

Town and Village of Ludlow, Vermont Planning Commission

Notice of Public Hearing

Pursuant to the provisions of Title 24, Chapter 117, § 4441, of the Vermont Statutes Annotated, the Planning Commission for the Town and Village of Ludlow will conduct a public hearing for the residents, taxpayers, and interested persons in the Town and Village of Ludlow on the thirtieth day of April, 2013, at 6:00 P.M., in the Town Hall conference room to hear comments on the Town and Village of Ludlow Flood Hazard Area Regulations.

Statement of Purpose: It is the purpose of this bylaw to:

- A. Implement the goals, polices, and recommendations in the current Municipal Plan;
- B. Avoid and minimize the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding;
- C. Ensure that the selection, design, creation, and use of development is reasonably safe and accomplished in a manner that is consistent with public well being, does not impair flood plain services or the stream corridor;
- D. Manage the flood hazard area designated pursuant to 10 V.S.A. chapter 32 §753, the municipal hazard mitigation plan; and make the Town of Ludlow, its citizens, and businesses eligible for federal flood insurance, federal disaster recovery funds, and hazard mitigation funds as may be available.

Geographic Areas Affected: All Flood Hazard Areas of the Town and Village of Ludlow are affected by the Inundation Hazard Area Regulations.

List of Section Headings:

- I. Statutory Authorization and Effect
- II. Statement of Purpose
- III. Other Provisions
- IV. Lands to Which these Regulations Apply
- V. Development Review in Hazard Areas
- VII. Development Standards
- VIII. Administration
- IX. Certificate of Occupancy
- X. Enforcement and Penalties
- XI. Definitions



The proposed "Regulations" are on file with the Town Clerk, and copies are available at the Planning and Zoning Department, at the Town Hall, Monday through Friday, from 8:30 A.M. through 4:30 P.M.

Planning Commission Reporting Form for Municipal Bylaw Amendments

This report is in accordance with 24 V.S.A. §4441 (c) which states:

“When considering an amendment to a bylaw, the planning commission shall prepare and approve a written report on the proposal. A single report may be prepared so as to satisfy the requirements of this subsection concerning bylaw amendments and subsection 4384(c) of this title concerning plan amendments..... The report shall provide(:

(A) brief explanation of the proposed bylaw, amendment, or repeal and ...include a statement of purpose as required for notice under section §4444 of this title:

The Town of Ludlow is proposing to replace Article 6 of the existing *Town of Ludlow, Vermont Zoning and Flood Hazard Regulations* in order to clarify existing standards and procedures, improve consistency with Vermont model flood hazard regulations, add additional protections to improve flood resiliency, and to add a 50 foot stream setback provision for streams that are not included in FEMA’s special flood hazard areas. The purpose statement from the proposed amendment is as follows:

It is the purpose of this bylaw to:

- A. Implement the goals, policies, and recommendations in the current municipal plan;
- B. Avoid and minimize the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding;
- C. Ensure that the selection, design, creation, and use of development is reasonably safe and accomplished in a manner that is consistent with public wellbeing, does not impair flood plain services or the stream corridor;
- D. Manage the flood hazard area designated pursuant to 10 V.S.A. Chapter 32 § 753, the municipal hazard mitigation plan; and make the Town of Ludlow, its citizens, and businesses eligible for federal flood insurance, federal disaster recovery funds, and hazard mitigation funds as may be available.

(A)nd shall include findings regarding how the proposal:

1. Conforms with or furthers the goals and policies contained in the municipal plan, including the effect of the proposal on the availability of safe and affordable housing:

The proposed amendments further Ludlow’s Municipal Development Plan by addressing the following recommendations:

- Coordinate with the SWCRPC, VT Agency of Natural Resources, Black River Watershed Association, Lake Association to explore regulatory and non-regulatory implementation measures to address river corridor issues identified in recent Phase 1 and 2 Stream Geomorphic Assessments.
- Investigate options to better protect the river corridors, such as preserving or restoring the river channel access to the surrounding floodplains, reducing flood

flows with streambank buffers, protection of channel-contiguous wetlands, preserving or supporting a return to more natural channel dimensions, and avoiding new development and infrastructure within river corridors.

