

CHAPTER 14

FLOOD PLAIN CODE

14-1-1 **PURPOSE.** This Code is enacted pursuant to the police powers granted to this City by the **Illinois Compiled Statutes, Chapter 65, Sections 5/1-2-1, 5/11-12-12, 5/11-30-2, 5/11-30-8, and 5/11-31-2** 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 promote and protect health, safety and general welfare of the citizens from the hazards of flooding;
- (D) To lessen the burden on the taxpayer for flood control, repairs to 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 blight areas;
- (F) To make federally subsidized flood insurance available; and
- (G) To recognize the environmental sensitivity of floodplains and to encourage their protection from inappropriate growth and development.

14-1-2 **DEFINITIONS.** For the purposes of this Code, the following definitions are adopted:

ADMINISTRATOR: The Mayor or some person appointed by him to execute this Code.

BASE FLOOD: The flood having a **one percent (1%)** probability of being equaled or exceeded in any given year. The base flood is also known as the 100-year flood. The base flood elevation at any location is as defined in **Section 14-1-3** of this Code.

BASE FLOOD ELEVATION (BFE): The elevation in relation to mean sea level of the crest of the base flood.

BUILDING: A structure that is principally above ground and is enclosed by walls and a roof including manufactured homes and prefabricated buildings. The term also includes recreational vehicles and travel trailers to be installed on a site for more than **one hundred eighty (180) days.**

[NOTE: The NFIP requires that references be made to "manufactured homes" rather than "mobile homes".]

DEVELOPMENT: Any man-made change to real estate including:

- (A) Construction, reconstruction, or placement of a building, or any addition to a building, exceeding **seventy (70) square feet** in floor area;
- (B) Substantial improvement of an existing building;
- (C) Installation of 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**;
- (D) Installation of utilities, construction of roads, bridges, culverts or similar projects;
- (E) Construction or erection of levees, dams, walls, or fences;
- (F) Drilling, mining, filling, dredging, grading, excavating, paving, or other alterations of the ground surface;
- (G) Storage of materials including the placement of gas and liquid storage tanks; and
- (H) Channel modifications or 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; resurfacing roads; or gardening, plowing, and similar practices that do not involve filling, grading, or construction of levees.

FEMA: Federal Emergency Management Agency.

[NOTE: FEMA regulations can be found at 44 CFR 59-79 effective October 1, 1986 (revised 10/01/90).]

FLOOD: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.

FLOOD FRINGE: That portion of the floodplain outside of the regulatory floodway.

FLOOD INSURANCE RATE MAP: A map prepared by the Federal Emergency Management Agency that depicts the floodplain or special flood hazard area (SFHA) within a community.

FLOODPLAIN AND SPECIAL FLOOD HAZARD AREA (SFHA): They are synonymous. Those lands within the jurisdiction of the City that are subject to inundation by the base flood. The floodplains 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 **February, 1999**. The floodplains of those parts of unincorporated **Hamilton 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 **Hamilton County** by the Federal Emergency Management Agency and dated **February 1, 1990**.

FLOODPROOFING: Any combination of structural or nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate, property and their contents.

FLOODPROOFING CERTIFICATE: A form published by the Federal Emergency Management Agency that is used to certify that a building has been designed and constructed to be structurally dry floodproofed to the flood protection elevation.

FLOOD PROTECTION ELEVATION OR FPE: The elevation of the base flood plus **one (1) foot** of freeboard at any given location in the floodplain.

[ED. NOTE: NFIP Regulations require protection to or above the base flood elevation. One (1) foot of freeboard is recommended by IDOT/DWR. A municipality may use higher freeboard requirements if it desires.]

FLOODWAY: That portion of the floodplain required to store and convey the base flood. The floodway for each of the floodplains of the City shall be according to the best data available from Federal, State, or other sources.

IDOT/DWR: Illinois Department of Transportation/Division of Water Resources.

MANUFACTURED HOME: A structure transportable in **one (1)** or more sections, that is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities.

NFIP: National Flood Insurance Program.

SFHA: See definition of floodplain.

SUBSTANTIAL IMPROVEMENT: Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds **fifty percent (50%)** of the market value of the structure either, (a) before the improvement or repair is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred.

SUBSTANTIAL IMPROVEMENT: is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or (2) any alteration of a structure listed on the National Register of Historic Places or the Illinois Register of Historic Places.

14-1-3 BASE FLOOD ELEVATION. This Code's protection standard is the base flood. The best available base flood elevation data are listed below. **Whenever a party disagrees with the best available data, the party may finance the detailed engineering study needed to replace the existing data with better data and submit it to the Federal Emergency Management Agency for approval.**

[See: NFIP Requirement: 44 CFR 60.3(b).]

