

Hudson Planning Board
Proposed Zoning Amendment Warrant Articles for the
2024 March Town Meeting
March 12, 2024 – ALL Articles Passed

Article 34

Amend the Town Code, Chapter 218, Flood Damage Prevention, to address changes that were identified during a review by the NH Office of Planning and Development related to Floodplain Development in reference to the National Flood Insurance Program. (*See attached Chapter 218 changes*)

Amend Chapter 218 - Flood Damage Prevention, to address changes that were identified during a review by the NH Office of Planning and Development related to Floodplain Development in reference to the National Flood Insurance Program.

Amend Chapter 218 to read as follows (language to be deleted shown in ~~strikethrough~~; highlighted text means language to be added).

Chapter 218

**FLOOD DAMAGE
PREVENTION**

§ 218-1. Purpose; establishment; applicability. [Amended 11-7-1989 by Ord. No. O88-2; 3-13-2007 ATM, Art. 8]

- A. Purpose. Certain areas of the Town of Hudson, New Hampshire are subject to periodic flooding, causing serious damages to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. Therefore, the Town of Hudson, New Hampshire has chosen to become a participating community in the National Flood Insurance Program, and agrees to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as detailed in this Floodplain Management Ordinance.
- B. Establishment. This chapter, adopted pursuant to the authority of RSA 674:16, shall be known as Chapter 218, Flood Damage Prevention, of the Town of Hudson Zoning Ordinance. The regulations in this chapter shall overlay and supplement the regulations in the Town of Hudson Zoning Ordinance, and shall be considered part of the Zoning Ordinance for purposes of administration and appeals under state law. If any provision of this chapter 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.
- C. The following regulations in this chapter shall apply to all lands designated as special flood hazard areas by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study for the County of Hillsborough, N.H., dated September 25, 2009 **or as amended**, together with the associated Flood Insurance Rate Maps dated September 25, 2009 **or as amended**, including the revised map panels 33011C0514E and 3011C0652E dated April 18, 2011, which are declared to be a part of this chapter and are hereby incorporated by reference. [**Amended 8-25-2009; 3-22-2011**]

§ 218-2. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

AREA OF SPECIAL FLOOD HAZARD — The land in the floodplain within the Town of Hudson subject to a one-percent or greater chance of flooding in any given year. The area is designated as Zones A and AE on the Flood Insurance Rate Map.¹ [**Amended 3-13-2007 ATM, Art. 8**]

BASE FLOOD — The flood having a one-percent chance of being equaled or exceeded in any given year.

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

BASEMENT — Any area of the building having its floor subgrade (below ground level) on all sides.²

BUILDING — See "structure." [Added 3-13-2007 ATM, Art. 8]

DEVELOPMENT — Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. [Amended 3-13-2007 ATM, Art. 8]

FEMA — The Federal Emergency Management Agency.³ [Added 3-16-1996 by ATM Art. 38]

FIRM — See "Flood Insurance Rate Map."⁴

FLOOD or FLOODING — A general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters.
- B. The unusual and rapid accumulation or runoff of surface waters from any source.

~~**FLOOD HAZARD BOUNDARY MAP (FHBM)** — An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the flood, mudslide (i.e., mudflow) and related erosion areas having special hazards have been designated as Zones A, M and/or E.~~

FLOOD INSURANCE RATE MAP (FIRM) — The official map incorporated with this chapter, on which FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to the Town of Hudson. [Amended 3-13-2007 ATM, Art. 8]

FLOOD INSURANCE STUDY — 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. [Amended 3-13-2007 ATM, Art. 8]

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.”

FLOODPLAIN or FLOODPRONE AREA — Any land area susceptible to being inundated by water from any source. (See the definition of "flooding.")

FLOODPROOFING — Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY — See "regulatory floodway."

~~**FUNCTIONAL 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 shipbuilding and ship repair facilities, but does not include long term storage or related manufacturing facilities.~~

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

HISTORIC STRUCTURE [Added 3-16-1996 by ATM Art. 38] -- Any structure that is: —

- A. Listed individually in the National Register of Historic Places (a listing maintained by the

Department of the Interior) or preliminary determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- B. 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;
- C. 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
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior; or
 - (2) Directly by the Secretary of the Interior in states without approved programs.

LOWEST FLOOR — The lowest floor of the lowest enclosed area, including the 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 enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter.

MANUFACTURED HOME — A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. 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. [**Amended 3-13-2007 ATM, Art. 8**]

MANUFACTURED HOME PARK OR SUBDIVISION — A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MEAN SEA LEVEL — For 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 Map are referenced.

