

Article 8. Flood Protection Standards

Sec. 14-8-1 Purpose

The purpose of this article is to avoid hazards to persons and damage to property resulting from flooding and to comply with the national flood insurance program and related regulations as promulgated by the Federal Emergency Management Agency and the Federal Insurance Administration as revised and which are hereby adopted by reference and filed in the office of the city clerk, pursuant to 65 ILCS 5/11-30-2.

Sec. 14-8-2 Definitions

For the purpose of this article, the following definitions apply:

Term	Definition
Base flood	The flood having a one percent chance of being equaled or exceeded in any given year. The base flood is also known as the one-hundred-year flood.
Base flood elevation	The elevation in relation to mean sea level of the crest of the base flood.
Development	Any manmade change to improved or unimproved real estate, including but not limited to construction of or substantial improvements to buildings or other structures, the placement of manufactured homes, mining, dredging, filling, grading, paving, excavation or drilling operations.
Flood or flooding	A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters, or the unusual and rapid accumulation or runoff or surface waters from any source.
Manufactured home or prefabricated building	A structure, transportable in one or more sections, that is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. For the purpose of this article, it does not include recreational vehicles or travel trailers unless installed on a site for 180 or more days.
Structure	A walled and roofed building including a gas or liquid storage tank that is principally above ground, as well as a manufactured home and a prefabricated building.
Substantial improvement	Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either before the improvement or repair is started, or if the structure has been damaged, and is being restored, before the damage occurred. The term does not, however, include either: (1) Any project or improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications that are solely necessary to assure safe living conditions, or (2) any alteration of a structure or site documented as deserving preservation by the Illinois Department of Conservation or listed on the National Register of Historic Places.

Sec. 14-8-3 Flood Insurance Rate Map

The Flood Insurance Rate Map prepared by the Federal Emergency Management Agency (No. 01-03, effective September 4, 1985 and amendments thereto) is hereby adopted for the purpose of this article.

Sec. 14-8-4 Administration

(a) Permit Required

No person may commence any construction, substantial improvement, subdivision of land, placement of manufactured homes or other development in areas located in an "A" zone without first obtaining a permit from the zoning administrator. The zoning administrator may not issue the permit for any construction, substantial improvement, or other development that does not comply with the provisions of this article or that has been denied a permit required by federal or state law, including Section 404 of the Federal Water Pollution Control Act, 1972, 33 U.S.C. 1334.

(b) Application

- (1) Within areas designated as “A” zones, each application for development must be accompanied by elevations, in relation to mean sea level, of the lowest habitable floor, including basement, and in the case of floodproofed structures, the elevation to which it will be floodproofed.
- (2) The zoning administrator will require certification from a registered professional engineer or architect that floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the base flood.
- (3) The application must also contain information or certification as reasonably may be required by the zoning administrator in order to determine eligibility for permits or to enforce the terms of this article.

(c) Variances

See Sec. 14-11-17, Variations.

(d) Reports and Records

- (1) The zoning administrator must provide the city council, the Illinois Department of Transportation, the Illinois Department of Natural Resources Office of Water Resources, and the Federal Insurance Administration with an Annual report on forms as provided the city by the Federal Insurance Administration.
- (2) The zoning administrator must maintain the records of first floor elevations, floodproofing certifications, all variance documents required by 44 CFR 60.6 (a)(5) and of the rules a regulations of the national flood insurance program; permit applications; and all other records required by the Federal Insurance Administration.

Sec. 14-8-5 Penalties for Violation

See Article 13, Violations, Penalties and Enforcement.

Sec. 14-8-6 Base Flood Elevation

The city council must obtain, review, and reasonably utilize base flood elevation data available from federal, state, or other sources until such time as such data has been received from the Federal Insurance Administration. Base flood data received from the Federal Insurance Administration will take precedence over data from other sources. No increase in the base flood elevation may be permitted unless:

- (a) The total cumulative effect on the proposed development, when combined with all other existing and anticipated development, will not increase the base flood elevation more than one 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 Resources, as required by this article;
- (c) For all projects involving channel modifications or fill (including levees), the city must submit sufficient data to the Federal Emergency Management Agency to revise the regulatory flood maps and profiles.

