

IN THE COUNTY LEGISLATURE OF JACKSON COUNTY, MISSOURI

AN ORDINANCE amending section 24004., Jackson County Code, 1984, relating to the development of land in unincorporated Jackson County.

ORDINANCE NO. 4942, November 28, 2016

INTRODUCED BY Tony Miller, County Legislator

WHEREAS, the Director of Public Works has recommended amendments to the County's Unified Development Code related to floodplain management governing the development of land in unincorporated Jackson County; and

WHEREAS, the Federal Emergency Management Agency has made certain recommendations to the County to bring the County's Floodplain Ordinance into compliance with the code of Federal Regulations; and

WHEREAS, at its meeting of November 17, 2016, the Plan Commission unanimously recommended these amendments; and

WHEREAS, the recommended amendments are in the best interests of the health, welfare, and safety of the citizens of Jackson County; now therefore

BE IT ORDAINED by the County Legislature of Jackson County, Missouri, as follows:

Section A. Enacting Clause. Sections 24004., Jackson County, 1984, is hereby amended to incorporate the following revisions to specified subsections:

24004.14 FLOODPLAIN OVERLAY DISTRICTS

a. Findings of Fact.

Flood losses resulting from periodic inundation. The flood hazard areas of the County are subject to inundation that results 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. General Causes of Flood Losses.

Flood losses are caused by (1) the cumulative effect of obstruction in floodways causing increases in flood heights and velocities; and (2) the occupancy of flood hazard by uses vulnerable to floods or hazardous to others that are inadequately elevated or otherwise protected from flood damages.

c. Methods Used to Analyze Flood Hazards.

The Flood Insurance Study (FIS) that is the basis of this section uses standard engineering methods of analyzing flood hazards which consist of a series of interrelated steps.

1. Selection of a regulatory flood that is based upon engineering calculations which permit a consideration of such flood factors as its expected frequency of occurrence, the area inundated, and the depth of inundation. The base flood selected for this section is representative of large floods which are characteristic of what can be expected to occur on the particular streams subject to this section. It is in the general order of a flood which could be expected to have a one percent chance of occurrence in any one year as delineated on the Federal Insurance Administration's Flood Insurance Study, and illustrative materials (FIRM) of Jackson County, Missouri, dated [September 29, 2006] January 20, 2017, as amended, and any future revisions thereto.
2. Calculation of water surface profiles based upon hydraulic engineering analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood.

3. Computation of the floodway required to convey this flood without increasing flood heights more than one (1) foot at any point.
4. Delineation of the floodway encroachment lines within which no obstruction is permitted that would cause any increases in flood height.
5. Delineation of the floodway fringes, i.e., that area outside the floodway encroachment lines, but that still is subject to inundation by the regulatory flood.

d. Statement of Purpose.

It is the purpose of the section to promote the public health, safety, and general welfare and to minimize those losses described above by provisions designed to:

1. Restrict prohibited uses which are dangerous to health, safety, or property in times of flood or cause increased flood heights or velocities;
2. Require that uses vulnerable to floods, including public facilities that serve those uses, be provided with flood protection at the time of initial construction;

3. Protect individuals from buying lands that are unsuited for intended purposes because of flood hazard; and
4. Ensure that eligibility is maintained for property owners in the community to purchase flood insurance in the Federal Flood Insurance Program.

e. Definitions.

The following definitions shall apply to this section:

"100-year Flood" *see "Base Flood."*

"Accessory Structure" means the same as *"Appurtenant Structure."*

"Actuarial Rates" *see "Risk Premium Rates."*

"Administrator" means the Federal Insurance Administrator.

"Agency" means the Federal Emergency Management Agency (FEMA).

"Appeal" means a request for review of the Floodplain Administrator's interpretation of any provision of this section or a request for a variance.

"Appurtenant Structure" means a structure that is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

"Area of Special Flood Hazard" is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

"Base Flood" means a flood having a one percent chance of being equaled or exceeded in any given year.

"Basement" means any area of the structure having its floor subgrade (below ground level) on all sides.

"Building" see *"Structure."*

"Chief Executive Officer" or **"Chief Elected Official"** means the Jackson County Executive who is charged with the authority to implement and administer laws, ordinances, and regulations for that community.

"Community" means any State or area or political subdivision thereof, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

"Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, levees, levee systems, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

"Elevated Building" means, for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

"Eligible Community" or "Participating Community" means a community for which the Administrator has authorized the sale of flood insurance under the National Flood Insurance Program (NFIP).

"Existing Construction" means, for the purposes of determining rates, structures for which the *"Start of Construction"* commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date.

"Existing Construction" may also be referred to as *"Existing Structures."*

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

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

"Flood" or "Flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of inland or tidal waters and/or (2) the unusual and rapid accumulation or runoff of surface waters from any source.

"Flood Boundary and Floodway Map (FBFM)" means an official map of a community on which the Administrator has delineated both special flood hazard areas and the designated regulatory floodway.

"Flood Elevation Determination" means a determination by the Administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year.

"Flood Elevation Study" means an examination, evaluation, and determination of flood hazards.

