit) is found, the Floodplain Administrator will serve upon the property owner or permit holder a Notice of Violation.
- B.** Pursuant to A.R.S. §48-3615.01, if the violation is not resolved by the deadline in the Notice of Violation, the Floodplain Administrator may set the matter for an administrative hearing before a Hearing Officer and serve notice of the hearing date, time, and place to the property owner or permit holder. The Floodplain Administrator may seek to enforce these Regulations in a court with applicable jurisdiction.

Section 704. Service of Notice of Violation

- A.** If a District representative determines that a violation is occurring on the privately owned real property under the jurisdiction of the District, that representative shall serve, or cause to be served, a Notice of Violation to the real property owner and separately on the alleged violator. If a District representative determines that a District facility has been damaged or is being interfered with, that representative shall serve, or cause to be served, a Notice of Violation to the alleged violator. For the purposes of this section, service shall be deemed complete upon:
1. Personal service to the recipient; or
 2. Receipt of the return receipt when mailing a Notice of Violation to the recipient, postage pre-paid, by certified mail, return receipt requested; or
 3. Expiration of ten (10) business days after the date of posting the Notice of Violation on the property.
- B.** Where the recipient is the owner of the real property, the address for notice shall be the address from the most recently issued equalized assessment roll for the property or as otherwise appears in the current records of the county. Where the recipient is a corporate or other entity, the address for the notice shall be the address of the statutory agent, or if none, the address from the most recent records of the Corporation Commission or Secretary of State. Service by posting of the Notice of Violation may only be used where the owner, operator, or alleged violator cannot be located after reasonable efforts by the Floodplain Administrator.

Section 705. Response to the Notice of Violation

Upon receipt of a Notice of Violation a person may:

1. Admit the allegations by appearing on the date and time indicated in the Notice of Violation to enter such admission;
2. Admit the allegations by mailing or delivering to the Floodplain Administrator the form accompanying the Notice of Violation indicating in writing the admission to the allegations. This admission shall include an agreement to acquire any permits as necessary, an agreement to remedy the violation in the manner requested by the Floodplain Administrator, or an agreement to remedy the damage or interference in accordance with terms determined by the Floodplain Administrator;
3. Deny the allegations by appearing at the date and time indicated in the Notice of Violation to enter such denial. This shall be deemed to be a request for a hearing unless the Floodplain Administrator has since withdrawn the Notice of Violation; or
4. Deny the allegations by mailing or delivering to the Floodplain Administrator a form accompanying the Notice of Violation indicating in writing and signed by the owner or alleged violator a request for a hearing.
5. If after ten (10) business from the date and time indicated in the Notice of Violation no response is received or appearance made by anyone on behalf of the owner or alleged violator then the District will construe the non-response as a request for a hearing and set a date pursuant to Section 706.

Section 706. Hearing Request

1. A request for a hearing shall be forwarded to a Hearing Officer who shall be appointed by the Flood Control District Board of Directors.
2. The Hearing Officer, or his designee, shall set a date, time and place for a hearing. The Hearing Officer, or his designee, shall cause notice of the hearing to be served on the owner or alleged violator and the Floodplain Administrator in accordance with this Section.
3. Notice of the hearing and a copy of the Notice of Violation shall be served on the owner or alleged violator by personal service at least ten (10) business days before the hearing, or alternatively, if the Hearing Officer is unable to personally serve the notice, the notice may be served by depositing the notice of hearing and a copy of the Notice of Violation in the post office, postage prepaid, addressed to the individual or entity to be served by any form of mail requiring a signed and returned receipt at least thirty (30) days before the hearing.
 - a. Personal service shall be completed by delivering a copy of the hearing notice and the notice of violation as follows:
 1. To that individual personally; or
 2. By leaving copies thereof at that individual's dwelling or usual place of abode with some person of suitable age and discretion then residing therein.

- b. If the real property owner or alleged violator are corporate or other entities, service shall be completed by delivering a copy of the hearing notice and Notice of Violation to the entity's statutory agent or, if none, to a partner, an officer, a managing or general agent, or to any other agent authorized by appointment or by law to receive service or process at the entity's most recent address as reflected in the records of the Corporation Commission or Secretary of State.

