

Article amendments approved unless noted:	OMPC	Owensboro	Daviess Co.	Whitesville
Flood plain regulations established	08-Nov-80	05-Dec-80	13-Jan-81	not applic.
Flood plain regulations amended	14-May-87	16-Jun-87	24-Jun-87	not applic.
Flood plain regulations amended	21-Apr-94	07-Jun-94	01-Jun-94	not applic.
Limited expansion of existing use in floodway {18-6(b)(2)(h)}	18-Apr-96	21-May-96	22-May-96	not applic.

18-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

18-1(a) Statutory Authorization. The legislature of the State of Kentucky has in KRS Chapter 100 delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Commission of the City of Owensboro and the Fiscal Court of Daviess County, Kentucky do ordain as follows:

18-1(b) Findings of Fact.

(1) Flood Losses Resulting From Periodic Inundation. The flood hazard areas of Daviess County are subject to periodic inundation which 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.

(2) General Causes of These Flood Losses. These flood losses are caused by the cumulative effect of obstructions in flood plains 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 protected from flood damages.

18-1(c) Statement of Purpose. It is the purpose of this article to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

(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;

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

18-1(d) Objectives. The objectives of this article are:

(1) to protect human life and health;

(2) to minimize expenditure of public money for costly flood control projects;

(3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) to minimize prolonged business interruptions;

(5) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;

(6) to help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and,

(7) to insure that potential home buyers are notified that property is in a flood area.

18-2 DEFINITIONS. Unless specifically defined below or elsewhere in this zoning ordinance, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application. If a word or phrase defined below is defined differently in another article of this zoning ordinance, the definition below shall apply to provisions of this article.

"Addition (to an existing building)" means 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.

"Appeal" means an appeal to the Board of Adjustment resulting from an official action, order, requirement, interpretation, grant, refusal, or decision of the Building Inspector, or an appeal to the Circuit Court of Daviess County resulting from any final action of the Board of Adjustment. Procedures for appeals are described in Section 18-4 of this Article.

"Area of shallow flooding" means a designated AO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one (1) to three (3) 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" is the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

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

"Basement" means that portion of a building having its floor subgrade (below ground level) on all sides.

"Breakaway wall" means 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" (for the purposes of this article) means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank,

or other man-made facilities or infrastructures. The term "building" herein is synonymous with the term "structure."

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

"Elevated building" means 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 or piers, shear walls, or breakaway walls.

"Existing construction" means any structure for which the "start of construction" commenced before the effective date of the FIRM. "Existing construction" may also be referred to as "Existing structures."

"Existing Manufactured Housing Park Complex or Subdivision" means a manufactured housing park complex 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) was completed before August 1, 1980, if located within the City of Owensboro, or before September 3, 1980, if located outside the City of Owensboro.

"Expansion to an existing Manufactured Housing Park Complex 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;
- (2) the unusual and rapid accumulation of runoff of surface waters from any source.

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Federal Emergency Management Agency, where boundaries of the areas of special flood hazard have been defined as zone A.

"Flood Insurance Rate Map (FIRM)" means 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" is the official report provided by the Federal Emergency Management Agency. The report contains profiles, as well as the Flood Boundary-Floodway Map and the water surface elevation of the base flood.

"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.

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

"Functionally dependent facility" means 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, boat building, boat repair, or fish food processing facilities. The term does not include long-term storage, manufacture, sales, or service 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 a structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (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 non-elevation design requirements of Subsection 18-5(b).

"Manufactured home" (for the purposes of this article) means 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 park trailers, travel trailers, and similar transportable structures placed on a site for one hundred eighty (180) consecutive days or longer and intended to be improved property.

"Mean Sea Level" means 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 article, the term is synonymous with National Geodetic Vertical Datum (NGVD).

"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" means structures for which the "start of construction" commenced on or after the effective date of Owensboro-Daviess County's flood plain management regulations and includes any subsequent improvements to such structures.

