



## Legislation Details (With Text)

**File #:** 21-0040      **Version:** 0      **Name:** Floodplain Management Code - Revision

**Type:** Ordinance      **Status:** Enacted

**File created:** 2/22/2021      **In control:** City Council

**On agenda:**      **Final action:** 5/21/2021

**Enactment date:**      **Enactment #:** 21-020

**Title:** Floodplain Management Code - Revision  
For the purpose of modifying the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law; incorporating certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers; defining and redefining certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting and conforming certain obsolete nomenclature; providing for a special effective date; and generally relating to the protection, maintenance, and enhancement of the public health, safety, and welfare through floodplain management.

**Sponsors:** City Council President (Administration)

**Indexes:** Code, Floodplain, Management, Revisions

**Code sections:**

**Attachments:** 1. 21-0040~1st Reader, 2. Planning 21-0040, 3. Law Word 21-0040, 4. Sustainability 21-0040, 5. Law 21-0040, 6. DHCD 21-0040, 7. Newspaper Affidavit 21-0040, 8. Finance 21-0040, 9. BMZA 21-0040, 10. 21-0040 - Agenda, 11. Hearing Packet 21-0040 C, 12. 21-0040 - Minutes, 13. Hearing Notes - 21-0040, 14. 2nd Reader Amendment 21-0040(1)~1st (comm), 15. 21-0040~3rd Reader, 16. Signed Ordinance 21-0040

Date	Ver.	Action By	Action	Result
6/8/2021	0	Mayor	Signed by Mayor	
5/17/2021	0	Baltimore City Council	Advanced to 3rd Reader on same day	
5/17/2021	0	Baltimore City Council	Approved and Sent to the Mayor	
5/17/2021	0	Economic and Community Development	Recommended Favorably with Amendment	
5/4/2021	0	Economic and Community Development	Recommended Favorably with Amendment	Pass
4/16/2021	0	Economic and Community Development	Advertising	
4/5/2021	0	Economic and Community Development	Scheduled for a Public Hearing	
3/8/2021	0	Economic and Community Development	Scheduled for a Public Hearing	
2/25/2021	0	Baltimore City Council	Refer to Office of Sustainability	
2/25/2021	0	Baltimore City Council	Refer to Dept. of Housing and Community Development	
2/25/2021	0	Baltimore City Council	Refer to City Solicitor	
2/25/2021	0	Baltimore City Council	Refer to Planning Commission	
2/25/2021	0	Baltimore City Council	Refer to Board of Municipal and Zoning Appeals	

2/25/2021	0	Baltimore City Council	Refer to Dept. of Finance
2/22/2021	0	Baltimore City Council	Assigned
2/22/2021	0	Baltimore City Council	Introduced

**Explanation:** Capitals indicate matter added to existing law.  
[Brackets] indicate matter deleted from existing law.

\* **Warning:** This is an unofficial, introductory copy of the bill.  
The official copy considered by the City Council is the first reader copy.

### **Introductory\***

## **City of Baltimore Council Bill**

Introduced by: The Council President

At the request of: The Administration (Department of Planning)

### A Bill Entitled

An Ordinance concerning

#### **Floodplain Management Code - Revision**

For the purpose of modifying the City laws governing floodplain management to meet or exceed requirements for eligibility in the National Flood Insurance Program and other requirements of Federal and State law; incorporating certain flood-resistant design and construction standards adopted by the American Society of Civil Engineers; defining and redefining certain terms; repealing redundant, obsolete, or otherwise superfluous provisions; correcting and conforming certain obsolete nomenclature; providing for a special effective date; and generally relating to the protection, maintenance, and enhancement of the public health, safety, and welfare through floodplain management.

By repealing and re-ordaining, with amendments

Article 7 - Natural Resources  
Division I - Floodplain Management  
Baltimore City Code  
(Edition 2000)

By repealing and re-ordaining, with amendments

Article 32 - Zoning  
Sections 4-203, 7-301, 7-304(b)  
Baltimore City Code  
(Edition 2000)

By repealing and re-ordaining, with amendments

Article - Building, Fire, and Related Codes  
Section(s) 2-103 (BC §§ 107.2.1, 110.3.3, 1603.1.7) and 10-102 (RC § 109.1.3 and Table 301.2(1))  
Baltimore City Revised Code  
(2020 Edition)

**Section 1. Be it ordained by the Mayor and City Council of Baltimore, That** the Maryland General Assembly, in Md. Code Ann., Land Use Article, Title 4, has established as policy of the State that the orderly development and the use of land and structures requires comprehensive regulation through the implementation of planning and zoning control, and that planning and zoning controls must be implemented by local government, in order to, among other purposes, secure the public safety, promote health and general welfare, and promote the conservation of natural resources. Therefore, the Mayor and City Council of Baltimore does hereby adopt the following floodplain management regulations.

**Section 2. And be it further ordained,** That the Laws of Baltimore City read as follows:

**Baltimore City Code**

**Article 7. Natural Resources**

**Division I. Floodplain Management**

**§ 1-1. Definitions - In general.**

In this Division I, the following terms have the meanings indicated.

**§ 1-2. Definitions - “Accessory structure” to “Floodplain District”.**

(a) *Accessory structure.*

“Accessory structure” means a detached structure:

- (1) that is usable solely for parking vehicles or limited storage;
- (2) that is on the same parcel of property as the principal structure;
- (3) that is no larger than 300 square feet and 1 story; and
- (4) the use of which is incidental to the use of the principal structure.

(b) *Actual start of construction.*

See “new construction”.

(c) *ASCE 24.*

“ASCE 24” means the most current edition of ASCE/SEI 24, “Flood Resistant Design and Construction” (American Society of Civil Engineers).

(d) *Base flood.*

“Base flood” means a flood that has a 1% chance of being equaled or exceeded in any given year.

(e) *Base-flood elevation.*

(1) *In general.*

[“Base-flood elevation” means the water surface elevation of the base flood in relation to the datum specified on the Flood Insurance Rate Map.] “Base-flood elevation” means the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

(2) *Areas of shallow flooding.*

In areas of shallow flooding, “base-flood elevation” means the highest natural elevation of the ground surface, prior to construction, that is adjacent to the proposed foundation of a structure; plus:

- (i) the depth number specified in feet on the Flood Insurance Rate Map; or
- (ii) if the depth number is not specified, 4 feet.

(f) *Basement.*

“Basement” means any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level on all sides. [a structure having its floor subgrade (below ground level) on all sides.]

(g) *Coastal A Zone.*

“Coastal A Zone” means an area within a special flood hazard area, landward of a coastal high hazard area (V Zone) or landward of a shoreline without a mapped coastal high hazard area, in which the principal source(s) of flooding are astronomical tides and storm surges, and in which, during base flood conditions, the potential exists for breaking waves with heights greater than or equal to 1.5 feet. The inland limit of the Coastal A Zone may be delineated on FIRMs as the Limit of Moderate Wave Action (LiWMA).

(h) [(g)] *Design flood.*

“Design flood”, as used in ASCE 24, means [is] the greater of the following two flood events:

- (1) area within a floodplain subject to a 1% or greater chance of flooding in any year [the base flood affecting areas] as identified on the Flood Insurance Rate Map as a Special Flood Hazard [Areas] Area; [and] or
- (2) area designated as a flood hazard area on a community’s flood hazard map or otherwise legally designated [the flood corresponding to the Flood Resilience Area].

(i) [(h)] *Design-flood elevation.*

“Design-flood elevation”, [as used in this Division I and] as used in ASCE 24 for application to the City, means the elevation of the design flood, including wave height, relative to the datum specified on the [FIRM] flood hazard map.

(j) [(i)] *Development.*

(1) *In general.*

“Development” means:

- (i) any man-made change to improved or unimproved real estate; or
- (ii) the subdivision of land.

(2) *Inclusions.*

“Development” includes any construction, reconstruction, modification, extension, or expansion of [buildings or other] structures, placement of fill or concrete, construction of new or replacement infrastructure, temporary development, placement of manufactured homes or buildings, dumping, mining, dredging, grading, paving, drilling operations, storage of equipment, vehicles, materials or products, land excavation, land clearing, land improvement, land fill operation, or any combination of these.

(k) [(j)] *Dry floodproofing.*

See “floodproofing”.

(l) [(k)] *Elevation [certificate] Certificate.*

(1) *In general.*

“Elevation [certificate] Certificate” means a certification, in the form and containing the information required by the Federal Emergency Management Agency, of the elevations of a structure and its improvements.

(2) *By whom and how prepared.*

An [elevation certificate] Elevation Certificate may only be prepared and certified by a licensed land surveyor or professional engineer, using Mean Sea Level as established by the North American Vertical Datum of 1988 (“NAVD”).

(m) [(l)] *Fair market value.*

(1) *In general.*

“Fair market value” means the price at which the improvement portion of the property will change hands between a willing buyer and a willing seller, neither of which is under compulsion to buy or sell and both of which have reasonable knowledge of relevant facts.

(2) *By whom determined.*

For purpose of this Division I, the fair market value of a structure is determined by:

(i) a licensed real estate appraiser; or

(ii) the most recent, fully phased-in assessed value of the structure, as determined by the Maryland Department of Assessments and Taxation.

(n) [(m)] *FEMA.*

“FEMA” means the Federal Emergency Management Agency.

(o) [(n)] *FIRM.*

See “Flood Insurance Rate Map”.

(p) [(o)] *FIS.*

See “Flood Insurance Study”.

(q) [(p)] *Flood.*

“Flood” 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; or

(2) the unusual and rapid accumulation or runoff of surface waters from any source.

See also “base flood” and “design flood”.

(r) [(q)] *Flood elevation.*

See “base-flood elevation”, “design-flood elevation”, and “flood-protection elevation”.

(s) [(r)] *Flood hazard area.*

See “Regulated Flood Hazard Area” and “Special Flood Hazard Area”.

(t) [(s)] *Flood Insurance Rate Map[;] (FIRM).*

“Flood Insurance Rate Map” or “FIRM” means an official map on which the Federal Emergency Management Agency has delineated special flood hazard areas to indicate the magnitude and nature of flood hazards, to designate applicable flood zones, and to delineate floodways, if applicable. FIRMs that have been prepared in digital format or converted to digital format are referred to as Digital FIRMs (DFIRM) [the official map that depicts the Regulated Flood Hazard Areas subject to this Division I].

(u) [(t)] *Flood Insurance Study[;] (FIS).*

“Flood Insurance Study” or “FIS” means the official report in which the Federal Emergency Management Agency has provided flood profiles, floodway information, and water surface elevations.

(v) [(u)] *Flood-protection elevation.*

“Flood-protection elevation” is: [means the minimum elevation requirements of ASCE 24, plus freeboard.]

- (1) the base flood elevation plus 2 feet of freeboard in the non-tidal floodplain; and
- (2) the modeled elevation of the 0.2% chance of flood plus 2 feet of freeboard in the tidal floodplain as listed on the Flood Insurance Study (Table 4).

(w) [(v)] *Floodplain.*

“Floodplain” means any land area and watercourse, susceptible to partial or complete inundation by water from any source, including:

- (1) a relatively flat or low land area adjoining a river, stream, or watercourse that is subject to partial or complete inundation;
- (2) an area subject to the unusual and rapid accumulation or runoff of surface waters from any source; or
- (3) an area subject to tidal surge or extreme tides.

(x) [(w)] *Floodplain District.*

“Floodplain District” means the District, and its constituent subdistricts, established under Subtitle 2 {“Floodplain District”} of this article.

§ 1-3. Definitions - “Floodproofing” to “Wet floodproofing”.