(A) The base flood elevation for each of the floodplains delineated as an "A Zone" on the Flood Insurance Rate Map of the City shall be according to the best data available from Federal, State or other sources. Should no other data exist, an engineering study must be financed to determine base flood elevations.

(B) The base flood elevation for the floodplains of those parts of unincorporated **Hamilton County** that are within the extraterritorial jurisdiction of the City, or that may be annexed into the City, shall be as delineated on the 100-year flood profiles of the Flood Insurance Study of **Hamilton County** prepared by the Federal Emergency Management Agency.

14-1-4 DUTIES OF THE BUILDING OFFICIAL. The Administrator shall be responsible for the general administration of this Code and ensure that all development activities within the floodplains under the jurisdiction of the City meet the requirements of this Code. Specifically, the Administrator shall:

(A) Process development permits in accordance with **Section 14-1-5;**

(B) Ensure that all development in a floodway (or a floodplain with no delineated floodway) meets the damage prevention requirements of **Section 14-1-6.**

(C) Ensure that the building protection requirements for all buildings subject to **Section 14-1-7** are met and maintain a record of the "as-built" elevation of the lowest floor (including basement) or floodproof certificate;

[See: NFIP Requirements: 44 CFR 60.3(b)(5)(iii) and 59.22(a)(9)(iii).]

(D) Assure that all subdivisions and annexations meet the requirements of **Section 14-1-8;**

(E) If a variance is requested, ensure that the requirements of **Section 14-1-9** are met and maintain documentation of any variances granted;

(F) Inspect all development projects and take any and all actions outlined in **Section 14-1-11** as necessary to ensure compliance with this Code;

(G) Assure that applicants are aware of and obtain any and all other required local, state and federal permits;

(H) Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques;

(I) Cooperate with State and Federal floodplain management agencies to coordinate base flood data and to improve the administration of this Code; and

(J) Maintain for public inspection base flood data, floodplain maps, copies of state and federal permits, and documentation of compliance for development activities subject to this Code.

14-1-5 DEVELOPMENT PERMIT. No person, firm, corporation, or governmental body, not exempted by state law, shall commence any development in the floodplain without first obtaining a development permit from the City. The Administrator shall not issue a development permit if the proposed development does not meet the requirements of this Code.

(A) **Application Documents.** The application for development permit shall be accompanied by:

- (1) drawings of the site, drawn to scale showing property line dimensions;
- (2) existing grade elevations and all changes in grade resulting from excavation or filling;
- (3) the location and dimensions of all buildings and additions to buildings, and
- (4) the elevation of the lowest floor (including basements) of all proposed buildings subject to the requirements of **Section 14-1-7** of this Code.

(B) **Elevation Comparisons.** Upon receipt of an application for development permit, the Administrator shall compare the elevation of the site to the base flood elevation. Any development located on land that can be shown by survey data 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 in the floodplain and therefore not subject to the requirements of this Code.

The 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.

[ED. NOTE: Although survey data may show the development site to be entirely above the base flood elevation, a Letter of Map Amendment (LOMA) will still be required to remove the site from the mapped floodplain for insurance requirements.]

14-1-6 PREVENTING INCREASED FLOOD HEIGHTS AND RESULTING DAMAGES. Within the City's floodplains, the following standards shall apply:

[NFIP Requirements: 44 CFR 60.3(a)(4)(1), 60.3(c)(10), and 60.3(d)(3).]

(A) Except as provided in **Section 14-1-6(B)**, no development shall be allowed which, acting in combination with existing and anticipated development, will cause any increase in flood heights or velocities or threat to public health and safety. The following specific development activities shall be considered as meeting this requirement:

- (1) Barge fleeting facilities meeting the conditions of IDOT/DWR Statewide Permit No. 3;
- (2) Aerial utility crossings meeting the conditions of IDOT/DWR Statewide Permit No., 4;
- (3) Minor boat docks meeting the conditions of IDOT/DWR Statewide Permit No. 5;

- (4) Minor, non-obstructive activities meeting the conditions of IDOT/DWR Statewide Permit No. 6;
 - (5) Outfall structures and drainage ditch outlets meeting the conditions of IDOT/DWR Statewide Permit No. 7;
 - (6) Underground pipeline and utility crossings meeting the conditions of IDOT/DWR Statewide Permit No. 8;
 - (7) Bank stabilization projects meeting the conditions of IDOT/DWR Statewide Permit No. 9;
 - (8) Accessory structures and additions to existing residential buildings meeting the conditions of IDOT/DWR Statewide Permit No. 10;
 - (9) Minor maintenance dredging activities meeting the conditions of IDOT/DWR Statewide Permit No. 11; and
 - (10) Any development determined by IDOT/DWR to be located entirely in a flood fringe area.
- (B) Other development activities not listed in (A) may be permitted only if:
- (1) A permit has been issued for the work by IDOT/DWR (or written documentation is provided that an IDOT/DWR permit is not required); and
 - (2) Sufficient data has been provided to FEMA when necessary to approve a revision of the regulatory map and base flood elevation.

(See 615 ILCS Sec. 5/5 through 29A)

14-1-7 PROTECTING BUILDINGS.

(A) **Requirements.** In addition to the damage prevention requirements of **Section 14-1-6**, all buildings to be located in the floodplain shall be protected from flood damage below the flood protection elevation. 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) Substantial improvements made to an existing building;
- (3) Structural alterations made to an existing building that increase the floor area by more than **twenty percent (20%)**;
- (4) Installing a manufactured home on a new site or a new manufactured home on an existing site (the building protection requirements do 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) **Alternative Methods.** Residential or non-residential buildings can meet the building protection requirements by one of the following methods:

[See NFIP Requirements: 44 CFR 60.3(c)(2).]

- (1) The building may be constructed on permanent landfill in accordance with the following:
 - (a) The lowest floor (including basement) shall be at or above the flood protection elevation;
 - (b) The fill shall be placed in layers no greater than **one (1) foot** before compaction and should extend at least **ten (10) feet** beyond the foundation before sloping below the flood protection elevation;
 - (c) The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or other structural measure;
 - (d) The fill shall be composed of rock or soil and not incorporated debris or refuse materials; and
 - (e) The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties; or
- (2) The building may be elevated in accordance with the following:

[See: NFIP Requirements: 44 CFR 60.3(a)(3) and 60.3(c)(5).]

 - (a) The building or improvements shall be elevated on stilts, piles, walls, or other foundation that is permanently open to flood waters;
 - (b) The lowest floor and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation;
 - (c) If walls are used, all fully enclosed areas below the base flood elevation shall address hydrostatic pressures by having a minimum of **two (2)** permanent openings no more than **one (1) foot** above grade and providing a total net area of not less than **one (1) square inch** for every **one (1) square foot** of enclosed area subject to flooding below the base flood elevation;
 - (d) The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to hydrodynamic forces such as current, waves, ice and floating debris;
 - (e) All structural components below the flood protection elevation shall be constructed of materials resistant to flood damage;

- (f) Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the flood protection elevation provided they are waterproofed; and
- (g) No area below the flood protection elevation shall be used for storage of items or materials.

(C) Manufactured homes and travel trailers to be installed on site for more than **one hundred eighty (180)** days shall be:

- (1) elevated to or above the flood protection elevation; and
- (2) 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 77 IL Adm. Code 870.

(D) **Non-Residential** buildings may be structurally floodproofed (in lieu of elevation) provided a registered professional engineer certifies that:

- (1) below the flood protection elevation, the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood;
- (2) the building design accounts for flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impact from debris and ice; and
- (3) floodproofing measures will be operable without human intervention and without an outside source of electricity.

(E) For the purposes of this Section, in the case of garages or sheds constructed ancillary to a residential use, wet floodproofing meeting the following conditions shall be sufficient:

- (1) The garage or shed must be non-habitable; and
- (2) The garage or shed must be used only for the storage of vehicles and tools and cannot be modified later into workshops, greenhouses, living areas, etc.; and
- (3) The garage or shed must be located outside of the floodway; and
- (4) The garage or shed must be on a single-family lot and be accessory to an existing principal structure on the same lot; and
- (5) Below the base flood elevation, the garage or shed must be built of materials not susceptible to flood damage as provided in FEMA Technical Bulletin 2-93; and
- (6) All utilities, plumbing, heating, air conditioning, electrical, etc. must be elevated above the flood protection elevation; and
- (7) The garage or shed must have at least **one (1)** permanent opening on each wall no more than **one (1) foot** above grade with **one (1) square inch** of opening for every square foot of floor area as provided in FEMA Technical Bulletin 1-93; and

- (8) The garage or shed must be less than **Seven Thousand Dollars (\$7,000.00)** in market value or replacement cost, whichever is greater, or less than **six hundred (600) square feet**; and
 - (9) The structure shall be anchored to resist flotation and overturning; and
 - (10) All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the flood protection elevation; and
 - (11) The lowest floor elevation should be documented and the owner advised of the flood insurance requirements.
- (F) Levees, berms, floodwalls and similar works are not considered floodproofing for the purpose of this Section.
[See NFIP Requirements: 44 CFR 60.3(c)(4).]

14-1-8 SUBDIVISION AND 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) **Data Required.** New subdivisions, manufactured home parks, annexation agreements, planned unit developments, and additions to manufactured home parks and subdivisions shall meet the damage prevention and building protection standards of **Sections 14-1-6** and **14-1-7** of this Code. Any proposal for such development shall include the following data:

- (1) The base flood elevation and the boundary of the floodplain (where the base flood elevation is not available from an existing study, the applicant shall be responsible for calculating the base flood elevation);
- (2) The boundary of the floodway when available; and
- (3) A signed statement by a Registered Professional Engineer that the proposed plat or plan accounts for changes in the drainage of surface waters in accordance with the Plat Act (**See 765 Illinois Compiled Statutes, Sec. 205/2**).