"Flood Fringe" means the area outside the floodway encroachment lines, but still subject to inundation by the regulatory flood.

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Administrator, where the boundaries of the flood areas having special flood hazards have been designated as (unnumbered or numbered) A zones.

"Flood Insurance Rate Map (FIRM)" means an official map of a community, on which the Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

"Flood Insurance Study (FIS)" means an examination, evaluation, and determination of flood hazards and, if appropriate, corresponding water surface elevations.

"Floodplain" or "Flood-prone Area" means any land area susceptible to being inundated by water from any source (*see "Flood"*).

"Floodplain Management" means 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" means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain and grading ordinances) and other applications of police power. The term describes such state or local regulations, in any combination thereof, that provide standards for the purpose of flood damage prevention and reduction.

"Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures that reduces or eliminates flood damage to real estate or improved real property, water and sanitary facilities, or structures and their contents.

"Floodway" or "Regulatory Floodway" means 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 one foot.

"Floodway Encroachment Lines" means the lines marking the limits of floodways on Federal, State, and local floodplain maps.

"Freeboard" means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. *"Freeboard"* tends to compensate 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 bridge openings and the hydrological effect of urbanization of the watershed.

"Functionally Dependent Use" means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities and facilities that are necessary for the loading and unloading of cargo or passengers, but does not include long-term storage or related manufacturing facilities.

"Highest Adjacent Grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historic Structure" means any structure that is (a) listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either (1) by an approved state program as determined by the Secretary of the Interior or (2) directly by the Secretary of the Interior in states without approved programs.

"Lowest Floor" means 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 floodproofing design requirements of this ordinance.

"Manufactured Home" means 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 attached to the required utilities. The term *"Manufactured Home"* **does not include** a *"Recreational Vehicle."*

"Manufactured Home Park or Subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"Map" means the Flood Hazard Boundary Map (FHBM), Flood Insurance Rate Map (FIRM), or the Flood Boundary and Floodway Map (FBFM) for a community issued by the Federal Emergency Management Agency (FEMA).

"Market Value" or "Fair Market Value" means an estimate of what is fair, economic, just, and equitable value under normal local market conditions.

"Mean Sea Level" means, for purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

"New Construction" means, 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 the floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

"New Manufactured Home Park or Subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lot 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.

"NFIP" means the National Flood Insurance Program (NFIP).

"Participating Community" also known as an *"Eligible Community,"* means a community in which the Administrator has authorized the sale of flood insurance.

"Person" includes any individual or group of individuals, corporation, partnership, association, or any other entity, including Federal, State, and local governments and agencies.

"Principally Above Ground" means that at least 51 percent of the actual cash value of the structure, less land value, is above ground.

"Recreational Vehicle" means a vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (c) designed to be self-propelled or permanently towable by a light-duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Remedy A Violation" means to bring the structure or other development into compliance with Federal, State, or local floodplain management regulations; or, if this is not possible, to reduce the impacts of its noncompliance.

"Risk Premium Rates" means those rates established by the Administrator pursuant to individual community studies and investigations which are undertaken to provide flood insurance in accordance with Section 1307 of the National Flood Disaster Protection Act of 1973 and the accepted actuarial principles. *"Risk Premium Rates"* include provisions for operating costs and allowances.

"Special Flood Hazard Area" see *"Area of Special Flood Hazard."*

"Special Hazard Area" means an area having special flood hazards and shown on an FHBM, FIRM or FBFM as zones (unnumbered or numbered) A and AE.

"Start of Construction" includes substantial-improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvements 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 slabs or footings, the installation of piles, the construction of columns, 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, the installation of streets and/or walkways, excavation for a basement, footings, piers, foundations, the erection of temporary forms, nor installation on the property of accessory structures, 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 Coordinating Agency" means that agency of the state government, or other office designated by the governor of the state or by state statute at the

request of the Administrator to assist in the implementation of the National Flood Insurance Program (NFIP) in that state.

"Structure" means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. *"Structure"* for insurance purposes, means a walled and roofed building, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, as well as a manufactured home on a permanent foundation. For the latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises.

"Substantial Damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

"Substantial Improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before *"Start of Construction"* of the

improvement. This term includes structures which have incurred "*Substantial Damage*," regardless of the actual repair work performed. The term does not, however, include either (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of a "*Historic Structure*," provided that the alteration will not preclude the structure's continued designation as a "*Historic Structure*."

"Variance" means a grant of relief by the community from the terms of a floodplain management regulation. Flood insurance requirements remain in place for any varied use or structure and cannot be varied by the community.

"Violation" means 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 by this ordinance is presumed to be in violation until such time as that documentation is provided.

"Water Surface Elevation" means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum where specified) of floods of various magnitudes and frequencies in the floodplain.

24004.15 FLOODWAY OVERLAY DISTRICT (FW)

- a. Purpose.** The areas designated in the Floodway Overlay (FW) District consist of land in drainageway channels where the construction of buildings would create obstructions to drainage or hazard to life or property. The FW District includes land in the floodway as defined by FEMA. It is intended that areas located in the FW District primarily will be used for private or public open space in accordance with the standards in section 24006.5 of this chapter.

