

RESOLUTION No. 296-09

A RESOLUTION RESCINDING AND REPLACING RESOLUTION #195-02, PROVIDING REGULATIONS FOR FLOOD HAZARD PREVENTION ACCORDING TO 44 CFR PERTAINING TO FLOODPLAIN MANAGEMENT

WHEREAS, The Board of County Commissioners of Oklahoma County, Oklahoma, did on March 28, 1983, adopt Resolution #73-83 assuring the Federal Insurance Administration of Oklahoma County's intent regarding National Flood Insurance, and Resolution #74-83 establishing eligibility requirements for National Flood Insurance and Resolution #18-84 on January 30, 1984, providing regulations for flood hazard prevention; and

WHEREAS, these regulations must be updated from time to time; and

WHEREAS, the adoption of these Regulations is a prerequisite for continued eligibility in the National Flood Insurance Program; and

WHEREAS, certain areas within the unincorporated areas of Oklahoma County, Oklahoma, are subject to periodic flooding from rivers and streams causing serious damage to properties within these areas; and

WHEREAS, relief is available in the form of federally subsidized flood insurance as authorized by the National Flood Insurance Act of 1968 upon participation by the county in the National Flood Insurance Program; and

WHEREAS, it is the intent of the Board of County Commissioners for Oklahoma County to participate in the National Flood Insurance Program; and

WHEREAS, the Board of County Commissioners for Oklahoma County established the Oklahoma County Floodplain Board and the Floodplain Board adopted floodplain regulations in accordance with 82 O.S. 1981, §§1604 and 1608 to participate in said program.

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners for Oklahoma County, Oklahoma, does hereby approve the floodplain regulations previously adopted by the Oklahoma County Floodplain Board.

APPROVED this 28th day of October, 2009.

BOARD OF COUNTY COMMISSIONERS
OKLAHOMA COUNTY, OKLAHOMA

Raymond R. Vaughn

Chairman

Willie A. [Signature]

Member

Brian Maughan

Member

ATTEST:

Carolyn Caudill


Carolyn Caudill, County Clerk

APPROVED as to form and legality this 16th day of October, 2009.

Ann Caudill

Assistant District Attorney

OKLAHOMA COUNTY

FLOODPLAIN BOARD

IN THE MATTER of adoptions of)
Floodplain Management)
Regulations And Establishment)
of Flood Hazard Boundaries)

Resolution No. FP-2009-01
Date October 15, 2009

RESOLUTION

WHEREAS, certain areas within the unincorporated areas of Oklahoma County, Oklahoma, are subject to periodic flooding from rivers and streams causing serious damage to properties within these areas: and,

WHEREAS, relief is available in the form of federally subsidized flood insurance as authorized by the National Flood Insurance Act of 1968 upon participation by the County in the National Flood Insurance Program; and,

WHEREAS, the Oklahoma County Floodplain Board is Authorized to adopt, administer, and enforce floodplain management regulations to reduce flood losses pursuant to 82 O. S. 1981, §§1601-1618, as amended.

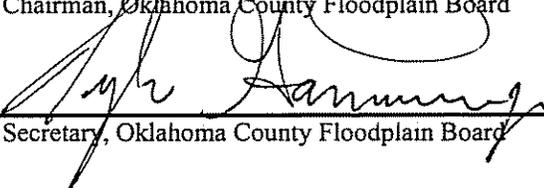
NOW, THEREFORE, BE IT RESOLVED that the Floodplain Board of Oklahoma County, Oklahoma, hereby adopts and enacts the Floodplain Board Floodplain Management Regulations as set forth in the attachment hereto.

PASSED AND APPROVED this 15th day of October 2009.



