

Article 4

Overlay Zoning Districts



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See Also:

Article 3,
Zoning Districts

Article 5,
Planned Unit
Development

4.1 Establishment & General Standards

- A. **Establishment of Overlay Districts:** The overlay districts noted below have been established to provide additional development standards that respond to unique characteristics of the properties to which they apply. The development of properties that are located in one or more overlay districts shall be subject to the standards of both the overlay district(s) and the underlying zoning district in which they are located. The following overlay zoning districts shall apply to properties as specified in the description of each district in this Article.

AH-OL - Airport Hazard Area	page 4-3
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HR-OL - Historic Resources Identification	page 4-7
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<i>Reserved for Future Use</i>	page 4-9
FH-OL - Flood Hazard Area	page 4-10

- B. **Effect of Planned Unit Development District:** All Planned Unit Developments shall be consistent with the requirements of Article 5 of this Ordinance. Planned Unit Developments shall not be subject to the requirements of any overlay district, unless otherwise specified as an element of the Planned Unit Development Final Plan.
- C. **Land Uses:** All land uses that are permitted, prohibited or a conditional use in any underlying zoning district to which an overlay district is applied shall remain permitted, prohibited, or conditional uses unless otherwise specified by the applicable overlay district(s).
- D. **Lot, Yard, & Development Standards:** Any lot, yard, and development standards established by an overlay district shall apply as follows:
1. Replacement of Underlying District Standards: All lot, yard, and development standards established by an underlying zoning district shall apply unless alternate requirements are provided by the overlay district(s).
 2. Additional Overlay District Standards: Properties located in any overlay district(s) shall also be subject to any additional lot, yard, and development standards established by the overlay district(s).

4.2 Airport Hazard Area (AH-OL)



- A. **Boundaries & Exemptions:** The Airport Hazard Area Overlay District shall apply to all properties included in an Approach Zone, Transition Zone, Horizontal Zone, and/or Conical Zone as identified by the Columbus Municipal Airport Plan of current adoption.
- B. **Uses:** The following use restrictions shall apply to that portion of the Approach Zone within a horizontal radius of 10,000 feet from the airport reference point, as identified by the Columbus Municipal Airport Plan of current adoption.
1. **Prohibited Uses:** The following types of uses shall be prohibited:
 - a. *Residential Uses:* Multi-family Dwelling, Nursing Home / Assisted Living Facility, and Retirement Center;
 - b. *Institutional Uses:* Correctional Institution, Community Center, Day Care Center, Hospital, Private Club, Clinic, School, University or College, Trade or Business School, and Worship Facility;
 - c. *Park Uses:* Athletic Complex;
 - d. *Commercial Uses:* Hotel / Motel, Recreation Uses (Medium Scale), and Instructional Center.
 2. **Conditional Uses:** The following types of uses shall be conditional (provided that they are also listed as permitted or conditional uses in the underlying zoning district): any uses involving the sales, storage, manufacture, and/or distribution of gasoline, propane, or other flammable, toxic, explosive, radioactive, or bio-hazardous materials in a quantity and of a type that would further jeopardize the health of aircraft occupants, by-standers, and emergency personnel in the event of an aircraft accident.
- C. **Development Standards:** All development within the boundaries of the AH-OL district shall comply with the following development standards:
1. **General Use Restrictions:** No land use within the AH-OL district shall:
 - a. create electrical interference with radio communication between the airport and aircraft or create interference with navigational aids employed by aircraft;
 - b. make it difficult for pilots to distinguish between airport lights and other lights;
 - c. result in glare in the eyes of pilots using the airport;
 - d. create pollution or other conditions that would impair visibility in the vicinity of the airport; or
 - e. otherwise endanger the landing, taking-off, or maneuvering of aircraft.
 2. **Bird Strike Hazard Restrictions:** No waste disposal site, solid waste transfer station, or other bird attracting use shall be located within the AH-OL district without the approval of the Federal Aviation Administration.

Intent:

The purpose of this Chapter is to establish specific zoning requirements for the vicinity of the Columbus Municipal Airport in order to maintain the vitality and functionality of the airport, protect persons on the ground and traveling by air from hazards associated with airplane flight, and reduce land use conflicts in the area of the airport.

The area around the airport presents unique considerations for the height of structures, the presence of factors that interfere with safe flight, and large gatherings of the public that require the establishment of additional development standards to meet the goals of the Comprehensive Plan and fulfill the purpose of this Ordinance.

4.2 Airport Hazard Area (AH-OL) (cont.)

3. Height Restrictions: No structure shall exceed the height restrictions established by Federal Aviation Regulations Part 77 as incorporated in the Columbus Municipal Airport Plan of current adoption, and adopted by reference as an element of this Ordinance. The owner of any legal non-conforming structure or tree in the AH-OL district is required to permit the installation, operation, and maintenance of any markers and lights deemed necessary by the Columbus Board of Aviation Commissioners to indicate the presence of such hazards.

4.3 Wellfield Protection (WP-OL)

- A. **Boundaries & Exemptions:** The Wellfield Protection Overlay District (WP-OL) shall apply to the entire area of all properties included in whole or in part within the boundaries of a 5-year wellfield time-of-travel area. These areas include any shown on the Official Zoning Map, as well as by the following: the Columbus Wellfield Protection Management Plan, as updated periodically.
- B. **Uses:** All land uses shall generally be permitted, non-permitted or conditional consistent with the provisions of the underlying zoning district, unless specifically noted below.
1. **Prohibited Uses:** The following uses shall be prohibited within the Wellfield Protection Overlay District:
 - a. Mineral Extraction
 - b. Confined Feeding Operation (CFO)
 - c. Hazardous Materials Production
 2. **Conditional Uses:** If any of the following uses is listed as permitted or conditional in the underlying zoning district, they shall be allowed only as a conditional use in the Wellfield Protection Overlay District:
 - a. **Park Uses:** Campground / RV Park; Driving Range (as a Primary Use); Golf Course.
 - b. **Public / Semi-Public Uses:** Airport; Animal Shelter; Government Facility (Non-Office); Hospital; and Clinic.
 - c. **Commercial Uses:** Agricultural Supply Facility; Auto-Oriented Uses (Small Scale); Auto-Oriented Uses (Medium Scale); Auto-Oriented Uses (Large Scale); Auto Rental; Equipment Rental; Farm Equipment Sales and Service; Greenhouse / Plant Nursery; Kennel; Livestock Auction / Sales Facility; and Truck Stop / Travel Center.
 - d. **Industrial Uses:** Agricultural Products Processing; Boat / RV Storage Facility (outdoor); Concrete / Asphalt Production Facility; Contractor's Office / Workshop; Dry Cleaners (commercial); Food & Beverage Production; General Industrial Production; Light Industrial Assembly & Distribution; Light Industrial Processing & Distribution; Research & Development Facility; Truck Freight Terminal; Truck Sales & Service Center; and Waste Disposal Facility.
 - e. **Uses not Specified:** The Planning Director may identify other uses to be considered as conditional uses if they are specifically demonstrated to pose a hazard to the drinking water supply due to chemicals used on-site or by-products of on-site activities. Some examples of this type of use may include building cleaning or maintenance service companies, engineering or vocational shops or laboratories, landscape or lawn installation or maintenance services, and mortuaries.

Intent:

This Chapter is intended to safeguard the public health, safety, and general welfare of those persons who rely on public and / or utility-operated wellfields for clean, safe drinking water. These regulations are intended to prevent land uses and certain development practices that commonly have the potential to degrade water quality by introducing chemicals, organic hazards, and other potentially harmful elements into the ground water system within a 5-year time-of-travel area of the wellfields. This includes the introduction of hazardous materials into the area, the creation of hazardous by-products from on-site activities, and the alteration of the land in a manner that increases the exposure of the ground water system to potential contaminants.

4.3 Wellfield Protection (WP-OL) (cont.)

- C. **Development Standards:** All development within the boundaries of the Wellfield Protection Overlay District shall comply with all applicable state, federal, and local regulations, in addition to the following development standards.
1. Minimum Setback from Well: No structure or septic field shall be located closer to any wellhead than the sanitary setback specified by the Indiana Department of Environmental Management, as periodically updated.
 2. Abandoned Wells: All known abandoned wells shall be identified and sealed consistent with any applicable requirements of the applicable water utility and the Indiana Department of Natural Resources per 312 IAC 13-10.
 3. Drainage Facilities: The use of dry wells shall be prohibited. A municipal storm sewer system shall be used if available to the subject property. No surface impoundments, ponds, or lagoons shall be established except for the purpose of (a) storm water retention and detention or (b) recreation and landscaping purposes.
 4. Public Sewer Service: All development, with the exception of a single-family residence located on a lot of at least 1 acre, shall be connected to a public sewer. All floor drains must be connected to the sanitary sewer or routed to a temporary holding area for proper disposal.
 5. Storage and Transfer of Potential Contaminants: All areas that may be used for the storage and / or transfer of potential ground water contaminants, such as fuel storage tanks, shall be constructed in a manner to prevent any release from the area from reaching the ground water. The containment area shall be capable of, at a minimum, containing 110% of the potentially hazardous material for which the area has storage and transfer capacity.
 7. Auto Repair Facilities: All vehicle and auto repair facilities shall be located within an enclosed building that includes a floor constructed of material that forms an effective barrier to prevent the migration of fluids or other materials into the ground water.

4.4 Historic Resource (HR-OL)

- A. **Boundaries & Exemptions:** The Historic Resource Identification Overlay District shall apply to all properties either (1) as identified on the Official Zoning Map and/or (2) included in the following area(s): the Sand Creek Township Rural Historic District as identified in the Indiana Historic Sites and Structures Inventory Final Report for Sand Creek Township and portions of Columbus and Wayne Townships, Bartholomew County, Indiana (Indiana Division of Historic Preservation and Archeology, 2002).
- B. **Uses:** All land uses shall be permitted, prohibited or conditional as consistent with the provisions of the underlying zoning district.
- C. **Development Standards:** All development within the boundaries of the HR-OL district shall comply with the development standards that apply to the underlying zoning districts. However, property owners and developers within this district are encouraged to recognize and protect historic structures and character.

Intent:

This Chapter is intended to encourage property owners and the development community to recognize clearly identified and documented historic areas in the community. It is further intended to provide information about local historic assets to the public and the development community, as well as support the preservation and enhancement of these resources. In no instance shall this Chapter be interpreted as imposing any additional development restrictions or limitations on private property.

Intent:

This Chapter is intended to maintain the comparatively high level of Plan Commission scrutiny applied to developments in certain portions of the jurisdiction of the Edinburgh / Bartholomew / Columbus Joint District Plan Commission. This Chapter establishes the authority for the Joint District Plan Commission to review site development plans and to require landscaping, signs, and other site characteristics to be compatible with the goals for development within its jurisdiction.