(a) *Floodproofing.*

(1) *In general.*

“Floodproofing” means any [combination of structural or non-structural adjustments, changes, or actions that reduce or eliminate flood damage to a structure, its contents, and its attendant utilities and equipment] combination of structural and nonstructural additions, changes, or adjustments to buildings or structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents, such that the buildings or structures are watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(2) *Methods of floodproofing.*

For purposes of this Division I, the two methods of floodproofing are as follows:

- (i) “Dry floodproofing”[, which is the floodproofing method that, as specified in ASCE 24, is used to render a structure’s envelope substantially impermeable to the entrance of floodwaters] is a combination of measures that results in a structure, including the attendant utilities and equipment, being watertight with all elements substantially impermeable and with structural components having the capacity to resist flood loads, as specified in ASCE 24; and
- (ii) “Wet floodproofing” is the floodproofing method that, as specified in the following FEMA Technical Bulletins and on ASCE 24, relies on the use of flood damage-resistant materials and construction techniques in areas of a structure that are below the flood protection elevation required by this standard by intentionally allowing those areas to flood [to minimize flood damage to areas below the design-flood elevation of a structure]:
  - (A) FEMA Technical Bulletin 2 {“Flood Damage-Resistant Material Requirements for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program”}; and
  - (B) FEMA Technical Bulletin 7 {“Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program”}.

(b) *Floodproofing certificate.*

(1) *In general.*

“Floodproofing certificate” means [a certification, in the form and containing the information required by the Federal Emergency Management Agency, that a structure has been designed and constructed to be dry floodproofed to the flood-protection elevation] the FEMA Form 086-0-34 that is to be completed, signed and sealed by a licensed professional engineer or licensed architect to certify that the design of floodproofing and proposed methods of construction are in accordance with the applicable requirements of Section 3-14 of these regulations.

(2) *By whom prepared.*

A floodproofing certificate may only be prepared and certified by a licensed professional engineer

or professional architect.

(c) *Flood Resilience Area.*

“Flood Resilience Area” means the area described in § 2-2(g) {“Subdistricts: Flood Resilience Area”} of this article, and it:

(1) appears on the Flood Insurance Rate Map as Shaded Zone X; and

(2) includes all areas subject to the 0.2% annual chance flood.

(d) *Floodway.*

(1) *In general.*

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that [are] must be reserved to pass [a] the base-flood discharge so that the cumulative increase in the water surface elevation of the base-flood discharge is no more than a designated height. When shown on a FIRM, the floodway is referred to as the “designated floodway.”

[(2) *How shown on FIRM.*]

[When shown on a FIRM, the Floodway is referred to as the “*designated floodway*”.]

(2) [(3)] *Considered high-velocity-flow area.*

An area shown on a FIRM as a “designated floodway” is considered an area with “high velocity flow”, as that term is used in ASCE 24, § 1.2 {“Definitions”}.

(e) *Freeboard.*

“Freeboard” [means a 2-foot increment of elevation added to the minimum elevation specifications of ASCE 24.] is a factor of safety expressed in feet above the:

(1) height of the 0.2% annual chance of flood in the tidal floodplain; or

(2) base flood elevation in the non-tidal floodplain.

The freeboard in Baltimore City is 2 feet.

(f) *Functionally dependent use.*

(1) *In general.*

“Functionally dependent use” means, except as otherwise provided in this subsection, any of the following uses that cannot perform their intended purposes unless located or carried out in close proximity to water:

(i) docking facilities that are necessary for the loading and unloading of cargo or passengers;  
and

(ii) ship building and ship repair facilities.

(2) *Exclusions.*

“Functionally dependent use” does not include long-term storage or related manufacturing facilities.

(g) *Historic structure.*

“Historic structure” means a structure that is:

- (1) individually listed in the National Register of Historic Places or certified or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing in the Register;
- (2) individually listed in the Maryland Inventory of Historic Properties;
- (3) individually listed in the Baltimore City Landmark List; or
- (4) certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of an historic district registered with the Secretary.

(h) *Limit of Moderate Wave Action (LiMWA).*

“Limit of Moderate Wave Action (LiMWA)” means the inland limit of the area affected by waves greater than 1.5 feet during the base flood. Base flood conditions between the VE Zone and the LiMWA will be similar to, but less severe than those in the VE Zone.

(i) *Limited storage.*

“Limited storage” means storage that is incidental to the primary use of the principal structure and consists of low-damage items that cannot be conveniently stored above the Flood Protection Elevation.

(j) [(h)] *Lowest floor.*

(1) *In general.*

“Lowest floor” means, except as otherwise provided in this subsection:[, the lowest floor of the lowest enclosed area.]

- (i) the lowest floor of the lowest enclosed area (including basement) of a building or structure; the floor of an enclosure below the lowest floor is not the lowest floor provided the enclosure is constructed in accordance with these regulations; and
- (ii) the lowest floor of a manufactured home is the bottom of the lowest horizontal supporting member (longitudinal chassis frame beam).

(2) *Exclusions.*

“Lowest floor” does not include any unfinished or flood-resistant enclosure that is usable solely for parking vehicles, building access, or limited storage, as long as the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the Federal Emergency Management Agency, National Flood Insurance Program.

(k) [(i)] *Manufactured home or building.*

(1) *In general.*

“Manufactured home or building” means a structure, transportable in 1 or more sections, that is built

on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities.

(2) *Inclusions.*

For floodplain management purposes, “manufactured home or building” includes any park trailer, travel trailer, and other similar vehicle placed on a site for more than 180 consecutive days.

(l) *Mixed-use structure.*

Any structure that is used or intended for use for a mixture of nonresidential and residential uses in the same structure.

(m) [(j)] *New construction.*

Structures include additions and improvements and the placement of manufactured homes, for which the start of construction commenced on or after March 15, 1978, the initial effective date of the City of Baltimore Flood Insurance Rate Map, including any subsequent improvements, alterations, modifications, and additions to such structures.

(1) *Exclusions.*

“New construction” does not include any structure for which the building permit was issued before March 15, 1978, and the actual start of construction was within 180 days of the permit date.

(2) *“Actual start of construction”.*

As used in paragraph (1) of this subsection, “actual start of construction” means either:

- (i) the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or
- (ii) the placement of a manufactured home on a foundation.

(3) *“Permanent construction”.*

As used in paragraph (2) of this subsection, “permanent construction” does not include:

- (i) land preparation, such as clearing, grading, and filling;
- (ii) the installation of streets and walkways;
- (iii) excavation for basements, footings, piers, or foundations;
- (iv) the erection of temporary forms; or
- (v) the installation on the property of accessory structures.

(n) [(k)] *Nonconforming structure.*

“Nonconforming structure” means any lawfully existing structure that does not comply with the applicable floodplain regulations of the subdistrict in which it is located.

(o) [(1)] *Nonresidential structure.*

“Nonresidential structure” includes the nonresidential portion of a mixed-use structure.

(p) [(m)] *Planning Department.*

“Planning Department” means the Baltimore City Department of Planning.

(q) [(n)] *Planning Director.*

“Planning Director” means the Director of the Baltimore City Department of Planning or the Director’s Designee.

(r) [(o)] *Regulated Flood Hazard Area.*

“Regulated Flood Hazard Area” means:

- (1) any Flood Resilience Area; and
- (2) any Special Flood Hazard Area.

(s) [(p)] *Residential structure.*

“Residential structure” includes the residential portion of a mixed-use structure.

(t) [(q)] *Special Flood Hazard Area.*

(1) *In general.*

“Special Flood Hazard Area” means the land in a floodplain subject to a 1% or greater chance of flooding in any given year.

(2) *By whom and how designated.*

Special Flood Hazard Areas are designated by the Federal Emergency Management Agency in the Flood Insurance Study and on the Flood Insurance Rate Map as Zones A, AE, AH, AO, A1-30 and A99, and Zones [V] V1-30, and VE.

(u) [(r)] *Structure.*

(1) *In general.*

“Structure” means any building or other structure, specifically, a walled and roofed building.

(2) *Inclusions.*

“Structure” includes a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

(v) [(s)] *Subdivision.*

(1) *In general.*

“Subdivision” means the division or redivision by any means of a lot, tract, or parcel of land into 2

or more lots, tracts, parcels, or other divisions of land.

(2) *Inclusions.*

“Subdivision” includes a change in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, building, or lot development.

(w) [(t)] *Substantial damage.*

(1) *In general.*

“Substantial damage” means damage of any origin sustained by a structure where the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

(2) *Calculation of costs.*

(i) The calculation of these costs must comply with FEMA P-758 {“Substantial Improvement / Substantial Damage Desk Reference”}.

(ii) *See also* § 1-2(x){“Definitions: Substantial improvement”} of this subtitle.

(x) [(u)] *Substantial improvement.*

(1) *In general.*

(i) “Substantial improvement” means, except as otherwise provided in this subsection, any combination of repairs, reconstruction, rehabilitation, additions, or other improvements to a structure made during the 6-year period immediately preceding a permit application, the aggregate cost of which, together with the cost of the work proposed by the latest permit application, equals or exceeds 50% of the fair market value of the structure before the improvement is started.

(ii) The calculation of these costs must comply with FEMA P-758 {“Substantial Improvement / Substantial Damage Desk Reference”}.

(iii) For purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the structure commences, whether or not that alteration affects the external dimensions of the structure.

(2) *Inclusions.*

“Substantial improvement” includes improvements to a structure that has been substantially damaged, regardless of the actual repair work done.

(3) *Exclusions.*

“Substantial improvement” does not include either:

(i) an improvement that is required by a condemnation or violation notice, order, or citation to secure safe living conditions in compliance with State or City health, sanitary, or safety code specifications; or

(ii) an alteration of an historic structure[, as long as] if the alteration will [not] preclude the structure's continued designation as an historic structure as approved by the Executive

Director of the Historic and Architectural Preservation.

(y) [(v) *Water Management Administration*] *Water & Science Administration*.

[“Water Management] “Water & Science Administration” means the Water [Management] & Science Administration of the Maryland Department of the Environment.

(z) [(w)] *Wetland*.

“Wetland” means any land that is:

- (1) considered a “private wetland” or a “State wetland” under Title 9 {“Wetlands and Riparian Rights”} of the State Natural Resources Article; or
- (2) defined as a “wetland” by the U.S. Fish and Wildlife Service Identification and Classification Procedures.

(aa) [(x)] *Wet floodproofing*.

See “floodproofing”.

#### § 1-4. {Reserved}

#### § 1-5. Rules of construction.

(a) *In general*.

In interpreting and applying this Division I, the following rules of construction apply.

(b) *Captions or headings*.

The captions or headings of the various sections and subsections:

- (1) are for convenience of reference only, intended to summarize the statutory provisions that follow; and
- (2) are not law and are not to be taken as affecting the meaning or effect of the law.

(c) *Conflicting provisions*.

(1) *Division sets minimum requirements*.

In their interpretation and application, the provisions of this Division I must be taken to be the minimum requirements for the promotion of the public health, safety, and general welfare.

(2) *Most restrictive provision governs*.

If any condition imposed by a provision of this Division I is either more or less restrictive than a comparable condition imposed by any other provision of this Division or by any other law, rule, or regulation of any kind, the condition that is the more restrictive governs.

(d) *Gender*.

Words denoting one gender include and apply to the other genders as well.

(e) *Includes; including.*

“Includes” or “including” means by way of illustration and not by way of limitation.

(f) *Mandatory, prohibitory, and permissive terms.*

(1) *Mandatory terms.*

“Must” and “shall” are each mandatory terms used to express a requirement or to impose a duty.

(2) *Prohibitory terms.*

“Must not”, “may not”, and “no ... may” are each mandatory negative terms used to establish a prohibition.

(3) *Permissive terms.*

“May” is permissive.

(g) *Number.*

The singular includes the plural and vice versa.

(h) *References to other laws.*

Whenever a provision of this Division I refers to any part of the City Code or to any other law, the reference applies to any subsequent amendment of the law referred to, unless the referring provision expressly provides otherwise.