Chairman, Oklahoma County Floodplain Board

10/15/09



Secretary, Oklahoma County Floodplain Board

10/15/09

OKLAHOMA COUNTY

FLOOD DAMAGE PREVENTION REGULATIONS

ARTICLE 1

STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

SECTION A. STATUTORY AUTHORIZATION

The Legislature of the State of Oklahoma has in Title 82, Oklahoma Statutes, Sections 1601 to 1620, Chapter 23, delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Board of County Commissioners of Oklahoma County, Oklahoma, does ordain as follows:

SECTION B. FINDINGS OF FACT

1. The flood hazard areas of the unincorporated areas of Oklahoma County are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare. Special regulations are applied in addition to or in combination with other regulations applying to these areas to guide the type and manner of floodplain use so that it is consistent with the land use needs of Oklahoma County.
2. These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood-proofed or otherwise protected from flood damage.

SECTION C. STATEMENT OF PURPOSE

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

1. Protect human life and health;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
6. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
7. Insure that potential buyers are notified that property is in a flood area.
8. As today's floodplain is not tomorrow's, these regulations provide a level of no adverse impact, in that a two foot freeboard requirement is administered and enforced for all structural development in the special flood hazard areas of Unincorporated Oklahoma County.
9. Control in special flood hazard areas, uses such as fill, dumping, storage of materials, structures, buildings and any other works which, acting alone or in combination with other existing or future uses, would cause damaging flood heights or erosive velocities by obstructing flows and reducing floodplain storage;
10. Meet the needs of the streams to carry flood waters and protect the creek channels and floodplains from encroachment so that flood heights and flood damage will not be increased;
11. Enhance existing protections for residents, structures, and public facilities from flood damage; and
12. Preserve floodplain areas for their open space and natural habitat values.

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, these regulations use the following methods:

1. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damage increases in erosion or flood heights or velocities;
2. Require uses vulnerable to flood, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

3. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
4. Control filling, grading, dredging and other development which may increase erosion or flood damages;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;
6. Qualify and maintain the participation in the National Flood Insurance Program.
7. Seek ways to reduce loss of natural floodplain areas and enhance natural and beneficial functions of floodplains in areas facing development.

ARTICLE 2

DEFINITIONS

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

100-YEAR FLOOD – See One Percent Chance Flood.

100-YEAR FLOODPLAIN – The land area that is inundated by floodwaters during a 100-Year Flood (1% chance). See special flood hazard area.

A-ZONE – A-Zones are areas which would be flooded by the Base Flood, and is the same as a Special Flood Hazard Area (SFHA) or a 100-year floodplain. These areas may be numbered as A1 to A30, or as A99, or they may be unnumbered as A, AE, AH or AO Zones. Numbered A-Zones indicate an area's risk to flooding.

ACT – The Oklahoma Floodplain Management Act, Title 82 O.S. 1981 §§1601 to 1619.

ACCESSORY STRUCTURE – Structures which are on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure (such as garages and storage sheds). The following are specific standards related to accessory structures:

- Structure is low valued and represents a minimal investment.
- Structure shall be small and not exceed 600 square feet in size.
- Structure shall be unfinished on the interior.
- Structure can be used only for parking and limited storage.
- Structure shall not be used for human habitation (including work, sleeping, living, cooking, or restroom areas.
- Service facilities such as electrical and heating equipment must be elevated a minimum of two (2) feet above the BFE or floodproofed.
- Structure is constructed and placed on building site so as to offer the minimum resistance to flow of floodwaters.
- Structure is firmly anchored to prevent flotation, collapse, and lateral movement. Floodway requirements must be met in the construction of the structure.
- Openings to relieve hydrostatic pressure during a flood shall be provided below the BFE.
- Structure is to be located so as not to cause damage to adjacent and nearby structures.

APPEAL – A request for a review of the Floodplain Board's interpretation of any provision of these regulations or a request for a variance.

AREA OF SHALLOW FLOODING – A designated AO or AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent (1%) chance or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

BASE FLOOD – The flood having a one percent chance of being equaled or exceeded in any given year, also known as the 100-year flood.