4.5 Joint District Plan Review (JD-OL)

- A. **Boundaries & Exemptions:** The Joint District Plan Review Overlay District shall apply to all properties as identified on the Official Zoning Map.
- B. **Uses:** All land uses shall be permitted, prohibited or conditional as consistent with the provisions of the underlying zoning district.
- C. **Development Standards:** All development within the boundaries of the JD-OL district shall comply with the development standards that apply to the underlying zoning districts. However, the Joint district Plan Commission shall also exercise Site Development Plan review and approval authority consistent with the provisions of Chapter 12.8 of this Ordinance.

4.6 Columbus Front Door (CFD-OL)

- A. **Boundaries & Exemptions:** The Columbus Front Door Overlay District shall apply to all properties as identified on the Official Zoning Map.
- B. **Uses:** All land uses shall be permitted, prohibited or conditional as consistent with the provisions of the underlying zoning district.
- C. **Development Standards:** All development standards shall be as specified for the underlying zoning district.
- D. **Design Guidelines:** The following design guidelines shall apply to all property in the Columbus Front Door Overlay District. They shall be interpreted and applied as describing the conditions necessary for a site development plan to comply with the criteria provided by Section 12.8(E)(2)(c,d, and e) of this Ordinance.
1. **Building Façade Materials:** Building facades, including the front, side, and rear facades, should be composed of a mix of high-quality building materials, such as brick; stone; an exterior insulation finishing system (EIFS); architectural metal paneling systems; split-faced, glazed, or polished concrete masonry units (CMU); wood-look architectural panels; and glass. A variety of textures and colors should be incorporated to visually break up the façade and complement the primary building material. *This guideline is intended to encourage high quality investment in the Columbus Front Door area that will add long term value and maintain visual appeal.*



2. **Building Façade Features:** Buildings façades should have “foursided” architecture, characterized by equal architectural treatment of all sides of the building and incorporating a combination of the listed features below.
 - a. **Defined Entrance:** A primary entrance defined by an awning, archway, or similar architectural feature.
 - b. **Cap & Cornice:** A horizontal element that caps or crowns the top of walls.
 - c. **Pillars:** Slender upright structures, generally consisting of a cylindrical shaft, a base, and a capital serving as a supporting or ornamental element.

Intent:

In the jurisdiction of Columbus, the CFD-OL, Columbus Front Door Overlay Zoning District is a Site Development Plan District consistent with the IC 36-7-4-1400 series and Chapter 12.8 of this Ordinance.

The CFD-OL is intended to provide for a variety of businesses and uses that are located at a primary entrance to the community. This Overlay is intended to enhance the architectural character of the area, ensuring that well thought out and designed buildings are constructed at the vital gateways into the city.

In the Bartholomew County and the Edinburgh/Bartholomew/ Columbus Joint District Plan Commission jurisdiction this district does not apply.

Interpretation Note: *The images included in this Section 4.9(D) are intended to portray examples of a building or other feature that is consistent with the design guideline with which they are associated in the text. They are not intended to represent the only options for complying with that guideline. Further, the applicability of each image is limited to the subject matter of the design guideline with which each is associated; other development features shown in the image shall not be deemed to be representative of these guidelines.*

4.6 Columbus Front Door (CFD-OL) (cont.)

- d. *Decorative Shutters or Awnings*: Architectural projections] that provide weather protection, identity or decoration.
- e. *Projections and/or Undulations*: Building features that extend from the surface of the building wall or façade, such as balconies, to create a rhythm of architectural features and materials on the building.
- f. *Material Change*: Different but complimentary façade materials included for an aesthetic affect.
- g. *Architectural Tiebacks*: Decorative or structural components used as an attachment between an awning or other similar extending component and the building wall.
- h. *Banding/Wainscoting*: Horizontal subdivisions of a column or wall using a change in profile or change in material found at the lower part of a wall.
- i. *Recesses*: Portions of a wall that are setback further than the main wall plane.
- j. *Archways*: Curved structures forming a passage or entry.
- k. *Curtain Wall*: An exterior outer wall of a building, typically glass that is non-structural, instead serving to protect the interior of the building from the elements and provide aesthetic appeal.
- l. *Windows*: Visual openings that enhance the visibility into the building to create an inviting environment. Faux windows or spandrel/shadow box windows can be utilized on the façade for internal areas of storage or service to minimize bare exterior walls.



4.6 Columbus Front Door (CFD-OL) (cont.)

3. Building Entrance Orientation: The architectural and functional front of the building, which includes its primary entrance and excludes service doors, utility equipment, roof access, ladders, and similar features, should face towards an adjacent public street. *This guideline is intended to ensure a consistent streetscape aesthetic along public roads and support building access by both motorists and pedestrians.*



4. Downspouts: To limit visibility, all downspouts should be internal, the same color as the primary or an accent color of the structure, or located out of public view. *This guideline is intended to minimize the visibility of downspouts and exposed building drainage systems from public view, to enhance the aesthetics of the building façade.*

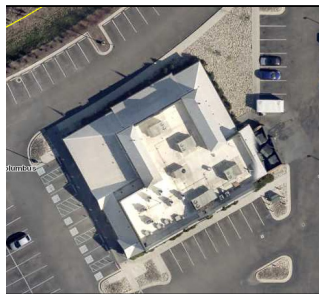


4.6 Columbus Front Door (CFD-OL) (cont.)

5. Screening of Cargo/Car Bays: Cargo bays/car bays should be shielded from the public streets. To limit visibility, cargo bays should be located at the rear of the building. Screening should include a Type B landscape buffer described in Section 8.2(E) (1,2,3,4) or a screen wall that utilizes primary façade building materials, or a combination of both landscape materials and screen wall. *This guideline is intended to minimize visibility of cargo/car bays that are typically used for service oriented tasks, and freight movement.*



6. Rooftop Mechanical Equipment: Rooftop mechanical equipment should be fully screened from view of adjacent streets and properties. The screening should be a part of the building composition and fully integrated architecturally through a parapet wall or other similar feature. *This guideline is intended to minimize or eliminate views of rooftop mechanical equipment, which, if visible, could detract from the character of the surrounding area.*



4.6 Columbus Front Door (CFD-OL) (cont.)

7. Signs: All permanent signs should be designed with appearance in mind and be consistent and compatible with the overall design characteristics of the structure(s) on each lot. Permanent freestanding signs should make use of supports and other design elements that are of consistent materials with those used on the structure(s) on the same lot on which they are located. *This guideline is intended to encourage high-quality signage that is consistent with the architectural character of the primary structure.*



8. Accessory & Incidental Structures: Accessory and incidental structures, such as cart corrals, ATM machines, carports, vehicle charging stations, and similar structures should be constructed of durable material consistent or complementary to that used on the primary structure(s). *This guideline is intended to enhance on-site features that are accessory or incidental to a primary structure to promote quality design and function that does not detract from the overall development.*



Note: Participation by the City of Columbus, Bartholomew County, and the Edinburgh / Bartholomew / Columbus Joint District in the National Flood Insurance Program (NFIP) requires the adoption of flood hazard regulations that meet certain minimum criteria. This Chapter is based on the Indiana Department of Natural Resources Indiana Model Flood Damage Prevention Ordinance, which has been developed to assist local governments in meeting the minimum NFIP criteria. Instances in which this Chapter differs from the IDNR model ordinance have been noted to assist with local administration.

4.7 Flood Hazard Area (FH-OL)

Part 1: Statutory Authorization, Findings of Fact, Purpose, and Methods

- A. Statutory Authority:** The Indiana Legislature has in IC 36-1-4-11 granted the power to local government units to control land use within their jurisdictions. Therefore, the City of Columbus, Bartholomew County, and the Edinburgh / Bartholomew / Columbus Joint District (the Joint District) adopt the following floodplain management regulations.
- B. Findings of Fact:** The flood hazard areas of the City of Columbus, Bartholomew County, and the Joint District 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. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. These regulations are adopted in order to minimize the threat of such damages and to achieve the purposes listed below.
- C. Statement of Purpose:** 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. Protect human life and health.
 2. Minimize expenditure of public money for costly flood control projects.
 3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
 4. Minimize prolonged business interruptions.
 5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges located in floodplains.
 6. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas.
 7. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
 8. Minimize the impact of development on adjacent properties within and near flood prone areas.
 9. Ensure that the flood storage and conveyance functions of the floodplain are maintained.
 10. Minimize the impact of development on the natural, beneficial values of the floodplain.
 11. Prevent floodplain uses that are either hazardous or environmentally incompatible.
 12. Meet community participation requirements of the National Flood Insurance Program.

4.7 Flood Hazard Area (FH-OL) (cont.)



- D. Methods of Reducing Flood Loss:** In order to accomplish its purposes, these regulations include methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities.
 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
 3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
 4. Controlling filling, grading, dredging, excavating, and other development which may increase flood damage.
 5. Preventing or regulating the construction of flood barriers, which will unnaturally divert floodwaters, or which may increase flood hazards in other areas.

Part 2: Definitions

Unless specifically defined below, words or phrases used in this Chapter shall be defined by Article 14 of this Ordinance and, if undefined by this Ordinance, shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter the most reasonable application.

Accessory Structure: means a structure with a floor area of 400 square feet or less that is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes structures used for human habitation.

1. Accessory structures are considered walled and roofed where the structure includes at least two outside rigid walls and a fully secured roof.
2. Examples of accessory structures include but are not necessarily limited to two-car detached garages (or smaller), carports, storage and tool sheds, and small boathouses.
3. The following may have uses that are incidental or accessory to the principal structure on a parcel but are generally not considered to be accessory structures by the NFIP:
 - a. Structures in which any portion is used for human habitation, whether as a permanent residence or as temporary or seasonal living quarters, such as a detached garage or carriage house that includes an apartment or guest quarters, or a detached guest house on the same parcel as a principal residence;
 - b. Structures used by the public, such as a place of employment or entertainment; and,
 - c. Development that does not meet the NFIP definition of a structure for floodplain management purposes. Examples includes, but are not necessarily limited to, a gazebo, pavilion, picnic shelter, or carport that is open on all sides (roofed but not walled).

4.7 Flood Hazard Area (FH-OL) (cont.)

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

Alteration of a Watercourse: means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other modification which may alter, impede, retard or change the direction and/or velocity of the flow of water during conditions of the base flood.

Appeal: means a request for a review of the floodplain administrator's interpretation of any provision of this Chapter.

Area of Special Flood Hazard: is the land within a community subject to a one percent (1%) or greater chance of being flooded in any given year.

Base Flood: means the flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood may also be referred to as the 1% annual chance flood or one hundred (100) year flood.

Base Flood Elevation (BFE): means the water surface elevation of the base flood in relation to a specified datum, usually the North American Vertical Datum of 1988.

Basement: means that portion of a structure having its floor sub-grade (below ground level) on all sides.

Best Available Flood Layer (BAFL): means floodplain studies and any corresponding floodplain maps prepared and/or approved by the Indiana Department of Natural Resources which provide base flood elevation information, floodplain limits, and/or floodway delineations for flood hazards identified by approximate studies on the currently effective FIRM (Zone A) and/or for waterways where the flood hazard is not identified on available floodplain mapping.

Building: see "Structure."

Community: means a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

Critical Facility: means a facility for which even a slight chance of flooding might be too great.

Development: means, for floodplain management purposes, any man-made change to improved or unimproved real estate including but not limited to:

1. construction, reconstruction, or placement of a structure or any addition to a structure;

4.7 Flood Hazard Area (FH-OL) (cont.)



2. installing a manufactured home on a site, preparing a site for a manufactured home or installing a recreational vehicle on a site for more than 180 days;
3. installing utilities, erection of walls and fences, construction of roads, or similar projects;
4. construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
5. mining, dredging, filling, grading, excavation, or drilling operations;
6. construction and/or reconstruction of boat lifts, docks, piers, and seawalls;
7. construction and/or reconstruction of bridges or culverts;
8. storage of materials; or
9. any other activity that might change the direction, height, or velocity of flood or surface waters.

“Development” does not include activities such as the maintenance of existing structures and facilities such as painting, reroofing; resurfacing roads; or gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent structures.

Elevated Structure: means a non-basement structure built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, filled stem wall foundations (also called chain walls), pilings, or columns (posts and piers).

Elevation Certificate: means a FEMA form that is routinely reviewed and approved by the White House Office of Management and Budget under the Paperwork Reduction Act that is encouraged to be used to collect certified elevation information.

Enclosed Area (Enclosure): is an area of a structure enclosed by walls on all sides.

Enclosure Below the Lowest Floor: See “Lowest Floor” and “Enclosed Area.”

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

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

FEMA: means the Federal Emergency Management Agency.

Note: In order to provide clarity, the definitions of “Filled Stem Wall Foundation” and “Five-Hundred Year Flood (500-year Flood)” have been added to supplement the IDNR model ordinance.

4.7 Flood Hazard Area (FH-OL) (cont.)

Fill: for floodplain management purposes, means any material deposited or placed which has the effect of raising the level of the ground surface above the natural grade elevation. Fill material includes but is not limited to consolidated material such as concrete and brick and unconsolidated material such as soil, sand, gravel, and stone.

Filled Stem Wall Foundation: means a solid perimeter foundation wall that is backfilled with compacted structural fill that supports the floor slab.

Five-Hundred Year Flood (500-year Flood): means the flood having a two-tenths of one percent (0.2%) chance of being equaled or exceeded in any year.

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 or runoff of surface waters from any source.
3. Mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

Flood or flooding also includes the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood Hazard Area: means areas subject to the one percent (1%) annual chance flood. (See “Special Flood Hazard Area”)

Flood Insurance Rate Map (FIRM): means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS): is the official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the water surface elevation of the base flood.

Flood Protection Grade (FPG): is the BFE plus two (2) feet at any given location in the SFHA. (see “Freeboard”)

Floodplain or Flood Prone Area: means any land area susceptible to being inundated by water from any source. (See “Flood”)

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

4.7 Flood Hazard Area (FH-OL) (cont.)



Floodplain Management Regulations: means this Chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance), and other applications of police power which control development in flood-prone areas. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing (Dry Floodproofing): is a method of protecting a structure that ensures that the structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation with walls that are substantially impermeable to the passage of water. All structural components of these walls are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

Floodproofing Certificate: is a form used to certify compliance for nonresidential structures as an alternative to elevating structures to or above the FPG.

Floodway: is 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 cumulative increasing the water surface elevation more than a designated height.

Freeboard: means 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.

Fringe or Flood Fringe: is the portion of the floodplain lying outside the floodway.

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

Hardship: (as related to variances of this Chapter) means the exceptional hardship that would result from a failure to grant the requested variance. The hardship must be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

4.7 Flood Hazard Area (FH-OL) (cont.)

Hazardous Materials: Explosive, flammable, combustible, corrosive, oxidizing, toxic, infectious, or radioactive materials that, when involved in an accident and released in sufficient quantities put some portion of the general public in immediate danger from exposure, contact, inhalation, or ingestion. (This definition accompanies the increased requirement established by Section 4.7(Part 5)(B)(9)).

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

Historic Structure: means 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 a 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 by (a) an approved state program as determined by the Secretary of Interior, or (b) directly by the Secretary of Interior in states without approved programs.

Hydrologic and Hydraulic Engineering Analysis: means analyses performed by a professional engineer licensed by the State of Indiana, in accordance with standard engineering practices that are accepted by the Indiana Department of Natural Resources and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

International Code Council-Evaluation Service (ICC-ES)

Report: means a document that presents the findings, conclusions, and recommendations from a particular evaluation. ICC-ES reports provide information about what code requirements or acceptance criteria were used to evaluate a product, and how the product should be identified, installed.

Joint District: means the Edinburgh / Bartholomew / Columbus Joint District established for the shared local-government regulation of land use and development generally in the northeast quadrant of the I-65 / US 31 interchange.

4.7 Flood Hazard Area (FH-OL) (cont.)



Letter of Final Determination (LFD): means a letter issued by FEMA during the mapping update process which establishes final elevations and provides the new flood map and flood study to the community. The LFD initiates the six-month adoption period. The community must adopt or amend its floodplain management regulations during the six-month period unless the community has previously incorporated an automatic adoption clause.

Letter of Map Change (LOMC): is a general term used to refer to several types of revisions and amendments to FEMA maps that can be accomplished by letter. They are broken down into the following categories:

1. **Conditional Letter of Map Revision (CLOMR):** means FEMA's comment on a proposed project that would, upon construction, result in modification of the SFHA through the placement of fill outside the existing regulatory floodway.
2. **Conditional Letter of Map Revision Based on Fill (CLOMR-F):** means a letter from FEMA stating that a proposed structure that will be elevated by fill would not be inundated by the base flood.
3. **Letter of Map Amendment (LOMA):** means an amendment by letter to the currently effective FEMA map that establishes that a building or land is not located in a SFHA through the submittal of property specific elevation data. A LOMA is only issued by FEMA.
4. **Letter of Map Amendment Out as Shown (LOMA-OAS):** means an official determination by FEMA that states the property or building is correctly shown outside the SFHA as shown on an effective NFIP map. Therefore, the mandatory flood insurance requirement does not apply. An out-as-shown determination does not require elevations.
5. **Letter of Map Revision (LOMR):** means an official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
6. **Letter of Map Revision Based on Fill (LOMR-F):** means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

Lowest Adjacent Grade: means the lowest elevation, after completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

4.7 Flood Hazard Area (FH-OL) (cont.)

Lowest Floor: means the lowest elevation described among the following:

1. the lowest floor of a building;
2. the basement floor;
3. the garage floor, if the garage is connected to the building;
4. the first floor of a structure elevated on pilings or pillars;
5. the floor level of any enclosure, other than a basement, below an elevated structure where the walls of the enclosure provide any resistance to the flow of flood waters. Designs for meeting the flood opening requirement must either be certified by a registered professional engineer or architect or meet or exceed the following criteria:
 - a. the walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters.
 - b. At least two (2) openings are designed and maintained for the entry and exit of floodwater; and those openings provide a total net area of at least one (1) square inch for every one square foot of enclosed area; the bottom of all such openings shall be no higher than one (1) foot above the exterior grade or the interior grade immediately beneath each opening, whichever is higher. Doorways and windows do not qualify as openings.
6. The first floor of a building elevated on pilings or columns in a coastal high hazard area (as that term is defined in 44 CFR 59.1), as long as it meets the requirements of 44 CFR 60.3.

Manufactured Home: means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle.”

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

Market Value (or Value): means the structure’s value, excluding the land, 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 building (actual cash value), or adjusted assessed values.

Mitigation: means sustained actions taken to reduce or eliminate longterm 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 cost of disaster response and recovery.

Natural Grade: for floodplain management purposes, means the elevation of the undisturbed natural surface of the ground. Fill placed prior to the date of the initial identification of the flood hazard on a FEMA map is also considered natural grade.

4.7 Flood Hazard Area (FH-OL) (cont.)



New Construction: for floodplain management purposes, means any structure for which the “start of construction” commenced on or after the effective date of a floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New Manufactured Home Park or Subdivision: means a manufactured home park or subdivision for which the construction of facilities for servicing the 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 the community’s first floodplain ordinance.

North American Vertical Datum of 1988 (NAVD 88): as adopted in 1993 is a vertical control datum used as a reference for establishing varying elevations within the floodplain.

Obstruction: includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, canalization, bridge, conduit, culvert, building, 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; or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One-Percent (1%) Annual Chance Flood: is the flood that has a one percent (1%) chance of being equaled or exceeded in any given year. See “Regulatory Flood”.

Physical Map Revision (PMR): is an official republication of a community’s FEMA map to effect changes to base (1-percent annual chance) flood elevations, floodplain boundary delineations, regulatory floodways, and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas, or correction to base flood elevations or SFHAs.

Prefabricated Building: is a building that is manufactured and constructed using prefabrication. It consists of factory-made components or units that are transported and assembled on-site to form the complete building.

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

Recreational Vehicle: means a vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use as a permanent dwelling, but as quarters for recreational camping, travel, or seasonal use.

4.7 Flood Hazard Area (FH-OL) (cont.)

Regulatory Flood: means the flood having a one percent (1%) chance of being equaled or exceeded in any given year, as calculated by a method and procedure that is acceptable to and approved by the Indiana Department of Natural Resources and the Federal Emergency Management Agency. The regulatory flood elevation at any location is as defined in Section 4.7(Part 3)(B) of this Chapter. The "Regulatory Flood" is also known by the terms "Base Flood", "One-Percent Annual Chance Flood", and "100-Year Flood".

Repetitive Loss: means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equaled or exceeded 25% of the market value of the structure before the damage occurred.