(i) *Severability.*

All provisions of this Division I are severable. If a court determines that a word, phrase, clause, sentence, paragraph, subsection, section, or other provision is invalid or that the application of any part of the provision to any person or circumstances is invalid, the remaining provisions and the application of those provisions to other persons or circumstances are not affected by that decision.

(j) *Time computations.*

(1) *Computation of time after an act, event, or default.*

- (i) In computing any period of time prescribed by this Division I, the day of the act, event, or default after which the designated period of time begins to run is not included.
- (ii) If the period of time allowed is more than 7 days, intermediate Saturdays, Sundays, and legal holidays are counted.
- (iii) If the period of time allowed is 7 days or less, intermediate Saturdays, Sundays, and legal holidays are not counted.
- (iv) The last day of the period so computed is included unless it is a Saturday, Sunday, or legal holiday, in which event the period runs until the end of the next day that is not a Saturday,

Sunday, or legal holiday.

(2) *Computation of time before a day, act, or event.*

- (i) In determining the latest day for performing an act that is required by this Division I to be performed a prescribed number of days before a certain day, act, or event, all days preceding that day, including intervening Saturdays, Sundays, and legal holidays, are counted in the number of days so prescribed.
- (ii) The latest day is included in the determination unless it is a Saturday, Sunday, or legal holiday, in which event the latest day is the first preceding day that is not a Saturday, Sunday, or legal holiday.

**§ 1-6. Interpretation.**

In their interpretation and application, the provisions of this Division I are to be:

- (1) considered as minimum requirements;
- (2) liberally construed in favor of proper flood hazard management and Baltimore City; and
- (3) considered as neither repealing nor limiting any powers granted by State law.

**§§ 1-7 to 1-8. {Reserved}**

**§ 1-9. Findings, intent, and design.**

(a) *Findings.*

- (1) Certain areas of Baltimore City are subject to periodic inundation that results in loss of life and property, risks to health and safety, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief.
- (2) Flood losses and associated losses are created by structures inappropriately located, inadequately elevated, or otherwise unprotected and vulnerable to floods or erosion or by development that increases flood or erosion damage to other lands or development.
- (3) The biological values of floodplains, particularly tidal and non-tidal wetlands, can be adversely affected by floodplain development.
- (4) Baltimore City has the responsibility under the Flood Hazard Management Act of 1976, Title 5, Subtitle 8 of the State Environment Article, to control floodplain development in order to protect persons and property from danger and destruction and to preserve the biological values and environmental quality of the watersheds or the portions of watersheds under its jurisdiction.
- (5) Baltimore City has the responsibility under the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to adopt and enforce floodplain management regulations that, at a minimum, meet the requirements of 44 Code of Federal Regulations Parts 55-77 et seq., in order to participate in the National Flood Insurance Program and remain eligible for federally subsidized flood insurance, federal disaster relief, and Federal and State financial assistance.
- (6) Baltimore City contains densely developed tidal shorelines that are and will continue to be in high demand. The science behind climate change acknowledges that sea-level rise and coastal flooding will impact current and future development along the shoreline. Floodplain regulations are meant to protect people and property while making the City more resilient to the impacts from natural

disasters and climate change.

(b) *Intent.*

It is, therefore, the intent of the Mayor and City Council by this Division I:

- (1) to protect human life and health;
- (2) to minimize public and private property damage;
- (3) to encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future;
- (4) to protect individuals from unwittingly buying lands and structures [which] that are unsuited for intended purposes because of the flood hazards;
- (5) to protect water supply, sanitary sewage disposal, and natural drainage;
- (6) to reduce financial burdens imposed on the community, its governmental units, and its residents by preventing the unwise design and construction of development in areas subject to flooding;
- (7) to provide for public awareness of the flooding potential; and
- (8) to provide for the biological and environmental quality of the watersheds or the portions [thereof] of watershed located in Baltimore City.

(c) *Design.*

This Division I provides a unified comprehensive approach to floodplain management that addresses the requirements of the following Federal and State programs concerned with floodplain management:

- (1) the National Flood Insurance Program and the President's Executive Order 11988 of May 27, 1977, on floodplain management;
- (2) the State Waterway Construction Permit Program;
- (3) the State Wetlands Permit Program;
- (4) the U.S. Army Corps of Engineers' Section 10 and Section 404 Permit Programs; and
- (5) the State Coastal Zone Management Program.

(d) *Warning and disclaimer of liability.*

(1) *Warning.*

The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur, and flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside of the special flood hazard areas or uses that are permitted within those areas will be free from flooding or flood damage.

(2) *Disclaimer of liability.*

These regulations shall not create liability on the part of the City of Baltimore, any of its officers or

employees, the Maryland Department of the Environment (MDE), or the Federal Emergency Management Agency (FEMA) for any flood damage that results from reliance on these regulations or any administrative decision lawfully made hereunder.

**§ 1-10. Short title.**

This Division I may be cited as the “Baltimore City Floodplain Management Code”.

**Subtitle 2. Floodplain District**

**§ 2-1. Establishment of district.**

(a) *City to establish.*

The City must establish a Floodplain District and an official floodplain map to include all areas subject to inundation by floodwaters.

(b) *Bases.*

- (1) The basis of this delineation must be, at a minimum, the data contained in the most recent Flood Insurance Study for Baltimore City, and illustrated in the most recently adopted Flood Insurance Rate Map. The Flood Insurance Rate Map illustrates both the Special Flood Hazard Areas and [that part of the tidal floodplain designated as] the Flood Resilience Area [“areas of 0.2% annual chance flood”].
- (2) The base-flood elevation, as determined in the Flood Insurance Study, is graphically delineated on the official floodplain map.
- (3) Where field-surveyed topography or digital topography indicates that ground elevations are above the base-flood elevation in a Special Flood Hazard Area, then the area is considered in the Special Flood Hazard Area until FEMA issues a Letter of Map Change.
- (4) Where field-surveyed topography or digital topography indicates that ground elevations are below the closest applicable [design-flood] flood-protection elevation, even in areas not delineated on the FIRM as a Regulated Flood Hazard Area, the area is considered to be a Regulated Flood Hazard Area.

(c) *District as overlay to zoning.*

The Floodplain District is an overlay zoning district, as provided in the Zoning Code of Baltimore City.

**§ 2-2. Subdistricts.**

(a) *In general.*

- (1) The Floodplain District comprises the [following] subdistricts set forth in this section.
- (2) In all floodplain districts, the flood protection elevation is calculated as follows:
  - (i) in the tidal floodplain areas, it is the height and geographic extent of the 0.2% annual chance flood in the tidal area plus freeboard.
  - (ii) in the non-tidal floodplain areas, it is the extent of the 0.2% annual chance flood, and the height of the 1% annual chance flood plus freeboard.

(b) *Floodway.*

The Floodway is that part of the Floodplain District that is reserved to [pass] convey a base-flood discharge so that the cumulative increase in the water surface elevation of the base-flood discharge is no more than [a designated] the height designated by FEMA in the Flood Insurance Study.

(c) *Floodway Fringe.*

(1) The Floodway Fringe comprises those lands within the Floodplain District that:

- (i) are subject to inundation by a base flood [or by a 0.2% annual chance flood]; and
- (ii) lie beyond the Floodway (where a floodway has been determined), or in areas where detailed study data, profiles, and base-flood elevations have been established.

(2) The Floodway Fringe appears on the [“Flood Boundary and Floodway Maps” and “] Flood Insurance Rate Map as Zone AE.

(d) *Approximated Floodplain.*

(1) The Approximated Floodplain comprises those lands within the Floodplain District that:

- (i) are subject to inundation by a base flood; and
- (ii) lie in:
  - (A) areas for which a detailed study has not been performed, but a base floodplain boundary has been approximated; or
  - (B) areas that are subject to shallow flooding.

(2) A base-flood elevation must be established after consideration of any flood elevation and floodway data available from Federal, State, or other sources.

(3) The Approximated Floodplain appears on the Flood Insurance Rate Map as Zones A and AO.

(e) *Coastal Floodplain.*

(1) The Coastal Floodplain, also referred to as tidal floodplain, comprises those lands within the Floodplain District that:

- (i) due to high tides, hurricanes, tropical storms, and steady onshore winds, are subject to coastal or tidal inundation by a base flood; and
- (ii) lie in areas where detailed study data are available.

(2) The Coastal Floodplain appears on the Flood Insurance Rate Map as Zones A and AE, and includes areas encompassed by transects delineated by FEMA in the Flood Insurance Study[.] (In Zone AE, a designation on the FIRM indicating “Limit of Moderate Wave Action” refers to the landward limit of waves of 1.5 feet or more in height.).

(f) *Coastal High Hazard Area.*

(1) The Coastal High Hazard Area [comprises those lands within the Floodplain District that are subject to inundation by coastal or tidal flooding, with high velocity waters and wave action] is the area within a special flood hazard area extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area that is subject to high velocity wave action from storms or seismic sources. This area is designated on FIRMs as velocity zones V, VO, VE, or V1-30, and includes areas encompassed by transects delineated by FEMA in the Flood Insurance Study.

(2) The Coastal High Hazard Area appears on the Flood Insurance Rate Map as Zones V and VE.

(g) *Flood Resilience Area.*

See § 1-3(c) {Definitions: Flood Resilience Area"} of this Division I.

[(1) The Flood Resilience Area comprises those lands within a tidal floodplain that:]

[(i) due to hurricanes, tropical storms, and the rising Bay are subject to a 0.2% chance of flooding in any given year; and]

[(ii) lie in areas where detailed study data are available.]

[(2) The Flood Resilience Area appears:]

[(i) on the Flood Insurance Rate Map, as that part of the tidal floodplain that is designated Zone X (“areas of 0.2% annual chance flood”); and]

[(ii) in the Flood Insurance Study’s Table 4 {“Transect Data”}, under the column heading “0.2% annual chance”.]

### § 2-3. Official map.

(a) *In general.*

(1) The official floodplain map is the most current Flood Insurance Rate Map, as prepared by the Federal Emergency Management Agency.

(2) The official floodplain map:

(i) must be maintained by the Planning Department; and

(ii) is incorporated by reference as part of this Division I.

(b) *Bases.*

[(1)] The minimum bases for establishing Regulated Flood Hazard Areas and their respective [design-flood] flood elevations are as follows:

(1) [(i)] the most recent revision of the Flood Insurance Study for the City of Baltimore, dated [April 2, 2014;] June 16, 2021.

(2) [(ii)] the accompanying Flood Insurance Rate Map; and

(3) [(iii)] all subsequent amendments and revisions to the FIRM.

[(c) *Areas with ground levels below closest DFE.*]

[Where field-surveyed topography or digital topography indicates that ground elevations are below the closest applicable design-flood elevation, even in areas not delineated on the FIRM as a Regulated Flood Hazard Area, the area is considered to be a Regulated Flood Hazard Area.]

#### § 2-4. [Design-flood] Flood elevations.

(a) *Nontidal floodplain.*

- (1) Regulated Flood Hazard Areas in the nontidal floodplain are designated on the FIRM as “Special Flood Hazard Areas”.
- (2) The [design-flood] flood elevations for these areas correspond to the base-flood elevations specified in the Flood Insurance Study.

(b) *Tidal floodplain.*

- (1) Regulated Flood Hazard Areas in the tidal floodplain are designated on the FIRM as Zones A, AE, V, VE, and X.
- (2) The [design-flood] flood elevations for Zones V and VE are as shown in the Flood Insurance Study’s Table 4 {“Transect Data”}, under the column heading “Zone Designation and BFE”.
- (3) The [design-flood] flood elevations for Shaded Zone X (“areas of 0.2% annual chance flood”) and for Zones A and AE are those shown in the Flood Insurance Study’s Table 4 {“Transect Data”}, under the column heading “0.2% Annual Chance”.