- Develop appropriate measures to protect or improve water quality in Ludlow's lakes, ponds, rivers, streams, and wetlands. Measures shall include requirements for adequate vegetative buffers and standards for development to control density, soil erosion, sedimentation, and pollution.
- Review current Flood Hazard Regulations to ensure consistency with the Municipal Plan.

2. Is compatible with the proposed future land uses and densities of the municipal plan:

The proposed amendment is compatible with the Municipal Development Plan. These changes generally do not change the future land use or densities proposed by the Plan; rather, they clarify the existing flood hazard standards and procedures that the Land Use Chapter addresses under Special Considerations on page 90 as well as Policy #5 on page 17. The additional stream setback standards help to address the recommendations listed above as well as the flooding and erosion damages experienced during Tropical Storm Irene.

3. Carries out, as applicable, any specific proposals for any planned community facilities.”

The proposed amendments do not carry out any planned community facilities. However, the new stream setback provisions do not preclude any future municipal bike path projects.

Please Note:

- ❖ The planning commission shall hold at least one public hearing within the municipality after public notice on any proposed bylaw, amendment or repeal and;
- ❖ At least **15** days prior to the first hearing, a copy of the proposed plan or amendment and the written report shall be delivered with proof of the receipt, or mailed by certified mail, return receipt requested, to each of the following:
 1. the chairperson of the planning commission of each abutting municipality, or in the absence of any planning commission in an abutting municipality, to the clerk of that abutting municipality;
 2. the executive director of the regional planning commission of the area in which the municipality is located;
 3. the department of housing and community affairs within the agency of commerce and community development.
- ❖ The planning commission may make revisions to the proposed bylaw, amendment, or repeal and to the written report, and shall then submit the proposed bylaw, amendment or repeal and the written report to the legislative body of the municipality.
- ❖ Simultaneously, with the submission, the planning commission shall file with the clerk of the municipality a copy of the proposed bylaw, amendment, or repeal, and the written report for public review.

VILLAGE OF LUDLOW
ARTICLE 6: FLOOD HAZARD AREA REGULATIONS

I. Statutory Authorization and Effect

In accordance with 10 V.S.A. Chapter 32, and 24 V.S.A. Chapter 117 §4424, §4411 and §4414, there is hereby established a bylaw for areas at risk of flood damage in the Village of Ludlow, Vermont. Except as additionally described below, all administrative procedures follow municipal procedures under 24 VSA Chapter 117.

II. Statement of Purpose

It is the purpose of this bylaw to:

- A. Implement the goals, policies, and recommendations in the current municipal plan;
- B. Avoid and minimize the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding;
- C. Ensure that the selection, design, creation, and use of development is reasonably safe and accomplished in a manner that is consistent with public wellbeing, does not impair flood plain services or the stream corridor;
- D. Manage the flood hazard area designated pursuant to 10 V.S.A. Chapter 32 § 753, the municipal hazard mitigation plan; and make the Village of Ludlow, its citizens, and businesses eligible for federal flood insurance, federal disaster recovery funds, and hazard mitigation funds as may be available.

III. Other Provisions

A. Precedence of Bylaw

The provisions of these flood hazard bylaws shall not in any way impair or remove the necessity of compliance with any other local, state, or federal laws or regulations. Where this flood hazard regulation imposes a greater restriction the provisions here shall take precedence.

B. Validity and Severability

If any portion of this bylaw is held unconstitutional or invalid by a competent court, the remainder of this bylaw shall not be affected.