- b. Permitted Uses.** In District FW, any use allowed in the underlying zoning district is permitted if none of these uses, when acting alone or in combination with other uses, will increase the regulatory flood elevation or in any way affect the free flow of floodwater. This effect of any allowed use must be documented by appropriate engineering studies if required by the Director.

- c. Identification of Boundaries.** The boundary limits of the FW District shall be identified and determined by the Flood Insurance Rate Maps for the unincorporated area of Jackson County, Missouri published by the Federal Emergency Management Agency dated [September 29, 2006; index panels

29095 CIND1A and 29095 CIND2A dated September 29, 2006] January 20, 2017; and index panels 29095 CIND1B, 29095 and CIND3B dated January 20, 2017.

- d. **Minimum Standards.** No filling or dumping shall be allowed which will increase flood hazard heights beyond existing limits or adversely affect the hydraulic efficiency or capacity of the floodway unless that filling or dumping is compensated by excavation in, or contiguous to, the filled area and does not adversely affect the hydraulic characteristics of the floodway. The term "filling" as used in this section shall mean the placement of structures, whether temporary or permanent, materials, or other matter which would obstruct the floodway or decrease its capacity.

24004.16 FLOODWAY FRINGE OVERLAY DISTRICT (FF)

- a. **Purpose.** The areas designated in the Floodway Fringe Overlay (FF) District consist of land outside the floodway but located where there is a one percent or greater chance of inundation in any given year. It is intended that areas located in the FF District primarily will be used for private or public open space in accordance with the standards in section 24006.5 of this chapter.

- b. Permitted Uses.** In the FF District, any use allowed in the underlying zoning district is permitted if none of those uses will adversely affect the capacity of channels or floodways of any tributary to the main stream, drainage ditch or any other drainage facility or system.
- c. Identification of Boundaries.** The boundary limits of FF District shall be identified and determined by the Flood Insurance Rate Maps for the unincorporated area of Jackson County, Missouri published by the Federal Emergency Management Agency dated [September 29, 2006; index panels 29095 CIND1A and 29095 CIND2A dated September 29, 2006] January 20, 2017; and index panels 29095 CIND1B and CIND3B dated January 20, 2017.
- d. Minimum Standards.**
1. **Construction of Structures.** All residential and non-residential structures shall be constructed on fill so that the first floor and basement floor are one (1) foot above the regulatory flood protection elevation.
 2. **Fill.** The fill shall at no point be lower than one foot (1') above the regulatory flood protection elevation for the particular area and shall

extend at that elevation at least fifteen feet (15') beyond the limits of any structure erected on the fill.

3. **Certification of Elevation.** When elevation is used as a measure of flood protection, Certification as to the elevation of the lowest floor of a structure after its completion shall be provided to the Director by a qualified individual as defined by FEMA.
4. **Nonresidential Structures.** Nonresidential structures may be floodproofed to or above the regulatory flood elevation. When floodproofing is utilized for nonresidential structures, the Director shall be presented certification of the floodproofing measures from a qualified individual as defined by FEMA.
5. **Residences.** Any residence permitted in the FF District, whether site built or manufactured, shall be permanently anchored to a permanent foundation.
6. **Utility and Sanitary Facilities.** All utility and sanitary facilities shall be elevated or floodproofed up to regulatory flood protection elevation so that those facilities below the regulatory flood

protection elevation are water tight with walls substantially impermeable to water.

7. **Structural Components.** The structural components of the utility and sanitary facilities shall have the capacity to resist hydrostatic and hydrodynamic loads and the effects of buoyancy.
8. **Certification.** Utilities and pipelines will be permitted on submission to the Director a letter certifying that all facilities will be below grade and that they will in no way affect the free flow of floodwater.
9. **Changes in Topography.** No changes in topography, such as by filling or excavation, will be allowed if these changes will result in a concentration of the natural flow of water so as to cause or increase drainage problems. The grading of any area shall be done in a manner to maintain proper drainage.
10. **Water Supply Systems.** Any water supply system must be designed to eliminate infiltration of flood waters into the system and discharges from the system into flood waters.

11. **On-Site Waste Disposal Systems.** Any on-site waste disposal system must be located or designed so as to eliminate contamination during or subsequent to flooding.

Effective Date: This Ordinance shall be effective immediately upon its signature by the County Executive.

APPROVED AS TO FORM:

John D. Hulse
Chief Deputy County Counselor

W. Stephen Meyer
County Counselor

I hereby certify that the attached ordinance, Ordinance No.4942 introduced on November 28, 2016, was duly passed on December 12, 2016 by the Jackson County Legislature. The votes thereon were as follows:

Yeas 8

Nays 0

Abstaining 0

Absent 0

Excused 1

This Ordinance is hereby transmitted to the County Executive for his signature.

12.12.16
Date

Mary Jo Spino
Mary Jo Spino, Clerk of Legislature

I hereby approve the attached Ordinance No. 4942.

12/13/16
Date

Frank White, Jr.
Frank White, Jr., County Executive