(c) [(d)] *Flood elevations not [Not] provided by FIRM or FIS.*

To establish [base-flood] flood elevations for Regulated Flood Hazard Areas that do not have these elevations shown on the Flood Insurance Rate Map or in the Flood Insurance Study, the Floodplain Manager may:

- (1) provide the best available data for [base-flood] flood elevations;
- (2) require the applicant to obtain available information from Federal, State, or other sources; or
- (3) require the applicant to establish Regulated Flood Hazard Areas and design-flood elevations as set forth in § 2-5 {“Changes to District”} of this subtitle.

#### § 2-5. Changes to District.

(a) *When authorized.*

The delineation of the Floodplain District and its Subdistricts may be revised, amended, or modified by the City, in compliance with the requirements of the National Flood Insurance Program and the Maryland Department of the Environment, if:

- (1) there are changes through natural or other causes to flood elevations and boundaries; or
- (2) changes are indicated by detailed hydrologic and hydraulic information and studies.

(b) *Notice of changes.*

As soon as practicable, but not later than 6 months after changes become known, the Planning

Department must notify the Federal Insurance Administrator of the changes by submitting technical and scientific data in accordance with 44 Code of Federal Regulations, Part 65.

(c) *Required Federal and State approvals.*

All changes are subject to the review and approval of the Federal Emergency Management Agency and the Maryland Department of the Environment.

**§ 2-6. Unmapped streams.**

(a) *Minimum flood protection setback.*

If development is proposed in the vicinity of an unmapped stream that has no delineated base floodplain, a minimum of a 25-foot flood protection setback from the stream's bank may be used.

(b) *State permits.*

State permits may be required. Applicants should request the State Water [Management] & Science Administration for a determination of whether its permit requirements apply.

(c) *Variances.*

Variances may be applied for under Subtitle 5 {"Floodplain Variances"} of this Division I.

**§ 2-7. Floodplain Manager.**

(a) *Duties of Planning Department.*

The Planning Department is responsible to ensure compliance with the National Flood Insurance Program.

(b) *Planning Director to appoint Manager.*

The Planning Director is responsible for appointing staff to carry out the duties of the Floodplain Manager.

(c) *Duties of Floodplain Manager.*

The Floodplain Manager is responsible for:

- (1)overseeing and implementing the City's floodplain program;
- (2)responding to all requests and inquiries by the Administrator of the National Flood Insurance Program;
- (3)reviewing applications to determine whether the proposed uses and other activities will be reasonably safe from flooding;
- (4)*reviewing elevation certificates and requiring incomplete or deficient certificates to be corrected;* and
- (5)keeping all files required by the National Flood Insurance Program.

### Subtitle 3. Development Regulations

#### Part 1. In General

##### § 3-1. In general.

(a) *New construction and substantial improvements.*

(1) In order to prevent excessive damage to structures, all new construction and substantial improvements to existing structures in the Floodplain District must comply with:

- (i) the regulations and restrictions of this subtitle; and
- (ii) except as otherwise provided in this Division I, the design and construction standards of:
  - (A) ASCE 24 {"Flood Resistant Design and Construction"}; and
  - (B) ASCE 7 {"Minimum Design Loads for Buildings and Other Structures"}, Chapter 5 {"Flood Loads"}.

(2) Where [base-flood] flood elevation data are used, the applicant must provide to the Planning Department:

- (i) floodproofing elevations for all new construction and all substantial improvements to an existing structure; and
- (ii) corresponding elevation certificates.

(b) *Projects overlapping subdistricts or elevations.*

If a proposed structure or substantial improvement is sited in 2 different subdistricts or in a subdistrict with 2 different [design-flood] flood elevations, the most restrictive regulation or higher flood elevation prevails.

(c) *Classification of structures.*

For the purpose of applying appropriate requirements, structures are classified according to ASCE 24, Table 1-1 {"Classification of Structures for flood Resistant Design and Construction"}.

#### Part 2. Districtwide Regulations

##### § 3-2. In general.

In the entire Floodplain District, the following regulations and restrictions apply.

##### § 3-3. Conformance to programs, plans, and BFR Codes Article.

(a) *Permit programs.*

The approval of any development must conform with the requirements of the permit programs of:

- (1) the State Water [Management] & Science Administration; and
- (2) all other applicable Federal, State, and City agencies.

(b) Building, Fire, and Related Codes.

The approval of any development must conform with all applicable requirements of the Baltimore City Building, Fire, and Related Codes Article.

(c) *Management plans.*

Where flood control and watershed management plans exist, all development must be consistent with those plans.

**§ 3-4. Residential structures.**

(a) *Elevation.*

- (1) Every new or substantially improved residential structure, including a manufactured home, must have its lowest floor elevated to at least the flood-protection elevation[, as specified in ASCE 24].
- (2) The elevation of the lowest floor and the lowest elevation of machinery serving the structure [of the improvement] must be certified on an elevation certificate after the lowest floor and machinery are [is] in place.
- (3) Every new or substantially improved residential structure must meet the requirements of § 3-14 {"Enclosures below lowest floor or flood-protection elevation"} of this subtitle.

(b) *Placement.*

Every proposed structure must be placed on the lot so as to avoid location in the floodplain as much as possible.

(c) *Basements.*

Basements are not permitted in new structures and substantial improvement of existing structures (including repair of substantial damage).

(d) *Enclosures below flood-protection elevation.*

[Enclosures below the flood-protection elevation must meet the requirements of § 3-14 {"Enclosures below lowest floor or flood-protection elevation"} of this subtitle.]

Enclosures below the flood-protection elevation shall be:

- (1) used solely for parking of vehicles, limited storage and building access;
- (2) constructed using flood damage-resistant materials; and
- (3) provided with flood openings that meet the criteria listed under § 1-3(a) {"Definitions: Floodproofing"} of this Division I.

(e) *Expansions in tidal and nontidal floodplains.*

[In nontidal floodplains, any] Any horizontal expansion that increases the footprint and that is less than substantial must also have the lowest floor elevated to at least the flood-protection elevation.

### § 3-5. Nonresidential or mixed-used structures.

(a) *In general.*

- (1) Every new or substantially improved nonresidential structure must be either:
  - (i) elevated to at least the flood-protection elevation[, as specified in ASCE 24]; or
  - (ii) dry or wet floodproofed.
- (2) Basements [or the floodproofing option] are prohibited for any new nonresidential structure in the tidal and nontidal floodplains.
- (3) Every new or substantially improved nonresidential structure must meet the requirements of § 3-14 {“Enclosures below lowest floor or flood-protection elevation”} of this subtitle.
- (4) The elevation of the lowest floor of the improvement must be certified on an elevation certificate after the lowest floor is in place.
- (5) In mixed-use structures, areas below the flood-protection elevation may not be used for residential use even if the area is floodproofed.

(b) *Floodproofing option.*

- (1) Floodproofing designs for existing structures must [insure] ensure that areas below the flood-protection elevation are watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, as described in § 1-3(a) {“Definitions: Floodproofing”} of this Division I.
- (2) If the floodproofing option is chosen, a floodproofing certificate must be completed by a licensed professional engineer or professional architect who has reviewed the design and specifications and certifies that the nonresidential structure will meet this standard. A Use and Occupancy permit cannot be approved until the floodproofing certificate is submitted.

(c) *Expansions in tidal and nontidal floodplains.*

In tidal and nontidal floodplains, any horizontal expansion that increases the footprint and that is less than substantial must also have the lowest floor elevated to at least the flood-protection elevation.

### § 3-6. Less than substantial improvement.

(a) *In general.*

If the construction, reconstruction, or modification of any structure constitutes less than a substantial improvement:

- (1) the [replacement] installation of any electric, plumbing, or mechanical systems must comply with § 3-10 {“Electric, plumbing, and mechanical systems”} of this subtitle[;], and
- (2) those parts of the improvement below] the flood-protection elevation must:
  - (i) be floodproofed; and

(ii) otherwise comply with the design and construction standards of ASCE 24.

(b) *Exceptions.*

- (1) Routine maintenance, [and] repairs, and the in-kind replacement of mechanical, electrical, and plumbing systems are [excepted] exempt from the requirements of this section.
- (2) For in-kind replacement, the systems must be elevated to the maximum extent possible to avoid or minimize flood damage.

**§ 3-7. Impacts on habitat.**

All development must be undertaken in a manner that minimizes adverse impacts on aquatic and terrestrial habitat and their related flora and fauna.

**§ 3-8. Design, anchoring, and materials.**

(a) *In general.*

All construction and improvements must be:

- (1) designed, constructed, connected, and anchored to prevent flotation, collapse, or lateral movement of the structure, in accordance with the standards for new construction and substantial improvements specified in ASCE 24, § 1.5.1 {"General"};
- (2) constructed and placed on the lot so as to offer the minimum obstruction to the flow and height of floodwaters;
- (3) constructed with material and utility equipment resistant to flood damage; and
- (4) constructed by methods and practices that minimize flood damage.

(b) Materials below *the flood protection elevation [FPE.]*

Unless the structure is dry floodproofed to the flood-protection elevation, materials used below that elevation must be resistant to floodwater damage, as specified in:

- (1) FEMA Technical Bulletin 2, "Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program"; [or] and
- (2) ASCE 24, § 5.0 {"Materials"}.

(c) *Tanks.*

Tanks must be designed and installed as specified in ASCE 24, § 7.4.1 {"Tanks"}.

(d) *Elevators.*

For installation in any structure located in any floodplain subdistrict, elevators must be designed and installed:

- (1) as specified in ASCE 24, § 7.5 {"Elevators"}; and

- (2) as specified in FEMA Technical Bulletin 4: Technical Bulletin 4, Elevators in Buildings Located in Special Flood Hazard Areas.

### § 3-9. Landscape design.

(a) *Ground cover.*

Adequate ground cover must be provided for soil stabilization within the Floodplain District.

(b) *Land contours and plant material.*

Land contours must be designed and plant material chosen[, so as] to direct surface runoff away from structures and not increase surface runoff onto neighboring properties.

### § 3-10. Electric, plumbing, and mechanical systems.

(a) *In general.*

Except as otherwise provided in subsection (b) of this section, electric, plumbing, and mechanical systems and their attendant components and equipment, including heaters, furnaces, generators, heat pumps, air conditioners, distribution panels, toilets, showers, sinks, duct work, and other permanent electrical, plumbing, or mechanical installations, are only permitted at or above the flood-protection elevation.

(b) *Exceptions.*

- (1) Subsection (a) of this section does not apply to a system that is designed and installed, in accordance with ASCE 24, to prevent water from entering or accumulating within its components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the flood-protection elevation.
- (2) In addition, electrical wiring systems for 1- and 2-family dwellings must conform to the requirements of the Baltimore City Residential Code for One- and Two-Family Dwellings, Part VIII {"Electrical"}, for wet locations.
- (3) Subsection (a) of this section does not apply to routine maintenance, repairs, and the in-kind replacement of mechanical, electrical and plumbing systems in less-than substantial improvement projects.

### § 3-11. Storage.

Materials and products that are buoyant, flammable, or explosive, or that in times of flooding could be injurious to human, animal, or plant life may not be stored [below 2 feet above the design-flood elevation] the flood protection elevation.

### § 3-12. Fill.

(a) *In general.*

(1) In the Coastal High Hazard Area:

- (i) fill is prohibited for structural support; but
- (ii) placement of nonstructural fill is allowed to the extent provided in this section and in ASCE

24, § 4.5.4 {"Use of Fill"}.

(2) In the Coastal Floodplain:

- (i) fill material must meet the requirements of this section; and
- (ii) structural fill must comply with all applicable provisions of ASCE 24.

(b) *Maximum fill amount.*

The placement of more than 600 cubic yards of net fill per acre in the floodplain is prohibited except by variance.

(c) *Required alternate consideration.*

(1) Elevating a structure by other methods must be considered unless 600 cubic yards or less of fill are required.