C. Warning of Disclaimer of Liability

This bylaw does not imply that land outside of the areas covered by this bylaw will be free from flood damages. This regulation shall not create liability on the part of the Village of Ludlow, or any municipal official or employee thereof, for any flood damages that result from reliance on this regulation, or any administrative decision lawfully made hereunder.

IV. Lands to Which these Regulations Apply

A. Regulated Flood Hazard Areas

These regulations shall apply to the following areas:

1. Special Flood Hazard Area in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 § 753, which are hereby adopted by reference and declared to be part of these regulations. The location of the boundary shall be determined by the Zoning Administrator (ZA). If the applicant disagrees with the determination made by the ZA, a Letter of Map Amendment from FEMA shall constitute proof.
2. The stream setback area (or Local Flood Hazard Area, herein LFHA), includes the land areas within 50 feet of streams as measured perpendicular to the top of bank, located outside of the SFHA, as shown on the LFHA Overlay District Map. (The land areas depicted on this Map are illustrative of the LFHA, as they are mapped based on stream centerlines, not top of bank.)

B. Base Flood Elevations and Floodway Limits in Special Flood Hazard Areas

Where available, base flood elevations and floodway limits provided by the National Flood Insurance Program and in the Flood Insurance Study and accompanying maps shall be used to administer and enforce these regulations. In Special Flood Hazard Areas where base flood elevations and/or floodway limits *have not* been provided by the National Flood Insurance Program in the Flood Insurance Study and accompanying maps, it is the applicant's responsibility to develop the necessary data. Where available, the applicant shall use data provided by FEMA, or State, or Federal agencies.

V. Development Review in Hazard Areas

A. Permit

A permit is required from the Administrative Officer for all development in all areas defined in Section IV. Development that requires conditional use approval, non-conforming use approval, or a variance from the Development Review Board (DRB) under these flood hazard regulations, must have such approvals prior to the issuance of a permit by the ZA. Any development subject to municipal jurisdiction in the designated hazard areas shall meet the criteria in Section V and VI. Any permit issued will require that all other necessary permits from State or Federal Agencies have been received before work may begin.

Tables 5.1 and 5.2 list the required application review procedures for land uses and activities within the regulated flood hazard areas in accordance with Section IV.

Table 5.1 – Local Flood Hazard Area (LFHA)

#	Activity	Flood Zone
	P Permitted C Conditional Use Review X Prohibited A Exempted	LFHA (50 foot stream setback)
1	New structures	X
2	Junkyards, Storage Facilities	X
3	Additions to existing structures	C
4	Accessory structures for existing structures	C
5	Road, driveway or utility crossings / Bridges and culverts	C
6	Public outdoor recreational facilities	C
7	Agricultural & forestry activities in accordance with 24 V.S.A. §4413	A
8	Public utility power generating facilities regulated under 30 V.S.A. §248	A
9	Public utility transmission facilities regulated under 30 V.S.A. §248	A

Table 5.2 – Special Flood Hazard Areas

#	Activity	Hazard Zone	
		Special Flood Hazard Area	Floodway
	P Permitted C Conditional Use Review X Prohibited A Exempted		
1	New structures	C	X
2	Non-Substantial Improvements to Existing Structures	P	C
3	Substantial Improvement, Elevation, Relocation or Flood proofing of Existing Structures	C	C
4	Small accessory structures	P	X
5	At grade parking	P	C
6	Replacement water supply or septic systems	P	C
7	Fill as needed to elevate existing structures	C	X
8	Fill	C	X
9	Grading, Excavating or Creation of a Pond	C	C
10	Maintenance of Existing Roads and Storm Drainage	A	A
11	Road improvements	C	C
12	Bridges and culverts	C	C
13	Channel Management, Shoreline/Bank Stabilization	C	C
14	Recreational vehicles	P	P
15	Building utilities	P	C
16	Storage facilities, junk yards	X	X
17	Public utilities	C	C
18	Critical facilities	X	X
19	All other development not exempted, permitted or conditionally permitted	X	X
20	Removal of a Building or Other Structure	A	A

B. Permitted Development

For the purposes of review under these regulations, the development activities listed in Table 5.2 and located in the Special Flood Hazard Area where outside of the Floodway, and meeting the Development Standards in Section VI, require only an administrative permit from the ZA.