Section 707. Hearing Procedures

Any hearing held pursuant to this section shall be open to the public. Proceedings shall be audio recorded. A record of the proceedings may be made by a court reporter at the owner or alleged violator's expense if they so request.

A. Parties

1. The owner or alleged violator and the District representative must appear before the Hearing Officer on the date, time and place designated for adjudication of the alleged violation.
2. An owner or alleged violator may be represented by an attorney or other designated representative. The District may be represented by the county attorney or by other counsel for the District or may be represented by District staff if the alleged violator is appearing without counsel.
3. If a party desires to be represented by counsel or a designated representative at the hearing, that party must provide written notice of such representation to the Hearing Officer and opposing party a minimum of 24 hours before the scheduled date and time of the hearing. Representation by counsel may not be permitted at the hearing unless proof of notification is produced at the hearing.

B. Discovery

1. Pre-hearing discovery shall not be permitted (i.e., no depositions, interrogatories, etc., will be allowed prior to the actual public hearing).
2. Immediately prior to the public hearing, both parties shall produce for inspection by the opposing party any prepared exhibits and written, taped or recorded statements of any witness which may be offered at the public hearing. Failure to comply with this rule may result, at the Hearing Officer's discretion, in the sanction of granting a recess or continuance to permit such inspection or denying admission of the evidence not so exchanged.

C. Rules of Procedure

1. The Arizona Rules of Evidence shall not apply. Admission of evidence is subject to the discretion and decision of the Hearing Officer. Admissible evidence shall be relevant and material. This is not to be construed as abrogating any statutory provision relating to privileged communications.
2. If the alleged violator does not appear at the date and time specified in the notice of hearing, the Hearing Officer may continue the case in the interest of justice, or may find the alleged violator in default, thereby finding the existence of all relevant facts set forth in the notice of violation, find for the District and submit his findings, determination and recommendation to the Chief Engineer within thirty (30) calendar days of the hearing.

3. If the District representative does not appear at the date and time specified in the notice of hearing, the Hearing Officer may continue the case in the interest of justice, or may find the District in default, thereby admitting that no violation exists, and submit his findings, determination and recommendation to the Chief Engineer within thirty (30) calendar days of the hearing.
4. Decisions of the Hearing Officer, the Chief Engineer or the Board of Hearing Review shall be available to any party to the hearing.

D. Conduct of the Hearing

1. The Hearing Officer shall call the case and briefly describe the procedures to be followed. The Hearing Officer may question any or all witnesses or parties to the action. No person may be examined at a hearing except by the Hearing Officer, the defendant or his attorney or designated representative, and the District representative or the county attorney or by other counsel for the District.
2. The Hearing Officer shall administer oaths and all testimony shall be given under oath or affirmation.
3. All witnesses for the District's case-in-chief, other than the owner or alleged violator, shall be required to testify prior to the owner or alleged violator being required to testify or to produce evidence. However, a witness not called in the District's case-in-chief may be called in rebuttal to testify to an issue raised by the owner or alleged violator.
4. The parties shall stipulate to all facts not in dispute.
5. The order of proceedings shall be as follows:
 - a. Testimony of District's witnesses
 - b. Testimony of owner or alleged violator's witnesses
 - c. Testimony of District's rebuttal witnesses, if any
 - d. Testimony of owner or alleged violator's rebuttal witnesses, if any
 - e. Argument of parties or their counsel or designated representatives
6. At the discretion of the Hearing Officer, cross-examination shall be limited to matters relevant to witnesses' testimony or direct examination.

E. Decision and Order

1. The Hearing Officer shall submit written findings and recommendations for the appropriate measures to be taken to abate or ameliorate any harm or damage arising from the violation and the imposition of any civil penalties to the Chief Engineer and the owner or alleged violator within thirty (30) calendar days after the date of the hearing.
2. The Chief Engineer shall issue a final decision and order. The final decision shall be in the form of findings of fact and conclusions why those facts constitute violations of statutes, regulations, ordinances or rules. The final order shall be in the form of measures required to abate or ameliorate any harm or damage resulting from the violation, requirements for permits and the imposition of civil penalties. The final decision and order shall be served on the parties to this action, in accordance with Sections 706.3.a and 706.3.b and is effective upon service.

