

ORDINANCE 16-2008

AN ORDINANCE REPEALING CHAPTER 151 OF THE CITY OF HOPKINSVILLE, KENTUCKY CODE OF ORDINANCES PERTAINING TO FLOOD DAMAGE PREVENTION AND ADOPTING A NEW CHAPTER PERTAINING TO FLOOD DAMAGE PREVENTION

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HOPKINSVILLE, KENTUCKY AS FOLLOWS:

SECTION ONE

That Chapter 151 of the Hopkinsville, Kentucky Code of Ordinances is hereby repealed in its entirety.

SECTION TWO

That a new chapter entitled Flood Damage Prevention is hereby adopted as follows:

GENERAL PROVISIONS

STATUTORY AUTHORIZATION.

In Chapter 100 of the Kentucky Revised Statutes, the legislature of the State of Kentucky delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, Hopkinsville City Council ordains the following sections set forth in this chapter.

FINDINGS OF FACT.

- (A) The flood hazard areas of the city are subject to periodic inundation which results in loss of life, 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 by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.

PURPOSE; OBJECTIVES.

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

- (1) Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Control the alteration of natural flood plains, 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 damage; and

- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

The objectives of this ordinance are 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, sewer lines, and streets and bridges located in flood plains;
- (6) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas;
- (7) Ensure that potential home buyers are notified that property is in a flood area; and
- (8) Ensure that those who occupy a Special Flood Hazard Area assume responsibility for their actions.

DEFINITIONS.

For the purpose of this chapter the following definitions shall apply unless the context clearly indicates or requires a different meaning.

A Zone – Portions of the Special Flood Hazard Area (SFHA) in which the principle source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, floodwaters may move slowly or rapidly, but waves are usually not a significant threat to structures. Areas of 100-year flood, base flood elevations, and flood hazard factors are not determined.

Accessory Structure (Appurtenant Structure) – A structure located on the same parcel of property as the principle structure, the use of which is incidental to the use of the principle structure. Accessory structures should constitute a minimal initial investment, may not be used for human habitation, and should be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

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

Addition (to an existing structure) – Any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

A1-30 and AE Zones – Special Flood Hazard Areas inundated by the 1% annual chance flood (100-year flood. Base flood elevations (BFEs) are determined.

AH Zone – An area of 100-year shallow flooding where depths are between one and three feet (usually shallow ponding). Base flood elevations are shown.

AO Zone – An area of 100-year shallow flooding where water depth is between one and three feet (usually sheet flow on sloping terrain). Flood depths are shown.

Appeal – A request for a review of the city's interpretation of any provision of this chapter or a request for a variance.

AR/A1 – A30, AR/AE, AR/AH, AR/AO, and AR/A zones – Special Flood Hazard Areas (SFHAs) that result from the de-certification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection. After restoration is complete these areas will still experience residual flooding from other flooding sources.

A99 Zone – That part of the SFHA inundated by the 100-year flood which is to be protected from the 100-year flood by a Federal flood protection system under construction. No base flood elevations are determined.

Area of Shallow Flooding – A designated AO or VO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Area of Special Flood Hazard – The land in the flood plain within a community subject to a 1% or greater chance of flooding in any given year.

B and X Zones (shaded) – Areas of the 0.2% annual chance (500-year) flood, areas subject to the 100-year flood with average depths of less than one foot or with contributing drainage area less than 1 square mile, and areas protected by levees from the base flood.

Base Flood – The flood having a 1% chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE) – The elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO that indicates the water surface elevation resulting from a flood that has a 1% or greater chance of being equaled or exceeded in any given year.

Basement – That portion of a building having its floor subgrade (below ground level) on all sides.

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

Building – A walled and roofed structure that is principally above ground; including a manufactured home, gas or liquid storage tank, or other man-made facility or infrastructure. See definition for structure.

Building/Zoning Permit – The building/zoning permit is issued by the Flood Safety Officer when the regulations of this chapter are satisfied. Issuance of a building/zoning permit does not relieve the builder/developer from the obligations to comply with pertinent state and local ordinances.

C and X (unshaded) Zones – Areas determined to be outside the 500-year floodplain.

Community – A political entity having the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

Community Rating System (CRS) – A program developed by the Federal Insurance Administration to provide incentives to those communities in the regular program to go beyond the minimum floodplain management requirements to develop extra measures for protection from flooding.

Community Flood Hazard Area (CFHA) – An area that has been determined by the Flood Safety Officer (or other delegated, designated, or qualified community official) from available technical studies, historical information, and other available and reliable sources, which may be subject to periodic inundation by floodwaters that can adversely affect public health, safety and general welfare. Included are areas downstream from dams.

