8.3 FLOODPLAINS (FP)

Contents:

- 8.3.1 Intent
- 8.3.2 Purpose
- 8.3.3 Applicability
- 8.3.4 District Boundaries
- 8.3.5 Definitions
- 8.3.6 Compliance with Other Regulations
- 8.3.7 Development Limitations
- 8.3.8 Notification of Watercourse Alteration

8.3.1 Intent

- a. To ensure public safety through reducing the threats to life and personal injury.
- b. To eliminate new hazards to emergency response officials.
- c. To prevent the occurrence of public emergencies resulting from water quality contamination and pollution due to flooding.
- d. To avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the community beyond the site of flooding.
- e. To eliminate costs associated with the response and cleanup of flooding conditions.
- f. To reduce damage to public and private property resulting from flooding.

8.3.2 Purpose

- a. To require development to be in compliance with applicable provisions of the Massachusetts State Building Code and Massachusetts General Laws.
- b. To appropriately limit development within floodways to reduce obstructions to flood flows and reduce flooding impacts on the community.

8.3.3 Applicability

- a. This section is applicable to real property located in the FP overlay district.
 - . The FP overlay district includes all special flood hazard areas within the City of Somerville designated as Zone AE on the Middlesex County Flood Insurance Rate Map (FIRM) dated July 8, 2025, issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program.
 - ii. The map panels of the Middlesex County FIRM, in effect as of July 8, 2025, that are wholly or partially within the City of Somerville are:
 - a) 25017C0417F
 - b) 25017C0419F
 - c) 25017C0436F
 - d) 25017C0438F
 - e) 25017C0439F
 - f) <u>25017C0576F</u>
 - g) 2501C00577F

- iii. The boundaries of the FP overlay district are defined by the 1% chance base flood elevations shown on the FIRM and further defined by the Middlesex County Flood Insurance Study (FIS) report dated July 8, 2025.
- iv. The FIRM and FIS report are incorporated herein by reference and are on file with the City Clerk, Planning Board, Building Official, Conservation Commission and City Engineer.
- b. The provisions of this Section supplement or supersede the provisions of the districts upon which it is superimposed.
- c. Where the provisions of this Section conflict with those found elsewhere in this Ordinance, the provisions of this Section apply.
- a.d. The degree of flood protection required by the FP overlay is considered reasonable but should not be considered to provide complete and total flood protection

8.3.4 Enforcement

a. The Building Official is the official floodplain administrator for the enforcement of this Section.

8.3.4 District Boundaries

- a. The FP overlay district includes all special flood hazard areas within the City of Somerville designated as Zone A or Zone AE on the Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program.
- b. The map panels of the Middlesex County FIRM, dated June 4, 2010, that are wholly or partially within the City of Somerville are:
 - i. 25017C0417E
 - ii. 25017C0419E
 - iii. 25017C0436E
 - iv. 25017C0438E
 - v. 25017C0439E
 - vi. -25017C0576E
 - vii. 25017C0577E
- c. The boundaries of the FP overlay district are defined by the 100-year base flood elevations shown on the FIRM and further defined by the Middlesex County Flood Insurance Study (FIS) report dated June 4, 2010.
- d. The FIRM and FIS report are incorporated herein by reference and are on file with the City Clerk, Planning Board, Building Official, Conservation Commission and City Engineer.

8.3.5 Definitions

- a. For the purpose of this overlay district alone, the definitions of 44 CFR 59.1 apply.
- a. This section defines the following words, phrases, and terms only for development subject to the FP overlay district.
- b. Development

Any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

c. Floodway

The channel of the river, creek, or other watercourse and the adjacent land areas that must be reserved to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

d. Functionally Dependent Use

A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

e. Highest Adjacent Grade

The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

f. Historic Structure

Any structure that is:

- i. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- <u>ii.</u> Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- iii. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- iv. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs.

g. New Construction

Structures for which the start of construction commenced on or after the effective date of the first floodplain management code, regulation, ordinance, or standard adopted by the authority having jurisdiction, including any subsequent improvements to such structures. New construction includes work determined to be substantial improvement.

h. Recreational Vehicle

A vehicle which is:

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

i. Special Flood Hazard Area

The land area subject to flood hazards and shown on a Flood Insurance Rater Map or other flood hazard map as Zone A, AE, A1-20, A99, AR, AO, AH, V, VO, VE, or V1-30.

j. Start of Construction

The date of issuance for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first

placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.

Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

k. Structure

For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

I. Substantial Repair of a Foundation

When work to repair or replace a foundation results in the repair or replacement of a portion of the foundation with a perimeter along the base of the foundation that equals or exceeds 50% of the perimeter of the base of the foundation measured in linear feet, or repair or replacement of 50% of the piles, columns or piers of a pile, column or pier supported foundation, the Building Official shall determine it to be substantial repair of a foundation. Applications determined by the Building Official to constitute substantial repair of a foundation shall require all existing portions of the entire building or structure to meet the requirements of 780 CMR.

m. Variance

A grant of relief by the Zoning Board of Appeals from the FP overlay district.

n. Violation

The failure of a structure or other development to be fully compliant with the FP overlay district. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3 is presumed to be in violation until such time as that documentation is provided.