NEW CONSTRUCTION — 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 21, 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 improvement to such structures. [**Added 3-16-1996 by ATM Art. 38**]

~~ONE HUNDRED YEAR FLOOD~~ — See "base flood."

RECREATIONAL VEHICLE [**Added 3-18-1995 by Amendment No. 1**] -- **A vehicle which is: —**

- A. Built on a single chassis.
- B. Four hundred square feet or less when measured at the largest horizontal projection.
- C. Designed to be self-propelled or permanently towable by a light duty truck.

- D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

REGULATORY FLOODWAY — The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. **[Amended 3-13-2007 ATM, Art. 8]**

RIVERINE — Relating to, formed by or resembling a river (including tributaries), stream, brook, etc.

SPECIAL FLOOD HAZARD AREA — See "area of special flood hazard." **[Amended 3-13-2007 ATM, Art. 8]**

START OF CONSTRUCTION — Includes substantial improvement and means the date the building permit was issued, provided that the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The "actual start" means either 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 the placement of a manufactured home on a foundation. "Permanent construction" does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

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

SUBSTANTIAL DAMAGE — Damage of any origin sustained whereby 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. **[Added 3-16-1996 by ATM Art. 38]**

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 50% 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 specification which are solely necessary to assure safe living conditions—or any alteration of an historic structure,~~

~~provided that the alteration will not preclude the structure's continued designation as an historic structure.~~ [Amended 3-13-2007 ATM, Art. 8]

VIOLATION — The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), (e)(5) is presumed to be in violation until such time as that documentation is provided.⁵ [Added 3-16-1996 by ATM Art. 38; amended 3-13-2007 ATM, Art. 8]

WATER SURFACE ELEVATION — 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. [Amended 3-13-2007 ATM, Art. 8]

§ 218-3. Permit required.

All proposed development in any special flood hazard areas shall require a floodplain permit, to be issued by the Town Engineer.

§ 218-4. Duties of Town Engineer.

- A. The Town Engineer shall maintain for public inspection, and furnish upon request, any certification of flood proofing and the as-built elevation, in relation to **mean sea level NGVD**, of the lowest floor, including the basement, of all new or substantially improved structures, and include whether or not such structures contain a basement, or, if the structure has been flood proofed, the as-built elevation, in relation to **mean sea level NGVD**, to which the structure was flood proofed. This information must be furnished by the applicant. [Amended 3-13-2007 ATM, Art. 8]
- B. The Town Engineer 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 Town Engineer.
- C. (Reserved)⁶
- D. In special flood hazard areas, the Town Engineer shall determine the **base flood elevation** ~~one-hundred-year flood elevation~~ in the following order of precedence according to the data available: [Amended 3-18-1995 by Amdt. No. 1; 3-13-2007 ATM, Art. 8]
 - (1) In Zones ~~A and~~ AE, refer to the elevation data provided in the community's Flood Insurance Study and accompanying FIRM.
 - (2) In **Zone A** ~~A-Zones~~, the Building Inspector shall obtain, review, and reasonably utilize any **base flood elevation** ~~one-hundred-year 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.**
 - (3) All recreational vehicles placed on sites within Zones A and AE shall either be on the site for fewer than 180 consecutive days, 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 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 (e) (6) of Section 60.3.~~

- E. The Town Engineer's ~~base flood elevation one hundred year flood elevation~~ determination will be used as criteria for requiring in Zones A and AE that: **[Amended 3-13-2007 ATM, Art. 8]**
- (1) All new construction and substantial improvements of residential structures have the lowest floor, including the basement, elevated to or above the ~~base flood elevation one hundred year flood level.~~
 - (2) All new construction and substantial improvements of nonresidential structures have the lowest floor, including basement, elevated to or above the ~~base flood elevation one hundred year flood level;~~ or together with attendant utility and sanitary facilities, shall:
 - (a) Be flood proofed so that below the ~~base flood elevation one hundred year flood elevation~~ the structure is watertight with walls substantially impermeable to the passage of water;
 - (b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and
 - (c) Be certified by a licensed 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.
 - (3) 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 flotation, 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.
 - (4) For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding are permitted, provided that the enclosed areas meet the following requirements:
 - (a) The enclosed area is unfinished or flood-resistant, usable solely for parking of vehicles, building access or storage.
 - (b) The area is not a basement.
 - (c) The area shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect or must meet or exceed the following minimum criteria:
 - [1] A minimum of two ~~flood~~ 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.
 - [2] The bottom of all openings shall be no higher than one foot above grade.

