

PROPOSED AMENDMENT No. 2

For Public Hearing on Wednesday January 4, 2023

This amendment would update language in Article XIV Floodplain Development and Article XXI Definitions as required for continued participation in the National Flood Insurance Program.

[Showing proposed additions like this,](#)

~~[and proposed deletions like this.](#)~~

Article XIV Floodplain Development

The following regulations shall apply to all lands designated as s special flood hazard areas by the Federal Emergency Management Agency in its [“Flood Insurance Study for Grafton County of N.H., dated February 20, 2008 or as amended, together with the associated Flood Insurance Rate Maps dDated February 20, 2008 or as amended, April 15, 1986,](#) which are declared to be a part of this regulation and are hereby incorporated by reference. If any provision of this ordinance differs or appears to conflict with any provision of the Zoning Ordinance or other ordinance or regulation, the provision imposing the greater restriction or more stringent standard shall be controlling.

ITEM I.

All proposed development in any special flood hazard areas shall require a permit.

ITEM II.

The building inspector shall review all building permit applications for new construction or substantial improvements to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:

1. Be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic loads, including the effects of buoyancy,
2. Be constructed with materials resistant to flood damage,
3. Be constructed by methods and practices that minimize flood damages, and;

4. Be constructed with electrical heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

ITEM III.

Where new and replacement water and sewer systems (including on-site systems) are proposed in flood prone areas the applicant shall provide the Building Inspector with assurance that new and replacement sanitary sewage systems will be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from systems into flood waters, and on-site waste disposal systems will be located to avoid impairment to them or contamination from them during periods of flooding.

ITEM IV.

The building inspector shall maintain for public inspection, and finish upon request, any certification of flood proofing and the as built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and include whether or not such structures contain a basement. If the structure has been flood proofed, the as built elevation (in relation to mean sea level) to which the structure was flood proofed. The applicant must furnish this information.

ITEM V.

The building inspector shall review proposed developments to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334. It shall be the responsibility of the applicant to certify these assurances to the Building Inspector.

ITEM VI.

In riverine situations, prior to the alteration or relocation of a watercourse, the applicant for such authorization shall notify the Wetlands Bureau of the New Hampshire Environmental Services Department and submit copies of such notification to the Building Inspector, in addition to the copies required by the RSA 482-A: 3. Further, the applicant shall be required to submit copies of said notification to those adjacent communities as determined by the Building Inspector, including notice of all scheduled hearings before the Wetlands Bureau.

Within the altered or relocated portion of any watercourse, the applicant shall submit to the Building Inspector, certification provided by a registered professional engineer assuring that the flood carrying capacity of the watercourse can and will be maintained.

Along watercourses with a designated Regulatory Floodway no encroachments, including fill, new construction, substantial improvements, and other development are allowed within the floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in

accordance with standard engineering practices that the proposed encroachment would not result in any increase in flood levels within the community during the base flood discharge.

Until a Regulatory Floodway is designated along watercourses, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zone AE on the FIRM, unless it is demonstrated by the applicant that the cumulative effect of the proposed development, when combined with all existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

The Building Inspector shall obtain, review, and reasonably utilize any floodway data available from Federal, State, or other sources as criteria for requiring that all development located in Zone A meet the following floodway requirement:

“No encroachments, including fill, new construction, substantial improvements, and other development are allowed within the floodway that would result in any increase in flood levels within the community during the base flood discharge.”

ITEM VII.

1. In special flood hazard areas the Building Inspector shall determine the ~~100-year~~ base flood elevation in the following order of precedence according to the data available
 - a. In Zone AE, refer to the elevation data provided in the community' Flood Insurance Study and accompanying FIRM.
 - b. In Zone A the Building Inspector shall obtain, review, and reasonably utilize any ~~100-year~~ base flood elevation data available from any federal, state or other source including data submitted for development proposals submitted to the community (i.e. subdivisions, site approvals). Where a base flood elevation is not available or not known for Zone A, the base flood elevation shall be determined to be at least 2 feet above the highest adjacent grade.
2. The Building Inspector's ~~100-year~~ base flood elevation determination will be used as criteria for requiring in **Zone(s) A and AE** that:
 - A. ALL new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated to or above the ~~100-year~~ base flood level.
 - B. That all new construction and substantial improvements of non-residential structures have the lowest floor (including basement) elevated to or above the ~~100-year~~ base flood level: or together with attendant utility and sanitary facilities, shall:
 1. Be flood proofed so that below the 100 year flood elevation the structure is watertight with walls substantially impermeable to the passage of water;

2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and hydrodynamic loads and the effects of buoyancy; and:
3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section.