BASE FLOOD ELEVATION – The elevation in feet above mean sea level for which there is a one-percent chance in any given year that flood levels will equal or exceed it. Sometimes referred to as the 100-year flood, the regulatory flood or the base flood.

BASEMENT – Any area of the building having its floor sub-grade (below ground level) on all sides.

BREAKAWAY FENCE – A fence that is designed to allow the passage of water and debris without impeding the flow. The panels or components shall be hinged or attached by other approved means to the fence rails and/or posts to prevent the panels or components from coming apart and becoming flood water debris.

BUILDING CONSTRUCTION – The erection, construction, or alteration of a building(s), or the erection or construction of any additions to existing buildings where outer walls are added or altered as to location, but not including alterations or remodeling where said outer walls are not added or altered as to location.

COMPENSATORY STORAGE – Stormwater storage that is built to replace storage volume that is lost due to development encroaching into the floodplain.

CRITICAL FEATURE – An integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

DESIGNATED FLOODWAY – The channel of a stream and that portion of the adjoining floodplain designated by a regulatory agency to be kept free of further development to provide for unobstructed passage of flood flows.

DEVELOPMENT – Any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, filling, grading, paving, fencing, excavation, storage of equipment or materials, platting, or drilling operations.

DEVELOPMENT PERMIT – Specific written authorization from the Floodplain Board or the Floodplain Administrator allowing development within a floodplain in accordance with the applicable regulations governing development within floodplains.

DIKE – A man-made structure, usually 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 flooding.

ELEVATED BUILDING – Placement of structure at least 24 inches above the Base Flood Elevation by means of fill, solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters, posts and piers or pilings, and adequately anchored so as not to impair the structural integrity of the building during a flooding event.

ELEVATION – The height above mean sea level based on the North American Vertical Datum of 1988 (NAVD 88).

ENCROACHMENT – Any physical object placed in a floodplain that hinders the passage of water or otherwise affects flood flows, such as landfills or buildings.

EXISTING CONSTRUCTION – For the purposes of determining rates, structures for which the “start of construction” commenced before the effective date of the FIRM or before January 1, 1985, for FIRMS effective before that date. “Existing construction” may also be referred to as “existing structures.”

FILL – Any natural or manmade material originating from off-site and/or on-site that is placed on the ground as a permanent alteration of the surface of the floodplain.

FLOOD OR FLOODING – (a) A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of inland or tidal waters. (2) The unusual and rapid accumulation or runoff of surface waters from any source. (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of the definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas. (b) The collapse or subsidence of land along the shore of a lake or other body 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 or similarly unusual and unforeseeable event.

FLOOD INSURANCE RATE MAP (FIRM) – The official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zoned applicable to the community.

FLOOD INSURANCE STUDY (FIS) – The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, the water surface elevation of the base flood, as well as the Flood Boundary/Floodway Map.

FLOODPLAIN – Floodplain or flood-prone means any land area susceptible to being inundated by water from any source.

FLOODPLAIN ADMINISTRATOR – A person accredited by the Oklahoma Water Resources Board and designated by a floodplain board to administer and implement laws and regulations relating to the management of the floodplains.

FLOODPLAIN BOARD – The administrative board for floodplain management of a county, or the planning commission of a county, if so designated by the governing body of the county.

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 MANAGEMENT REGULATIONS – Zoning regulations, subdivision regulations, building codes, health regulations, special purpose regulations (such as floodplain regulations and erosion control regulations) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOODPROOFING – Any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.

FLOODWAY (Regulatory Floodway) – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

FREEBOARD – A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. Compensates for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrologic effect of urbanization of the watershed.

HIGHEST ADJACENT GRADE – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

GRANDFATHERING (nonconforming use) – An exemption based upon circumstances previously existing. Under NFIP, buildings located in Emergency Program communities and Pre-Flood Insurance Rate Map buildings in the Regular Program are eligible for subsidized flood insurance rates. Post-Flood Insurance Rate Map buildings in the Regular Program built in compliance with the floodplain management regulations in effect at the start of construction will continue to have favorable rate treatment even though higher base flood elevations are more restrictive, greater risk zone designations result from Flood Insurance Rate map revisions.

IMPROVEMENTS – Fixtures, alterations, installations, or additions comprising a part of the insured building.

INCREASED COST OF COMPLIANCE – Coverage for expenses that a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of state or local floodplain management regulations or laws. Acceptable mitigation measures are elevation, floodproofing, relocation, demolition, or any combination thereof.

LETTER OF MAP CHANGE (LOMC) - A general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They include Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-F).

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.

LOWEST ADJACENT GRADE – The lowest point of the ground level next to the building.

LOWEST FLOOR – The lowest floor of the lowest enclosed area (including the 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 requirements.

MANUFACTURED (MOBILE) HOME – A structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term “manufactured home” also includes park trailers, travel trailers, recreational vehicles and other similar vehicles placed on a site for greater than 100 consecutive days unless it meets the definition of a recreational vehicle. For insurance purposes the term “manufactured home” does not include park trailers, travel trailers, or other similar vehicles. and affixed to a permanent foundation. “Manufactured (mobile) home” does not include recreational vehicles.

MAXIMUM EXTENT FEASIBLE – No prudent, practical, and feasible alternative exists, and all possible planning to minimize potential harm has been undertaken. Economic considerations may be taken into account, but shall not be the overriding factor in determining “maximum extent feasible.”

MEAN SEA LEVEL – For purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) 1988 or other datum to which base flood elevations shown on a community's FIRM are referenced.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) – The program of flood insurance coverage and floodplain management administered under the Act and applicable Federal regulations promulgated in Title 44 of the Code of Federal Regulations, Subchapter B.

NEW CONSTRUCTION – Buildings 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, including 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 a community.

NONCONFORMING STRUCTURE - Any legally existing building which fails to comply with the provisions of this regulation.

OBSTRUCTION – An artificial obstruction, such as any dam, wall, wharf, embankment, levee, dike, pike, abutment, excavation, channel rectification, bridge, conduit, culvert, building, structure, wire, fence, rock, gravel, refuse, fill, or other analogous structure or matter in, along, across, or projecting into any floodway which may impede, retard, change the direction of the flow of water, or increase the flooding height, either in itself or by catching or collecting debris carried by such water, or that is placed where the natural flow of the water would carry the same downstream to the damage or detriment of either life or property.

ONE PERCENT CHANCE FLOOD – The flood having a one percent (1%) chance of being equaled or exceeded in any given year (same as 100-Year Flood, Base Flood and Regulatory Flood).

REGULATORY FLOOD – See One Percent Chance Flood.

REGULATORY FLOODWAY – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

RECREATIONAL VEHICLE – A vehicle which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projections; (iii) designed to be self-propelled or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

POST-FIRM BUILDING – A building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of an initial Flood Insurance Rate Map (FIRM), whichever is later.

PRE-FIRM BUILDING – A building for which construction or substantial improvement occurred on or before December 31, 1974, or before the effective date of an initial Flood Insurance Rate Map (FIRM).

PROPER OPENINGS – All enclosures below the lowest elevated floor must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings, with positioning on at least two walls, having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding must be provided. The bottom of all openings must be no higher than 1 foot above grade.

SPECIAL FLOOD HAZARD AREA (SFHA) – The area of land that is subject to flooding from a one percent (1%) chance. Sometimes known as the 100-year floodplain or the regulatory floodplain. After detailed rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, or AI-99.

STRUCTURE – a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE – Damage of any origin sustained by a building whereby the cost of restoring the building to its before-damaged condition would be equal or exceed 50 percent of the market value of the building before the damage occurred.