Critical Facility – Any property that, if flooded, would result in severe consequences to public health and safety or a facility which, if unusable or unreachable because of flooding, would seriously and adversely affect the health and safety of the public. Critical facilities include, but are not limited to: housing likely to contain occupants not sufficiently mobile to avoid injury or death unaided during a flood; schools, nursing homes, hospitals, police, fire and emergency response installations, vehicle and equipment storage facilities, emergency operations centers likely to be called upon before, during, and after a flood, public and private utility facilities important to maintaining or restoring normal services before, during and after a flood, and those facilities or installations which produce, use or store volatile, flammable, explosive, toxic, and/or water-reactive materials, hazardous materials, or hazardous waste.

D Zone – An area in which the flood hazard is undetermined.

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, or permanent storage of materials.

Elevated Building – A non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

Elevation Certificate – A statement certified by a registered professional engineer or surveyor on the FEMA-approved form in effect at the time of certification that verifies a structure's elevation and other related information to verify compliance with this ordinance.

Emergency Program - The initial phase under which a community participates in the NFIP, intended to provide a first layer amount of insurance at subsidized rates on all insurable structures in that community before the effective date of the initial FIRM.

Enclosure – That portion of a structure below the Base Flood Elevation (BFE) used solely for parking of vehicles, limited storage, or access to the structure.

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

Existing Construction – Any structure 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 Subdivisions – 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 first floodplain management ordinance adopted by the city based on specific technical base flood elevation data which established the area of special flood hazards.

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 Material – Any foreign matter or material introduced into the area of special flood hazard or floodway, which changes the existing elevations and/or contours for that particular section of the river. Fill material is normally considered rock, construction debris, earth, asphalt, or any material which, in the opinion of the Flood Safety Officer, is a change to the area of special flood hazard or floodway. It is the intent of this definition to cover any foreign matter or material that is introduced into the area of special flood hazard or floodway that did not exist on the site prior to the adoption of this ordinance.

Five-Hundred Year Flood – The flood that has a 0.2% chance of being equaled or exceeded in any year. Areas subject to the 500-year flood have a moderate to low risk of flooding.

Flood, Flooding, or Flood Water – (1) A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e. mudflows). See Mudslides. (2) The condition resulting from flood-related erosion. See flood-related erosion.

Flood Boundary and Floodway Map (FBFM) – A map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and the regulatory floodway.

Flood Hazard Boundary Map (FHBM) – A map on which the boundaries of the flood, mudslide (i.e. mudflow), and flood-related erosion areas having special hazards have been designated as Zones A, M, and/or E by the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA).

Flood Insurance Rate Map (FIRM) – An official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood Insurance Study – The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary-Floodway Map and the water surface elevation of the base flood.

Flood Safety Officer – The individual appointed by a NFIP participating community to administer and enforce the floodplain management ordinances. The Flood Safety Officer for Hopkinsville is the Director of the Hopkinsville-Christian County Planning Commission.

Floodplain or Flood-Prone Area – Any land area susceptible to being inundated by flood waters from any source.

Floodplain Management – The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management ordinances, and open space plans.

Floodplain Management Regulations – This ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control), and other applications of police power, which control development in flood-prone areas. This term describes federal, state and/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 non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

Floodproofing Certificate – A certification by a registered professional engineer or architect, on a FEMA-approved form in effect at the time of certification stating that a non-residential structure, together with attendant utilities and sanitary facilities is watertight to a specified design elevation with walls that are substantially impermeable to the passage of water and all structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy and anticipated debris impact forces.

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 one foot.

Floodway Fringe – That area of the floodplain on either side of the regulatory floodway where encroachment may be permitted without additional hydraulic and/or hydrologic analysis.

Floor – The top surface of an enclosed area in a building (including the basement); i.e., the top of the slab in concrete slab construction or the top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

Fraud and Victimization – As related in the Variance Procedures section of this ordinance, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City of Hopkinsville will consider the fact that every newly constructed structure adds to government responsibilities and remains a part of the community for fifty to one hundred years. Structures that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages may incur. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

Freeboard – A factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Freeboard must be applied not just to the elevation of the lowest floor or floodproofing level, but also to the level of protection provided to all components of the structure, such as building utilities, HVAC components, etc.

Functionally Dependent Use Facility – A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Governing Body - The local governing unit, i.e. county or municipality that is empowered to adopt and implement ordinances to provide for the public health, safety and general welfare of its citizenry.

Hazard Potential – The possible adverse incremental consequences that result from the release of water or stored contents due to failure of a dam or misoperation of a dam or appurtenances. The hazard potential classification of a dam does not reflect in any way the current condition of a dam and its appurtenant structures (e.g., safety, structural integrity, flood routing capacity).

HEC II – The Army Corps of Engineers' step back water computer program and/or an approved computer modeling program.

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

Historic Structure – Any structure that is:

- (1) 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 as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved state program as determined by the Secretary of the Interior; or
 - (b) Directly by the Secretary of the Interior in states without approved programs.