8.3.6 Development Review

- a. Development is subject to the provisions of Article 15: Administration of this Ordinance.
- b. This Ordinance may also require Subdivision Plan Approval, Site Plan Approval, a Special Permit, or a Hardship Variance based on the nature of a development proposal. In such cases, additional development review is required in accordance with Article 15: Administration.
 - i. The Zoning Board of Appeals is the decision-making authority for all development that requires administrative or discretionary permit in the FP overlay district.
- c. All development within the FP overlay district including, but not limited to, new construction or modification of an existing structure, placement of a manufactured home, placement of an agricultural facility, fences, sheds, storage facilities or drilling, mining, paving and any other development that might increase flooding or adversely impact flood risks to other properties requires a Special Permit in accordance with the provisions of §15.2.1. Special Permit.
- d. In addition to the review criteria for all Special Permits specified in §15.2.1.e. Review Criteria, the Zoning Board of Appeals shall make findings considering the following in its discretion to approve or deny a special permit authorizing development within the FP overlay district:
 - Potential flood damage.
 - ii. Location and construction of public utilities and facilities and the potential for flood damage.
 - iii. Drainage.

- e. In addition to the review criteria for the issuance of a Hardship Variance specified in 15.2.3.e, the Zoning Board of Appeals may grant a Hardship Variance to the standards of the Floodplain overlay district only upon finding all of the following:
 - i. Good and sufficient cause and exceptional non-financial hardship exists.
 - <u>ii.</u> The variance permitted will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public.
 - iii. The variance permitted is the minimum action necessary to afford relief.
- f. The Zoning Board of Appeals shall attach conditions or limitations to any Subdivision Plan Approval, Site Plan Approval, Special Permit, or Hardship Variance that it deems necessary to assure the following:
 - i. Flood damage is minimized.
 - ii. The location and construction of public utilities and facilities minimize flood damage.
 - iii. Adequate drainage is provided.
- g. Applications for any Subdivision Plan Approval, Site Plan Approval, a Special Permit, or a Hardship Variance required for development within the FP overlay district must demonstrate that all necessary local, state, and federal permits to carry out the proposed development have been acquired.

8.3.6-7 Compliance with Other Regulations

- a. All development within the FP overlay district must be in compliance with, or operating under duly approved Hardship Variances from, the following regulations:
 - i. Section of the Massachusetts State Building Code which addresses floodplain and coastal high hazard areas (currently 780 CMR 120.G, "Flood Resistant Construction and Construction in Coastal Dunes").
 - ii. Wetlands Protection Regulations, Department of Environmental Protection (DEP) (currently 310 CMR 10.00)
 - iii. Sections of Massachusetts <u>General</u> Law which address altering of land bordering waters (currently Chapter 131, Section 40 of the Massachusetts General Laws)
 - iv. Inland Wetlands Restriction (currently 310 CMR 13.00)
 - v. Minimum Requirements for the Subsurface Disposal of Sanitary Sewage (currently 310 CMR 15, Title 5)
- b. Upon the issuance of a Variance from the Massachusetts State Building Code by the Building Code Appeal Board for development within the FP overlay district, the Building Official shall do the following:
 - i. Request a written transcript or audio or video recording of the portion of the hearing related to the variance for the public record.
 - ii. Issue written notification to the property owner of the potential impacts to the annual premiums for the flood insurance policy covering the property and that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and increase risks to life and property.
 - iii. Retain a copy of any notification sent to the property owner within the permit record for the property.

8.3.7-8 Development Limitations

- a. In "A" Zones, the Building Official shall use the best available Federal, State, local or other floodway data to prohibit encroachments in floodways which would result in any increase in flood levels within the overlay district during the occurrence of the base flood discharge.
- a. In Zones AE: Floodway Encroachments

- i. along Along watercourses that have regulatory floodways designated within the City of Somerville on the FIRM, encroachments including infill, new construction, substantial improvements, and other development are prohibited inwithin the regulatory floodway are prohibited unless which would result in hydrologic and hydraulic analysis in accordance with standard engineering best practices demonstrates that the proposed development would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- ii. along Along watercourses that have not had a regulatory floodway designated, no new construction, substantial improvement, or other development is permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood discharge. the best available Federal, State, local, or other floodway data must be used to prohibit encroachments in floodways which would result in any increase in flood levels during the occurrence of the base flood discharge.

b. Recreational Vehicles

. All recreational vehicles must be elevated and anchored in accordance with the foundation and elevation requirements of the FP overlay district unless the recreational vehicle will be placed on site for less than one hundred and eighty (180) consecutive days or be fully licensed and highway ready.

c. Subdivision

- i. Subdivisions or other development proposals that are greater than fifty (50) lots or five (5) acres, whichever is less, must include technical data to determine base flood elevations for each developable parcel shown on the proposed plans.
- b.d. The following uses of low flood damage potential and causing no obstructions to flood flows are encouraged provided they are permitted in the underlying district and they do not require structures, fill, or storage of materials or equipment:
 - outdoor recreational uses
 - ii. conservation of water, plants, wildlife
 - iii. buildings lawfully existing prior to the adoption of these provisions

8.3.8-9 Notification of Watercourse Alteration and Base Flood Elevation Changes

- a. The Building Official shall notify the following of any alteration or relocation of a watercourse:
 - i. Adjacent Municipalities
 - ii. The State Coordinator for the National Flood Insurance Program at the Massachusetts Department of Conservation and Recreation
 - iii. <u>The Program Specialist for the National Flood Insurance Program at the Federal Emergency Management Agency, Region 1 Office.</u>
- b. The Building Official shall provide notification of any new data that changes the base flood elevation of the special flood hazard areas within the City of Somerville designated on the Middlesex County FIRM by submitting the technical or scientific data that supports the change(s) to:
 - i. The State Coordinator for the National Flood Insurance Program at the Massachusetts Department of Conservation and Recreation.
 - <u>ii.</u> The Program Specialist for the National Flood Insurance Program at the Federal Emergency Management Agency, Region 1 Office.

8.3.10 Severability & Invalidity

a. If any provision of the Floodplains overlay district is declared unconstitutional or otherwise held invalid, the remaining provisions remain valid.