Riverine: means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Special Flood Hazard Area (SFHA): means those lands within the jurisdictions of the City of Columbus, Bartholomew County, and the Joint District subject to a one percent (1%) or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps and Flood Insurance Studies as Zones A, AE, AH, AO, A1 30, A99. The SFHA includes areas that are flood prone and designated from other federal, state or local sources of data including but not limited to best available flood layer maps provided by or approved by the Indiana Department of Natural Resources, historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

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 either the first placement or permanent construction of a structure on a site, such as the pouring of a slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, 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.

4.7 Flood Hazard Area (FH-OL) (cont.)



Structure: means a walled and roofed building including a gas or liquid storage tank, which is primarily above ground. The term includes a manufactured home, as well as a prefabricated building. It also includes recreational vehicles installed on a site for more than 180 consecutive days. See “Walled and Roofed”.

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 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement: means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “repetitive loss” or “substantial damage” regardless of the actual repair work performed. The term does not include improvements of structures to correct existing violations of state or local health, sanitary, or safety code requirements or any alteration of a “historic structure”, provided that the alteration will not preclude the structures continued designation as a “historic structure”.

Variance: is a grant of relief from the requirements of this Chapter consistent with the variance conditions herein.

Violation: means the failure of a structure or other development to be fully compliant with this Chapter.

Walled and Roofed: means a building that has two or more exterior rigid walls and a fully secured roof and is affixed to a permanent site.

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

Part 3: General Provisions

- A. Applicability:** This Chapter shall apply to all special flood hazard (SFHAs), and 500-year floodplain areas within the jurisdictions of the City of Columbus, Bartholomew County, and the Edinburgh / Bartholomew / Columbus Joint District as identified in Section 4.7(Part 3)(B) below.

Increased Requirement:
The IDNR model ordinance provides standards for flood hazard reduction in the SFHAs (100-year floodplains) only. This Chapter extends those same regulations (based on the 100-year BFEs and FPGs) to the 500-year floodplain area as well.

4.7 Flood Hazard Area (FH-OL) (cont.)

B. Basis for Establishing Regulated Flood Hazard Areas: Special flood hazard and 500-year floodplain areas shall be determined as follows:

1. Studied SFHA's and 500-year Floodplains: The regulatory flood elevation, floodway, and fringe limits for the studied SFHAs and 500-year floodplains within the jurisdictions of the City of Columbus, Bartholomew County, and the Joint District shall be determined from the one-percent and 0.2-percent annual chance flood profiles in the Flood Insurance Study of Bartholomew County, Indiana and Incorporated Areas and the corresponding Flood Insurance Rate Maps (FIRM) dated December 9, 2014 as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date. Should the floodway limits not be delineated on the Flood Insurance Rate Map for a studied SFHA designated as an "AE Zone", the limits of the floodway will be according to the best available flood layer as provided by the Indiana Department of Natural Resources.
2. "A Zones": The regulatory flood elevation, floodway, and fringe limits for each of the SFHAs and 500-year floodplains within the jurisdictions of the City of Columbus, Bartholomew County, and the Joint District delineated as an "A Zone" on the Bartholomew County, Indiana and Incorporated Areas Flood Insurance Rate Map dated December 9, 2014 as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date shall be according to the best data available as provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile. Whenever a party disagrees with the best available data, the party needs to replace existing data with better data that meets current engineering standards. To be considered, this data must be submitted to the Indiana Department of Natural Resources for review and subsequently approved.
3. Other Upstream Drainage Areas Exceeding One Square Mile: In the absence of a published FEMA map, or absence of identification on a FEMA map, the regulatory flood elevation, floodway, and fringe limits of any watercourse in the community's known flood prone areas shall be according to the best data available as provided by the Indiana Department of Natural Resources; provided the upstream drainage area from the subject site is greater than one square mile.
4. More Restrictive but Not Yet Effective Data: Upon issuance of a Letter of Final Determination (LFD), any more restrictive data in the new (not yet effective) mapping / study shall be utilized for permitting and construction (development) purposes, replacing all previously effective less restrictive flood hazard data provided by FEMA.

4.7 Flood Hazard Area (FH-OL) (cont.)



C. Establishment of Floodplain Development Permit: A Floodplain Development Permit shall be required in conformance with the provisions of this Chapter prior to the commencement of any development activities in the SFHA (100-year floodplain) and 500-year floodplain areas.

1. Floodplain Alteration with other Construction: The Floodplain Development Permit shall be included as an element of any Improvement Location Permit required by this Ordinance in all instances where floodplain alterations (filling, grading, etc.) and other improvements (construction of a structure, etc.) are to be permitted simultaneously.
2. Floodplain Alteration without other Construction: The Floodplain Development Permit shall follow the procedures for a Zoning Compliance Certificate when applied for independently of other improvements (such as the placement of fill or other alterations not immediately including construction of a structure).

D. Compliance: No structure shall be located, extended, converted or structurally altered within the SFHA or 500-year floodplain without full compliance with the terms of this Chapter and other applicable regulations. Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this Chapter applicable to the most restrictive flood zone and the most conservative (highest) base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development. No land or stream within the SFHA or 500-year floodplain shall be altered without full compliance with the terms of this Chapter and other applicable regulations.

E. Abrogation and Greater Restrictions: This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and other ordinances or regulations conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

F. Discrepancy between Mapped Floodplain /and Actual Ground Elevation: In cases where there is a discrepancy between the mapped floodplain (SFHA or 500-year floodplain) with base flood elevations provided (riverine or lacustrine Zone AE or X (shaded)) on the FIRM and the actual ground elevations, the map shall be disregarded and the elevation provided on the profiles or table of still water elevations shall be applied to the actual ground elevation to determine if a flood hazard area is present.

1. Site below the 500-year Flood Elevation: If the natural grade elevation of the site in question is below the 500-year flood elevation it shall be regulated accordingly.
2. Site at or above the 500-year Flood Elevation: If the natural grade elevation of the site in question is at or above the 500-year flood elevation the floodplain regulations will not be applied.

Note: The IDNR model ordinance refers only to a Floodplain Development Permit. Sub-sections C(1) and (2) have been added to ensure a coordinated and efficient local review process.

Interpretation Note:
For the purpose of the local Floodplain Development Permit, the common construction practice of removing unsuitable existing material (topsoil) and backfilling with select structural material is not considered the placement of fill if the practice does not alter the existing elevation and is not occurring in a floodway. If this occurs in a floodway and is allowed under this Chapter 4.7, all applicable approvals from IDNR must first be obtained.

Interpretation Note:

With clear and definite data that the natural grade of a site is above the 1% annual chance flood elevation, the site shall be considered outside of the SFHA. If the elevation of the site's natural grade is above the 1% annual chance flood elevation but below the 0.2% annual chance flood elevation, the regulations applicable in the 500-year floodplain will apply. If the elevation of the site's natural grade is above both the 1% annual chance flood elevation and the 0.2% annual chance flood elevation, the floodplain regulations will not apply, but for these sites in the SFHA a LOMA or LOMR-FW must first have been obtained and remain in effect. FEMA only will issue a LOMA or LOMR-FW for the SFHA (the 1% annual chance flood) and not for the 500-year floodplain (the 0.2%

Note: *The specific procedures and penalties for violations provided by the IDNR model ordinance have been omitted in favor of a reference to Article 13 of this Ordinance. This alteration is intended to ensure consistent enforcement of all requirements of this Ordinance.*

4.7 Flood Hazard Area (FH-OL) (cont.)

3. Site at or above the 100-year (Base) Flood Elevation: For sites at or above the 100-year (1% annual chance flood) elevation, a LOMA or LOMR-FW may be sought and obtained, but unless that LOMA or LOMR-FW has the effect of removing the property from both the SFHA and the 500-year floodplain, the provisions of this Chapter 4.7 applicable to the 500-year floodplain shall remain in effect.
4. LOMA or LOMR-FW Required: For any site where the natural grade elevation of the property would result in it being considered as not regulated under this Chapter 4.7, a corresponding LOMA or LOMR-FW must have first been obtained, and not subsequently superseded or invalidated.

G. Interpretation: In the interpretation and application of this Chapter 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.

H. Warning and Disclaimer of Liability: The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods can and will occur on rare occasions. Therefore, this Chapter does not create any liability on the part of the City of Columbus, Bartholomew County, the Edinburgh/Bartholomew/Columbus Joint District Plan Commission or Council, the Indiana Department of Natural Resources, or the State of Indiana for any flood damage that results from reliance on this Chapter or any lawfully made administrative decision.

I. Violations: Failure to obtain a Floodplain Development Permit in the SFHA or 500-year floodplain or failure to comply with the requirements of a Floodplain Development Permit or conditions of a variance shall be deemed to be a violation of this Ordinance. All violations shall be subject to the provisions of Article 13, Enforcement & Penalties of this Ordinance.

1. The floodplain administrators shall inform the property owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.
2. Nothing in this Chapter shall prevent the City of Columbus or Bartholomew County from taking any other lawful action to prevent or remedy any violations. All costs connected with enforcement action shall accrue to the person or persons responsible.

4.7 Flood Hazard Area (FH-OL) (cont.)



Part 4: Administration

- A. Designation of Administrators:** The Planning Director, the Chief Code Enforcement Officer, and their designees shall administer and implement the provisions of this Chapter and be referred to as the Floodplain Administrators. The Planning Director shall be responsible for the administration and implementation of this Chapter with regard to subdivision requests and all site related improvements for which a Zoning Compliance Certificate is required by this Ordinance for commercial, industrial, multi-family, and public/semi-public facilities. The Planning Director shall also be responsible for review of the placement of fill not associated with other development activity. The Chief Code Enforcement Officer shall be responsible for the administration and implementation of this Chapter with regard to all 1- and 2-family residences and all structural elements of all developments, such as floodproofing; anchoring; flood resistance; utility service protection; additions, improvements and reconstruction of structures for the purpose of determining costs for substantial improvements and reconstructions per Section 4.7(Part 5)(C)(1); and other similar development features and requirements.
- B. Floodplain Development Permit and Certification Requirements:** An application for a Floodplain Development Permit shall be made to the appropriate Floodplain Administrator for all development activities located wholly within, partially within, or in contact with an identified special flood hazard (SFHA) or 500-year floodplain area. Such application shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual commencement of such construction on a form furnished for that purpose. Such applications shall include, but not be limited to plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and their locations. Specifically, the following information is required:
1. Application Stage:
 - a. A description of the proposed development.
 - b. Location of the proposed development sufficient to accurately locate property and structure(s) in relation to existing roads and streams.
 - c. A legal description of the property site.
 - d. For the reconstruction, rehabilitation, or improvement of an existing structure, or an addition to an existing building, a detailed quote and description of the total work to be completed including but not limited to interior work, exterior work, and labor as well as a certified valuation of the existing (pre-improved or pre-damaged) structure.
 - e. A site plan showing existing and proposed development locations and existing and proposed land grades.