C. ALL manufactured homes to be placed or substantially improved within special flood hazard areas shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood level; and be securely anchored to resist floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

D. For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding are permitted providing the enclosed areas meet the following requirements:

1. The enclosed area is unfinished or flood resistant, useable solely for parking of vehicles, building access or storage.
2. The area is not a basement.
3. Shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

E. ALL recreational vehicles placed on sites within Zone A **or Zone AE** shall either:

1. Be on the site for fewer than 180 consecutive days;
2. Be fully licensed, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions ~~and ready for highway use~~; or
3. Meet all standards of this Ordinance ~~Section 60.3 (b) (1) of the National Flood Insurance Program Regulations~~ and the elevation and anchoring requirements for "manufactured homes" in this Ordinance ~~Paragraph (c) (6) of Section 60.3.~~

ITEM VIII. VARIANCES AND APPEALS:

~~1. The Zoning Board of Adjustment shall notify the applicant in writing that:~~

~~1. The issuance of a variance to construct 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;~~

~~2. Such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions.~~

1. Any order, requirement, decision or determination of the Building Inspector made under this Ordinance may be appealed to the Zoning Board of Adjustment as set forth in RSA 676:5.
2. If the applicant, upon appeal, requests a variance as authorized by RSA 674:33, ~~I(b)~~, the applicant shall have the burden of showing in addition to the usual variance standards under State Law:
 - a. That the variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense.
 - b. That if the requested variance is for activity within a designated regulatory floodway, no increase in flood levels during the base flood discharge will result.
 - c. That the variance is the minimum necessary, considering the flood hazard, to afford relief.

32. The Zoning Board of Adjustment shall notify the applicant in writing that (i) the issuance of a variance to construct below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions.

43. The community shall (i) maintain a record of all variance actions, include their justification for their issuance, and (ii) report such variances issued in its annual or biennial report submitted to FEMA's Federal Insurance Administrators.

~~2. The community shall:~~

~~A. Maintain a record of all variance actions, including their justification for their issuance, and;~~

- ~~B. Report such variances issued in its annual or biennial report submitted to FEMA's Federal Insurance Administrator.~~

3. The Zoning Board of Adjustment shall notify the applicant in writing that:

- ~~A. The issuance of a variance to construct 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;~~
- ~~B. Such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions.~~

4. The community shall:

- ~~A. Maintain a record of all variance actions, including their justification for their issuance, and;~~
- ~~B. Report such variances issued in its annual or biennial report submitted to FEMA's Federal Insurance Administrator.~~

In Article XXI Definitions:

Area of special flood hazard: is the land in the floodplain within the Town of Bethlehem subject to a one percent or greater chance of flooding in any given year. The area is designated as Zone A and AE on the FIRM, as the current definition relates to maps and Special Flood Hazard Areas (SFHA) that do not apply to Bethlehem.

Base Flood Elevation (BFE): means the elevation of surface water resulting from the base flood.

Development: means any man-made change to improved or unimproved real estate, including but not limited to other structures, mining, dredging, filling, grading, paving, excavating, ~~or~~ drilling operations, or storage of equipment or materials.

~~**Flood Hazard Boundary Map (FHBM):** means an official map of a community, issued by the Federal Emergency Agency, where the boundaries of the: flood, mudslide (i.e., mudflow)-related erosion areas having special hazards have been designated as Zones A, M, and/or E.~~

Flood Insurance Study (FIS): means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e. mudflow) and/or flood-related erosion hazards.

Flood Opening means an opening in a foundation or enclosure wall that allows automatic entry and exit of floodwaters. See FEMA "Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures.

~~**Functional dependent use:** means 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.~~

Lowest Floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

Manufactured Housing: Any structure, transportable in one or more sections, which, in the traveling mode, is 8 body feet or more in width and 40 body feet or more in length, or when erected on site, is 320 square feet or more, and which is built on an permanent chassis and is designed to be used as a dwelling with or without a permanent foundation when connected to required utilities, which include plumbing, heating and electrical heating systems contained therein. Manufactured housing as defined in this section shall not include presite built housing as defined in RSA 674:31 -a. For floodplain management purposes the term "manufactured home" includes park trailers, travel trailers, and other similar vehicles placed on site for greater than 180 consecutive days. This includes manufactured homes located in a manufactured home park or subdivision.

Mean Sea Level means, for the purposes of the National Flood Insurance Program , the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum to which base flood elevations shown on a community's Flood Insurance Rate Maps are referenced.

New Construction means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, *new construction* means structures for which the *start of construction* commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Special flood hazard area: ~~means an area having special flood, mudslide (i.e. Mudflow) and/or flood-related erosion hazards, and shown on an FIRM as Zone A,~~ (See Area of Special Flood Hazard).

Substantial Improvement: means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code

enforcement official and which are the minimum necessary to assure safe living conditions;
or

b. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

~~any combination of repairs, reconstruction, alteration, or improvements to a structure in which the cumulative cost equals or exceeds fifty percent of the market value of the structure. The market value of the structure should equal:~~

~~a. —the appraised value prior to the start of the initial repair or improvement, or~~

~~b. —In the case of damage, the value of the structure prior to the damage occurring.~~

~~For the 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 building commences, whether or not that alteration affects the external dimensions of the structure. This term includes structures that have incurred substantial damage, regardless of actual repair work performed. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".~~

Violation: when used in reference to floodplain development, means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations.

Water surface elevation: means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988 (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains.