

# City of Chicago



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# Office of the City Clerk

**Document Tracking Sheet** 

Meeting Date:

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Sponsor(s):

Dept./Agency

Type:

Ordinance

Title:

Amendment of Municipal Code Chapter 16-6 by modifying various sections and adding new Sections 16-6-045, 16-6-

055 and 16-6-071 to Flood Control Ordinance

Committee(s) Assignment:

Committee on Zoning, Landmarks and Building Standards

## ORDINANCE

#### BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

**SECTION 1.** Section 16-6-010 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

#### 16-6-010 Definitions.

(omitted text is not affected by this ordinance)

(b) "Base flood elevation" shall be as provided in the F.I.R.M. Section 16-6-045.

(omitted text is not affected by this ordinance)

(c-1) "Breakaway wall" means a wall that is not part of the structural support of a building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or supporting foundation system.

(omitted text is not affected by this ordinance)

(d-1) "Coastal high hazard area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast, and any other area subject to high velocity wave action from storms or seismic sources. A coastal high hazard area is identified on the F.I.R.M. by the designation of Zone VE.

(omitted text is not affected by this ordinance)

- (h-1) "Flood fringe" means that portion of a Zone A or Zone AE floodplain that is outside of the floodway.
- (i) "Flood Insurance Rate Map" or "F.I.R.M." means the most recently published map of the City of Chicago on which F.E.M.A. has delineated both the areas of special flood hazards and the risk premium zones applicable to portions of the city City of Chicago. The F.I.R.M. shall be kept on file by the commissioner of buildings Commissioner of Buildings. Before adopting the most recent publication published version of the F.I.R.M., said commissioner Commissioner shall give a minimum of fifteen days' notice of the proposed adoption by publication in a newspaper of general circulation published within the city in accordance with Section 14A-1-104.4. Said notice shall state the commissioner's City's intent to adopt the F.I.R.M., shall solicit public comment and provide an address to where any such comment may be sent, and shall state how a person may obtain a copy of the proposed F.I.R.M. to be adopted.

(omitted text is not affected by this ordinance)

(n-1) "Limit of moderate wave action" or "LiMWA" means a line shown on a F.I.R.M. to indicate the inland limit of the 1.5-foot breaking wave height during the base flood.

(omitted text is not affected by this ordinance)

(o-1) "Moderate wave action area" or "MoWA" is a special flood hazard area subject to the potential for breaking wave heights of greater than or equal 1.5 feet but less than 3 feet, where the primary source of flooding is astronomical tides, storm surges, seiches, or tsunamis. A MoWA is an area within Zone AE on a F.I.R.M. that is between the inland limit of Zone VE and a LiMWA, where identified.

(omitted text is not affected by this ordinance)

(v) "Special flood hazard area" or "S.F.H.A." means land subject to inundation by the base flood as delineated on the F.I.R.M.

**SECTION 2.** Chapter 16-6 of the Municipal Code of Chicago is hereby amended by inserting a new Section 16-6-045 as follows:

#### 16-6-045 Base flood elevation.

For purposes of this chapter, the base flood elevation shall be determined as follows:

- (a) The base flood elevation for riverine floodplains shall be as delineated on the base flood profiles in the F.I.S.
- (b) The base flood elevation for each floodplain delineated as an "AH Zone" or "AO Zone" shall be the elevation (or depth) specified on the F.I.R.M.
- (c) The base flood elevation for each of the remaining floodplains delineated as "A Zones" on the F.I.R.M. shall be as specified on the F.I.R.M. or, if no flood elevation is specified on the F.I.R.M., the applicant shall finance an engineering study and submit the resulting study to F.E.M.A. and I.D.N.R./O.W.R. for review and approval.
- (d) The base flood elevation for any floodplain delineated as a "VE Zone" shall be the highest elevation specified on the F.I.R.M. among all zones affecting the development.
- (e) Where the permit applicant disagrees with the base flood elevation established pursuant to subsections (a) through (d), the permit applicant may obtain, at the permit applicant's sole expense, an engineering study and submit the resulting study to F.E.M.A. and I.D.N.R./O.W.R. for review and approval.