C. Prohibited Development in Special Flood Hazard Area

Tables 5.1 and 5.2 lists development activities that are prohibited in the floodway, floodway fringe and/or local flood hazard areas.

D. Conditional Use Review

Conditional use review and approval by the DRB, is required prior to the issuance of a permit by the ZA for the proposed development activities in accordance with Tables 5.1 and 5.2.

E. Exempted Activities

The development activities listed in Tables 5.1 and 5.2 are exempt from regulation under this bylaw.

F. Variances

Variances may be granted in writing by the DRB only in accordance with all the criteria in 24 V.S.A. § 4469, § 4424 (E), and 44 CFR Section 60.6, after a public hearing noticed as described in Section VII.

Any variance issued in the Special Flood Hazard Area will not increase flood heights, and will inform the applicant in writing over the signature of a community official that the issuance of a variance to construct a structure below the base flood elevation increases risk to life and property and will result in increased flood insurance premiums up to amounts as high as \$25 for \$100 of coverage. Such notification shall be maintained with a record of all variance actions.

G. Nonconforming Structures and Uses

The DRB may, after public notice and hearing, approve the repair, relocation, replacement, or enlargement of a nonconforming structure within a special flood hazard area provided that:

1. The proposed development is in compliance with all the Development Standards in Section VI of this bylaw;
2. A nonconforming structure that is substantially damaged or destroyed may be reconstructed only in circumstances when the structure cannot be relocated to a less hazardous location on the parcel. The lowest floor of the reconstructed structure must be rebuilt to one foot or more above the base flood elevation, and the structure must otherwise comply with all requirements of the National Flood Insurance Program;
3. Nonconforming structures or uses shall be considered abandoned where such structures or uses are discontinued for more than 12 months; and
4. An individual manufactured home lot in an existing manufactured home park that is vacated shall not be considered a discontinuance or abandonment of nonconformity. Replacement manufactured homes must be placed so as to meet the development standards in this bylaw.

VII. Development Standards – The criteria below are the minimum standards for development in the flood hazard areas. Where more than one zone or area is involved, the most restrictive standard shall take precedence.

A. Special Flood Hazard Area

1. *All development* shall be:
 - a. Reasonably safe from flooding;
 - b. Designed, operated, maintained, modified, and adequately anchored to prevent flotation, collapse, release, or lateral movement of the structure;
 - c. Constructed with materials resistant to flood damage;
 - d. Constructed by methods and practices that minimize flood damage;
 - e. 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;

- f. Adequately drained to reduce exposure to flood hazards;
 - g. Located so as to minimize conflict with changes in channel location over time and the need to intervene with such changes; and,
 - h. Required to locate any fuel storage tanks (as needed to serve an existing building in the Special Flood Hazard Zone) a minimum of one foot above the base flood elevation and be securely anchored to prevent flotation; or storage tanks may be placed underground, if securely anchored as certified by a qualified professional.
2. In Zones AE, AH, and A1 – A30 *where base flood elevations and/or floodway limits have not been determined*, development shall not be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated encroachment, will not increase the base flood elevation more than 1.00 foot at any point within the community. The demonstration must be supported by technical data that conforms to standard hydraulic engineering principles and certified by a registered professional engineer.
 3. *Structures to be substantially improved* in Zones A, A1-30, AE, and AH shall be located such that the lowest floor is at least one foot above base flood elevation, this must be documented, in as-built condition, with a FEMA Elevation Certificate;
 4. *Non-residential structures to be substantially improved* shall:
 - a. Meet the standards in VII A 3; or,
 - b. Have the lowest floor, including basement, together with attendant utility and sanitary facilities be designed so that two feet above the base flood elevation the structure is 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. A permit for flood proofing shall not be issued until a registered professional engineer or architect has reviewed the structural design, specifications and plans, and has certified that the design and proposed methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection.
 5. *Fully enclosed areas below grade* on all sides (including below grade crawlspaces and basements) are prohibited.
 6. *Fully enclosed areas that are above grade*, below the lowest floor, below BFE and subject to flooding, shall
 - a. Be solely used for parking of vehicles, storage, or building access, and such a condition shall clearly be stated on any permits; and,
 - b. Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Such designs must be certified by a