SUBSTANTIAL IMPROVEMENT - Any reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which equals or exceeds fifty percent (50%) of the market value of the building before the "start of construction" of the improvement. Substantial improvement includes buildings that have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either any project for improvement of a building to correct existing state or local code violations or any alteration to a "historic building," provided that the alteration will not preclude the building's continued designation as an "historic building."

VARIANCE – A grant of relief by a participating community from the terms of its floodplain management regulations.

VIOLATION – The failure of a structure or other development to be in full compliance with the community's floodplain management regulations.

WATER SURFACE ELEVATION – The height, in relation to the National American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

ARTICLE 3

GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THESE REGULATIONS APPLY

These regulations shall apply to all areas of special flood hazard within the jurisdiction of the unincorporated areas of Oklahoma County.

SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOODHAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The Flood Insurance Study for Oklahoma County, Oklahoma and Incorporated Areas," dated December 18, 2009, with accompanying Flood Insurance Rate Maps (FIRM) are hereby adopted by reference and declared to be a part of these regulations. However, the current existing flood hazard district regulation for unincorporated Oklahoma County shall remain in effect until December 18, 2009. This "Flood Insurance Study" with its accompanying FIRM are hereby adopted by reference and declared to be part of this regulation.

SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be required to ensure conformance with the provisions of these regulations.

1. General Standards and Provisions for Flood Hazard Reduction

- a. The following provisions are required for all new construction and substantial improvements and a floodplain permit is required:

Fill is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered and erosion problems may develop. The use of fill shall be limited to:

- i. The elevation of individual residential and nonresidential structures, including driveways providing access to those structures.
- ii. The construction or repair of public roads and bridges,
- iii. River or stream bank stabilization or reinforcement projects; and

In any case where fill is authorized, only the minimum amount necessary to accomplish the permitted floodplain development shall be used.

- b. All new construction or substantial improvement shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- c. Any new construction or substantial improvement which individually or when combined with all other existing and anticipated development exposes additional upstream, downstream or adjacent properties to adverse flood affects that would otherwise not be exposed to such affects due to the regulatory flood shall not be permitted.
- d. Any new construction or substantial improvement which increases velocities or volumes of flood waters that would erode floodplain soils either on the subject property or on some other property either upstream or downstream shall not be permitted.
- e. Compensatory storage must be provided within the general location of any storage that is displaced by fill or other development activity and must serve the equivalent hydrologic function as the portion which is displaced with respect to the area and elevation of the floodplain.
- f. All new construction, substantial improvements, or other development (including fill) shall not be permitted within the floodplain area, unless it its demonstrated the effect of the proposed development will not increase the water surface elevation of the base flood by more than .05 feet on any adjacent property.
- g. Fill shall be protected against erosion and sedimentation by such measures as rip-rap, vegetative cover, sedimentation basins and in accordance with the Oklahoma County Stormwater Regulations.
- h. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- i. All new construction or substantial improvements shall be constructed with materials resistant to flood damage.
- j. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. All Public Utilities and facilities shall be constructed so as to minimize flood damage;
- k. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- l. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters.
- m. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding;
- n. 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 shall adhere to the requirements of Article 3, Section C. 3 of these regulations.

- o. Recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either must be:
 - i. Be on the site for fewer than 180 consecutive days,
 - ii. Be fully licensed and ready for highway use, or
 - iii. Meet the permit requirements of Section C Article III of this regulation and the elevation and anchoring requirements for "manufactured homes" in letter sixteen (16) of this section, as well as all zoning requirements.