(2) An applicant must demonstrate that:

- (i) fill is the only alternative to raising the structure to at least the flood-protection elevation; and
- (ii) the amount of fill used will not affect the flood storage capacity or increase flooding onto neighboring properties.

(d) *Affect on adjacent properties.*

Fill may be used only to the extent to which it does not adversely affect adjacent properties.

(e) *Materials.*

- (1) Fill may consist of soil or rock materials only.
- (2) Landfills, dumps, and sanitary soil fills are not permitted.

(f) *Compacting standards.*

Fill material must be compacted in accordance with the standard proctor test method issued by the American Society for Testing and Materials (ASTM Standard D-698) to provide the necessary stability and resistance to erosion, scouring, or settling.

(g) *Slopes.*

Fill slopes may be no steeper than 1 vertical to 2 horizontal, unless substantiating data justifying steeper slopes are submitted to and approved by the Department of Public Works.

(h) *Hydrologic and hydraulic analyses.*

If structures on adjacent properties are known or determined to be subject to flooding under current conditions, the Floodplain Manager may require submission of hydrologic and hydraulic analyses to adequately demonstrate the effects of the proposed fill. A hydrologic and hydraulic analysis requirement does not apply to projects located in the Coastal Floodplain or tidal portion of the Flood Resilience Area.

**§ 3-13. Accessory structures.**

(a) *In general.*

[Due to their minimal investment, accessory structures are exempt from the elevation or dry floodproofing standards of this Division I as long as all of the requirements of this section are met.]

Accessory structures shall be limited to no more than 300 square feet in total floor area.

(b) *Requirements.*

Accessory structures:

- (1) shall comply with the elevation requirements and other requirements of § 3-14 {“Enclosures below the first floor or flood protection elevation”} of this subtitle; or
- (2) shall:
  - (i) be useable only for parking of vehicles or limited storage;
  - (ii) be constructed with flood damage-resistant materials below the flood protection elevation;
  - (iii) be constructed and placed to offer the minimum resistance to the flow of floodwaters;
  - (iv) be anchored to prevent flotation;
  - (v) have electrical service and mechanical equipment elevated to or above the flood protection elevation; and
  - (vi) have flood openings that meet the criteria described in § 1-3(a) {“Definitions: Floodproofing”} of this Division I.

[(b) *Plans statement.*]

[A statement must be placed on the building plans, to read as follows:

“This structure may not be converted to any use other than for parking vehicles or limited storage, nor may it be enlarged beyond 300 square feet or 1 story, unless the structure is brought into compliance with City Code Article 7 {“Natural Resources”}, Division I {“Floodplain Management”}.”]

[(c) *Elevation.*]

[The floor elevation of the accessory structure:

- (1) does not qualify as a basement; and
- (2) must be constructed on or above grade and meet the requirements of § 3-14 {“Enclosures below lowest floor or flood-protection elevation”} of this subtitle.]

[(d) *Minimum resistance.*]

[The accessory structure must:

- (1) be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters; and
- (2) meet the requirements of § 3-14 {“Enclosures below lowest floor or flood-protection elevation”} of this subtitle.]

[(e) *Firm anchorage.*]

[The accessory structure must be firmly anchored to prevent flotation that might result in damage to other structures.]

[(f) *Flood damage potential.*]

[The accessory structure must be designed to have low flood damage potential, including provisions to allow free flow of water into and out of it to maintain equal pressure.]

[(g) *Service facilities.*]

[The service facilities, such as electrical, plumbing, and heating equipment, must be elevated to the applicable flood-protection elevation or be floodproofed.]

[(h) *Non-conversion agreement.*]

[(1) A non-conversion agreement must be completed and signed by the property owner.

(2) The design and construction of the structure must follow the regulations stated in the agreement and be equipped with water equalizing vents as specified in §§ 3-4 {“Residential structures”} and 3-5 {“Nonresidential structures”}.]

### § 3-14. Enclosures below lowest floor or flood-protection elevation.

(a) *In general.*

New construction and substantial improvements of fully enclosed areas below the lowest floor or below the flood-protection elevation:

- (1) are limited to floodproofed areas usable solely for parking vehicles, limited storage, and building access[, and crawl spaces] as specified in §§ 1-3(a) {“Definitions: Floodproofing”}, § 3-4 {“Residential structures”}, and 3-5 {“Non-residential and mixed-used structures”} of this Division I; [and] or
- (2) must be designed to meet or exceed the minimum criteria [ASCE 24, § 2.6 {“Enclosures Below the Design Flood Elevation”}] described in § 1-3(a) {“Definitions: Floodproofing”} of this Division I for dry floodproofing and wet floodproofing.

(b) *State regulations.*

The State may have different, more stringent requirements set forth in COMAR 26.17.03 {“Construction on Nontidal Waters and Floodplains”}.

### § 3-15. Watercourses.

(a) *In general.*

(1) For any proposed development that involves alteration of a watercourse, unless waived by MDE, the applicant shall develop hydrologic and hydraulic engineering analyses and technical data reflecting such changes, and submit such technical data to the Floodplain Administrator and to FEMA. The analyses shall be prepared by a licensed professional engineer in a format required by MDE and by FEMA for a Conditional Letter of Map Revision and a Letter of Map Revision upon completion of the project.

(2) Submittal requirements and fees shall be the responsibility of the applicant.

(b) *Submission requirements.*

Alteration of a watercourse may be permitted only upon submission, by the applicant, of the following:

- (1) a description of the extent to which the watercourse will be altered or relocated;
- (2) a certification by a licensed professional engineer that the flood-carrying capacity of the watercourse will not be diminished;
- (3) evidence that adjacent communities, the U.S. Army Corps of Engineers, and MDE have been notified of the proposal, and evidence that the notifications have been submitted to FEMA; and
- (4) evidence that the applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of the watercourse so that the flood carrying capacity will not be diminished.

(c) *Agreement with City.*

- (1) The Floodplain Administrator may require the applicant to enter into an agreement with the Mayor and City Council specifying the maintenance responsibilities.
- (2) If an agreement is required, the permit shall be conditioned to require that the agreement be recorded on the deed of the property which shall be binding on future owners.

[(a) *Variance required to alter.*]

In all floodplain zones or areas within 25 feet from a water course, any development that proposes to alter a watercourse must obtain a variance under Subtitle 5 {"Floodplain Variances"} of this Division I.

[(b) *Conditions for encroachment to be minimized.*]

[All conditions for encroachment in the Floodway must be minimized.]

[(c) *Required notices.*]

[Adjacent communities and property owners, FEMA, and the State Water Management Administration must be notified of any application.]

**§ 3-16. Flood protection setback.**

(a) *Watercourse with floodplain.*

- (1) A minimum 25-foot flood protection setback must be maintained from the edge of the banks of any watercourse delineated on the floodplain map or FIRM as having a floodplain.

- (2) To prevent erosion, natural vegetation must be maintained in this area.
- (3) Where natural vegetation does not exist along the water course and conditions for replanting are suitable, high priority must be given to planting trees in the setback area to stabilize banks and to enhance aquatic resources.

(b) *Stream with no floodplain.*

- (1) A minimum 25-foot flood-protection setback must be maintained from the top of the bank of any stream that has no designated floodplain.
- (2) Natural vegetation must be maintained and, if needed, trees planted.

**§ 3-17. Utilities and facilities.**

(a) *In general.*

In the entire Floodplain District, the design, placement, and construction of all public and private utilities and facilities must meet:

- (1) the requirements of this section; and
- (2) all applicable requirements of ASCE 24.

(b) *Design and floodproofing.*

- (1) New or replacement water supply systems, on-site disposal systems, or sanitary sewage systems must be designed and floodproofed:
  - (i) to eliminate or minimize infiltration of floodwaters into the systems and discharges from the systems into floodwaters; and
  - (ii) to avoid impairment during flooding and minimize flood damage.
- (2) All gas, electrical, and other facility and utility systems must be located, constructed, and floodproofed to eliminate or minimize flood damage.

(c) *Sewage systems.*

- (1) All pipes connected to sewage systems must be sealed to prevent leakage.
- (2) Cesspools and seepage pits are prohibited.
- (3) Septic tanks are permitted if they are securely anchored to resist buoyant forces during inundation.

(d) *New storm drainage facilities.*

All new storm drainage facilities within or leading to or from the Floodplain District must be adequately designed, floodproofed, and installed to:

- (i) eliminate or minimize property damage resulting from the floodwaters of a base flood; and
- (ii) minimize adverse environmental impacts of their installation and use.

**§ 3-18. Nontidal AE Zones without designated floodways.**

New development is not permitted within a nontidal AE Zone that is without a designated floodway, unless it is demonstrated that the cumulative effect of all past and projected development will not increase the base-flood elevation by more than 1 foot.

**§ 3-19. Recreational vehicles.**

(a) *“Recreational vehicle” defined.*

*In this section, “recreational vehicle” means a vehicle that is:*

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

(b) *Treatment of recreational vehicles.*

All recreational vehicles in the Floodplain District must be:

- (1) elevated and anchored as required by applicable State and Federal laws; or*
- (2) fully licensed and highway ready.*

**§ 3-20. Temporary structures or storage.**

(a) *“Temporary structure” defined.*

In this section, “temporary structure” a structure erected, installed, and used for a period [of less than] not to exceed 180 days.

(b) *Application for permit.*

In addition to the requirements of § 4-2 {“Development Permits: Applications”} of this Division I, an application for the placement or erection of a temporary structure or for the temporary storage of any goods, materials, or equipment must specify the duration of the temporary use.

(c) *Structures.*

The temporary structure:

- (1) must be designed and constructed to prevent flotation, collapse, or lateral movement resulting*

from hydrodynamic loads and hydrostatic loads during conditions of a base flood;

- (2) must have electric service installed in compliance with the Baltimore City electric code;
- (3) must comply with all other requirements of the applicable State and City permit authorities; and
- (4) if in a Floodway, all necessary Federal and State permits must be obtained.

(d) *Storage.*

[Temporary storage:] Storage in a temporary structure

[(1)] may not include any hazardous materials[; and

(2) if in a Floodway, all necessary Federal and State permits must be obtained].

### § 3-21. Letter of Map Change.

(a) *Scope of section.*

This section applies to any property owner requesting mapping changes.

(b) *Letter of Map Change.*

A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study.

(c) *Letter of Map Amendment (LOMA).*

A Letter of Map Amendment is an amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property or structure is not located in a special flood hazard area.

(d) *Letter of Map Revision (LOMR).*

A Letter of Map Revision is a revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A Letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

(e) *Conditional Letter of Map Revision (CLOMR).*

A Conditional Letter of Map Revision is a formal review and comment as to whether a proposed flood protection project or other project comply with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A Conditional Letter of Map Revision Based on Fill (CLOMR-F) is a determination that a parcel of land or proposed structure that will be elevated by fill would not be inundated by the base flood if fill is placed on the parcel as proposed or the structure is built as proposed. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; on submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA, to revise the effective FIRM.

(f) *Issuance of permits.*

If a proposed development is contingent upon a map change, no permits will be issued for the development until the Letter of Map Revision (LOMR) has been issued by FEMA. The proposed development must be compliant with all pertinent requirements of Division I of Article 7.

[§§ 3-21 to 3-22. *{Reserved}*]

§ 3-22. *{Reserved}*

***Part 3. Floodway Regulations***

**§ 3-23. In general.**

In the Floodway, the following regulations and restrictions apply.

**§ 3-24. New private principal structures prohibited.**

New construction of private principal structures, whether residential, commercial, or industrial, is prohibited.

**§ 3-25. All development requires offset.**

[No development is permitted unless:]

Public infrastructure and environmental projects taking place on public land that aim to improve drainage and water quality are permitted in the floodway if:

- (1) the development complies with all otherwise applicable requirements of this Division I;
- (2) the effect of that development on flood heights is fully offset by accompanying stream modification; and
- (3) the development is approved by all appropriate local authorities, the State Water [Management] & Science Administration, and the U.S. Army Corps of Engineers.