Increased Cost of Compliance (ICC) – Increased cost of compliance coverage provides for the payment of a claim for the cost to comply with State or community floodplain management laws or ordinances after a direct physical loss by flood. When a building covered by a Standard Flood Insurance Policy under the NFIP sustains a loss and the state or community declares the building to be substantially or repetitively damaged, ICC will help pay up to \$30,000 for the cost to elevate, floodproof, demolish, or remove the building.

ICC coverage is available on residential and non-residential buildings (this category includes public or government buildings, such as schools, libraries, and municipal buildings) insured under the NFIP.

Kentucky Revised Statute 151.250 – Plans for dams, levees, etc. to be approved and permit issued by cabinet – (Environmental and Public Protection Cabinet) –

- (1) Notwithstanding any other provision of law, no person and no city, county or other political subdivision of the state, including levee districts, drainage districts, flood control districts or systems, or similar bodies, shall commence the construction, reconstruction, relocation or improvement of any dam, embankment, levee, dike, bridge, fill or other obstruction (except those constructed by the Department of Highways) across or along any stream, or in the floodway of any stream, unless the plans and specifications for such work have been submitted by the person or political subdivision responsible for the construction, reconstruction or improvement and such plans and specifications have been approved in writing by the cabinet and a permit issued. However, the cabinet by regulation may exempt those dams, embankments or other obstructions which are not of such size or type as to require approval by the cabinet in the interest of safety or retention of water supply.
- (2) No person, city, county, or other political subdivision of the state shall commence the filling of any area with earth, debris, or any other material, or raise the level of any area in any manner, or place a building, barrier or obstruction of any sort on any area located adjacent to a river or stream or in the floodway of the stream so that such filling, raising, or obstruction will in any way affect the flow of water in the channel or in the floodway of the stream unless plans and specifications for such work have been submitted to and approved by the cabinet and a permit issued as required in subsection (1) above.
- (3) Nothing in this section is intended to give the cabinet any jurisdiction or control over the construction, reconstruction, improvement, enlargement, maintenance or operation of any drainage district, ditch or system established for agricultural purposes, or to require approval of the same except where such obstruction of the stream or floodway is determined by the cabinet to be a detriment or hindrance to the beneficial use of water resources in the area, and the person or political subdivision in control thereof so notified. The Department for Natural Resources through KRS Chapter 350 shall have exclusive jurisdiction over KRS Chapter 151 concerning the regulation of dams, levees, embankments, dikes, bridges, fills, or other obstructions across or along any stream or in the floodway of any stream which structures are permitted under KRS Chapter 350 for surface coal mining operations.

Letter of Map Change (LOMC) – An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMC's include the following categories:

- (1) Letter of Map Amendment (LOMA) – A revision based on technical data showing that a property was incorrectly included in a designated SFHA. A LOMA amends the current effective FIRM and establishes that a specific property is not located in a SFHA.
- (2) Letter of Map Revision (LOMR) – A revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features.

- (3) Letter of Map Revision – Fill (LOMR-F) – A determination that a structure or parcel has been elevated by properly placed engineered fill above the BFE and is, therefore, excluded from the SHFA.

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.

For a levee system to be recognized, the following criteria must be met:

- (1) All closure devices or mechanical systems for internal drainage, whether manual or automatic, must be operated in accordance with an officially adopted operation manual (a copy of which must be provided to FEMA by the operator when levee or drainage system recognition is being sought or revised).
- (2) All operations must be under the jurisdiction of a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the NFIP.

Limited Storage – An area used for storage and intended to be limited to incidental items which can withstand exposure to the elements and have low flood damage potential. Such an area must be of flood resistant material, void of utilities except for essential lighting, and cannot be temperature controlled.

Lowest Adjacent Grade – The elevation of the sidewalk, patio, deck support, or basement entryway immediately next to the structure and after the completion of construction. It does not include earth that is emplaced for aesthetic or landscape reasons around a foundation wall. It does include natural ground or properly compacted fill that comprises a component of a structure's foundation system.

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

Manufactured Home – A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes part trailers and similar transportable structures, placed on a site for 180 consecutive days or longer and intended to be improved property.

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

Map – The Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by the Federal Emergency Management Agency (FEMA).

Map Panel Number – The four-digit number on a flood map, followed by a letter suffix, assigned by FEMA. The first four digits represent the map panel. The letter suffix represents the number of times the map panel has been revised. (The letter “A” is not used by FEMA, the letter “B” is the first revision.)

Market Value – The structure value, excluding the land (as agreed between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal; replacement cost depreciated by age of structure (Actual Cash Value) or adjusted assessed values.

Mean Sea Level – The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the flood plain. For purposes of this chapter, the term is synonymous with either the National Geodetic Vertical Datum (NGVD) 1929 or North American Vertical Datum (NAVD) 1988.

Mitigation – Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the costs of disaster response and recovery.