"New manufactured housing park complex or subdivision" means a manufactured housing park complex 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) was or is completed after August 1, 1980, if located within the City of Owensboro, or after September 3, 1980, if located outside the City of Owensboro.

"100 year flood." See base flood.

"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 projection;
- (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.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means 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 not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" (for the purposes of this article) means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures. The term "structure" herein is synonymous with the term "building."

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the

structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

"Substantial improvement" means any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during a five (5) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure. The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. For the purposes of this definition, "substantial improvements" is considered to occur 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 structure. The term does not, however, include either: (1) any project for improvement of a building required to comply with existing health, sanitary, or safety code specifications which have been identified by code enforcement official(s) 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."

"Substantially improved existing manufactured housing park complex or subdivision" is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities, and pads equals or exceeds fifty (50) percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

"Variance" is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this article where specific enforcement would result in unnecessary hardship. Procedures and conditions for variances are described in Subsection 18-4(e) of this article.

18-3 GENERAL PROVISIONS.

18-3(a) Lands to Which This Ordinance Applies.

This article shall apply to all areas of special flood hazard within the jurisdiction of the City of Owensboro and the County of Daviess, Kentucky.

18-3(b) Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard identified by the Federal Emergency Management Agency through a scientific and engineering report entitled "The Flood Insurance Study for the City of Owensboro," dated August 1st, 1980, and "The Flood Insurance Study for Daviess County, Kentucky," dated September 3rd, 1980, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this article.

18-3(c) Establishment of Development Permit.

A development or construction permit, as appropriate, shall be required in conformance with the provisions of this article prior to commencement of any development activities.

18-3(d) Compliance. No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this article and other applicable regulations.

18-3(e) Abrogation and Greater Restrictions.

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

18-3(f) Interpretation.

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

18-3(g) Warning and Disclaimer of Liability.

The degree of flood protection required by this article 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 article 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 damages.

This article shall not create liability on the part of the City of Owensboro, Kentucky, or the County of Daviess, Kentucky, or any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

18-3(h) Penalties for Violations. Penalties for violation of the regulations of this article shall be as established in Article 5 of this Zoning Ordinance.

18-4 ADMINISTRATION.

18-4(a) Designation of Building Inspector as local administrator.

The Building Inspector is hereby appointed to administer and implement the provisions of this article.

18-4(b) Permit Procedures.

Application for a development or construction permit for any development within any area of special flood hazard or along any watercourse shall be made to the Building Inspector on forms furnished by him or her prior to any development activities, 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 nonresidential structure has been flood-proofed.

(c) Certificate from a registered professional engineer or architect that the nonresidential flood-proofed structure will meet the flood-proofing criteria in Subsection 18-5(b)(2).

(d) Description of the extent to which any watercourse and/or its associated flood plain will be altered (filled or excavated) or relocated as a result of the proposed development.

(e) The Building Inspector may require the applicant to secure a permit from the Kentucky Division of Water (under KRS 151.250), prior to issuance of a local development permit or building permit.

Subdivision plats, development plans, or site plans that have received local approval prior to issuance of a permit by the Division of Water may require local reapproval if substantial changes to those plans are required by the Division of Water.

(2) Construction Stage.

(a) Provide a floor elevation or flood-proofing certification after the lowest floor is completed. Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Building Inspector a certification of the elevation of the lowest floor or flood-proofed elevation, as built, in relation to mean sea level.

(b) Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood-proofing is utilized for a particular building, said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.

(c) Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The Building Inspector shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed.

(d) Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

(3) Conditional Uses Permitted in the FW District.

Conditional uses permitted in the FW District (floodway) by Subsection 18-6(b)(2) shall require the issuance of a conditional use permit by the Owensboro Metropolitan Board of Adjustment prior to the issuance of any development or construction permits, and shall be subject to the following requirements:

(a) **Required Findings.** The Board of Adjustment in its review of a proposed conditional use must find that all flood hazard reduction provisions of Subsection 18-5(b) (4) can be met.