registered professional engineer or architect, or meet or exceed the following minimum criteria: A minimum of two openings on two walls 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, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

7. *Recreational vehicles* must be fully licensed and ready for highway use.
8. A *small accessory* structure of 500 square feet or less that represents a minimal investment need not be elevated to the base flood elevation in this area, provided the structure is placed on the building site so as to offer the minimum resistance to the flow of floodwaters and shall meet the criteria in VI A 6 (above).
9. *Water supply systems* shall be designed to minimize or eliminate infiltration of flood waters into the systems.
10. *Sanitary sewage systems* shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
11. *On-site waste disposal systems* shall be located to avoid impairment to them or contamination from them during flooding.
12. *The flood carrying and sediment transport capacity* within the altered or relocated portion of any watercourse shall be maintained, and any alteration or relocation shall not result in any decrease of stream stability;
13. *Bridges and culverts*, which by their nature must be placed in or over the stream, must have a stream alteration permit from the Agency of Natural Resources where applicable.
14. *Subdivisions and Planned Unit Developments* must be accessible by *dry land* access outside the special flood hazard area.
15. *Existing buildings, including manufactured homes, to be substantially improved in Zone AO* shall have the lowest floor, including basement, elevated above the highest adjacent grade, at least as high as the depth number specified on the community's FIRM, or at least two feet if no depth number is specified.

B. Floodway Areas

1. New fill and new structures in the floodway are prohibited.
2. Junkyards and storage facilities for floatable materials, chemicals, explosives, flammable liquids, or other hazardous or toxic materials are prohibited within the floodway.

3. Bank stabilization, channel management, public utility and bridge, culvert and road projects in the floodway are subject to conditional use approval as specified in Section V, and must have hydrologic and hydraulic analyses performed in accordance with standard engineering practice, by a registered professional engineer, certifying that the proposed development will:
 - a. Not result in any increase in flood levels (0.00 feet) during the occurrence of the base flood;
 - b. Not increase any risk to surrounding properties, facilities, or structures from erosion or flooding;
 - c. Not diminish the flood carrying and sediment transport capacity of the floodway in the opinion of the Vermont River Management Program.
4. Improvements to existing structures shall meet all applicable standards under Section VII (A) and are subject to conditional use approval as specified in Section V. Additions to existing structures that increase the building footprint area shall not be permitted until a Conditional Letter of Map Revision (CLOMR) is issued by FEMA.
5. Public utilities may be placed underground, and the analyses may be waived, where a registered professional engineer certifies that there will be no change in grade and the utilities will be adequately protected from scour.

C. Local Flood Hazard Area

1. In order to regulate the potential flood and erosion hazards in unmapped areas near streams and to minimize destabilization of streambanks, no structures, junkyards or storage facilities are allowed within 50 feet of the top of bank on streams as specified in Section IV.A(2).
2. Nonconformities are subject to Sections 261, 262 and 263 of the Zoning Bylaws. In addition to those standards, the following shall apply to nonconformities within the LFHA:
 - a. Additions to nonconforming structures shall not increase the degree of nonconformance.
 - b. Accessory structures may be located within 50 feet of the existing nonconforming primary building provided that the location does not decrease the distance between the existing primary structure and the top of bank.
 - c. A nonconforming structure that is unintentionally destroyed by fire, disaster or other unintentional cause may be reconstructed in place only in circumstances when the structure cannot be relocated to be a minimum of 50 feet from the top of bank.
3. Development shall not increase the potential of materials being swept onto other lands or into the stream and causing damage to other properties;