- [3] Openings may be equipped with screens, louvers or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

§ 218-5. Duties of Building Inspector. [Amended 3-13-2007 ATM, Art. 8]

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 special flood hazard area, all new construction and substantial improvements shall:

- A. Be designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- B. Be constructed with materials resistant to flood damage.
- C. Be constructed by methods and practices that minimize flood damages and 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.

§ 218-6. Drainage and sanitary facilities.

Where new and replacement water and sewer system, including on-site systems, are proposed in **special flood hazard areas** ~~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 floodwaters into the systems and discharges from the systems into floodwaters, and on-site waste disposal systems will be located to avoid impairment to them or contamination from them during periods of flooding.

§ 218-7. Alteration or relocation of watercourse.

- A. 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 Department of Environmental Services and submit copies of such notification to the Building Inspector, in addition to the copies required by 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 Wetland Bureau (add here notice for local wetlands hearings if the community has a local wetlands ordinance). Further, the applicant shall demonstrate compliance with the Wetland Conservation Ordinance, Article IX of the Hudson Zoning Ordinance. **[Amended 3-13-2007 ATM, Art. 8]**
- B. Within the altered or relocated portion of any watercourse, the applicant shall submit to the Building Inspector certification provided by a licensed professional engineer assuring that the flood-carrying capacity of the watercourse has been maintained.
- C. 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. **[Amended 3-13-2007 ATM, Art. 8]**

- D. 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. **[Added 3-13-2007 ATM, Art. 8]**
- E. The Town Engineer 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 within the floodway that would result in any increase in flood levels within the community during the base flood discharge, including fill, new construction, substantial improvements, and other development, are allowed. **[Added 3-13-2007 ATM, Art. 8]**

§ 218-8. Administration; appeal procedure; variances.

- A. The Town Engineer, ~~with the approval of the Director of Public Works and Development,~~ shall prepare appropriate forms for application and issuance of the floodplain permit; the application forms may include reasonable application and review fees.
- B. The Town Engineer is the enforcing agent in the administration of this chapter.
- C. Appeal board; conditions for variances.
 - (1) Appeal board. A Joint Committee of the Zoning Board of Adjustment and the Building Board of Appeals (JCZBA/BBA) as respectively established by the Hudson Zoning Ordinance and the Hudson Building Code⁷ will hear and decide appeals and requests for variances from the requirements of this chapter. The JCZBA/BBA will hear and decide appeals when it is alleged that there is an error in any requirement, decision or determination made by the Town Engineer or the Building Inspector in the enforcement or administration of this chapter. Those aggrieved by the decision of the JCZBA/BBA or any taxpayer may appeal such decision to the Superior Court. In passing upon such applications, the JCZBA/BBA shall consider all technical evaluations, all relevant factors, standards specified elsewhere within this chapter and:
 - (a) The danger that materials may be swept onto other lands to the injury of others;
 - (b) The danger to life and property due to flooding or erosion damage;
 - (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (d) The importance of the services provided by the proposed facility to the community;
 - (e) The necessity of a waterfront location, where applicable;
 - (f) The availability of alternate locations for the proposed use which are not subject to flooding or erosion damage;
 - (g) The compatibility of the proposed use with existing and anticipated development;

- (h) The relationship of the proposed use to the Comprehensive Plan and floodplain management program for that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems and streets and bridges.
- (2) Upon consideration of the factors listed above, and the purposes of this chapter, the JCZBA/BBA may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter. The Town Engineer shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon its request.

D. Conditions for variances.

- (1) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places, without regard to the procedures set forth in the remainder of this section. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief. Variances shall only be issued upon:
- (a) A showing of good and sufficient cause.
 - (b) A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - (c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Subsection C(1) above or conflict with existing local laws or ordinances.
- (2) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

E. Any order, requirements, decision or determination of the Building Inspector made under this chapter may be appealed to the Zoning Board of Adjustment as set forth in RSA 676:5. **[Added 3-13-2007 ATM, Art. 8]**

- (1) If the applicant, upon appeal, requests a variance as authorized by RSA 674:33I(~~b~~), the applicant shall have the burden of showing, in addition to the usual variance standards under state law, that:
- (a) The variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense.

- (b) 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) The variance is the minimum necessary, considering the flood hazard, to afford relief.
- (2) Notification.
- (a) 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.
 - (b) Such notification shall be maintained with a record of all variance actions.
- (3) The community shall:
- (a) Maintain a record of all variance actions, including the justification for their issuance; and
 - (b) Report such variances issued in its annual or biennial report submitted to FEMA's Federal Insurance Administrator.