Mudslide (i.e. mudflow) – Describes a condition where there is a river, flow, or inundation of liquid mud down a hillside, usually as a result of a dual condition of loss of brush cover and the subsequent accumulation of water on the ground, preceded by a period of unusually heavy or sustained rain. A mudslide (i.e. mudflow) may occur as a distinct phenomenon while a landslide is in progress, and will be recognized as such by the Flood Safety Officer only if the mudflow, and not the landslide, is the proximate cause of damage that occurs.

Mudslide (i.e. mudflow) Area Management – The operation of and overall program of corrective and preventative measures for reducing mudslide (i.e. mudflow) damage, including but not limited to emergency preparedness plans, mudslide control works, and floodplain management regulations.

Mudslide (i.e. mudflow) Prone Area – An area with land surfaces and slopes of unconsolidated material where the history, geology, and climate indicate a potential for mudflow.

National Flood Insurance Program (NFIP) – The federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the federal government and the private insurance industry.

National Geodetic Vertical Datum (NGVD) – As corrected in 1929, is a vertical control used as a reference for establishing varying elevations within the flood plain.

New Construction – Structures for which the "start of construction" commenced on or after the effective date of this chapter and includes any subsequent improvements to such structures.

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

Non-Residential – Structures that are not designed for human habitation, including but is not limited to: small business concerns, churches, schools, farm structures (including grain bins and silos), pool houses, clubhouses, recreational structures, mercantile structures, agricultural and industrial structures, warehouses, and hotels or motels with normal room rentals for less than 6 months duration.

North American Vertical Datum (NAVD) – As corrected in 1988, a vertical control used as a reference for establishing varying elevations within the floodplain. (Generally used on the newer FIRM's and Digitally Referenced FIRM's (DFIRM's). (Refer to FIRM or DFIRM legend panel for correct datum.)

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

One-Hundred Year Flood (100-Year Flood) (see Base Flood) – The flood that has a 1% or greater chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the 100-year flood. Over the life of a 30-year loan, there is a 26% chance of experiencing such a flood with the SFHA.

Participating Community – A community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

Pre-FIRM Construction – Construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

Post-FIRM Construction – Construction or substantial improvement that started on or after the effective date of the initial FIRM of the community or after December 31, 1974, whichever is later.

Probation – A means of formally notifying participating NFIP communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations. During periods of probation, each insurance policy is subject to a \$50 surcharge.

Program Deficiency – A defect in a community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management standards or of the standards of 44 CFR 60.3, 60.4, 60.5, and/or 60.6.

Public Safety and Nuisance – Anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational Vehicle – A vehicle that is:

- (1) Built on a single chassis;

- (2) 400 square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable to a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regular Program – The phase of a community’s participation in the NFIP where more comprehensive floodplain management requirements are imposed and higher amounts of insurance are available based upon risk zones and elevations determined in a FIS.

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 one foot. See Base Flood.

Remedy a Violation – The process by which a community brings a structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impact of non-compliance. Reduced impact may include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing state or federal financing exposure with regard to the structure or other development.

Repair – The reconstruction or renewal of any part of an existing structure.

Repetitive Loss – Flood-related damages sustained by a structure on two or more separate occasions during a 10-year period where the value of damages equals or exceeds an average of 50% of the current value of the structure, beginning on the date when the damage first occurred, or, four or more flood losses of \$1,000.00 or more over the life of the structure, or, three or more flood losses over the life of the structure that are equal to or greater than the current value of the structure.

Riverine – Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Section 1316 – That section of the National Flood Insurance Act of 1968, as amended, which states that no new or renewal flood insurance coverage shall be provided for any property that the Administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

Sheet Flow Area - see "Area of Shallow Flooding".

Significant – The term as defined by this chapter shall not be construed as exceeding more than six inches in the increase of flood water elevations. The six inch measurement is based on the accuracy of the HEC II analysis used by the Army Corps of Engineers in defining the floodway hazard. The HEC II computer run is accurate to six inches.

Special Flood Hazard Area (SFHA) – That portion of the floodplain subject to inundation by the base flood and/or flood-related erosion hazards as shown on a FHBM or FIRM as Zone A, AE, A1 – A30, AH, AO, or AR.

Start of Construction – The first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does include land preparation, such as clearing, grading, and filling; it includes the installation of streets and/or walkways; it includes excavation for a basement, footings, piers, or foundations, or the erection of temporary forms; it includes the installation on the property of accessory buildings.

Structure – A walled and roofed building that is principally above ground, manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

Subdivision – Any division, for the purposes of sale, lease, or development, either on the installment plan or upon any and all other plans, terms and conditions, of any tract or parcel of land into two or more lots or parcels.

Subrogation – An action brought by FEMA to recover insurance money paid out where all or part of the damage can be attributed to acts or omissions by a community or other third party.

Substantial Damage – Means any damage to a building for which the cost of repairs equals or exceeds 50% of the market value of the building prior to the damage occurring. This term includes structures that are categorized as repetitive loss.