Note: The division of duties between the Planning Director and the Chief Code Enforcement Officer is unique to Columbus, Bartholomew County, and the Joint District.

4.7 Flood Hazard Area (FH-OL) (cont.)

Note: The Chief Code Enforcement Officer will integrate the needed construction stage inspections and certifications described by Section 4.7(Part 4)(B)(2) with the typical building inspection process for all construction.

Increased Requirement: The IDNR model ordinance indicates the construction stage elevation certificate as optional. It is required by this Chapter.

- f. Verification that connection to either a public sewer system or to an approved on-site septic system is available and approved by the respective regulatory agency for proposed structures to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
 - g. Plans showing elevation of the top of the planned lowest floor (including basement) of all proposed structures in Zones A, AE, and X shaded (the 500-year floodplain). Elevation should be in NAVD 88.
 - h. Plans showing elevation (in NAVD 88) to which any non-residential structure will be floodproofed.
 - i. Plans showing location and specifications for flood openings for any proposed structure with enclosed areas below the flood protection grade.
 - j. Plans showing materials to be used below the flood protection grade for any proposed structure are flood resistant.
 - k. Plans showing how any proposed structure will be anchored to resist flotation or collapse.
 - l. Plans showing how any electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed and/or located. Elevation should be in NAVD 88.
 - m. If any portions of a structure are to be floodproofed, specific plans for compliance with Section 4.7(Part 5)(C)(3)(d).
 - n. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. A hydrologic and hydraulic engineering analysis is required, and any watercourse changes submitted to the Department of Natural Resources for approval. Once Department of Natural Resources' approval is obtained, a FEMA Conditional Letter of Map Revision must be obtained prior to construction. (See Sections 4.7(Part 4)(C)(3)((a) and (e) for additional information.)
 - o. An elevation certificate, if applicable, certified by a registered land surveyor or professional engineer providing the proposed structure's intended elevation information.
 - p. Any additional information, as requested by a Floodplain Administrator, which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this Chapter.
2. **Construction Stage:** Upon establishment of the lowest floor of an elevated structure or structure constructed on fill, it shall be the duty of the applicant to submit to the Floodplain Administrator an elevation certificate for the building under construction. The Floodplain Administrator shall review the elevation certificate. Any deficiencies detected during the review shall be corrected by the applicant before work is allowed to continue. Failure to submit the certificate or failure to make said corrections required shall be cause to issue a stop-work order for the project.

4.7 Flood Hazard Area (FH-OL) (cont.)

3. Finished Construction:

- a. Upon completion of construction of any structure requiring certification of elevation, an elevation certificate which depicts the “as-built” lowest floor elevation as well as other applicable elevation data is required to be submitted by the applicant to the Floodplain Administrator. The elevation certificate shall be prepared by or under the direct supervision of a registered land surveyor and certified by the same.
- b. Upon completion of construction of an elevated structure constructed on fill, a fill report is required to be submitted to the Floodplain Administrator to verify the required standards were met, including compaction.
- c. Upon completion of construction of a floodproofing measure, a floodproofing certificate is required to be submitted by the applicant to the Floodplain Administrator. The floodproofing certificate shall be prepared by or under the direct supervision of a registered professional engineer or architect and certified by same.

C. **Duties and Responsibilities of the Floodplain Administrators:**

The Floodplain Administrators and/or designated staff are authorized and directed to enforce the provisions of this Chapter. The administrators are further authorized to render interpretations of this Chapter, which are consistent with its spirit and purpose. Duties and responsibilities of the Floodplain Administrators shall include, but not be limited to the following, consistent with the Section 4.7(Part 4)(A) above:

1. Shared Duties and Responsibilities: Both the Planning Director and Chief Code Enforcement Officer and/or their respective designees shall:
 - a. Enforce the provisions of this ordinance.
 - b. Evaluate application for permits to develop in special flood hazard areas to assure that the permit requirements of this ordinance have been satisfied.
 - c. Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.
 - d. Issue permits to develop in special flood hazard and 500-year floodplain areas when the provisions of these regulations have been met or refuse to issue the same in the event of noncompliance.
 - e. Advise applicants that additional Federal, State and/or local permits may be required. If specific Federal, State and/or local permits are known, require that copies of such permits be provided and maintained on file with the floodplain development permit.
 - f. Ensure that construction authorization has been granted by the Indiana Department of Natural Resources for all development projects subject to Section 4.7(Part 5)(A)(1), (A)(3)(a), and (A)(4) of this Chapter. Maintain a record of such authorization (either copy of actual permit/authorization or floodplain analysis/regulatory assessment).

***Note:** The description of the duties of the administrators have been reorganized from the IDNR model ordinance to best reflect the roles of the Planning Director and Chief Code Enforcement Officer.*

4.7 Flood Hazard Area (FH-OL) (cont.)

- g. Verify the upstream drainage area of any proposed development site near any watercourse not identified on a FEMA map to determine if Section 4.7(Part 4)(C)(1)(f) is applicable.
 - h. Verify and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, in accordance with Section 4.7(Part 4)(B). both
 - i. Coordinate with insurance adjusters prior to permitting any proposed work to bring any flood-damaged structure covered by a standard flood insurance policy into compliance (either a substantially damaged structure or a repetitive loss structure) to ensure eligibility for ICC funds.
 - j. Ensure that an approved connection to a public sewer system or an approved on-site septic system is planned for any structures (residential or non-residential) to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
 - k. Provide information, testimony, or other evidence as needed during variance hearings.
 - l. Maintain for public inspection and furnish upon request local permit documents, damaged structure inventories, substantial damage determinations, regulatory flood data, SFHA maps, Letters of Map Change (LOMC), copies of Department of Natural Resources' permits, letters of authorization, and floodplain analysis and regulatory assessments (letters of recommendation), federal permit documents, and "as-built" elevation and floodproofing data for all buildings constructed subject to this ordinance in accordance with Section 4.7(Part 4)(D). both Utilize and enforce all Letters of Map Change (LOMC) or Physical Map Revisions (PMR) issued by FEMA for the currently effective SFHA maps of the community.
 - m. Request any additional information which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this Chapter.
2. Chief Code Enforcement Officer Duties and Responsibilities:
The Chief Code Enforcement Officer specifically and/or their designees shall:
- a. Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard and 500-year floodplain areas, must meet the development standards of these regulations.
 - b. For applications to improve structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures:
 - i. Verify and document the market value of the pre-damaged or pre-improved structure.

4.7 Flood Hazard Area (FH-OL) (cont.)



- ii. Compare the cost to perform the improvement; or the cost to repair a damaged building to its pre-damaged condition; or, the combined costs of improvements and repair, if applicable, to the market value of the pre-damaged or pre-improved structure. The cost of all work must be included in the project costs, including work that might otherwise be considered routine maintenance. Items/activities that must be included in the cost shall be in keeping with guidance published by FEMA to ensure compliance with the NFIP and to avoid any conflict with future flood insurance claims of policyholders within the community.
 - iii. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of “substantial improvement” for proposed work to repair damage caused by flood, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of substantial damage.
 - iv. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the applicable general and specific standards in Chapter 4.7(Part 5) of this Chapter are required.
- c. Verify and record the actual elevation to which any new or substantially improved structures have been floodproofed in accordance with Section 4.7(Part 4)(B)(3).
- d. Make on-site inspections of projects in accordance with Section 4.7(Part 4)(D).
- e. Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with Section 4.7(Part 4)(D).
- 3. Planning Director Duties and Responsibilities: The Planning Director specifically and/or their designees shall:
 - a. Notify adjacent communities and the State Floodplain Coordinator prior to any alteration or relocation of a watercourse and submit copies of such notifications to FEMA.
 - b. Assure that maintenance is provided within the altered or relocated portion of any watercourse so that the flood-carrying capacity is not diminished.
 - c. Coordinate map maintenance activities and associated FEMA follow-up in accordance with Section 4.7(Part 4)(E).

4.7 Flood Hazard Area (FH-OL) (cont.)

D. Administrative Procedures

1. Inspections of Work in Progress: As the work pursuant to a permit progresses, the Chief Code Enforcement Officer and/or their designees (in the role of floodplain administrator) shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of this Chapter and terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
2. Stop Work Orders: Upon notice from the Chief Code Enforcement Officer and/or their designees (in the role of floodplain administrator), work on any building, structure or premises that is being done contrary to the provisions of this Chapter shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed.
3. Revocation of Permits: Either floodplain administrator may revoke a permit or approval, issued under the provisions of this Chapter, in cases where there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based. Further, either floodplain administrator may revoke a permit upon their determination that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this Chapter.
4. Floodplain Management Records: Regardless of any limitation on the period required for retention of public records, records of actions associated with the administration of this Chapter shall be kept on file and maintained under the direction of the Floodplain Administrators in perpetuity.
 - a. These records include permit applications, plans, and certifications; Flood Insurance Rate Maps; Letters of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations required by this ordinance; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance.
 - b. These records shall be available for public inspection through the offices of the Floodplain Administrators.

4.7 Flood Hazard Area (FH-OL) (cont.)



5. Periodic Inspection: Once a project is completed, periodic inspections may be conducted by the Floodplain Administrators to ensure compliance. The Floodplain Administrators shall have a right, upon presentation of proper credential, to enter on any premises within their territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.

- E. Map Maintenance Activities:** To meet NFIP minimum requirements to have flood data reviewed and approved by FEMA, and to ensure that the flood maps, studies and other data identified in Section 4.7(Part 3)(B) accurately represent flooding conditions so appropriate floodplain management criteria are based on current data, the following map maintenance activities are identified:
1. Impacts to Floodway Determinations or Base Flood Elevations:
 - a. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. In no instance shall this section be interpreted as requiring the Floodplain Administrators to make the determinations identified below. These development proposals include:
 - i. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries, as determined by the Indiana Department of Natural Resources.
 - ii. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area; with such information submitted to FEMA by the applicant through the LOMC process.
 - iii. Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and subdivision or large-scale development proposals requiring the establishment of base flood elevations, as determined by the Indiana Department of Natural Resources.
 - b. It is the responsibility of the applicant to have required technical data for a Conditional Letter of Map Revision or Letter of Map Revision submitted to FEMA. The Indiana Department of Natural Resources will review the submittals as part of a partnership with FEMA. The submittal should be mailed to the Indiana Department of Natural Resources at the address provided on the FEMA form (MT-2) or submitted through the online Letter of Map Change website. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
 - c. The Floodplain Administrators shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for proposed floodway encroachments that increase the base flood elevation, as determined by the Indiana Department of Natural Resources.