F. Right to Appeal

1. Either party to a final decision and order of the Chief Engineer may request a review of the final decision and order by the Board of Hearing Review. A request for review shall be delivered to the Clerk of the Board of Directors within fifteen (15) calendar days after the effective date of the final decision and order.
2. The final decision of the Board of Hearing Review is subject to judicial review pursuant to A.R.S. Title 12, Article 6. Any decision not appealed in a timely fashion becomes the final enforceable order of the Floodplain Administrator.

Section 708. Penalties

- A. It is a Class 2 Misdemeanor to engage in any Development or to divert, retard or obstruct the flow of waters in a watercourse without first securing the written authorization of the District. A violator may be subject to jail and fines.
- B. The penalty for the civil offense of violation of Flood Control District regulations, ordinances or rules is a fine not in excess of that which is chargeable for a Class 2 Misdemeanor. Each day the violation continues constitutes a separate offense.
- C. All development located or maintained within any Special Flood Hazard Area since August 8, 1973, in violation of flood control statutes or regulations without authorization from the Floodplain Administrator is a public nuisance per se and may be abated, prevented or restrained by action of this political subdivision.
- D. Nothing in this section precludes any private right of action by any person damaged by another's unauthorized diversion, retardation or obstruction of a watercourse. Further the District is not precluded by anything in these Regulations from pursuing injunctive and other remedies as provided by law.

Section 709. Abatement

- A. If the violation has not been resolved to the satisfaction of the Chief Engineer after all steps have been exhausted of Article Seven of these Regulations the following may be done to abate the unresolved violation:
 1. Within thirty (30) calendar days of confirmation of an unresolved violation of these Regulations, the Chief Engineer may either authorize the abatement of the violation at District cost or apply to the Superior Court or any court with appropriate jurisdiction for a temporary restraining order or preliminary or permanent injunction. Any complaint filed shall include all information available to the Chief Engineer which is pertinent to said violation and request the following relief:
 - a. For an order allowing the Chief Engineer to take any necessary action to effect the abatement of such violation and to recoup any costs and expenses of taking such action from the owner. The order may, among other things, direct the owner of the property upon which the violation exists to provide whatever additional information and access may be required for the Chief Engineer's action to abate the violation and to provide such information and access within a reasonable time; or

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APPENDICES

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APPENDIX A - FEE SCHEDULE

Floodplain Regulations for Maricopa County, Arizona

Effective November 30, 2011

Adopted by Resolution FCD 2011R007

The following administrative fees shall be charged for the processing of Appeals, Floodplain Use Permits, Floodplain Variances, plan review and map changes with no provision for refund, unless an error occurred or other state statutes apply:

<u>FLOODPLAIN USE PERMITS</u>	FEES *	
	Community	Unincorporated County
Complexity 1 – Minor, non-complex residential property development	\$250	\$350
Complexity 2 – Single family residential, mobile/manufactured building, commercial/industrial development	\$465	\$600
Complexity 3 – Residential subdivision, commercial/industrial center, other complex residential or commercial development	\$635	\$800
Clearance Review – Incidental Use	\$100	\$100
Clearance Review – No Development Activity in Floodplain	\$50	\$50
Clearance Review – Perimeter Floodplain and Exemptions	\$0	\$0
Permit Amendment or Modification	\$150	\$200
Post Construction Fee – Associated with Floodplain Inquiry Case	\$150 plus Complexity 1, 2, or 3	
<u>FLOODPLAIN USE PERMIT – EXTRACTION OF SAND AND GRAVEL</u>	FEE**	
Permit Application	\$ 12,800	
Non-compliance Engineering Review	\$ 1,600	
Permit Renewal (5 year)	\$ 6,400	
Major Amendment	\$ 7,440	
Minor Amendment	\$ 3,700	
Administrative Amendment	\$50	
<u>VARIANCE</u> <i>(Floodplain Administrator, Floodplain Review Board, or Board of Directors)</i>	FEE	
Residential/Commercial/Industrial (posting required)	\$ 2,600	
Continuance of Hearing – Applicants request	\$ 50	
New Posting Required	\$ 170	
<u>FLOODPLAIN DELINEATION REVIEW</u>	FEE	
CLOMR/LOMR (MT1)	\$ 880	
CLOMR/LOMR (MT2)	\$ 3,000	
Review of Floodplain Study	\$ 1,500	
<u>APPEALS</u>	FEE	
Appeals, Interpretations	\$250	

Note: Fees shall not be charged by the Floodplain Administrator to any government entities (federal, state, county, or municipal) for services provided by the District.