For the purposes of this definition, “repair” is considered to occur when the first repair or reconstruction of any wall, ceiling, floor, or other structural part of the building commences. The term does not apply to:

- (1) Any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely 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”.

Substantial Improvement – Means any combination of reconstruction, alteration, or improvement to a building, taking place during a 1-year period, in which the cumulative percentage of improvement equals or exceeds 50% of the current market value of the building. For the purposes of this definition, an improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not apply to:

- (1) Any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official and which are solely necessary to assure safe living conditions;
- (2) Any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure”; or
- (3) Any building that has been damaged from any source or is categorized as repetitive loss.

Substantially Improved Existing Manufactured Home Park or Subdivision – Where the repair, reconstruction, rehabilitation, or improvement of the streets, utilities, and pads equals or exceeds 50% of the value of the streets, utilities, and pads before the repair, reconstruction, or improvements commenced.

Suspension – Removal of a participating community from the NFIP for failure to enact and/or enforce floodplain management regulations required for participation in the NFIP. New or renewal flood insurance policies are no longer available in suspended communities.

Utilities – Includes electrical, heating, ventilation, plumbing, and air conditioning equipment.

Variance – A grant of relief from the requirements of this chapter which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.

Violation – Failure of a structure or other development to fully comply with this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Watercourse – A lake, river, creek, stream, wash, channel or other topographic feature on or over which water flows at least periodically.

Water Surface Elevation – 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 floodplains of coastal or riverine areas.

Watershed – All the area within a geographic boundary from which water, sediments, dissolved materials, and other transportable materials drain or are carried by water to a common outlet, such as a point on a larger stream, lake, or underlying aquifer.

X Zone – The area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs (B zones on older FIRMs) designate areas subject to inundation by the flood with a 0.2% probability of being equaled or exceeded (the 500-year flood) in any year. Unshaded X zones (C zones on older FIRMS) designate areas where the annual exceedance probability of flooding is less than 0.2%.

Zone – A geographical area shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

INTERPRETATION.

In the interpretation and application of this chapter all provisions shall be considered as minimum requirements, liberally construed in favor of the governing body, and deemed neither to limit nor repeal any other powers granted under state statutes.

APPLICATION; JURISDICTION.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city and any future annexations, and areas applicable to KRS 151.250, and as determined by the Flood Safety Officer or other delegated, designated, or qualified community official as determined by City Council from available technical studies, historical information, and other available and reliable sources, areas within the jurisdiction of the City of Hopkinsville which may be subject to periodic inundation by floodwaters that can adversely affect the public health, safety, and general welfare of the citizens of the City of Hopkinsville.

COMPLIANCE.

No structure or land shall hereafter be constructed, located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable state regulations. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the city from taking such lawful action as is necessary to prevent or remedy any violation.

BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD.

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) for Christian County, dated September 17, 2008, with the accompanying Flood Insurance Rate Maps (FIRMs), and other supporting data, and any revisions thereto, are adopted by reference and declared to be a part of this chapter. This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance by the Flood Safety Officer pursuant to statutes governing land use management regulations. The FIS and/or FIRM are permanent records of Christian County and are on file and available for review by the public during regular business hours at the Hopkinsville-Christian County Planning Commission at 101 North Main Street, Hopkinsville, Kentucky.

WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damage. This chapter shall not create liability on the part of the city or by any officer or employee, the Commonwealth of Kentucky, the Federal Insurance Administration, or the Federal Emergency Management Agency, thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

PERMITS

BUILDING/ZONING PERMIT REQUIRED; APPLICATION.

- (A) A building/zoning permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities. The building/zoning permit is a multi-purpose permit and shall not be issued until evidence of compliance with all local ordinances is provided.
- (B) Application for a building/zoning permit shall be made to the Flood Safety Officer on forms furnished by him prior to any development activity, and may include, but not be limited to the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures; fill; storage of materials; drainage facilities; and the location of the foregoing. Specifically, the following information is required:
 - (1) Application stage.
 - (a) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;
 - (b) Elevation in relation to mean sea level to which any residential/nonresidential structure will be floodproofed;

- (c) A certificate from a registered professional engineer or architect that the residential/ nonresidential floodproofed structure meets the floodproofing criteria in subsection (B) of the Specific Standards section of this ordinance; and
 - (d) A description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.
- (2) Construction stage. The following is required:
- (a) Provide a floor elevation or floodproofing certification after the lowest floor is completed, or floodproofing by whatever construction means, it shall be the duty of the permit holder to submit to the Flood Safety Officer a certification of the elevation of the lowest floor, floodproofed elevation. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building, certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
 - (b) Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Flood Safety Officer shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to any further progressive work. Failure to submit the survey or failure to make any required corrections shall be cause to issue a stop-work order for the project.

FLOOD HAZARD REDUCTION

GENERAL STANDARDS.

