Chapter 15.60

FLOOD HAZARD PROTECTION REGULATIONS

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Section 15.60.010 Purpose.

This chapter is enacted pursuant to the police powers granted to this city by Illinois Revised Statutes, Chapter 24, Sections 1-2-1, 11-12-12, 11-30-2, 11-30-8 and 11-31-2 in order to accomplish the following purposes:

- A. To prevent unwise developments from increasing flood or drainage hazards to others;
- B. To protect new buildings and major improvements to buildings from flood damage;
 - C. To protect human life and health from the hazards of flooding;
- D. To lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations;
- E. To maintain property values and a stable tax base by minimizing the potential for creating flood blighted areas; and,
- F. To make federally subsidized flood insurance available for property in the city by fulfilling the requirements of the National Flood Insurance Program. (Ord. 819 § 1, 1990)

Section 15.60.020 Definitions.

For the purposes of this chapter, the following definitions are adopted:

"Base flood" means the flood having a one-percent probability of being equalled or exceeded in any given year. The base flood is also known as the one hundred (100) year flood. The base flood elevation at any location is as defined in Section 15.60.040.

"Building" means a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home or a prefabricated building. The term also includes recreational vehicles and travel trailers to be installed on a site for more than one hundred eighty (180) days.

"Development" means any manmade change to real estate, including:

- 1. Construction, reconstruction or placement of a building or any addition to a building valued atmore than one thousand dollars (\$1,000.00);
- 2. Installing a manufactured home on a site, preparing a site for a manufactured home or installing a travel-trailer on a site for more than one hundred eighty (180) days;
 - 3. Installing utilities, construction of roads, or similar projects;

- 4. Construction or erection of levees, walls, fences, bridges or culverts;
- 5. Drilling, mining, filling, dredging, grading, excavating or other nonagricultural alterations of the ground surface;
 - 6. Storage of materials; or
- 7. Any other activity that might change the direction, height or velocity of flood or surface waters.

Development does not include maintenance of existing buildings and facilities such as re-roofing; re-surfacing roads; or gardening, plowing and similar agricultural practices that do not involve filling, grading or construction of levees.

"Flood" means a general and temporary condition of inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.

"Floodway" means that portion of the SFHA required to store and convey the base flood. The floodway for the SFHAs of the Mississippi River and Carr and Palmer Creeks shall be as delineated on the Flood Insurance Rate Map applicable to the city. The floodway for each of the remaining SFHAs of the city shall be according to the best data available to the Illinois State Water Survey Floodplain Information Repository.

"FPE" or "flood protection elevation" means the elevation of the base flood plus one foot at any given location in the SFHA.

"Riverine SFHA" means any SFHA subject to flooding from a river, creek, intermittent stream, ditch or any other identified channel. This term does not include areas subject to flooding from lakes (except public bodies of water), ponding areas, areas of sheet flow, or other areas not subject to overbank flooding.

"SFHA" or "special flood hazard area" means the lands within the jurisdiction of the city that are subject to inundation by the base flood. The SFHAs of the city are generally identified as such on the Flood Insurance Rate Map of the city prepared by the Federal Emergency Management Agency and dated September 5, 1990. The SFHAs of those parts of unincorporated Monroe County that are within the extraterritorial jurisdiction of the city or that may be annexed into the city are generally identified as such on the Flood Insurance Rate Map prepared for Monroe County by the Federal Emergency Management Agency and dated April 5, 1988. (Ord. 819 § 2, 1990)

Section 15.60.030 Duties of the building inspector.

The building inspector, with the advice and counsel of the city engineer when needed, shall be responsible for the general administration and enforcement of this chapter, including but not limited to the following duties:

- A. Ensure that all development activities with the SFHAs of the jurisdiction of the city meet the requirements of this chapter;
- B. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques;
- C. Ensure that construction authorization has been granted by the Illinois Department of Transportation, Division of Water Resources for all development projects subject to Section 15.60.060, and maintain a record of such authorization;
- D. Maintain a record of the as-built elevation of the lowest floor (including basement) of all buildings subject to Section 15.60.070;
- E. Maintain a record of the engineer's certificate and the as-built floodproofed elevation of all buildings subject to Section 15.60.070(C);
- F. Inspect all development projects to ensure they comply with the provisions of this chapter;

- G. Cooperate with state and federal floodplain management agencies to improve base flood and floodway data and to improve the administration of this chapter. Submit reports as required for the National Flood Insurance Program;
- H. Maintain for public inspection and furnish upon request base flood data, SFHA maps, copies of federal or state permit documents and as-built elevation and floodproofing data for all buildings constructed subject to this chapter. (Ord. 819 § 3, 1990)

Section 15.60.040 Base flood elevation.

This chapter's protection standard is the base flood. The best available base flood data are listed below. Whenever a party disagrees with the best available data, the party may finance the detailed engineering study needed to replace existing data with better data and submit it to the State Water Survey.

- A. The base flood elevation for the SFHAs of the Mississippi River, Carr Creek and Palmer Creek shall be as delineated on the one hundred (100) year flood profiles in the Flood Insurance Study of the city prepared by the Federal Emergency Management Agency and dated September 5, 1990.
- B. The base flood elevation for each SFHA delineated as an AH zone or AO zone shall be that elevation (or depth) delineated on the Flood Insurance Rate Map of the city.
- C. The base flood elevation for each of the remaining SFHAs delineated as an A zone on the Flood Insurance Rate Map of the city shall be according to the best data available to the Illinois State Water Survey Floodplain Information Repository. When no base flood elevation exists, the base flood elevation shall be the one hundred (100) year flood depth calculated according to the formulas presented in Depth and Frequency of Floods in Illinois published by the U.S. Geological Survey, 1976.
- D. The base flood elevation for the SFHAs of those parts of unincorporated Monroe County that are within the extraterritorial jurisdiction of the city or that may be annexed into the city shall be as delineated on the one hundred (100) year flood profiles in the Flood Insurance Study of Monroe County prepared by the Federal Emergency Management Agency and dated April 5, 1988. (Ord. 819 § 4, 1990)

Section 15.60.050 Development permit.

No person, firm, corporation or governmental body not exempted by state law shall commence any development in the SFHA without first obtaining a development permit from the building inspector. The building inspector shall not issue a development permit if the proposed development does not meet the requirements of this chapter.

- A. The application for a development permit shall be accompanied by drawings of the site, drawn to scale showing property line dimensions; existing grade elevations and all changes in grade resulting from excavation or filling; the location and dimensions of all buildings and additions to buildings; and the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 15.60.070.
- B. Upon receipt of an application for a development permit, the building official shall compare the elevation of the site to the base flood elevation. Any development located on land that can be shown to have been higher than the base flood elevation as of the date of the site's first Flood Insurance Rate Map identification is not located in the SFHA and therefore not subject to the requirements of this chapter. The building official shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation

existed prior to the date of the site's first Flood Insurance Rate Map identification.

C. The building inspector shall inform the applicant of any and all other local, state and federal permits that may be required for this type of development activity.

The building inspector shall not issue the development permit unless all required federal and state permits have been obtained. (Ord. 819 § 5, 1990)

Section 15.60.060 Preventing increased damages.

No development in the SFHA shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health and safety.