**§ 3-26. Engineering report.**

(a) *Report required.*

Any proposal to offset the effect of development in the Floodway by construction of stream modifications must be documented by an engineering report, prepared by a licensed professional engineer, that fully evaluates the effects of the construction and is submitted with the application for a building permit.

(b) *Basis.*

As the basis of analysis, the report must use the base flood and floodway data prepared by the Federal Emergency Management Agency.

**§ 3-27. Map revision.**

Any development in the floodway that proposes to increase the water surface elevation or change the delineation of the floodway requires a Conditional Letter of Map Revision and a Letter of Map Revision as

described in § 3-21 {"Letter of map change"} of this subtitle.

*[(a) Scope of section.]*

[This section applies to any development in the Floodway that might result in an increase in water surface elevations or a change to the Floodway.]

*[(b) Conditional Letter of Map Revision.]*

[(1) Before a permit may be issued for a proposed development that is subject to this section, the applicant must obtain from FEMA a Conditional Letter of Map Revision.]

[(2) To obtain this Conditional Letter, the applicant must submit hydrologic and hydraulic analyses that are based on existing floodway models, performed in accordance with standard engineering practices, and certified by a licensed professional engineer.]

*[(c) Letter of Map Revision.]*

[Before an occupancy permit may be issued for the development, the developer must obtain from FEMA a Letter of Map Revision.]

**§ 3-27. {Reserved}**

**§ 3-28. Alternative analysis.**

*(a) Required for permit.*

Before a permit may be issued for any [proposed] allowed development in the Floodway, the applicant must prepare and submit to the Planning Department an alternative analysis in accordance with this section.

*(b) Scope of analysis.*

The alternative analysis must demonstrate that:

- (1) no reasonable alternative exists outside of the Floodway;
- (2) the encroachment in the Floodway is the minimum necessary;
- (3) the development will withstand a base flood without significant damage; and
- (4) on the basis of hydrologic and hydraulic analyses, prepared by a licensed professional engineer in accordance with the requirements of the Federal Emergency Management Agency and the Maryland Department of the Environment, the development:
  - (i) will not result in any increase in the base-flood elevation; and
  - (ii) will neither increase downstream or upstream flooding or erosion nor significantly contribute to debris.

**§ 3-29. Changes to existing structures.**

*(a) Substantial improvements.*

- (1) An existing structure in the Floodway may be substantially improved only:
  - (i) by variance;
  - (ii) if the structure can be brought into conformance with this Division I without increasing its existing footprint; and
  - (iii) if all residential uses of the structure are provided egress outside of the base flood.
- (2) Substantial improvement of a nonconforming structure, regardless of location, may only be undertaken in compliance with this Division I and any other applicable law.

(b) *Substantial damage or proposed replacement.*

- (1) In the event of substantial damage or proposed replacement, the applicant must submit an alternative analysis to determine if the structure can be relocated to a less hazardous site.
- (2) Where replacement structures cannot be relocated, they must be limited to the footprint of the previous structure.
- (3) Any replacement structure must meet all applicable requirements of this Division I.

(c) *Elevation or floodproofing.*

The modification, alteration, repair, reconstruction or improvement of any non-conforming structure and/or development amounting to less than 50% of its fair market value shall be elevated and/or floodproofed to the greatest extent possible.

(d) *Nuisance to be eliminated.*

Uses or their adjuncts that are or become nuisances may not be permitted to continue.

**§ 3-30. Prohibited structures.**

(a) *Manufactured homes or buildings.*

The placement of any manufactured homes or buildings is prohibited.

(b) *Fences, enclosures, etc.*

The following may not be placed or caused to be placed in the Floodway:

- (1) fences, except 2-rail or single-cable fences; and
- (2) any enclosures or materials (including fill) that:
  - (i) might impede, retard, or change the direction of the flow of water;
  - (ii) will catch or collect debris carried by water; or
  - (iii) is placed where the natural flow of stream or floodwaters would carry enclosures or materials downstream to the damage or detriment of public or private property in or adjacent to the floodplain.

§§ 3-31 to 3-32. *{Reserved}*

***Part 4. Other Subdistrict Regulations***

**§ 3-33. Approximated Floodplain.**

(a) *In general.*

In the Approximated Floodplain (Zones A and AO), the following additional regulations apply.

(b) *Use of available data.*

In the enforcement of this Division I, the Planning Department must obtain, review, and reasonably use any base-flood elevation and floodway data available from Federal, State, or other sources, such as the U.S. Army Corps of Engineers, the Soil Conservation Service, the State Water [Management] & Science Administration, or any regional planning organization.

(c) *When data unavailable.*

When the base-flood elevation is not known, the Planning Department, in consultation with the State Water [Management] & Science Administration, must evaluate each site and establish an approximate base-flood elevation.

**§ 3-34. Coastal Floodplain and Flood Resilience Area.**

In the Coastal Floodplain and the Flood Resilience Area, the regulations specified in ASCE 24, § 4.0 {"Coastal High Hazard Areas and Coastal A Zones"} apply.

**§ 3-35. Coastal High Hazard Area.**

(a) *In general.*

In the Coastal High Hazard Area (Zones V and VE):

- (1) the [following regulations of this section apply; and
- (2) except as otherwise provided in this Division I, the regulations specified in ASCE 24, § 4.0 {"Coastal High Hazard Areas and Coastal a Zones"} also apply.

(b) *Land below base flood level.*

No land below the level of the base flood may be developed unless the new construction or substantial improvement:

- (1) is located landward of the reach of mean high tide;
- (2) is elevated on adequately anchored pilings or columns to resist flotation, collapse, and lateral movement due to the effects of base-flood wind and water loads acting simultaneously on all building components, and the bottom of the lowest horizontal structural members of the lowest floor (excluding the pilings or columns) is elevated to at least the flood-protection elevation;
- (3) has been certified by a licensed professional engineer or professional architect that it is securely anchored to adequately anchored pilings or columns so as to withstand velocity waters and hurricane wave wash and that it will meet the requirements of item (2) of this subsection;

(4) has no basement and has the space below the lowest floor free of obstructions (which space may not be used for human habitation, but may be used solely for parking, building access, or limited storage) [or] and is constructed with breakaway walls, as that term is defined in ASCE 24, § 1.2 {"Definitions"} ; and

(5) does not utilize fill for structural support of structures.

(c) *Required showings.*

No new development in the Coastal High Hazard Area may be permitted unless the applicant demonstrates that:

- (1) the encroachment into the Coastal High Hazard Area is the minimum necessary;
- (2) the development will withstand, without damage, the wind and water loads attendant a base flood; and
- (3) the development will not create an additional hazard to existing structures.

(d) *Existing structures.*

An existing nonconforming structure located on land below the level of the base flood may not be expanded, vertically, horizontally, or otherwise, unless:

- (1) the foundation system is certified by a licensed professional engineer or professional architect as capable of supporting the existing structure and the proposed improvements during a base flood; and
- (2) all construction is in full compliance with this and all other applicable laws.

(e) *Manufactured homes or buildings.*

The placement of manufactured homes or buildings is strictly prohibited.

(f) *Record management.*

For all new construction and every substantially improved structure in the Coastal High Hazard Area, the developer must submit and the Floodplain Manager must maintain on file an elevation certificate that certifies the elevation of the bottom of the lowest horizontal structural member of the lowest floor.

(g) *Recreational vehicles.*

- (1) In this subsection, "recreational vehicle" has the meaning stated in § 3-19 {"Recreational vehicles"} of this subtitle.
- (2) In the Coastal High Hazard Area, recreational vehicles are prohibited.

#### **Subtitle 4. Development Permits**

##### **§ 4-1. Permit required.**

A Building permit issued by the Building Official under the Baltimore City Building Code:

- (1) is required for all development in the Floodplain District; and
- (2) may be granted only after necessary permits from the State Water [Management] & Science Administration and all other applicable Federal, State, and City agencies have been obtained and verified by the Planning Department.

**§ 4-2. Applications.**

(a) *From and to whom submitted.*

The application for the permit must be submitted by the owner or authorized agent of the owner to the Building Official.

(b) *Required information.*

The application must contain, in addition to the information otherwise required by the Building Official for a building permit, the following information:

- (1) the name and address of the applicant;
- (2) the name and address of the owner of land on which development is proposed;
- (3) the name and address of the contractor;
- (4) the site location;
- (5) a plan of the site showing the size and location of the proposed development, as well as any existing structures;
- (6) plans, drawn to scale, that show the location, dimensions, and NAVD 88 elevation of the site in relation to the stream channel[,] or shoreline[,] and Floodplain District delineation;
- (7) a summary description of the proposed work and estimated cost; and
- (8) copies of all necessary permits from the State Water [Management] & Science Administration and all other applicable Federal, State, and City agencies.

(c) *Conditional information.*

- (1) Depending on the type of development or structure involved, the Floodplain Manager may require:
  - (i) that an elevation certificate for the proposed development be submitted with the application; and
  - (ii) that the following information be shown on plans submitted with the application:
    - (A) the size of each proposed structure and the position on the lot where it is to be constructed;
    - (B) the elevations of the proposed final grading and lowest floor and the existing ground and base-flood elevation, as certified by a licensed land surveyor or professional engineer; and

(C) the method of elevating the proposed structure, including details of proposed fills, pile structures, retaining walls, foundations, erosion protection measures, and the like.

(2) These plans must be prepared by a licensed professional engineer or professional architect.

(d) *Appraisals for existing structures.*

If substantial improvement to an existing structure is proposed, an appraisal must be submitted by a professional real estate appraiser of the fair market value of the existing structure, less land value.

#### **§ 4-3. Plans for subdivisions or new development.**

(a) *Plan drawing required.*

(1) Every proposal for the subdivision of land or for new development must include a plan that shows the location of all existing and proposed public and private utilities, facilities, drainage structure, and road access.

(2) If the base-flood elevation has been determined by the Flood Insurance Study or other reliable source, as provided in § 2-3 {"Official map"} of this Division I, that flood elevation must be delineated on the plan.

(3) If the proposal involves more than 5 lots or more than 5 acres and the base-flood elevation has not been determined for the land area, the developer must determine the base-flood elevation and delineate that flood elevation on the plan. If hydrologic and hydraulic engineering analyses are submitted, they must be certified in accordance with the requirements of the Maryland Department of the Environment and the Federal Emergency Management Agency.

(b) *Certification and review.*

All plans must be certified by a licensed professional engineer or professional architect and reviewed by the Department of General Services to assure that:

(1) all proposals are consistent with the need to minimize flood damage;

(2) all necessary permits have been received from the State Water [Management] & Science Administration and appropriate Federal agencies;

(3) all public and private utilities and facilities (including sewer, water, telephone, electric, gas, etc.) are located, constructed, and floodproofed to minimize or eliminate flood damage;

(4) adequate drainage is provided to reduce exposure to flood hazards;

(5) during a base flood, at least 1 access point provides safe vehicular access to and egress from the subdivision or new development; and

(6) adequate measures have been taken to minimize adverse environmental impacts of the proposed development.

#### **§ 4-4. Conformance to codes required.**

A permit may be granted only after it has been determined that the proposed work will be in conformance with the requirements of this and all other applicable laws.

#### § 4-5. Alteration of watercourse.

(a) *Notices required.*

- (1) When the proposed development includes the relocation or alteration of a watercourse, evidence must be presented as part of the permit application that all adjacent communities and the State Water [Management] & Science Administration have been notified by certified mail and have approved of the proposed alteration or relocation.
- (2) Copies of these notifications must then be forwarded to the Federal Emergency Management Agency, Federal Insurance Administration.