(b) **Storage of Material or Equipment.** The storage or processing of material is prohibited if, in time of flooding, it is buoyant, flammable,

explosive, or could otherwise be injurious to human, animal, or plant life. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

(c) **Other Required Permits.** All other permits as may be required by the Army Corps of Engineers or the Kentucky Division of Water must be obtained prior to the Board of Adjustment's issuance of a conditional use permit.

18-4(c) Duties and Responsibilities of the Building Inspector. Duties of the Building Inspector shall include, but not be limited to:

(1) Review all development permits to assure that the permit requirements of this article have been satisfied.

(2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

(3) Notify adjacent communities and the Kentucky Division of Water prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(4) Assure that maintenance is provided within the altered or relocated portion of said 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 18-4(b)(2).

(6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, in accordance with Subsection 18-4(b)(2).

(7) When flood-proofing is utilized for a particular structure, the Building Inspector shall obtain certification from a registered professional engineer or architect, in accordance with Subsection 18-5(b)(2).

(8) 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 Building Inspector 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 article.

(9) When base flood elevation data have not been provided in accordance with Subsection 18-3(b), then the Building Inspector shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Section 18-5.

(10) All records pertaining to the provisions of this Article shall be maintained in the office of the Building Inspector and shall be open for public inspection.

18-4(d) Administrative Appeals. Appeals to the Board of Adjustment may be taken by any person or entity claiming to be injuriously affected or aggrieved by an official action, order, requirement, interpretation, grant, refusal, or decision of the Building Inspector. Such administrative appeal shall be taken within thirty (30) days after the appellant or his agent receives notice of the action of the Building Inspector, by filing with the Building Inspector and with the Board of Adjustment a notice of appeal specifying the grounds thereof, and giving notice of such appeal to any and all parties of record. The Building Inspector shall forthwith transmit to the Board of Adjustment all papers constituting the record upon which the action appealed from was taken and shall be treated as and be the respondent in such further proceedings. At the public hearing on the appeal held by the Board of Adjustment, any interested person may appear and enter his/her appearance, and all shall be given an opportunity to be heard.

18-4(e) Variance Procedures. The Board of Adjustment as established by the local governmental bodies shall hear and decide requests for variances from the requirements of this article.

(1) Variances may be issued for the repair or rehabilitation of historic structures (see definition) upon determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum to preserve the historic character and design of the structure.

(2) In passing upon such applications, the Board of Adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:

- (a) the danger that materials may be swept onto other lands to the injury of others;
- (b) the danger to life and property due to flooding or erosion damage;
- (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) the importance of the services provided by the proposed facility to the community;
- (e) the necessity to the facility of a waterfront location, in the case of a functionally dependent facility;
- (f) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (g) the compatibility of the proposed use with existing and anticipated development;
- (h) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
- (i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site; and,
- (k) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(3) Upon consideration of the factors listed above and the purposes of this article, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

(4) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(5) Conditions for Variances.

(a) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazards, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.

(b) Variances shall only be issued upon (i) a showing of good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(c) 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.

(d) The Owensboro Metropolitan Planning Commission shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

18-4(f) Appeals from Final Action of the Board of Adjustment. Any person or entity claiming to be injured or aggrieved by any final action of the Board of Adjustment shall appeal from the action to the Circuit Court of Daviess County. Such appeal shall be taken within thirty (30) days after the final action of the Board of Adjustment. All final actions which have not been appealed within thirty (30) days shall not be subject to judicial review. The Board of Adjustment shall be a party in any such appeal filed in the circuit court.

18-5 PROVISIONS FOR FLOOD HAZARD REDUCTION.

18-5(a) General Standards. In all areas of special flood hazard, the following provisions are required:

(1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

(2) 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, other acceptable installation standards and acceptable similarity appearance standards.

(3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(4) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.

(5) 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.