- A. Within the floodway identified on the Flood Insurance Rate Map applicable to Columbia, Illinois, the following standards shall apply:
- 1. Except as provided in subsection A(2) of this section, no development shall be allowed which acting in combination with existing or future similar works, will cause any increase in the base flood elevation. The specific development activities identified in subsection B(2) of this section shall be considered as meeting this requirement.
 - 2. No increase in the base flood elevation may be permitted unless:
- a. The total cumulative effect of the proposeddevelopment, when combined with all other existing and anticipated development, will not increase the base flood elevation more than 1.0 foot for the affected hydraulic reach of the stream and will not increase flood damages or potential flood damages;
- b. A permit has been issued by the Illinois Department of Transportation, Division of Water Resource as required in subsection B(1) of this section; and
- c. For all projects involving channel modifications or fill (including levees), the city shall submit sufficient data to the Federal Emergency Management Agency to revise the regulatory flood data.
 - B. Within all other riverine SFHAs, the following standards shall apply:
- 1. In addition to the other requirements of this chapter, a development permit for a site located in a floodway (or in a riverine SFHA where no floodway has been identified) shall not be issued unless the applicant first obtains a permit or written documentation that a permit is not required from the Illinois Department of Transportation, Division of Water Resources, issued pursuant to Illinois Revised Statutes, Chapter 19, Sections 52 et. seq.
- 2. The following activities may be constructed without the individual permit required in subsection B(1) of this section in accordance with Statewide Permits issued by the Illinois Department of Transportation, Division of Water Resources, provided the activities do not involve placement of fill, change of grade, or construction in the normal channel. Such activities must still meet the other requirements of this chapter:
- a. The construction of wells, septic tanks and underground utility lines not crossing a lake or stream;
 - b. The construction of light poles, sign posts and similar structures;
- c. The construction of sidewalks, driveways, athletic fields (excluding fences), patios and similar surfaces which are built at grade;
- d. The construction of properly anchored, unwalled, open structures such as playground equipment, pavilions and carports;
- e. The placement of properly anchored buildings not exceeding seventy (70) square feet in size, nor ten feet in any dimension (e.g., animal shelters and tool sheds); and
- f. The construction of additions to existing buildings which do not increase the first floor area by more than twenty (20) percent, which are located on the upstream or downstream side of the existing building, and which do not extend beyond the sides of the existing building that are parallel to the flow of floodwaters.

- 3. The total cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the base flood elevation more than 1.0 foot for the affected hydraulic reach of the stream and will not increase flood damages or potential flood damages.
 - C. Public Health Standards in All SFHAs.
- 1. No development in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants or other hazardous or toxic materials below the FPE unless such materials are stored in a storage tank or floodproofed building constructed according to the requirements of Section 15.60.070(B)(4).
- 2. New and replacement sanitary sewer lines and on-site waste disposal systems may be permitted providing all manholes or other above ground openings located below the FPE are watertight. (Ord. 819 § 6, 1990)

Section 15.60.070 Protecting buildings.

- A. In addition to the damage prevention requirements of Section 15.60.060, all buildings to be located in the SFHA shall be protected from flood damage below the FPE. This building protection requirement applies to the following situations:
- 1. Construction or placement of a new building valued at more than one thousand dollars (\$1,000.00);
- 2. Structural alterations made to an existing building that increase the floor area by more than twenty (20) percent, or the market value of the building by more than fifty (50) percent;
- 3. Reconstruction or repairs made to a damaged building that are valued at or more than fifty (50) percent of the market value of the building before the damage occurred;
- 4. Installing a manufactured home on a new site or a new manufactured home on an existing site. This chapter does not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and
 - 5. Installing a travel trailer on a site for more than one hundred eighty (180) days.
- B. This building protection requirement may be met by one of the following methods. The building official shall maintain a record of compliance with these building protection standards as required in Section 15.60.030.
- 1. A residential or nonresidential building may be constructed on permanent land fill in accordance with the following:
 - a. The fill shall be placed in layers no greater than one foot deep before compaction.
- b. The lowest floor (including basement) shall be at or above the FPE. The fill should extend at least ten feet beyond the foundation of the building before sloping below the FPE.
- c. The fill shall be protected against erosion and scour during flooding by vegetative cover, rip rap, or bulkheading. If vegetative cover is used, the slopes shall be no steeper than three horizontal to one vertical.
- d. The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
- 2. A residential or nonresidential building may be elevated in accordance with the following:
- a. The building or improvements shall be elevated on crawl space, walls, stilts, piles or other foundation provided:
 - i. The walls have permanent openings no more than one foot above grade; and
 - ii. The walls and floor are not subject to damage by hydrostatic pressures

associated with the base flood.

- b. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris.
- c. All areas below the FPE shall be constructed of materials resistant to flood damage. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing and air conditioning equipment and utility meters shall be located at or above the FPE. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPE.
- 3. Manufactured homes and travel trailers to be installed on a site for more than one hundred eighty (180) days shall be:
- a. Elevated at or above the FPE in accordance with subsection (B)(1) or (2) of this section; and
- b. Anchored to resist flotation, collapse or lateral movement by being tied down in accordance with the Rules and Regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to Illinois Revised Statutes, Chapter 111 1/2, Sections 4401-4406.
- 4. Only a nonresidential building may be floodproofed in accordance with the following:
- a. A registered professional engineer shall certify that the building has been designed so that below the FPE, the structure and attendant utility facilities are watertight and capable of resisting the affects of the base flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice.
- b. Floodproofing measures shall be operable without human intervention and without an outside source of electricity. (Ord. 819 § 7, 1990)

Section 15.60.080 Other development requirements.