4.7 Flood Hazard Area (FH-OL) (cont.)

- d. Floodplain development permits issued by the Floodplain Administrators shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to this section.
 - 2. Base Map Corrections: The Floodplain Administrators may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing and may be submitted to FEMA at any time.
 - 3. Annexation / Detachment: Upon occurrence, the Planning Director and/or their designees (in the role of floodplain administrator) shall notify FEMA in writing whenever the boundaries of the City of Columbus, Bartholomew County, and/or the Joint District have been modified by annexation or they have otherwise assumed authority over an area, or no longer have authority to adopt and enforce floodplain management regulations for a particular area. In order that the Bartholomew County, Indiana and Incorporated Areas Flood Insurance Rate Map accurately represents the local jurisdictions, any such notification should include a copy of a map suitable for reproduction, clearly showing the new corporate limits or the new area for which the City of Columbus, Bartholomew County, and/or the Joint District has assumed or relinquished floodplain management regulatory authority.
- F. Appeal and Variance Procedures:** The Board of Zoning Appeals of jurisdiction (the board) shall hear and decide appeals and requests for variances from the requirements of this Chapter.
- 1. Appeals of Administrative Decisions: The board shall hear and decide appeals when it is alleged that an error in any requirement, decision, or determination is made by a Floodplain Administrator in the enforcement or administration of this Chapter. Any appeal shall follow the procedure provided by Chapter 12.5 of this Ordinance.
 - 2. Variance Considerations: In considering any applications for variance the board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this Chapter, and the considerations listed below. A written report addressing each of the factors listed below shall be submitted with the application for a variance.
 - a. The danger to life and property due to flooding or erosion damage.
 - b. The danger that materials may be swept onto other lands to the injury of others.
 - 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, where applicable.

4.7 Flood Hazard Area (FH-OL) (cont.)

- f. The compatibility of the proposed use with existing and anticipated development
 - g. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - h. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - i. The expected height, velocity, duration, rate of rise, and sediment of transport of the floodwaters at the site.
 - j. 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. Variance Criteria: Variances from the provisions of this ordinance shall only be granted when the board can make positive findings of fact based on evidence submitted at the hearing for the following:
- a. A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship, with hardship as defined in Chapter 4.7(Part 2).
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, and/or extraordinary public expense; create nuisances; cause fraud or victimization of the public; or conflict with existing laws or ordinances.
 - d. A determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
4. Variance Limitations: As specified by Chapter 44 of the Code of Federal Regulations Part 60.6(a) the following limitations shall apply to variance applications:
- a. Any structure or other land alteration for which a variance is granted in a floodway subject to Section 4.7(Part 5)(A)(1), (A)(3)(a), or (A)(4) will also require a permit from the Indiana Department of Natural Resources. However, variances shall not be granted within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result, as determined by the Indiana Department of Natural Resources.
 - b. The granting of variances to the Provisions for Flood Hazard Reduction of Chapter 4.7(Part 5) is generally limited to situations where a new structure is to be located on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the flood protection grade. Deviations from this limitation may occur. However, as the lot size increases beyond one-half acre, the required technical justification required for issuing a variance also increases.

Note: The IDNR model ordinance prohibits the granting of variances for residential uses within a floodway that are subject to Sections 4.7(Part 5)(A)(1), (A)(3)(a), and/or (A)(4). Because the legal authority, based in state and/or federal law, for this variance prohibition could not be established it has been omitted from this Ordinance.

Increased Requirement:
The IDNR model ordinance does not specify or limit floodway uses or activities. Section 4.7(Part 5)(A)(1) provides added limitations on the types of uses and activities permitted in the floodway.

4.7 Flood Hazard Area (FH-OL) (cont.)

- c. Variances may be issued for the repair or rehabilitation of “historic structures” upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as an “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.
- d. Variances may be issued for new construction, substantial improvements, and other development necessary for the conduct of a functionally dependent use provided that the applicable criteria have been met and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- 5. Variance Conditions: Upon the consideration of the factors listed above and the purposes of this Chapter, the board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Chapter.
- 6. Variance Notification: Any applicant to whom a variance is granted shall be given written notice specifying the difference between the flood protection grade and the elevation to which the lowest floor is to be built and stating that the cost of the flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- 7. Appeal and Variance Reporting: The Floodplain Administrators shall maintain the records of appeal actions and report any variances to the Federal Emergency Management Agency or the Indiana Department of Natural Resources upon request.

Part 5: Provisions for Flood Hazard Reduction

A. Floodplain Status Standards: The following standards are based on the status of the property within the floodplain.

- 1. Standards for Identified Floodways (Riverine): Located within SFHAs, established in Section 4.7(Part 3)(B) are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and has erosion potential.
 - a. Use Restrictions: All development and land altering activities, including the construction of new buildings, the placement of fill, and the creation of any other potential obstructions to the flow of floodwater shall be prohibited in all floodways. The following activities and uses shall be exempt from this prohibition, provided that all necessary IDNR approvals are obtained and all other applicable provisions of this Chapter are met:
 - i. Expansion of buildings and uses that are pre-existing in the floodway when such buildings and uses are located on a parcel having 75% or more of its total area within the floodway. This pre-existing exemption applies only to those buildings and uses present prior to February 19, 2013, the effective date of this increased floodway regulation. This provision shall not prevent the expansion of buildings that are located in

4.7 Flood Hazard Area (FH-OL) (cont.)



- the floodway when the building is being expanded into an area not located within the floodway, regardless of the percentage of the property within the floodway.
- ii. Construction of buildings on and use of pre-existing lots having 75% or more of their total area within the floodway that have been previously, specifically established for development. "Established" is defined as having an approved and unexpired preliminary plat.
 - iii. Agricultural uses (pasture land, fields, etc. excluding all structures).
 - iv. Wellfields, utility transmission lines and related infrastructure.
 - v. Nature preserve / conservation areas.
 - vi. Marinas, boat ramps, fishing piers and other similar water-related recreation facilities.
 - vii. Public streets, roads, bridges, pedestrian paths, and related infrastructure.
 - viii. Mineral extraction operations.
 - ix. Flood mitigation projects, regulated drain maintenance, and other drainage improvement projects provided that all applicable permits have been obtained.
- b. **Review Procedure:** If the site is in a regulatory floodway, as established in Section 4.7(Part 3)(B), and the proposed activity is exempt from the prohibitions provided by Section 4.7(Part 5)(A)(1) above or permitted through a use variance or other similar process, the Floodplain Administrators shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources to apply for approval for construction in a floodway. IDNR approval may not be required for any activity that qualifies for a general license or exemption (IC 14-28-1 or 312 IAC 10).
- c. **IDNR Permit Required:** Under the provisions of the Flood Control Act (IC 14-28-1) a permit for construction in a floodway from the Indiana Department of Natural Resources is required prior to the issuance of a local building permit for any excavation, deposit, construction, or obstruction activity located in the floodway. This includes land preparation activities such as filling, grading, clearing and paving etc. undertaken before the actual start of construction of the structure. General licenses and exemptions to the requirements of the Flood Control Act (IC 14-28-1 and 312 IAC 10) may apply to qualified additions/improvements to existing lawful residential structures, rural bridges, logjam removals, wetland restoration, utility line crossings, outfall projects, creek rock removal, and prospecting.

Note: The last sentence of Section 4.7(Part 5)(A)(1)(g) has been added to the IDNR model ordinance to clarify responsibility.

4.7 Flood Hazard Area (FH-OL) (cont.)

- d. *Local Action Withheld:* No action shall be taken by the Floodplain Administrators until approval has been granted by the Indiana Department of Natural Resources for construction in the floodway, or evidence provided by an applicant that the development meets specified criteria to qualify for a general license or exemption to the requirements of the Flood Control Act. The Floodplain Development Permit shall meet the provisions contained in this Chapter 4.7(Part 5).
- e. *Controlling Regulations:* The Floodplain Development Permit cannot be less restrictive than an approval issued for construction in a floodway by the Indiana Department of Natural Resources, or the specified criteria used to qualify for a general license or exemption to the Flood Control Act for a specific site/project. However, a community's more restrictive regulations (if any) shall take precedence.
- f. *Floodways Identified by FEMA:* In floodway areas identified on the FIRM, development shall cause no increase in flood levels during the occurrence of the base flood discharge without first obtaining a Conditional Letter of Map Revision and meeting requirements of Section 4.7(Part 4)((E)(1). A Conditional Letter of Map Revision cannot be issued for development that would cause an increase in flood levels affecting a structure and such development should not be permitted. Revised per IDNR Comments 12.8.22
- g. *Floodways Identified by IDNR:* In floodway areas identified by the Indiana Department of Natural Resources through detailed or approximate studies but not yet identified on the effective FIRM as floodway areas, the total cumulative effect of the proposed development, when combined with all other existing and anticipated development, shall not adversely affect the efficiency of, or unduly restrict the capacity of the floodway. This adverse effect is defined as an increase in the elevation of the regulatory flood of at least fifteen-hundredths (0.15) of a foot as determined by comparing the regulatory flood elevation under the project condition to that under the natural or pre-floodway condition as proven with hydraulic analyses. The increase in the regulatory flood resulting from any development shall be as determined by IDNR based on a review of the data provided by the development permit applicant.
- h. *Procedures for Projects Involving Channel Modifications:* For all projects involving channel modifications or fill (including levees) the Floodplain Administrators shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data per mapping standard regulations found at 44 §CFR 65.12.

4.7 Flood Hazard Area (FH-OL) (cont.)



2. Standards for Identified Fringe (Riverine): If the site is in the fringe (either identified on the FIRM or identified by the Indiana Department of Natural Resources through detailed or approximate studies and not identified on a FIRM), the Floodplain Administrator may issue the local Floodplain Development Permit provided the provisions contained in this Part 5 of this Chapter have been met.
3. Standards for SFHAs Without Established Base Flood Elevation and/or Floodways/Fringes (Riverine):
 - a. *Significant Upstream Drainage:* If the site is in an identified floodplain where the limits of the floodway and fringe have not yet been determined, and the drainage area upstream of the site is greater than one square mile, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources for review and comment.
 - i. No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) or a floodplain analysis/regulatory assessment citing the one-percent annual chance flood elevation and the recommended Flood Protection Grade has been received from the Indiana Department of Natural Resources.
 - ii. Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, a Floodplain Development Permit may be issued, provided the conditions of the Floodplain Development Permit are not less restrictive than the conditions received from the Indiana Department of Natural Resources and the provisions contained in this Section 4.7(Part 5)(A) have been met.
 - b. *Insignificant Upstream Drainage:* If the site is in an identified floodplain where the limits of the floodway and fringe have not yet been determined and the drainage area upstream of the site is less than one square mile, the Floodplain Administrator shall require the applicant to provide an engineering analysis showing the limits of the floodplain and one-percent annual chance flood elevation for the site. Upon receipt, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in this Section 4.7(Part 5) have been met.