In all areas of special flood hazard the following provisions are required:

- (A) New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
- (B) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
- (C) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (D) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (E) Electrical, heating, ventilation, plumbing, air-conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and if
- (F) Within Zones AH or AO, so that there are adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures;
- (G) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (H) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (I) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;

- (J) Any alteration, repair, reconstruction, or improvements to a structure on which is in compliance with the provisions of this section, shall meet the requirements of new construction contained in this section; and
- (K) A HEC II computer analysis or an approved computer modeling program will be run for all developments by the developer to determine off-site effects to flood water elevation on adjoining properties. Any questions concerning the running of the HEC II study shall be directed to and interpreted by the Flood Safety Officer. The HEC II Study will be certified by a licensed engineer.
- (L) No fill material is permitted within the area of special flood hazard. Fill material is defined in the Definitions section of this ordinance. Any fill material incorporated into the area of special flood hazard will constitute a violation of this ordinance. Fill material placed in the area of special flood hazard must be compensated by removing an equal amount of fill from the area of special flood hazard. The fill introduced and the removal of fill will be documented appropriately with the documentation being submitted to the Flood Safety Officer for approval. The documentation must be certified by a licensed engineer.
- (M) Property within the area of special flood hazard may be graded, and the contour elevations within the areas of special flood hazard may be altered or changed upon proper documentation being submitted to the Flood Safety Officer for review and approval. A licensed engineer must certify predevelopment contour and post-development contour changes.
- (N) The Flood Safety Officer, at his/her discretion, may require a HEC-II study to be performed for divisions (K) and (L) above.
- (O) Any alteration, repair, reconstruction, or improvements to a structure, which is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

SPECIFIC STANDARDS.

In all areas of special flood hazard where base flood elevation data has been provided as set forth in the Basis for Establishing Areas of Special Flood Hazard section and subsection (B)(12) of the Flood Safety Officer; Duties and Responsibilities section of this ordinance, the following provisions are required:

- (A) Residential construction. New construction or substantial improvement of any residential structure (or manufactured home) shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of division (B) of this section.
 - (1) In an AO zone, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade if no depth is specified.
 - (2) In an A zone, where no technical data has been produced by the Federal Emergency Management Agency, elevated 3 feet above the base flood elevation, as determined by this community. The Flood Safety Officer will determine the method by which base flood elevations are determined. Methods include but are not limited to detailed hydrologic and hydraulic analyses, use of existing data available from other sources, use of historical data, best supportable and reasonable judgment in the event no data can be produced. Title 401 KAR (Kentucky Administrative Regulations) Chapter 4, Regulation 060, states as a part of the technical requirements for a State

Floodplain Permit: The applicant shall provide cross sections for determining floodway boundaries (and thereby Base Flood Elevations) at any proposed construction site where FEMA maps are not available. All cross sections shall be referenced to mean sea level and shall have vertical error tolerances of no more than + five-tenths (0.5) foot. Cross sections elevations shall be taken at those points which represent significant breaks in slope and at points where hydraulic characteristics of the base floodplain change. Each cross section shall extend across the entire base floodplain and shall be in the number and at the locations specified by the cabinet. If necessary to ensure that significant flood damage will not occur, the cabinet may require additional cross sections or specific site elevations which extend beyond those needed for making routine regulatory floodway boundary calculations.

- (3) In all other Zones, elevated three feet above the base flood elevation.
- (B) Nonresidential construction. New construction or substantial improvement of any commercial, industrial, or nonresidential structure (including manufactured homes used for non-residential purposes) shall have the lowest floor, including basement, and attendant utility and sanitary facilities elevated no lower than three feet above the level of the base flood elevation. Structures located in all zones may be floodproofed in lieu of being elevated provided that all areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this division are satisfied. Certification shall be provided to the official as set forth in the Building/Zoning Permit Required; Application section of this ordinance.
- (C) Elevated buildings.
 - (1) New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria (FEMA Technical Bulletin 1-93):
 - (a) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (b) The bottom of all openings shall be no higher than one foot above grade; and
 - (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - (2) Electrical, plumbing, and other utility connections are prohibited below the base flood elevation.
 - (3) Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).
 - (4) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

- (5) The total floor area of all such enclosed areas shall not exceed 300 square feet.
 - (6) For enclosures greater than seven (7) feet in interior height, where elevation requirements exceed six (6) feet above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the structures' originally approved design, shall be presented as a condition of issue of the final Certificate of Occupancy.
- (D) Floodways. Located within areas of special flood hazard established in the Basis for Establishing Areas of Special Flood Hazard section of this ordinance are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris and potential projectiles, and has erosion potential, the following provisions shall apply:
- (1) Encroachments, including fill, new construction, substantial improvements, and other developments are prohibited unless certification (with supporting data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;
 - (2) If division (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this chapter.
 - (3) The placement of manufactured homes (mobile homes) is prohibited, except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of subsection (E)(2)(c) of the Specific Standards section of this ordinance and the elevation standards of subsection (E)(2)(a) of the Specific Standards section and subsection (J) of the General Standards section of this ordinance are met.
- (E) Standards for manufactured homes and recreational vehicles.
- (1) All manufactured homes placed or substantially improved outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, must meet all the requirements for new construction, including elevation and anchoring.
 - (2) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
 - (a) The lowest floor of the manufactured home is elevated no lower than three feet above the base flood elevation, and
 - (b) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches above grade.
 - (c) The manufactured home must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (d) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, and manufactured home must meet the standards of division (E) (2) (a) through (c).