**SECTION 3.** Section 16-6-050 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

## 16-6-050 Preventing increased flood heights and resulting damage.

(omitted text is not affected by this ordinance)

- (ix) Minor maintenance dredging activities meeting the conditions of I.D.N.R./O.W.R. Statewide Permit Number 11; and
  - (x) Bridge and culvert replacement structures and bridge widening meeting the conditions of I.D.N.R./O.W.R. Statewide Permit Number 12;
  - (xi) Temporary construction activities meeting the conditions of I.D.N.R./O.W.R. Statewide Permit Number 13; and

(xii) Any development determined by I.D.N.R./O.W.R. to be located entirely in a flood fringe area.

(omitted text is not affected by this ordinance)

**SECTION 4.** Chapter 16-6 of the Municipal Code of Chicago is hereby amended by inserting a new Section 16-6-055 as follows:

### 16-6-055 Site development requirements applicable to Zone VE.

In Zone VE, all development must meet the following requirements:

- (a) The use of fill for structural support of buildings is prohibited.
- (b) Non-structural fill shall be permitted only if an engineering report demonstrates that the fill will not cause runup, ramping, or deflection of floodwaters that cause damage to buildings.
- (c) Man-made alterations of sand dunes are prohibited unless an engineering report documents that the alterations will not increase potential flood damage by reducing the wave and flow dissipation characteristics of the sand dunes.
- (d) Bulkheads, seawalls, revetments, and other erosion control structures shall not be connected to the foundation or superstructure of a building and shall be designed and constructed so as not to direct floodwaters or increase flood forces or erosion impacts on the foundation or superstructure of any building.

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**SECTION 5.** Section 16-6-060 of the Municipal Code of Chicago is hereby amended by inserting the language underscored, as follows:

## 16-6-060 Protection of buildings.

In addition to the requirements of Section 16-6-050, a building located in the S.F.H.A. shall be protected from flood damage below the F.P.E. in accordance with Section 16-6-070 or Section 16-6-071, as applicable, if any of the following applies:

(omitted text is not affected by this ordinance)

**SECTION 6.** Section 16-6-070 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

## 16-6-070 Means of protection in Zones A, AO, AH and AE.

Buildings located in the S.F.H.A. Zones A, AO, AH or AE that are subject to Section 16-6-060 must meet the protection requirements described in this section.

(omitted text is not affected by this ordinance)

**SECTION 7.** Chapter 16-6 of the Municipal Code of Chicago is hereby amended by inserting a new Section 16-6-071 as follows:

### 16-6-071 Means of protection in Zone VE.

Buildings located in Zone VE that are subject to Section 16-6-060 must meet the protection requirements described in this section.

- (a) All new construction and substantial improvements shall be elevated on pilings or columns so that the bottom of the lowest horizonal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the F.P..E, and the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
  - (i) Water loading values used shall be those associated with the base flood.
    - (ii) Wind loading values shall determined in accordance with Title 14B.
- (b) A licensed structural engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Section 16-6-071(a).
- (c) All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting

breakaway walls, open wood lattice-work, or insect screening intended to collapse without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.

- (i) For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot.
- (ii) Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot shall be allowed only if a licensed structural engineer or architect certifies that the designs proposed meet all of the following conditions:
  - (A) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
  - (B) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values shall be those associated with the base flood. Wind loading shall be as specified in Title 14B.
- (iii) All space enclosed by breakaway walls, open wood lattice-work, or insect screening below the lowest floor shall be used solely for parking of vehicles, building access, or storage.
- (d) Placement or substantial improvement of manufactured homes must comply with Section 16-6-71(a) through (c).
  - (e) Recreational vehicles must either:
    - (i) Be on site for fewer than 180 consecutive days;
    - (ii) Be fully licensed and ready for highway use; or
    - (iii) Comply with Section 16-6-071(a) through (c).

**SECTION 8.** Section 16-6-075 of the Municipal Code of Chicago is hereby amended by inserting the language underscored, as follows:

### 16-6-075 Subdivision and other development requirements.

(omitted text is not affected by this ordinance)

(h) In Zone AO and AH, drainage paths shall be provided around buildings on sloped ground to guide water around and away from the buildings.

**SECTION 9.** Section 16-6-140 of the Municipal Code of Chicago is hereby amended by deleting the language struck through and by inserting the language underscored, as follows:

### 16-6-140 Review of elevations.

Upon receipt of proper documentation indicating that land is higher than the base flood elevation as of the date of the site's first Flood Insurance Rate Map F.I.R.M. identification, the commissioner of buildings Commissioner of Buildings may determine that the site is not subject to the requirements of this chapter unless the site is within a mapped floodway or Zone VE.

**SECTION 10.** This ordinance shall take full force and effect upon passage and approval.