Sec. 14-8-7 New Construction and Substantial Improvements

All new construction and substantial improvements to structures located in an “A” zone must:

- (a) For residential structures, have the lowest floor, including basement, elevated to one foot above the base flood elevation. Beneath the lowest elevated floor of an elevated residential building, all electrical, plumbing, ventilating, heating and air conditioning equipment, related ductwork and utility meters must be located at or above the flood protection elevation. Elevated residential buildings must have permanent openings no more than one foot above grade, and the walls and floors must not be subject to damage by hydrostatic pressures of the base flood.
- (b) For nonresidential structures, have the lowest floor, including basement, elevated or floodproofed to one foot above the base flood elevation.
- (c) Be designed or modified and adequately anchored to prevent flotation, collapse, or lateral movement of the structure.
- (d) Be constructed with materials and utility equipment resistant to flood damage.
- (e) Be constructed by methods and practices that minimize flood damage to other properties.
- (f) Have all structural components below the base flood elevation designed to be watertight with walls substantially impermeable to the passage of water, and such structural components must be designed to resist hydrostatic and hydrodynamic loads and the effects of buoyancy.

Sec. 14-8-8 Manufactured Homes

- (a) All manufactured home parks and manufactured home subdivisions located in the “A” zone must file evacuation plans indicating vehicular access and escape routes, including manufactured home hauler routes, with the appropriate disaster preparedness authorities.
- (b) All manufactured homes to be placed on a site located in an “A” zone must:
 - (1) Have the lowest floor elevated one foot above the base flood elevation.
 - (2) In the instance of elevation on pilings, have all piling foundations placed in stable soil no more than ten feet apart, and reinforcement must be provided for piers more than 6 feet above ground.
 - (3) Have lots large enough to permit steps to the manufactured home and have adequate surface drainage on all sides of the structure.
 - (4) Be placed to prevent flotation, collapse, or lateral movement of the structure due to flooding.
 - (5) Be anchored according to the following specifications:
 - a. Over-the-top ties must be provided at each of the four corners of the manufactured home, with two additional ties per side at intermediate locations, and manufactured homes less than 50 feet long will require one additional tie per side;
 - b. Frame ties must be provided at each corner of the manufactured home with five additional ties per side at intermediate points, and manufactured homes less than 50 feet long will require four additional ties per side;
 - c. All components of the anchoring system must be capable of carrying 4,800 pounds. and
 - d. Any additions to the manufactured home must be similarly anchored.

Sec. 14-8-9 Utilities

All new construction and substantial improvements to utilities located in an “A” zone must provide that:

- (a) All new and replacement water supply systems must be designed to minimize or eliminate infiltration of floodwaters into the systems.
- (b) All new and replacement sanitary sewage systems must be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into the floodwaters.
- (c) All new and replacement on-site waste disposal systems must be located to avoid impairment to them or contamination from them during flooding.
- (d) All public utilities and facilities, such as sewer, gas, electrical, and water systems must be located, elevated, and constructed to minimize or eliminate flood damage.

Sec. 14-8-10 Subdivisions and Other Development Standards

All subdivisions and other development located in an “A” zone must provide that:

- (a) All subdivision and other development proposals must be designed to minimize flood damage to the proposed subdivision or development site as well as to other properties.
- (b) Adequate drainage must be provided so as to reduce exposure to flood hazards
- (c) For any proposed subdivision or new development greater than 50 lots or five acres, whichever is the lesser, the applicant must show the base flood elevation data for each lot or platted parcel. Provided, that if the base flood elevation data is not available, the applicant must compute and provide this information for each lot or platted parcel greater than 50 lots or five acres, whichever is the lesser.

Sec. 14-8-11 Watercourse Standards

The zoning administrator must notify adjacent communities and the Illinois Department of Transportation, Division of Water Resources and the Federal Insurance Administration prior to any alteration or relocation of a watercourse. The flood-carrying capacity within the altered or relocated portion of any watercourse must be maintained.