- (e) All recreational vehicles placed on sites located within A, A1-30, AO, AH, and AE on the community's Flood Insurance Rate Map (FIRM) must either:
 - (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 for new construction of this ordinance, including anchoring and elevation requirements for "manufactured homes."

A recreational vehicle is ready for highway use if it is licensed and insured in accordance with the State of Kentucky motor vehicle regulations, is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

STANDARDS FOR STREAMS WITHOUT BASE FLOOD ELEVATIONS OR FLOODWAYS.

Located within the areas of special flood hazard established in the Basis for Establishing Areas of Special Flood Hazard section of this ordinance, where small streams and sinkholes exist but where no base flood data has been provided or where no floodways have been provided, the following provisions apply:

- (A) No encroachments, unless certification by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (B) New construction or substantial improvements of structures shall be elevated or floodproofed to elevations established in accordance with subsection (B)(12) of the Flood Safety Officer; Duties and Responsibilities section of this ordinance.

STANDARDS FOR SHALLOW FLOODING ZONES.

Located within the special flood hazard areas established in the Basis for Establishing Areas of Special Flood Hazard section of this ordinance are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the water path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures shall:
 - (a) Have the lowest floor, including basement, elevated to or above either the base flood elevation or in Zone AO the flood depth specified on the Flood Insurance Rate Map above the highest adjacent grade. In Zone AO, if no flood depth is specified, the lowest floor, including basement, shall be elevated no less than two (2) feet above the highest adjacent grade.
- (2) All new construction and substantial improvements of non-residential structures shall:
 - (a) Have the lowest floor, including basement, elevated to or above either the base flood elevation or in Zone AO the flood depth specified on the Flood Insurance Rate Map, above the highest adjacent grade. In Zone AO, if no flood depth is specified, the lowest floor, including basement, shall be elevated no less than two (2) feet above the highest adjacent grade.
 - (b) Together with attendant utility and sanitary facilities be completely floodproofed either to the base flood elevation or above or, in Zone AO, to or above the specified flood depth plus a minimum of one foot so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

STANDARDS FOR SUBDIVISION PROPOSALS

- (A) All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood and be consistent with the need to minimize flood damage;
- (B) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (C) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and,
- (D) In areas where base flood elevation and floodway data is not available (Zone A or unmapped streams), base flood elevation and floodway data for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, shall be provided.
- (E) All subdivision plans will include the elevation of proposed structure(s) and lowest adjacent grade. If the site is filled above the base flood elevation, the lowest floor and lowest adjacent grade elevations shall be certified by a registered professional engineer or surveyor and provided to the Flood Safety Officer.
- (F) All new subdivision proposals shall include streets for emergency access that will be elevated to three feet above the base flood elevation.

STANDARDS FOR ACCESSORY STRUCTURES IN ALL ZONES BEGINNING WITH THE LETTER 'A'

For all accessory structures in special flood hazard areas designated 'A' the following provisions shall apply:

- (1) Structure must be non-habitable;
- (2) Must be anchored to resist flotation forces;
- (3) Will require flood openings/vents no more than one foot above grade, total openings are to be one square inch per one square foot of floor area, at least two openings required on opposite walls;
- (4) Built of flood resistant materials below a level three feet above the base flood elevation;
- (5) Must elevate utilities above the base flood elevation;
- (6) Can only be used for storage or parking;
- (7) Cannot be modified for a different use after permitting.

CRITICAL FACILITIES

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the SFHA (100-year floodplain). Construction of new critical facilities shall not be permissible within the floodway; however, they may be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to three feet above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

ADMINISTRATION

FLOOD SAFETY OFFICER; DUTIES AND RESPONSIBILITIES.