(6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

(7) 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.

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

(9) Any alteration, repair, reconstruction, or improvements to a building which is not in compliance with the provisions of this article, shall meet the requirements of "new construction" as contained in this article, and shall be undertaken only if said nonconformity is not furthered, extended, or replaced.

18-5(b) Specific Standards. In all areas of special flood hazard where base flood elevation data have been

provided as set forth in Subsection 18-3(b) or Subsection 18-4(c)(9), the following provisions are required.

(1) Residential Construction. New construction or substantial improvement of any residential structure (or manufactured home) shall have the lowest floor, including basement, elevated to or 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 Section 18-5(b)(3).

(2) Nonresidential Construction. New construction or substantial improvement of any commercial, industrial or other nonresidential structure (or manufactured home) shall have the lowest floor, including basement, elevated to or above the base flood elevation. Structures located in all A-zones may be flood-proofed 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 subsection are satisfied. Such certification shall be provided to the official as set forth in Subsection 18-4(c)(7).

(3) Elevated Buildings. 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 entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

(a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

(i) 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;

(ii) The bottom of all openings shall be no higher than one foot above grade; and,

(iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of flood waters in both directions.

(b) 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); and

(c) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(4) Floodways. Located within areas of special flood hazard established in Subsection 18-3(b) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:

(a) Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical 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.

(b) If Subsection 18-5(b)(4)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(5) Standards for Manufactured Homes and Recreational Vehicles.

(a) All manufactured homes placed or substantially improved **(i)** outside of a manufactured housing park complex or subdivision, **(ii)** in a new manufactured housing park complex or subdivision, **(iii)** in an expansion to an existing manufactured housing park complex or subdivision, or **(iv)** in an existing manufactured housing park complex 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.

(b) All manufactured homes placed or substantially improved in an existing manufactured housing park complex or subdivision must be elevated so that:

(i) the lowest floor of the manufactured home is elevated to or above the level of the base flood elevation, or

(ii) 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 in height above grade.

(iii) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.

(iv) In an existing manufactured housing park complex or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, any manufactured home placed or substantially improved must meet the standards of Subsection 18-5(b)(5)(b)(i) and (iii) above.

18-5(c) Standards for Areas of Shallow Flooding (AO Zones). Located within the areas of special flood hazard established in Section 18-3(b) are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one to three feet (1'-3') where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

(1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated above the highest adjacent grade, at least as high as the depth number specified on the applicable Flood Insurance Rate Map. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade.

(2) All new construction and substantial improvements of nonresidential structures shall:

(a) have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified on the applicable Flood Insurance Rate Map. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade, or

(b) together with attendant utility and sanitary facilities be completely flood-proofed to or above that level 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.

18-5(d) Standards for All Subdivision Proposals and Development Plans.

(1) All subdivision proposals and development plans shall be consistent with the need to minimize flood damage.

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

(3) All subdivision proposals and development plans shall have adequate drainage provided to reduce exposure to flood hazards.

(4) Base flood elevation data shall be provided for all subdivision proposals, development plans, and other proposed development (including manufactured housing park complexes and subdivisions). When a subdivision proposal, development plan, or other proposed development involves streams where no base flood data has been provided or where base flood data has been provided without floodways, the plat or plan drawings shall be accompanied by a certification and supporting data, as specified in Subsection 18-5(e) below.

18-5(e) Standards for Streams without Established Base Flood Elevations and/or Floodways. Located within the areas of special flood hazard established in Subsection 18-3(b), where streams exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:

(1) No encroachments, including fill material or structures, shall be located within areas of special flood hazard, unless certification by a registered professional engineer is provided demonstrating that the cumulative effects of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community. The engineering certification should be supported by technical data that conforms to standard hydraulic engineering principles.

(2) New construction or substantial improvements of buildings shall be elevated or flood-proofed to elevations established in accordance with Subsection 18-4(c)(9).