The city council shall take into account flood hazards, to the extent that they are known, in all official actions related to land management, use and development.

- A. New subdivisions, manufactured home parks, annexation agreements, planned unit developments (PUDs) and additions to manufactured home parks and subdivisions shall meet the requirements of Sections 15.60.060 and 15.60.070. Plats or plans for new subdivisions, manufactured home parks, and planned unit developments (PUDs) shall include a signed statement by a registered professional engineer that the plat or plan accounts for changes in the drainage of surface waters in accordance with the Plat Act (Illinois Revised Statutes, Chapter 109, Section 2).
- B. Proposals for new subdivisions, manufactured home parks, planned unit developments (PUDs) and additions to manufactured home parks and subdivisions shall include base flood elevation data. Where the base flood elevation is not available from an existing study filed with the Illinois State Water Survey, the applicant shall be responsible for calculating the base flood elevation and submitting it to the State Water Survey for review and approval as best available elevation data. (Ord. 819 § 8, 1990)

Section 15.60.090 Variances.

Whenever the standards of this chapter place undue hardship on a specific development proposal, the applicant may apply to the building inspector for a variance. The building inspector

shall review the applicant's request for a variance and shall submit its recommendation to the city council. The city council may attach such conditions to granting of a variance as it deems necessary to further the intent of this chapter.

- A. No variance shall be granted unless the applicant demonstrates that:
- 1. The development activity cannot be located outside the SFHA;
- 2. An exceptional hardship would result if the variance were not granted;
- 3. The relief requested is the minimum necessary;
- 4. There will be no additional threat to public health or safety or creation of a nuisance:
- 5. There will be no additional public expense for flood protection, rescue or relief operations, policing, or repairs to roads, utilities or other public facilities; and,
 - 6. The provisions of Section 15.60.050(C) are met.
- B. The building inspector shall notify an applicant in writing that a variance from the requirements of Section 15.60.070 that would lessen the degree of protection to a building will:
- 1. Result in increased premium rates for flood insurance up to amounts that may be as high as twenty-five dollars (\$25.00) for one hundred dollars (\$100.00) of insurance coverage;
 - 2. Increase the risks to life and property; and
- 3. Require that the applicant proceed with knowledge of these risks and that the applicant acknowledge in writing the assumption of the risk and liability.
- C. Variances to the building protection requirements of Section 15.60.070 requested in connection with the reconstruction, repair or alteration of a site or building included on the National Register of Historic Places for the Illinois Register of Historic Places may be granted using criteria more permissive than the requirements of subsection A(1) through (5) of this section. (Ord. 819 § 9, 1990)

Section 15.60.100 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 may occur or flood heights may be increased by manmade or natural causes. This chapter does not imply that development either inside or outside of the SFHA will be free from flooding or damage. This chapter does not create liability on the part of the city or any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision made lawfully thereunder. (Ord. 819 § 10, 1990)

Section 15.60.110 Violation--Penalty.

Failure to obtain a permit for development in the SFHA or failure to comply with the requirements of a permit or conditions of a variance resolution shall be deemed to be a violation of this chapter. Upon due investigation the building inspector may determine that a violation of the minimum standards of this chapter exist. The building inspector shall notify the owner in writing of such violation.

- A. If such owner fails after ten days notice to correct the violation:
- 1. The city may make application to the Circuit Court for an injunction requiring conformance with this chapter or make such other order as the court deems necessary to secure compliance with the chapter.
- 2. Any person who violates this chapter shall upon conviction thereof be fined not less than one hundred dollars (\$100.00) nor more than seven hundred fifty dollars (\$750.00).
- 3. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.
- B. The building inspector shall inform the 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.
- C. Nothing herein shall prevent the city from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

(Ord. 819 § 11, 1990) (Ordinance No. 3180, Amended, 04/20/2015, Amended Fines.)