4.7 Flood Hazard Area (FH-OL) (cont.)

Interpretation Note:

Section 4.7(Part 5)(B) refers to the placement of all structures regardless of square footage, including principal and accessory structures.

Increased Requirement:

The inclusion of reconstruction or repairs made to a repetitive loss structure in the general anchoring requirement of Section 4.7(Part 5)(B) (1) is indicated as optional by the IDNR model ordinance. It is required by this Chapter.

4. SFHAs not Identified on a Map: If a proposed development site is near a waterway with no SFHA identified on a map, the Floodplain Administrator shall verify the drainage area upstream of the site. If the drainage area upstream of the site is verified as being greater than one square mile, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources for review and comment.
 - a. No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) or a floodplain analysis/regulatory assessment citing the one-percent annual chance flood elevation and the recommended Flood Protection Grade has been received from the Indiana Department of Natural Resources.
 - b. Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, a Floodplain Development Permit may be issued, provided the conditions of the Floodplain Development Permit are not less restrictive than the conditions received from the Indiana Department of Natural Resources and the provisions contained in this Section 4.7(Part 5) have been met.

B. General Standards: In all special flood hazard and 500-year floodplain areas the following provisions are required.

1. General Anchoring Required: All new construction, reconstruction or repairs made to a repetitive loss structure, and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
2. Flood Resistance Required: New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage below the FPG.
3. Flood Damage Minimized: New construction and substantial improvements must incorporate methods and practices that minimize flood damage.
4. Service Facilities Protected: Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG for residential structures. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG or designed so as to prevent water from entering or accumulating within the components below the FPG for non-residential structures. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other water-proofed service facilities may be located below the FPG.
5. Water Supply Systems Protected: New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

4.7 Flood Hazard Area (FH-OL) (cont.)

6. Sanitary Sewage Systems Protected: New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
7. On-site Waste Disposal Protected: On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
8. Protection from Hazardous Materials: All outdoor storage of hazardous materials shall not be permitted. Storage of hazardous materials indoors shall be permitted in regulated flood hazard areas, only if said hazardous materials are protected from flood risk below Flood Protection Grade.
9. Alteration of Structures in Compliance: Any alteration, repair, reconstruction or improvements to a structure that is in compliance with the provisions of this Chapter shall meet the requirements of “new construction” as contained in this Chapter.
10. BFE Data Provided: Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which are greater than the lesser of fifty (50) lots or five (5) acres.
11. Multiple Flood Zones Addressed: Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this Chapter applicable to the most restrictive flood zone and the highest base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.
12. Erosion Protection: Fill projects that do not involve a structure must be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3 feet horizontal to 1-foot vertical.

Increased Requirement:

The protection from hazardous materials provided by Section 4.7(Part 5)(B)(9) is in addition to the minimum requirements established by the IDNR model ordinance.

Note: *While not enforced through this Chapter, the City of Columbus has additional stormwater requirements that apply within floodplains. Specifically, Section 4.5.13 of the Columbus Stormwater Design Manual notes that no design credit will be granted for stormwater storage volumes below the elevation of the regulatory flood unless compensatory (1:1) storage is also provided.*

Increased Requirement:
The IDNR model ordinance indicates the inclusion of repetitive loss structures and structures with a previous addition in the building protection requirement (Sections 4.7(Part 5)(C)(1)(g) and (h)) as optional. Their inclusion is required by this Chapter. Section 4.7(Part 5)(C)(1)(h) differs from the model ordinance optional text in that it applies only to building additions, rather than both additions and other improvements.

4.7 Flood Hazard Area (FH-OL) (cont.)

C. Specific Standards: In all areas of special flood hazard and 500-year floodplain areas where base flood elevation data or flood depths have been provided, as set forth in Section 4.7(Part 3)(B) the following provisions are required:

1. **Building Protection Requirement:** In addition to the general standards described in Section 4.7 (Part 5)(B) above to be located in the SFHA and/or 500-year floodplain shall be protected from flood damage below the FPG (two feet above the base flood elevation). This building protection requirement applies to the following situations:
 - a. Construction or placement of a residential structure.
 - b. Construction or placement of a non-residential structure.
 - c. Addition or improvement made to an existing structure where the cost of the addition or improvement equals or exceeds 50% of the value of the existing structure (excluding the value of the land). An addition and/or improvement project that is continuous in scope and/or time is considered as one project for permitting purposes.
 - d. Reconstruction or repairs made to a damaged structure where the costs of restoring the structure to its before damaged condition equals or exceeds 50% of the market value of the structure (excluding the value of the land) before damaged occurred (the costs of any proposed additions or improvements beyond restoring the damaged structure to its before damaged condition must be included in the cost).
 - e. Installing a manufactured home on a new site or a new manufactured home on an existing site.
 - f. Installing a travel trailer or recreational vehicle on a site for more than 180 days.
 - g. Reconstruction or repairs made to a repetitive loss structure.
 - h. An addition made to any existing structure (that is legal nonconforming with regard to the building protection requirement above) which has had a previous addition constructed since that existing structure became legal nonconforming (most likely as the result of a revision to the building protection requirement and/or applicable Flood Insurance Rate Map). In this situation, the building protection requirement applies to the second and subsequent additions, with no threshold for the original structure to be brought into compliance with the current building protection requirement unless Sections 4.7(Part 5)(C)(1)(c) or (d) above apply.

4.7 Flood Hazard Area (FH-OL) (cont.)

Interpretation Note:

IDNR interprets Section 4.7(Part 5)(C)(1) as follows:

(a) and (b) indicate that all new structures, excluding accessory structures per Section 4.7(Part 5)(C)(5), pavilions, etc. per Section 4.7(Part 5)(C)(6), and storage tanks per Section 4.7(Part 5)(C)(7), shall be protected from flood damage below the FPG (elevated or floodproofed, if a non-residential structure);

(c) indicates that any addition or improvement made to any existing structure, excluding accessory structures per Section 4.7(Part 5)(C)(5), pavilions, etc. per Section 4.7(Part 5)(C)(6), and storage tanks per Section 4.7(Part 5)(C)(7), for which the cost of the addition or improvement equals or exceeds 50% of the value of the existing structure (excluding the value of the land), requires the following: (i) for a lateral addition whereby the former exterior wall is left intact and only the absolute minimum alteration to accommodate an entrance to the addition is installed; the addition, but not the existing structure, must be protected from flood damage below the FPG, (ii) for a lateral addition whereby the former exterior wall is removed or modified in excess of the absolute minimum alteration: the entire structure, including the existing structure, must be protected from flood damage below the FPG, (iii) for a vertical addition or a lateral addition in combination with improvements to the existing structure: the entire structure, including the existing structure, must be protected from flood damage below the FPG, and (iv) for substantial improvements to the existing structure only: the existing structure must be protected from flood damage below the FPG;

(d) indicates that reconstruction or repairs, excluding those to accessory structures per Section 4.7(Part 5)(C)(5), pavilions, etc. per Section 4.7(Part 5)(C)(6), and storage tanks per Section 4.7(Part 5)(C)(7), resulting from damage (by any cause), that are completed to restore that structure to its before damaged condition, that equal or exceed 50% of the value of the pre-damaged structure (excluding the land) shall only be conducted if the structure being reconstructed or repaired is protected from flood damage below the FPG (elevated or floodproofed, if a non-residential structure).

2. **Residential Construction:** New construction or substantial improvement of any residential structures, excluding those provided for by Sections 4.7(Part 5)(C)(5), (6), and (7), shall meet the provisions described in Section 4.7(Part 5)(A) and applicable general standards described in Section 4.7(Part 5)(B).
 - a. **Zone A, AE, and X-shaded Locations:** In Zones A, AE and X-shaded, new construction or substantial improvement of any residential structure shall have the lowest floor, including basement, at or above the FPG. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of Section 4.7(Part 5)(C)(2)(b) below. Should fill be used to elevate a structure, the standards of Section 4.7(Part 5)(C)(2)(c) must be met.

Increased Requirement:
The IDNR model ordinance indicates the clean or granular fill material requirement as optional. It is required by this Chapter.

4.7 Flood Hazard Area (FH-OL) (cont.)

- b. *Fully Enclosed Areas Below FPG:* Fully enclosed areas formed by foundation and other exterior walls below the flood protection grade must be at or above grade on at least one side. They shall be designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - i. Provide a minimum of two openings on different sides of an enclosure. If there are multiple enclosed areas, each is required to meet the requirements for enclosures, including the requirement for flood openings in exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - ii. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - iii. Doors and windows do not qualify as openings.
 - iv. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
- c. *Constructed on Fill:* A residential structure may be constructed on fill in accordance with the following:
 - i. Fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Fill shall extend 10 feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3 feet horizontal to 1 foot vertical.
 - iv. Fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. Fill shall be composed of clean granular or earthen material.

4.7 Flood Hazard Area (FH-OL) (cont.)



- d. *Stem Wall Foundations:* A residential structure may be constructed using a stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill) must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.
- 3. Non-Residential Construction: New construction or substantial improvement of any non-residential structures, excluding those provided for by Sections 4.7(Part 5)(C)(5), (6), and (7), shall meet the provisions described in Section 4.7(Part 5)(A) and applicable general standards described in Section 4.7(Part 5)(B).
 - a. *Zone A, AE, and X-shaded Locations:* In Zones A, AE and X-shaded, new construction, or substantial improvement of any commercial, industrial, or non-residential structure shall either have the lowest floor, including basement, elevated to or above the FPG or be floodproofed to or above the FPG. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of Section 4.7(Part 5)(C)(3)(b) below. Should fill be used to elevate a structure, the standards of Section 4.7(Part 5)(C)(3)(c) must be met.
 - b. *Fully Enclosed Areas Below FPG:* Fully enclosed areas formed by foundation and other exterior walls below the flood protection grade must be at or above grade on at least one side. They shall be designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - i. Provide a minimum of two openings on different sides of an enclosure. If there are multiple enclosed areas, each is required to meet the requirements for enclosures, including the requirement for flood openings in exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - ii. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - iii. Doors and windows do not qualify as openings.

Increased Requirement:

The IDNR model ordinance indicates the clean or granular fill material requirement as optional. It is required by this Chapter.