- (A) The Flood Safety Officer is appointed to administer, implement, and enforce the provisions of this chapter.
- (B) Duties of the Flood Safety Officer shall include, but not be limited to:
 - (1) Review all building/zoning permits to assure that the permit requirements of this chapter have been satisfied.
 - (2) Advise the permittee that additional federal or state permits may be required, and if specific federal or state permits are known, require that copies of the permits be provided and maintained on file with the development permit.
 - (3) Notify adjacent communities and the National Resources and Environmental Protection, Division of Water, and any other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse, and submit evidence of the notification to the Federal Emergency Management Agency.
 - (4) Assure that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.
 - (5) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures in accordance with subsection (B)(2) of the Building/Zoning Permit Required; Application section of this ordinance.
 - (6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed in accordance with subsection (B)(2) of the Building/Zoning Permit Required; Application section of this ordinance.
 - (7) Certification required by subsection (C) of the Specific Standards section of this ordinance (Elevated buildings).
 - (8) Certification of elevation required by subsection (1) of the Standards for Subdivision Proposals section of this ordinance (Subdivision standards).
 - (9) Certification required by subsection (D)(1) of the Specific Standards section of this ordinance (Floodway encroachments).
 - (10) When floodproofing is utilized for a particular structure, the Flood Safety Officer shall obtain certification from a registered professional engineer or architect in accordance with subsection (B) of the Specific Standards section of this ordinance.
 - (11) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Flood Safety Officer shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this chapter.
 - (12) When base flood elevation data has not been provided in accordance with the Basis for Establishing Areas of Special Flood Hazard section of this ordinance, then the Flood Safety Officer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to the provisions of this chapter.
 - (13) All records pertaining to the provisions of this chapter shall be maintained in the office of the Flood Safety Officer shall be open for public inspection.

VARIANCE PROCEDURES.

The variance criteria set forth in this section of the ordinance are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level is so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

- (A) The Hopkinsville-Christian County Planning Commission as established by City Council shall hear and decide appeals and requests for variances from the requirements of this chapter.
- (B) The Hopkinsville-Christian County Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Flood Safety Officer in the enforcement or administration of this chapter.
- (C) Any person aggrieved by the decision of the Flood Safety Officer or any taxpayer may appeal the decision to the County Circuit Court, as provided by law.
- (D) 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 this section, except for divisions (H)(1) and (4) of this section, and provided that the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical designation.
- (E) In passing upon such applications, the Hopkinsville-Christian County Planning Commission shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter, and:
 - (1) The danger that materials may be swept onto other lands to the injury of others.
 - (2) The danger to life and property due to flooding or erosion damage.
 - (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of the damage on the individual owner.
 - (4) The importance of the services provided by the proposed facility to the community.
 - (5) The necessity of the facility of a waterfront location, in the case of a functionally-dependent facility.
 - (6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
 - (7) The compatibility of the proposed use with existing and anticipated development.
 - (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area.

- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - (10) 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.
 - (11) The cost of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (F) Upon consideration of the factors listed above and the purposes of this chapter, the Hopkinsville-Christian County Planning Commission may attach conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- (G) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (H) The conditions for variances shall be as follows:
- (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that a variance is the minimum necessary so as not to destroy the historic character and design of the building.
 - (2) Variances shall only be issued upon a showing of good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship, and a determination that the granting of a variance would not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance (as defined in the Definition section under "Public Safety and Nuisance"), cause fraud on or victimization of the public (as defined in the Definition section), or conflict with existing local laws or ordinances.
 - (3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built, and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
 - (4) The Flood Safety Officer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

ENFORCEMENT AND PENALTY.

- (A) The provisions of this ordinance may be enforced by the Code of Ordinance Enforcement Board established in Chapters 33.180-33.194 of the Hopkinsville Code of Ordinances, or in the alternative, by the Christian County District Court as a misdemeanor or violation through the powers delegated to the Flood Safety Officer. The decision on where the ordinance will be enforced shall be at the City's discretion. However, nothing contained in Chapters 33.180-33.194 shall be construed or interpreted to limit those powers delegated to the Flood Safety Officer. Likewise, nothing contained in this ordinance shall be construed or interpreted to limit those powers delegated to a Code Enforcement Officer as created in Chapter 33.180-33.194. Further, any Flood Safety Officer may also become certified as a Code Enforcement Officer.
- (B) Any person violating any of the provisions of this ordinance or failing to comply with any of its requirements, including violations of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute an offense under this ordinance and shall result in a fine. The first offense shall result in a fine

of not greater than \$300. A second offense shall result in a fine of not greater than \$500. All other offenses shall result in a fine of not greater than \$600. Each day that a violation continues shall constitute a separate offense. Nothing herein contained shall prevent the City from taking other lawful action as is necessary to prevent or remedy any violation.

SECTION THREE

If any section, subsection, sentence, clause, or phrase of this ordinance is held unconstitutional or otherwise invalid, such infirmities shall not affect the validity of the remaining portions of this ordinance.

SECTION FOUR

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

SECTION FIVE

This ordinance shall take effect September 17, 2008 after its passage and publication according to law.

ORDINANCE 16-2008 FLOOD DAMAGE PREVENTION

PUBLICLY READ AND PASSED FIRST TIME: July 15, 2008

PUBLICLY READ AND PASSED SECOND TIME: August 5, 2008

APPROVED: _____
J. DANIEL KEMP
MAYOR

ATTEST: _____
WENDE ALDRIDGE, CKMC
ASSISTANT CITY CLERK