2. Specific Standards that Require Floodplain Permits (A, AE, AH, AO Zones).

- a. Uses requiring floodplain permit involving structures, fill, excavation, mining, or storage of materials or equipment may be permitted as provided below: Residential Structures – including both "site-built" and "manufactured homes," shall be constructed on fill so that the lowest floor (including basement) is at least two (2) feet above the base flood elevation. The fill shall be at a level no lower than one (1) foot above the base flood elevation for the particular areas. All manufactured homes to be placed within Zone A shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to use of over-the-top or frame ties to ground anchors. Manufactured homes are to be placed or substantially improved on a permanent foundation such that the lowest floor of the manufactured home is elevated at least two (2) feet above the base flood elevation for the particular area in which the home is to be located.
- b. Non-residential Construction – new construction and substantial improvement of any commercial, industrial or other non-residential structures shall be constructed on fill as above (number sixteen (16) of this section) including any attendant utility and sanitary facilities, shall be designed so that the lowest floor (including basement) is elevated at least two (2) feet above base flood elevation and the fill shall be at a level no lower than one (1) foot above the base flood elevation.
- c. Enclosures – New construction and substantial improvements, with fully enclosed areas below the lowest floor that are solely used for parking of vehicles, building access, or storage in an area other than a basement that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria for non-engineered openings:
 - i. Openings shall be installed on at least two walls of each enclosed area;
 - ii. The bottom of the openings must be no higher than one foot above the adjacent finished grade.
 - iii. The openings shall have a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
 - iv. Openings shall be at least three inches in diameter. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
- d. Alteration, addition, or repair to a non-conforming structure.
- e. Extraction of sand, gravel and other materials.
- f. Stables and riding academies.
- g. Industrial/Commercial uses including, but not limited to loading areas, parking areas, airport landing strips.
- h. All new fences or replacement of existing fences in the SFHA require a floodplain permit. Approved fences shall be designed and installed to be breakaway or in some other manner so that flows will not be impeded.

3. Special Requirements for Drilling Oil and Gas Wells in a SFHA

- a. A Base Flood Elevation Determination – a BFE must be provided, by an Oklahoma State licensed PE or registered Land Surveyor, based on an acceptable method of determination.
- b. Floodways – If the drilling site is in the floodway portion of the floodplain, the developer (petroleum company) shall demonstrate through an engineering study that there will be no increase in flood stages during the discharge of the one percent chance caused by the development. No reserve pits will be allowed in the floodway.
- c. Buildings and Other Structures: Any buildings and other structures (including fuel storage tanks) in the floodplain will shall either be elevated to or above the BFE or floodproofed to that elevation. Any electrical and mechanical equipment must be elevated or floodproofed to the BFE. Any storage tanks and any equipment at the site could be damaged by floodwaters will have to be elevated above the BFE or made watertight and anchored to resist flotation, collapse, and lateral movement. A registered engineer will have to certify the design of the floodproofing measures. As this is non-residential construction, the drill site and road to the well does not need to be elevated. The drilling operation shall comply with all other local, state and federal requirements prior to the issuance of a floodplain development permit. All new or replacement flowlines, pipelines, etc., that will cross rivers, streams, creeks, and channels shall be bored to be below the bed. The depth below the bed shall be a minimum of ten (10) feet. The pipe used for the crossing shall be a minimum of one (1) pipe grade higher, or have a wall thickness twice the thickness of the standard pipe used for the flowline, pipeline, etc. If the flowline, pipeline ect. becomes exposed, the crossing must be rebored. The ground surface shall not be disturbed within 50 feet of the river, stream, creek, or channel banks.

4. Prohibited Uses

- a. Manufactured Home Parks shall not be constructed in any Special Flood Hazard Areas.

- b. Any encroachments, including fill, new construction, substantial improvements, and other development, within any floodway that would result in any increase in flood levels during the occurrence of the one percent (1%) chance flood are prohibited.

5. **Standards for Subdivision Proposals**

- a. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article 3, Section C of this regulation.
- b. All proposals for the development of subdivisions including manufactured home parks and
- c. Subdivisions shall meet all applicable permitting requirements of this regulation.
- d. Base flood elevations shall be generated for subdivision proposals and other proposed developments including manufactured home parks and subdivisions, pursuant to Article 1, Sections B, C, and D and Article 3, Section C of this regulation.
- e. All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- f. All subdivision proposals including manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.