18-6 ESTABLISHMENT OF ZONING DISTRICTS.

The mapped areas of special flood hazard within the jurisdiction of this article are hereby designated as the General Flood Plain Overlay District (GFP District). The GFP District shall be divided into two subdistricts: The portions of the GFP District located outside floodways are hereby designated as the Floodfringe District (FF District); and the portions of the GFP District located within floodways are hereby designated as the Floodway District (FW District). The flood district boundaries as delineated on the currently applicable Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM) (or as described by any revisions thereto or interpretations thereof that are authorized by the Federal Emergency Management Agency or by provisions of this article), shall serve as the Official Zoning Map of the flood plain overlay districts established by this subsection. All uses not permitted as principal, accessory or conditional uses within each district shall be prohibited.

18-6(a) Floodfringe District (FF District).

(1) **Permitted Uses.** Permitted uses in the FF District shall be the same principal, accessory and conditional uses as are permitted in the applicable base zone, subject to the requirements or limitations in the following subsections.

(2) **Development and/or Structures.** Any development, or new construction or substantial improvement of any structure (see definitions) shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(3) **Storage of Material or Equipment.** The storage or processing of material is prohibited if, in time of flooding, it is buoyant, flammable, explosive, or could otherwise be injurious to human, animal, or plant life. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

18-6(b) Floodway District (FW District).

(1) **Principal and Accessory Uses Permitted.** Principal and accessory permitted uses in the FW

District shall have a low flood-damage potential, shall not obstruct flood flows, shall not be prohibited by other ordinances or the base zone, shall not be a use which requires a conditional use permit under Subsection 18-6(b)(2) below, shall not adversely affect the capacity of the channels or floodways of any tributary to the main stream, drainage ditch, or any other drainage facility, and shall not require structures, fill, or storage of materials or equipment unless explicitly permitted below. The following are principal and accessory permitted uses to the extent that they conform to the aforementioned criteria. The base zone in which particular uses are located may require conditional use permits.

(a) Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, viticulture, truck farming, forestry, sod farming, horticulture, and wildcrop harvesting.

(b) Industrial/commercial accessory uses such as loading areas, parking areas, and airport landing strips.

(c) Private and public recreation uses such as golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat-launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding traces.

(d) Residential accessory uses such as lawns, gardens, parking areas, and play areas.

(e) Streets, railroads, bridges, utility transmission lines, and pipe lines. Such uses are explicitly permitted to require structures or fill, or the temporary storage of materials or equipment. All characteristics of such uses, including their effects on areas of special flood hazard, shall comply with all applicable flood hazard reduction provisions of Section 18-5.

(2) **Conditional Uses Permitted.** Conditional permitted uses in the FW District shall not be prohibited by other ordinances or the base zone; may involve encroachments such as temporary or permanent structures, fill, or storage of equipment or materials, subject to compliance with the requirements of Subsection 18-5(b)(4); and shall comply with the permit procedures in Subsection 18-4(b)(3). The

following are permitted conditional uses to the extent that they conform to the aforementioned criteria.

(a) Uses or structures accessory to open space or other permitted conditional uses.

(b) Single-family residential structures, including manufactured homes, if located on existing lots of record created within the City of Owensboro before August 1, 1980, or if located on existing lots of record created outside the City of Owensboro before September 3, 1980.

(c) Circuses, carnivals, and similar transient amusement enterprises.

(d) Drive-in theaters, new and used car lots, and roadside stands.

(e) Extraction of sand and gravel.

(f) Marinas, boat rentals, docks, piers, wharves, and other functionally dependent facilities as defined in this article.

(g) Other uses similar in nature to those described above which may include temporary or permanent structures, fill, or storage of equipment or materials.

(h) Limited expansion of an existing use that was established before the date it was mapped within a Floodway District. This provision is not intended to allow major expansions of existing uses within floodways. Major expansions would not be able to comply with the requirements of Subsection 18-5(b)(4).