* Fees for unincorporated county include inspections. Inspections by District staff are not performed for communities unless requested by the community, and in those cases the applicant would be charged the unincorporated county fee.

** Fees include all required inspections throughout the life of the Floodplain Use Permit.

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APPENDIX B – Communities Dependent on the District

Listed below are the dates of the original firms, FIRMS, FBFM and FIS studies for the communities for which the Flood Control District of Maricopa County performs floodplain management:

COMMUNITY	ORIGINAL FIS & MAP DATES
Maricopa County Unincorporated Areas	July 2, 1979
Town of Buckeye	February 15, 1980
Town of Carefree	July 2, 1979
Town of Cave Creek	September 29, 1989
City of Chandler	July 16, 1980
City of El Mirage	December 1, 1978
Town of Gila Bend	December 4, 1979
Town of Guadalupe	April 15, 1988
City of Litchfield Park	September 29, 1989
City of Mesa	May 15, 1980
Town of Queen Creek	September 4, 1991
City of Surprise	January 15, 1978
City of Tolleson	January 16, 1980
Town of Youngtown	November 15, 1978

REVISIONS

Revisions to these Regulations will be required from time to time due to ongoing regulatory and technical changes, revisions or additions to state statutes, and other federal and state requirements. Such revisions will take place in accordance with the procedures outlined in state statutes.

A Floodplain Regulation for Maricopa County has been in force since February 25, 1974. The version that these Regulations supersede are the Floodplain Regulations for Maricopa County, Arizona that were adopted on August 4, 1986; and subsequently amended

March 23, 1987;

April 6, 1988;

September 18, 1989;

September 3, 1991;

December 15, 1993;

November 1, 2000;

December 20, 2006; and

Latest date, November 30, 2011



Flood Control District of Maricopa County

PURPOSE:

Pursuant to A.R.S. §48-3645, the District establishes overall licensing time frames during which the District will either grant or deny each type of license (permit) that it issues. The overall time frame for each type of license states separately the District’s time frame for the administrative completeness review time frame and the substantive review time frame.

The District must take into account the partnerships with the communities that have elected not to assume their own floodplain management and participation in the Maricopa County One Stop Shop when establishing overall time frames. These time frames may be subject to modification in accordance with state statutes. Time frames include the District’s review time and not the time the applicant takes responding to notice of deficiencies for either administrative or substantive review.

The following time frames are provided for development located within special flood hazard areas in the Flood Control District’s area of jurisdiction in Maricopa County:

Time Frames

<u>FLOODPLAIN USE PERMITS</u>	Admin/Substantive/Overall Time (Working Days)
Complexity 1 – Minor, non-complex residential property development	30/60/90
Complexity 2 – Single family residential, mobile/manufactured building, commercial/industrial development	30/60/90
Complexity 3 – Residential subdivision, commercial/industrial center, other complex residential or commercial development	30/60/90
Clearance Review – Incidental Use	30/60/90
Clearance Review – No Development Activity in Floodplain	30/60/90
Clearance Review – Perimeter Floodplain and Exemptions	30/60/90
Permit Amendment	30/60/90
<u>FLOODPLAIN USE PERMIT – EXTRACTION OF SAND AND GRAVEL</u>	
Permit Application	30/60/90
Non-compliance Engineering Review	N/A
Permit Renewal (5 year)	30/0/30 *
Major Amendment	30/60/90
Minor Amendment	30/60/90
Administrative Amendment	N/A
<u>VARIANCE</u> (Floodplain Administrator, Floodplain Review Board, or Board of Directors)	
Residential/Commercial/Industrial (posting required)	30/60/90
<u>FLOODPLAIN DELINEATION REVIEW</u>	
CLOMR/LOMR (MT1)	20/10/30
CLOMR/LOMR (MT2)	30/60/90

*Provided that development has been done in accordance with the approved plan of development.