4.7 Flood Hazard Area (FH-OL) (cont.)

- iv. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
- c. **Constructed on Fill:** A nonresidential structure may be constructed on fill in accordance with the following:
 - i. Shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Shall extend 10 feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3 feet horizontal to 1 foot vertical.
 - iv. Shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. Shall be composed of clean granular or earthen material.
- d. **Floodproofing:** A nonresidential structure may be floodproofed in accordance with the following:
 - i. A Registered Professional Engineer or Architect shall certify that the structure has been designed so that, below the FPG, the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The structure design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice. Such certification shall be provided to the Floodplain Administrator.
 - ii. Floodproofing measures shall be operable without human intervention and without an outside source of electricity.
- e. **Stem Wall Foundations:** A nonresidential structure may be constructed using a stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.
- 4. **Manufactured Homes and Recreational Vehicles:**
 - a. **Manufactured Homes:** These requirements apply to all manufactured homes to be placed on a site in the SFHA and 500-year floodplain:
 - i. The manufactured home shall be elevated on a permanent foundation such that the lowest floor shall be at or above the FPG and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

4.7 Flood Hazard Area (FH-OL) (cont.)



- ii. Fully enclosed areas formed by foundation and other exterior walls below the FPG 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 as required in Section 4.7(Part 5)(C)(2)(b).
 - b. *Recreational Vehicles*: Recreational vehicles placed on a site in the SFHA or 500-year floodplain shall either:
 - i. be on site for less than 180 days and be fully licensed and ready for highway use (defined as being on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and with no permanently attached additions), or
 - ii. meet the requirements for “manufactured homes” as stated earlier in Section 4.7(Part 5)(C)(4)(a).
- 5. Accessory Structures: Within SFHAs and 500-year floodplains, new construction or placement of an accessory structure must meet the following standards:
 - a. Shall have a floor area of 400 square feet or less.
 - b. Use shall be limited to parking of vehicles and limited storage.
 - c. Shall not be used for human habitation.
 - d. Shall be constructed of flood resistant materials.
 - e. Shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters.
 - f. Shall be firmly anchored to prevent flotation.
 - g. Service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the FPG.
 - h. Shall be designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls as required for elevated structures in Section 4.7(Part 5)(C)(3)(b).
 - i. Shall not have subsequent additions or improvements that would preclude the structure from its continued designation as an accessory structure.
- 6. Free-standing Pavilions, Gazebos, Decks, Carports, and Similar Development: Within SFHAs and 500-year floodplains, new construction or placement of free-standing pavilions, gazebos, decks, carports, and similar development must meet the following standards:
 - a. Shall have open sides (having not more than one rigid wall).
 - b. Shall be anchored to prevent flotation or lateral movement.
 - c. Shall be constructed of flood resistant materials below the FPG.
 - d. Any electrical, heating, plumbing and other service facilities shall be located at/above the FPG.
 - e. Shall not have subsequent additions or improvements that would preclude the development from its continued designation as a free-standing pavilion, gazebo, carport, or similar open-sided development.

Interpretation Note:

Section 4.7(Part 5)(D)(3) supplements the standards provided in the IDNR model ordinance in order to clarify the local subdivision requirements.

Increased Requirement:

The IDNR model ordinance contains only general standards for critical facilities. This Chapter provides specific standards for critical facilities and potentially harmful facilities.

4.7 Flood Hazard Area (FH-OL) (cont.)

7. Above Ground Gas or Liquid Storage Tanks: Within SFHAs and 500-year floodplains, all newly placed aboveground gas or liquid storage tanks shall meet the requirements for a non-residential structure as required in Section 4.7(Part 5)(C)(3).

D. Standards for Subdivisions and Other New Developments: All subdivision proposals and all other proposed new development in the SFHA and/or 500-year floodplain shall be consistent with the need to minimize flood damage, as well as the following requirements:

1. All subdivision proposals and all other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
2. All subdivision proposals and all other proposed new development shall have adequate drainage provided to reduce exposure to flood hazards.
3. Floodplain boundaries shall be shown on all buildable properties included in and/or resulting from administrative, minor, and major subdivision plats, including all preliminary and final plats. In addition, base flood elevation data shall be shown on all buildable lots of all major subdivision final plats.
4. In all special flood hazard and 500-year floodplain areas where base flood elevation data is not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all major subdivision proposals and all other proposed new development (including manufactured home parks) which involves no more than fifty (50) lots or five (5) acres, whichever is less.

E. Standards for Critical and Potentially Harmful Facilities:

Critical facilities are those for which even the slightest risk from flooding is too great given the importance of the facility in responding to a flood event or the complexities of evacuating the facility's occupants during a flood event. Potentially harmful facilities are those that include chemicals or other substances that are potentially harmful to water quality or public health in the event they are inundated by and mixed with flood waters. The Floodplain Administrators may determine if any uses not specifically listed below are also either a critical or potential harmful facility and regulate them accordingly. The determination of the Floodplain Administrators may be appealed to the Board of Zoning Appeals through the Administrative Appeal process.

1. Critical Facilities: The following critical facilities, including their access driveways, shall be prohibited from locating in the SFHA or 500-year floodplain. The expansion of buildings or other aspects of any of these uses that are pre-existing in an SFHA or 500-year floodplain shall be exempt from this prohibition when the use is located on a parcel having 75% or more of its total area within the SFHA or 500-year floodplain, provided that all other applicable provisions of this Chapter are met. This provision shall not prevent the expansion of buildings that are located in the SFHA or 500-year floodplain when the

4.7 Flood Hazard Area (FH-OL) (cont.)



building is being expanded into an area not located within the SFHA or 500-year floodplain, regardless of the percentage of the property within the SFHA or 500-year floodplain.

- a. nursing home / assisted living facility.
- b. animal shelter.
- c. correctional facility.
- d. day-care center (child or adult).
- e. hospital.
- f. institution for the developmentally disabled / mentally ill.
- g. police, fire, or rescue station.
- h. school (grades pre-school through 12).

2. Potentially Harmful Facilities: The following potentially harmful facilities, if permitted or conditional in the underlying zoning district or permitted through a use variance or other similar process, shall also be reviewed as a conditional use in the SFHA or 500-year floodplain for the purpose of scrutinizing plans for containment of all chemicals and other potential water-borne pollutants. The expansion of surface parking lots pre-existing in an SFHA or 500-year floodplain is exempt from this conditional use provision. The expansion of buildings or other aspects of any of these uses that are pre-existing in an SFHA or 500-year floodplain shall be exempt from this conditional use provision when the use is located on a parcel having 75% or more of its total area within the SFHA or 500-year floodplain, provided that all other applicable provisions of this Chapter are met. This provision shall not prevent the expansion of buildings that are located in the SFHA or 500-year floodplain when the building is being expanded into an area not located within the SFHA or 500-year floodplain, regardless of the percentage of the property within the SFHA or 500-year floodplain.
- a. Confined Feeding Operation (CFO)
 - b. Sewage Treatment Plant.
 - c. Gas station (and other similar fueling facilities).
 - d. Dry cleaners (commercial).
 - e. Hazardous materials production and/or bulk storage.
 - f. Waste disposal facility.

4.7 Flood Hazard Area (FH-OL) (cont.)

F. Additional Standards for Identified Haw Creek Flood Flow Conveyance Paths: The Haw Creek flood hazard modeling developed by Christopher B. Burke Engineering (CBBEL) in May of 2011, as updated periodically shall serve as a supplement to the FEMA-provided Flood Insurance Rate Maps for the Haw Creek watershed, specifically with regard to identified flood flow conveyance paths outside of FIRM-identified floodways. This modeling, including updates, shall hereafter be referred to as the “base model”. Prior to the commencement of any development, construction, earth moving, or other similar activities to occur within the 500-year flood flow conveyance paths (as identified by the base model and beyond FIRM-identified floodways) the proposed activity shall be evaluated for its potential impacts. This modeling requirement includes all flood control measures, including those that are intended for temporary protection (such as sandbagging, etc.) that may potentially impact the 500-year flood flow conveyance paths. The Planning Director may, upon the advice of a qualified engineer, exempt from the modeling requirement development activities that are so minimal that any conceivable impact would also be minimal and likely not detectable. To the extent possible, these activities shall be included in the base model, consistent with Section 4.7(Part 5)(F)(2)(c) below.

1. The modeling shall be conducted and/or evaluated by a qualified consultant chosen and under contract by the City of Columbus and all costs associated with the modeling shall be incurred by the applicant and shall be paid to the City prior to the modeling.
2. No development, construction, earth moving, or other similar activities shall result in any obstruction or loss of capacity in any 500-year flood flow conveyance path (as identified by the base model and beyond FIRM-identified floodways) unless the required modeling shows that the proposed project along with any proposed compensatory measure, acting alone or in combination with existing development will not increase the modeled 500-year flood elevations more than 0.14 foot. The amount of obstruction shall be measured cumulatively beginning October 12, 2011 (the effective date of this provision).
 - a. The maximum increase in 500-year flood elevations shall apply to all properties, streets, and other off-site locations in the watershed, but shall not apply to the property on which the development or similar activity is taking place. There shall be no limit to these self-imposed increases in flood elevations.

4.7 Flood Hazard Area (FH-OL) (cont.)



- b. Any self-imposed increases in flood elevations on property on which development or similar activity takes place shall not be counted toward calculating the cumulative increase in flood elevations on that same property as a result of development activity undertaken by others. The maximum flood elevation increase refers to the maximum amount of increase that a property owner or owners, over time, can cause to occur on adjacent properties. In no instance shall self-imposed increases prevent adjacent property owners from developing their properties to the maximum extent permitted.
 - c. All calculations of the flood elevation increase shall be rounded to the nearest hundredths of a foot. Non-rounded results equaling 5 thousandths, 5 ten-thousands, etc. or more shall be rounded up to result in figures in the nearest hundredths of a foot. Similarly, all non-rounded results of less than 5 thousandths, ten-thousands, etc. shall be rounded down.
 - d. At the time of modeling for any development or similar activity the base model shall be updated to reflect any improved topographic information and shall be adjusted to include any stormwater storage that previously occurred in a structure that is proposed to be protected and therefore no longer available for storage. Any increase in flood elevations that results from removal of stormwater storage from existing structures shall not count toward the maximum flood elevation increase.
 - e. All interpretations and calculations not expressly described in this Section shall follow Indiana Department of Natural Resources standards, policies, etc. for the review of development proposed in a floodway.
3. At the discretion of the Planning Director, upon the advice of the qualified consultant, the applicant shall also be required to provide as-built plans for any completed development, construction, earth moving, or other similar activities and to incur the costs to update the base model to include that change. The as-built plans and model update cost shall be paid prior to occupancy or other similar use of the completed activity.