(B) **Health Standards.** Public health standards must be met for all floodplain development. In addition to the requirements of **Sections 14-1-6** and **14-1-7**, the following standards apply:

- (1) No development in the floodplain shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation unless such materials are stored in a storage tank or floodproofed building constructed according to the requirements of **Section 14-1-7** of this Code.
- (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 flood protection elevation are watertight.

(C) All other activities defined as development shall be designed so as not to alter flood flows or increase potential flood damages.

[ED. NOTE: This Section sets minimum subdivision design review and recording standards when subdivisions are located within a floodplain. It also provides guidance for other activities defined as "development" which may occur in a floodplain. NFIP Requirement: 44 CFR 60.2(c)

NFIP Requirement: 44 CFR 60.3(b)(3) only applies to subdivisions greater than five (5) acres or fifty (50) lots.

All new plats recorded must show the location of any floodplains and must be signed, sealed, and certified by a Professional Land Surveyor as per the requirements of Public Act 85-267.]

14-1-9 **VARIANCES.** Whenever the standards of this Code place undue hardship on a specific development proposal, the applicant may apply to the Zoning Board for a variance. The Zoning Board 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 Code.

(A) **Requirements for Variance.** No variance shall be granted unless the applicant demonstrates that:

- (1) The development activity cannot be located outside the floodplain;
- (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;
- (6) The applicant's circumstances are unique and do not establish a pattern inconsistent with the intent of the NFIP; and
- (7) All other required local, state and federal permits have been obtained.

[65 ILCS Sec. 5/11-13-4 and 5/11-13-5 establishes specific municipal zoning variance criteria.]

(B) **Notification of Applicant.** The Administrator shall notify an applicant in writing that a variance from the requirements of the building protection standards of **Section 14-1-7** would lessen the degree of protection to a building will:

- (1) Result in increased premium rates for flood insurance up to **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.

[NOTE: The Standard Flood Insurance Policy permits an insurance adjustor to not pay for damage that was caused by something the owner did which increased the hazard to the property. Section 1316 of the National Flood Insurance Act authorizes local officials to request denial of flood insurance for buildings in violation of local floodplain codes.]

(C) Variances to the building protection requirements of **Section 14-1-7** of this Code requested in connection with the reconstruction, repair or alteration of a site or building included on the National Register of Historic Places or the Illinois Register of Historic Places may be granted using criteria more permissive than the requirements of **Section 14-1-19 (A)(1-5)**.

[NOTE: Communities in the NFIP are required to maintain a record of all variance actions, including justification for their issuance, and report them to FEMA. FEMA may review variances and suspend a community from the NFIP if the review "indicates a pattern inconsistent with the objectives of sound floodplain management..."]

14-1-10 DISCLAIMER OF LIABILITY. The degree of protection required by this Code 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 man-made or natural causes. This Code does not imply that development either inside or outside of the floodplain will be free from flooding or damage. This Code 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 Code or any administrative decision made lawfully thereunder.

14-1-11 PENALTY. Failure to obtain a permit for development in the floodplain or failure to comply with the conditions of a permit or a variance shall be deemed to be a violation of this Code. Upon due investigation, the Administrator may determine that a violation of the minimum standards of this Code exist. The Administrator shall notify the owner in writing of such violation.

- (A) If such owner fails, after **ten (10) days'** notice, to correct the violation:
- (1) The City may make application to the Circuit Court for an injunction requiring conformance with this Code or make such other order as the court deems necessary to secure compliance with this Code.
 - (2) Any person who violates this Code shall, upon conviction thereof, be fined not less than **Seventy-Five Dollars (\$75.00)** nor more than **Seven Hundred Fifty Dollars (\$750.00)**.

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- (3) A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.
- (B) The City Attorney 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.

14-1-12 **ABROGATION AND GREATER RESTRICTIONS.** This Code repeals and replaces other ordinances adopted by the City Council to fulfill the requirements of the National Flood Insurance Program including all previous ordinances. However, this Code does not repeal the original ordinance adopted to achieve eligibility in the Program. Nor does this Code repeal, abrogate, or impair any existing easements, covenants or deed restrictions. Where this Code and other ordinance easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail. **[See: NFIP Requirement: 44 CFR 60.2(B).]**

(See 65 ILCS 5/1-2-1; 5/11-12-12; 5/11-30-2; 5/11-30-8 and 5/11-31-2)

[ED. NOTE: The City entered the Flood Plain program on September 4, 1986. These regulations may have a more definitive application in the territory surrounding the City that may be annexed.]