6. **Floodways**

Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, encroachments are prohibited including fill, new construction, substantial improvements and other development unless certification by a professional registered engineer is provided demonstrating that encroachments shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

ARTICLE 4

ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN BOARD AND FLOODPLAIN ADMINISTRATOR

The Floodplain Board shall appoint a County Floodplain Administrator who shall administer and implement these regulations and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management. The manager shall maintain records, regular office hours, and assist the public in determining floodplain locations, and filing development permit applications. The floodplain manager will assist the Floodplain Board in all matters concerning the consideration of applications for development permits. The manager will to the extent possible obtain all material necessary for the Board to make sound decisions concerning development within the floodplain.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN BOARD AND FLOODPLAIN ADMINISTRATOR

1. Maintain and hold open for public inspection all records pertaining to the provisions of these regulations.
2. Review permit application to determine whether proposed building site will be reasonably safe from flooding.
3. Review, approve or deny all applications for development permits required by adoption of these regulations.
4. Review permits for proposed development to assure that all necessary permits have been obtained from federal, state or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments 1972, 33 USC 1334) from which prior approval is required.
5. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Board shall make the necessary interpretation.
6. Notify, in riverine situations, adjacent communities and the state coordinating agency, which is the Oklahoma Water Resources board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
7. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
8. When base flood elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Board shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal or state agency or other source, in order to administer the provisions of Article 5. All floodplain definitions and one hundred year flood elevations must be submitted to the Oklahoma Water Resources Board.
9. When a regulatory floodway has not been designated, the Floodplain Board must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed

development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

10. Under the provisions of 44 CFR Chapter 1, Section 65.12 of the National Flood Insurance Program regulations, Oklahoma County may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM (Conditional Letter of Map Revision) revision through FEMA

SECTION C. PERMIT PROCEDURES

1. Application for a Development Permit shall be presented to the Floodplain Board and/or Floodplain Administrator on forms furnished by the Floodplain Administrator (accompanied by a filing fee). The application may include, but is not limited to the following documentation:
 - a. Plans, in duplicate, drawn to scale showing the nature, location, dimensions, and elevation of the property, existing or proposed structures, fill, storage of materials, floodproofing measures, and the relationship of the above to the location of the channel, floodway, and the flood-protections elevation.
 - b. Plan view showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, soil types, and other pertinent information.
 - c. Elevation (in relation to mean sea level) of the floodplain and lowest floor (including basement) of all new construction and substantially improved structures.
 - d. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of the proposed development.
 - e. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For a proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
2. The following information may be required by the Floodplain Board and/or Floodplain Administrator:
 - a. Specifications for building construction and materials, floodproofing, filling, dredging, grading, channel improvement, storage of materials, water supply, and sanitary facilities.
 - b. Such other pertinent information as may be required to analyze the specific situation.
 - c. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed.
 - d. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of the regulation.
 - e. Upon consideration of the factors of the specific Development Permit use and the purpose of this regulation, the Floodplain Board and/or Floodplain Administrator may attach such conditions to the granting of such permits as it deems necessary to further the purposes of this regulation.
3. Approval or denial of a Development Permit by the Floodplain Board shall be based upon all of the provisions of these regulations and the following relevant factors:
 - a. The danger to life and property due to flooding or erosion damage;
 - b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - c. The danger that materials may be swept onto other lands to the injury of others;
 - d. The compatibility of the proposed use with existing and anticipated development;
 - e. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - f. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
 - g. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
 - h. The necessity to the facility of a waterfront location, where applicable;
 - i. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - j. The relationship of the proposed use to the Master Plan for that area.

SECTION D. VARIANCE PROCEDURE

1. The Floodplain Board shall hear and render judgment concerning requests for variances from the requirements of these regulations.
2. The Floodplain Board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Oklahoma County Floodplain Administrator in the enforcement or administration of these regulations.
3. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of these regulations.

4. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and variance is the minimum necessary to preserve the historic character and design of the structure.
5. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C (2) of this Article have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
6. Upon consideration of the factors noted above and the intent of these regulations, the Floodplain Board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of these regulations (Article 1, Section C).
7. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
8. Prerequisites for granting variances:
 - a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief and meets the following criteria:
 - i. Showing good and sufficient cause;
 - ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant, and;
 - iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
 - b. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
9. Variances may be issued by Oklahoma County for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that:
 - a. The criteria outlined in Article 4, Section D (1)-(9) are met, and;
 - b. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
10. Any person seeking a variance shall file a petition with the Floodplain Board, accompanied by the required filing fee.
11. The Floodplain Board shall exercise wide discretion in weighing the equities involved and the advantages and disadvantages to the applicant and to the public at large when determining whether the variance shall be granted. The Floodplain Board shall conduct a hearing that complies with all requirements of the Floodplain Management Act, Title 82 O.S. 1981, §1610 (B), for public notice. In no case shall variances be effective for a period longer than twenty (20) years. A copy of any variance issued shall be sent to the Oklahoma Water Resources Board within fifteen (15) days of issuance.
12. The Floodplain Board shall maintain a record of all actions involving a variance and shall report variances to the Federal Emergency Management Agency upon request.

SECTION E. APPEALS PROCEDURE

Appeals of the decision of a county Floodplain Board shall be taken to the Board of Adjustment. Appeals may be taken by any person aggrieved or by a public officer, department, board or bureau affected by any decision of the Floodplain Board in administering the Floodplain Board's rules and regulations. The appeal shall be taken within a period of not more than ten (10) days, by filing written notice with the Board of Adjustment and the Floodplain Board, stating the grounds thereof. An Board of Adjustment shall stay all proceedings concerning the action being appealed unless the Floodplain Board certifies that by reason of facts stated in the certificate a stay would cause imminent peril to life or property. The appellant body shall have the following powers and duties:

1. Hear and decide appeals where it is alleged that there is error of law in any order, requirement, decision or determination made by the Floodplain Board in the enforcement of the Floodplain Board's rules and regulations.
2. May reverse or affirm wholly or partly, or may modify the order, requirement, decision or determination as ought to be made, and to that end shall have all the powers of the Floodplain Board from which the appeal is taken.
3. Act upon any appeal, by applying the principles, standards, and objectives set forth and contained in all applicable regulations and plans adopted.

ARTICLE 5

SECTION A. COMPLIANCE

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

SECTION B. ABROGATION AND GREATER RESTRICTIONS

These regulations are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these regulations conflict or overlap with another, whichever imposes the more stringent restrictions shall prevail.

SECTION C. INTERPRETATION

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

SECTION D. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. These regulations shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder.

SECTION E. EXCEPTIONS

These regulations shall not apply to the *use* of the usual farm buildings for agricultural purposes, the planting of agricultural crops or the construction of farm ponds (Title 82 O.S. 1981, §1608(3)).

SECTION F. EXISTING USES

Any use that exists prior to the adoption of these regulations that does not meet the minimum standards set forth herein may continue. However, unless brought into compliance with the minimum standards set forth in the regulations adopted, such uses may not be substantially altered, enlarged or added to.

SECTION G. VIOLATIONS

No new structure, fill, excavation or other floodplain use that is unreasonably hazardous to the public or that unduly restricts the capacity of the floodway to carry and discharge the base flood shall be permitted without securing written authorization from the Floodplain Board. Any person, firm or corporation violating any provision of these regulations or performing any unlawful act as defined herein, or failing to perform any act required herein, shall be guilty of a misdemeanor and/or subject to fines/penalties/costs pursuant to the issuance of a citation as provided by 19 O.S. §868.11A.