(b) *Assurances of flood-carrying capacity.*

In addition, the developer must assure the City, in writing, that the flood-carrying capacity within the altered or relocated portion of the watercourse in question will be preserved.

#### § 4-6. Changes to application, permit, etc.

After the issuance of a building permit by the Building Official, no changes of any kind may be made to the application, permit, or any of the plans, specifications, or other documents submitted with the application without the written consent or approval of the Building Official.

#### § 4-7. Inspections; permit revocation.

(a) *Inspections by City and State.*

- (1) During the construction period, the Building Official must inspect the premises to determine that the work is progressing in compliance with the permit and with all applicable laws.
- (2) The premises are also subject to inspection by the State Water [Management] & Science Administration.

(b) *Revocation of permit.*

If the Building Official determines that the work is not in compliance with the permit and all applicable laws or that there has been a false statement or misrepresentation by the applicant, the Building Official, on instruction from the Planning Department, may revoke the permit and report that fact to the State Water [Management] & Science Administration.

#### § 4-8. Occupancy permit.

An occupancy permit issued by the Building Official:

- (1) is required for all new construction and substantial improvements in the Floodplain District; and
- (2) may not be issued until the Building Official has been provided with an elevation certificate that certifies the “as-built” elevations of the new construction or substantial improvements. When applicable, a dry floodproofing certificate is also required prior to the approval of the occupancy permit.

#### § 4-9. Record of permit actions.

(a) *Required.*

A record of all permit actions in the Floodplain District, including all permits from applicable Federal, State, and City agencies, must be maintained by the Planning Department and must be made available on the request of the Federal Emergency Management Agency or the State Water [Management] & Science Administration during periodic assessments of Baltimore City's participation in the National Flood Insurance Program.

(b) *Contents.*

This record must include, at a minimum:

- (1) the date the permit was issued;
- (2) the "as-built" lowest floor elevation of all new construction or substantial improvement;
- (3) a copy of all other elevation certificates submitted under this Division I;
- (4) the issuance date of any occupancy permit; and
- (5) any map amendments issued by the Federal Emergency Management Agency.

### **Subtitle 5. Floodplain Variances**

#### **§ 5-1. In general.**

Applications for variances may be considered by the Planning Department, after a review by the City agencies responsible for stormwater management and erosion control, for the following:

- (1) functionally dependent uses;
- [(2) reconstruction, rehabilitation, or restoration of historic structures as provided in § 5-8 {"Historic structures"} of this subtitle;]
- (2) [(3)] all necessary City utilities in the Floodway or the Coastal High Hazard Area; and
- (3) [(4)] substantial improvements to an existing structure in the Floodway.

#### **§ 5-2. Prohibited variances.**

A variance may not be granted for:

- (1) the placement of fill in the Floodway or the Coastal High Hazard Area unless approved by appropriate Federal and State agencies;
- (2) new construction of any principal structure in the Floodway or the Coastal High Hazard Area; or
- (3) manufactured homes or buildings within the Floodway and Coastal High Hazard Area.

#### **§ 5-3. Considerations; Findings of fact.**

(a) *Request for MDE comments.*

The Floodplain Manager must:

- (1) request the NFIP State Coordinator, Maryland Department of the Environment, to comment on variance applications; and
- (2) submit those comments, when received, to the Director of the Planning Department.

(b) *Factors to consider [- In general].*

In considering a variance application, the Planning Department must consider and make findings of fact on all evaluations, [all] relevant factors, and [all] requirements specified in this Division I[.] including:

[(c) *Factors to consider - Additional factors.*]

[In considering a variance application, the Planning Department must also consider and make findings of fact on the following additional factors:]

- (1) the danger that materials may be swept onto other lands to the injury of others;
- (2) the danger to life and property due to flooding or erosion damage;
- (3) the susceptibility of the proposed development and its contents to flood damage and the effect of that damage on the individual owner;
- (4) the importance of the services to the community provided by the proposed development;
- (5) the availability of alternative locations for the proposed use that are not subject to or are subject to less flooding or erosion damage;
- (6) the need of a waterfront location for the proposed use and whether the proposed use is a functionally dependent use;
- (7) the compatibility of the proposed use with existing and anticipated development;
- (8) the relationship of the proposed use to the comprehensive plan for that area;
- (9) the safety of access to the property in times of flood for passenger vehicles and emergency vehicles;
- (10) expected heights, velocity, duration, rate of rise, and sediment transport of floodwaters and the effects of wave action, if applicable, expected at the site;
- (11) the costs of providing government services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as streets, bridges, and sewer, gas, electrical, and water systems; [and]
- (12) the comments provided by NFIP State Coordinator; and
- (13) the intent of environmental projects taking place on public land, including associated benefits and co-benefits.

**§ 5-4. Limitations on granting variances.**

The Planning Department may make an affirmative decision on a variance request only on:

- (1) a showing of good and sufficient cause;
- (2) a determination that failure to grant the variance would result in exceptional hardship due to the physical characteristics of the property (for which determination, increased cost or inconvenience of meeting the requirements of this Division I does not constitute an “exceptional hardship”);
- (3) a determination that the granting of a variance for development within a designated floodway, or within a Special Flood Hazard Area with base-flood elevations but no designated floodway, will not result in increased flood heights beyond that which is allowed by this Division I;
- (4) a determination that the granting of a variance will not result in additional threats to public safety, extraordinary public expense, nuisances, fraud or victimization of the public, or conflict with existing local laws;
- (5) a determination that the structure or other development is protected by methods to minimize flood damage; and
- (6) a determination that the variance is the minimum necessary to afford relief, considering the flood hazard.

#### **§ 5-5. Applications.**

(a) *In general.*

The application for a variance must be submitted to the Planning Department and, to the greatest extent possible, must comply with the provisions of this Division I.

(b) *Notices to applicant.*

- (1) The Planning Department must notify the applicant, in writing:
  - (i) of the increased premium rates for flood insurance; and
  - (ii) that construction below the level of the base flood increases risks to life and property.
- (2) This notification must be maintained as part of the record required in § 5-7 {“Record of variance actions”} of this Subtitle.

#### **§ 5-6. Agreement not to convert accessory structures.**

The owner of any accessory structure for which a variance is granted must sign an agreement that the structure will never be converted to any use other than for parking vehicles or limited storage, and the deed restriction must be recorded with Land Records.

#### **§ 5-7. Record of variance actions.**

A record of all variance actions, including the justification for their issuance, must be:

- (1) maintained by the Planning Department;
- (2) included in the bi-annual report submitted to the Federal Insurance Administrator; and
- (3) available on request to the Federal Emergency Management Agency or its authorized agent during periodic assessments of Baltimore City’s participation in the National Flood Insurance Program.

**[§ 5-8. Historic structures.]**

[A variance may be issued for the reconstruction, rehabilitation, or restoration of an historic structure only if:]

- [(1) the activity does not cause an increase in the elevation of the base flood;]
- [(2) all construction efforts are made to meet the intent of the provisions of this Division I that deal with the elevation of electric, plumbing, mechanical, and other facility and utility systems;]
- [(3) all materials below the flood-protection elevation meet the requirements of this Division I for dry or wet floodproofing; and]
- [(4) the reconstruction, rehabilitation, restoration, or other activity will not preclude the structure's continued designation as an historic structure.]

**§ 5-8. {Reserved}**

**§ 5-9. Notice on deed.**

Notice of the flood hazard and the variance action must be placed on the deed that conveys title to land on which construction has occurred under this subtitle.

**Subtitle 6. Administration**

**§ 6-1. Municipal non-liability.**

The granting of a permit or approval is not a representation, guarantee, or warranty of any kind and does not create or impose any liability on the City, its officials, employees, or agents.

**§ 6-2. Administrative fees.**

(a) *City may impose.*

The City may impose additional application fees commensurate with those costs incurred in the processing, review, and evaluation of permit applications for development in the Floodplain District.

(b) *Costs included.*

The costs covered by the fees may include:

- (1) consultant fees for certification of as-built condition of structures;
- (2) Floodplain District and subdistrict delineations;
- (3) environmental impact characterizations;
- (4) staff assignments; and
- (5) other related costs.

**Subtitle 7. Enforcement**

**§ 7-1. Compliance required.**

(a) *In general.*

No structure or other development may be located, erected, constructed, reconstructed, improved, repaired, extended, converted, enlarged, or altered except in full compliance with this Division I and all other applicable Federal, State, and City laws, rules, and regulations.

(b) *Noncompliance presumed without documentation.*

A structure or other development without the required design certifications, elevation certificates, or other evidence of compliance is presumed to be noncompliant with and in violation of this Division I until the required documentation is provided.

(c) *Noncompliant structures as public nuisance.*

Any structure or other development that is located, erected, constructed, reconstructed, improved, repaired, extended, converted, enlarged, or altered in violation of this Division I or of any other applicable Federal, State, and City law, rule, or regulation is declared to be a public nuisance and abatable as such.

**§ 7-2. {Reserved}**

**§ 7-3. Violation notice; Stop work order.**

(a) *In general.*

If the Floodplain Manager finds that any development or person has failed to comply with or otherwise has violated any provision of this Division I, any provision of a rule or regulation adopted under this Division I, or any term or condition of a permit issued under this Division I, the Floodplain Manager may issue a violation notice and, for ongoing activities, a stop work order to:

- (1) the person responsible for the violation or that person's authorized agent;
- (2) the developer or owner of the development or that person's authorized agent; and
- (3) on-site personnel.

(b) *Service.*

The violation notice must be served:

- (1) in person;
- (2) by certified or registered mail; or
- (3) if the identity or whereabouts of the person responsible, developer, or owner is unknown, by posting a copy of the notice in a conspicuous place in or on the property.

(c) *Contents.*

The violation notice must:

- (1) describe the nature of the violation;
- (2) describe the remedial action needed to correct the violation; and

(3) specify a reasonable period of time within which to complete the remedial action.

**§ 7-4. Enforcement of notice or order.**

(a) *In general.*

If a violation is not promptly discontinued or abated, or if the violation notice or order is not complied with promptly, the Floodplain Manager may institute or cause to be instituted any appropriate legal proceeding.

(b) *Types of proceedings.*

Enforcement proceedings may include:

- (1) injunctive or other equity proceedings;
- (2) criminal prosecution, including a prosecution initiated by a prepayable criminal citation under City Code Article 19, § 71-2 {"Prepayable criminal citations"}; and
- (3) administrative proceedings, including one initiated by a prepayable environmental citation under City Code Article 1, § 40-14 {"Violations to which subtitle applies"}.

(c) *Remedies not exclusive.*

In pursuing a violation, the Floodplain Manager may use any 1 or more available remedies or enforcement actions. The initiation of any 1 remedy or enforcement action does not preclude pursuing any other remedy or enforcement action authorized by law. Neither damages, irreparable injury, nor the lack of an adequate remedy at law is a prerequisite to enforcement in equity.

**Subtitle 8. Administrative and Judicial Review**

**§ 8-1. Administrative review - In general.**

(a) *Right of appeal and hearing.*

Any person aggrieved by the action of the Floodplain Manager or other official charged with the enforcement of this Division I, whether as the result of the disapproval of an application, the issuance of a violation notice, an alleged failure to properly enforce this Division I, or otherwise:

- (1) may appeal the action to the Planning Director; and
- (2) on timely request, is entitled to a hearing on that appeal.

(b) *When and how taken.*

The appeal must:

- (1) be in writing;
- (2) state clearly the grounds on which the appeal is based;
- (3) if the person aggrieved desires a hearing on the appeal, contain an express statement to that effect; and

(4) be filed with the Director within 10 days of the action in dispute.

§ 8-2. **Administrative review - Delegation of hearing authority.**

(a) *In general.*

Hearings may be conducted by:

- (1) the Planning Director; or
- (2) a hearing officer designated by the Planning Director.

(b) *Scope of delegation.*

The Director may delegate to a hearing officer the authority to issue:

- (1) proposed or final findings of fact;
- (2) proposed or final conclusions of law;
- (3) proposed or final findings of fact and conclusions of law;
- (4) proposed or final orders; or
- (5) the final administrative decision of the Department.

§ 8-3. **Administrative review - Conduct of hearing.**

(a) *Notice.*

(1) The Planning Director must provide all parties reasonable written notice of the hearing.

(2) The notice must state:

- (i) the date, time, place, and nature of the hearing;
- (ii) the right of a party to be represented, at the party's own expense, by an attorney or, if permitted by law, other representative;
- (iii) the right of a party to call witnesses and submit documents or other evidence under § 8-4 {"Administrative review - Evidence"} of this subtitle; and
- (iv) that failure to appear for the scheduled hearing may result in an adverse action against the party.

(b) *Hearings to be open and informal.*

Except as otherwise provided by law or by rule or regulation of the Planning Director, all hearings must be:

- (1) open to the public; and

(2)conducted in an orderly but informal manner.

**§ 8-4. Administrative review - Evidence.**

(a) *In general.*

Except as otherwise provided by this section or by rule or regulation of the Planning Director, formal rules of evidence and trial procedures do not apply.

(b) *Right to submit.*

On a genuine issue of fact, a party is entitled to:

- (1)call witnesses;
- (2)offer evidence, including rebuttal evidence;
- (3)cross-examine any witness that another party or the Planning Director calls;  
and
- (4)present summation and argument.

(c) *Scope.*

The Planning Director or hearing officer:

- (1)may admit probative evidence that reasonable and prudent individuals commonly accept in the conduct of their affairs and give probative effect to that evidence;
- (2)may not exclude evidence solely on the basis that it is hearsay;
- (3)must give effect to a privilege recognized by law;
- (4)may receive documentary evidence in the form of copies or excerpts or through incorporation by reference;
- (5)may take official notice of a fact that is judicially noticeable or that is general, technical, or scientific and within the specialized knowledge of the Planning Department; and
- (6)may exclude evidence that is:
  - (i)incompetent;
  - (ii) irrelevant;
  - (iii) immaterial; or
  - (iv) unduly repetitious.

**§ 8-5. Administrative review - Final decisions.**

(a) *Form and contents.*

A final decision must:

- (1) be in writing; and
- (2) contain separate statements of:
  - (i) the findings of fact;
  - (ii) the conclusions of law; and
  - (iii) the decision or order.

(b) *Distribution.*

A copy of the final decision must be mailed or delivered to each party or that party's attorney of record.

[§ 8-6. *{Reserved}*]

**§ 8-6. Administrative appeals.**

(a) *Appeal to Commission.*

An applicant who is aggrieved by the final site plan decision of the Director of Planning may appeal that decision to the Planning Commission.

(b) *When filed.*

Appeals must be filed within 30 days of the Planning Director's final decision as specified in § 8-5 {"Administrative review- Final decisions"} of this subtitle.

(c) *Hearing.*

The Planning Commission must review the Director's decision at a public hearing held within 45 days of receiving the appeal.

**§ 8-7. Judicial and appellate review.**

(a) *Judicial review.*

A party aggrieved by a final decision of the Planning Department under this Division I may seek judicial review of that decision by petition to the Circuit Court for Baltimore City in accordance with the Maryland Rules of Procedure.

(b) *Appellate review.*

A party to the judicial review may appeal the court's final judgment to the Court of Special Appeals in accordance with the Maryland Rules of Procedure.

**Subtitle 9. Penalties.**

**§ 9-1. In general.**

Any person who violates or fails to comply with any provision of this Division I, any provision of a rule or regulation adopted under this Division I, or any term or condition of a permit issued under this Division I is guilty of a misdemeanor and, on conviction, is subject to a fine of not more than \$500 for each violation.

**§ 9-2. Department of Housing and Community Development to enforce.**

This Division I may be enforced by the Department of Housing and Community Development in the manner provided in § 104 {"Duties and powers of Building Official"} of the Baltimore City Building Code.

**§ 9-3 [ 9-2]. Each day a separate offense.**

(a) *In general.*

Every day that a violation continues is a separate offense.

(b) *Prima facie proof of continuation.*

Proof that a violation exists on any date that follows the issuance of a violation notice constitutes prima facie evidence that the violation has continued throughout the intervening period of time.

**§ 9-4 [ 9-3]. Penalty no substitute for remediation.**

(a) *In general.*

The imposition of a fine or penalty for a violation or noncompliance does not excuse the violation or noncompliance nor permit it to continue.

(b) *Remediation still required.*

All offenders are required to correct or remedy the violation or noncompliance within a reasonable time.

**Baltimore City Code**

**Article 32. Zoning**

**Title 4. Development Reviews**

***Subtitle 2. Site Plan Review***

**§ 4-203. Applicability.**

Site plan review is required for the following types of development applications:

(1) new construction that involves any of the following:

- (i) any proposed development over 15,000 square feet of gross floor area;
- (ii) developments with multiple structures on a single lot, excluding accessory structures; and
- (iii) all multi-tenant commercial development, including mixed-use development;

- (2) subdivision of land;
- (3) additions or structural alterations to an existing structure, other than a single-family detached or semi-detached dwelling, that results in a 50% increase in gross floor area over the gross floor area of the existing structure prior to the addition or alteration;
- (4) planned unit development;
- (5) conditional use, unless the conditional use can and will be fully contained within an existing structure;
- (6) parking lot or structures containing 5 or more motor vehicle parking spaces;
- (7) any development within an environmentally sensitive area, including projects in a [100-year floodplain] Floodplain District and projects within the Buffer of the Critical Area (*See* Subtitle 3 {“Environmentally Sensitive Areas Review”} of this title);
- (8) urban agriculture or community-managed open-space farm; and
- (9) any development within the C-5-IH Subdistrict.

## **Title 7. Open-Space and Environmental Districts**

### ***Subtitle 3. Floodplain Overlay Zoning District***

#### **§ 7-301. Definitions.**

(a) *In general.*

In this subtitle, the following terms have the meanings indicated.

(b) *Floodplain.*

“Floodplain” has the meaning stated in City Code Article 7 {“Natural Resources”}, § 1-2(v) {“Definitions: Floodplain”}.

(c) *Floodplain maps.*

“Floodplain maps” means the series of maps and profiles known as the Flood Insurance Rate Maps and Flood Insurance Study for the City of Baltimore, dated [February 2, 2012] June 16, 2021, as prepared, revised, or amended from time to time for the Federal Emergency Management Agency, Flood Insurance Administrator in accordance with City Code Article 7, Division I {“Floodplain Management”}.

(d) *Floodplain Overlay Zoning District; Floodplain District; Overlay District.*

“Floodplain Overlay Zoning District”, “Floodplain District”, or “Overlay District” means all areas shown as floodplains on the floodplain maps.

§ 7-304. Use regulations.

(b) *Floodway*.

The only uses allowed in the Floodway are the following recreational facilities, but not including accessory buildings:

- (1) athletic fields; and
- [(2) golf courses; and]
- (2) [(3)] parks.

**Baltimore City Revised Code**

**Article - Building, Fire, and Related Codes**

**Part II. International Building Code**

§ 2-103. City modifications.

The additions, deletions, amendments, and other modifications adopted by the City are as follows:

**Chapter 1. Scope and Administration**

**Section 107 Submittal Documents**

**107.2.1 General requirements.** The site plan must:

- 1. show to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades, and the proposed finished grades,
- 2. show, as applicable, Regulated Flood Hazard Areas, Floodways, and [design flood elevations] flood protection elevations,
- 3. be drawn in accordance with an accurate boundary line survey, and
- 4. comport with all other requirements of this section.

**Section 110 Inspections**

**110.3.3 Lowest floor elevation.** In a flood hazard area, on placement of the lowest floor [, including the basement,] and before undertaking any further vertical construction, the elevation certificate required by the Floodplain Management Code must be submitted to the Building Official.

**Chapter 16. Structural Design**

**Section 1603 Construction Documents**

**1603.1.7 Flood design data.** For structures located in whole or in part in a flood hazard area, the documentation pertaining to design, if required by the Floodplain

Management Code, must be included, and the following information, referenced to the datum on the City’s Flood Insurance Rate Map (FIRM), must be shown, regardless of whether flood loads govern the design of the structure:

1. In flood hazard areas not subject to high-velocity wave action, the elevation of the proposed lowest floor[, including the basement].
2. In flood hazard areas not subject to high-velocity wave action, the elevation to which any nonresidential building will be dry floodproofed.
3. In flood hazard areas subject to high-velocity wave action, the proposed elevation of the bottom of the lowest horizontal structural member of the lowest floor, including the basement.
4. Any other documentation required by the Flood Management Code.

**Part X. International Residential Code**

**§ 10-102. City modifications.**

The additions, deletions, amendments, and other modifications adopted by the City are as follows:

**Chapter 1. Scope and Administration**

**Section 109 Inspections**

*109.1.3 Floodplain inspections. For construction in a flood hazard area, placement of the lowest floor [, including the basement,] and before undertaking any further vertical construction, the elevation certificate required by the Floodplain Management Code must be submitted to the Building Official.*

**Table 301.2(1)**  
**Climatic and Geographic Design Criteria**

<i>Ground Snow Load</i>	<i>Wind Speed</i>	<i>Wind Topographic Effects</i>	<i>Special Wind Region</i>	<i>Wind-Borne Debris Zone</i>	<i>Seismic Design Category</i>
<i>30 psf</i>	<i>90 mph</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>B</i>

<i>Weathering</i>	<i>Frost Line Depth</i>	<i>Termite</i>
<i>Severe</i>	<i>30" (762 mm)</i>	<i>Moderate to Heavy [Decay: Slight to Moderate]</i>

Winter Design Temp	Ice Barrier Underlayment Required	Air Freezing Index	Mean Annual Temp
13° F	No	231	57° F

Flood Hazards			
a. Entry into National Flood Insurance Program: 3/15/78. Updated Code: [4/2/14] 6/16/2021. b. Flood Insurance Study: Revised [4/2/14] 6/16/2021. c. Panel numbers and dates of currently effective FIRMs:			
<u>Effective Date</u>		<u>Panels</u>	
	0001 [E] F - 0005 [E] F		
6/16/2021 [2/2/12]	0008 [E] F - 0016 [E] F		
6/16/2021 [2/2/12]	0018 [F] G [- 0019 F]		
6/16/2021 [4/2/14]	0019 F	4/2/14	0020
[E] F - 0023 [E] F			
6/16/2021 [2/2/12]	0024 G - 0025 G	6/16/2021	
[0024] 0026 F - [0036] 0028 F			
4/2/14	0030 G		
6/16/2021	0031 F - 0033 F	4/2/14	0035 f
4/2/14	0036 G		
6/16/2021			

**Section 3. And be it further ordained,** That the catchlines contained in this Ordinance are not law and may not be considered to have been enacted as a part of this or any prior Ordinance.

**Section 4. And be it further ordained,** That:

(a) *this Ordinance applies to all development for which a permit application is filed (or required to be filed) on or after the effective date of this Ordinance;*

(b) *except as expressly provided to the contrary in this Ordinance, any*

*transaction, case, proceeding, investigation, or other matter validly begun before the effective date of this Ordinance and affected by or flowing from any law amended or repealed by this Ordinance, and any right, duty, or interest flowing from any ordinance amended or repealed by this Ordinance, remains valid after the effective date of this Ordinance and may be terminated, completed, enforced, or prosecuted as required or permitted by the prior law as though the amendment or repeal has not occurred; and*

*(c) if any change in nomenclature involves a change in name or designation of any City agency or official, the successor agency or official has all the powers and obligations granted the predecessor agency or official.*

**Section 5. And be it further ordained,** That this Ordinance takes effect on the date it is enacted.