VIII. Administration

A. Application Submission Requirements

1. Applications for development shall include:

- a. Where applicable, a site plan that depicts the proposed development, all water bodies, stream setbacks, Special Flood Hazard Areas, floodways, any existing and proposed drainage, any proposed fill, and pre and post development grades, and the elevation of the proposed lowest floor, as referenced to the same vertical datum as the elevation on the current Flood Insurance Rate Maps;
- b. A Vermont Agency of Natural Resources Project Review Sheet for the proposal. The Project Review Sheet shall identify all State and Federal agencies from which permit approval is required for the proposal, and shall be filed as a required attachment to the municipal permit application. The identified permits, or letters indicating that such permits are not required, shall be submitted to the ZA and attached to the permit before work can begin;

B. Referrals

1. Upon receipt of a complete application for a substantial improvement or new construction the ZA shall submit a copy of the application and supporting information to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, in accordance with 24 V.S.A. § 4424. A permit may be issued only following receipt of comments from the Agency, or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner.

2. If the applicant is seeking a permit for the alteration or relocation of a watercourse, copies of the application shall also be submitted to the adjacent communities, the Stream Alteration Engineer at the Vermont Agency of Natural Resources, and the Army Corps of Engineers. Copies of such notice shall be provided to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation. A permit may be issued only following receipt of comments from the Vermont Agency of Natural Resources, or the expiration of 30 days from the date the application was mailed to the Vermont Agency of Natural Resources, whichever is sooner. The Board should consider comments from the NFIP Coordinator at ANR.

C. Decisions

The DRB shall consider comments from the NFIP Coordinator at ANR in reaching a decision on the application. The DRB may recess the proceedings on any application pending submission of additional information.

D. Records

The Administrative Officer shall properly file and maintain a record of:

1. All permits issued in areas covered by this bylaw;
2. Elevation Certificates with the as-built elevation (consistent with the datum of the elevation on the current Flood Insurance Rate Maps for the community) of the lowest

floor, including basement, of all new or substantially improved buildings (not including accessory buildings) in the Special Flood Hazard Area

3. All flood proofing and other certifications required under this regulation; and,
4. All decisions of the Board (including variances and violations) and all supporting findings of fact, conclusions and conditions.

IX Certificate of Occupancy

In accordance with Chapter 117 §4449, it shall be unlawful to use or occupy, or permit the use or occupancy of any land or structure, or part thereof, created, erected, changed, converted, or wholly or partly altered or enlarged in its use or structure within Special Flood Hazard Area until a certificate of occupancy is issued therefore by the Administrative Officer, stating that the proposed use of the structure or land conforms to the requirements of these bylaws. A certificate of occupancy is not required for structures that were built in compliance with the bylaws at the time of construction and have not been improved since the adoption of this bylaw. Within 14 days of the receipt of the application for a certificate of occupancy, the ZA shall inspect the premises to ensure that all permits identified on the Project Review Sheet have been acquired and all that all work has been completed in conformance with the zoning permit and associated approvals. If the ZA fails to grant or deny the certificate of occupancy within 14 days of the submission of the application, the certificate shall be deemed issued on the 15th day. If a Certificate of Occupancy can not be issued, notice will be sent to the owner and copied to the lender.

X. Enforcement and Penalties

A. This bylaw shall be enforced under the municipal zoning bylaw in accordance with 24 VSA § 1974a, § 4451, and § 4452. A copy of the notice of violation will be mailed the State NFIP Coordinator.

B. If any appeals have been resolved, but the violation remains, the ZA shall submit a declaration to the Administrator of the National Flood Insurance Program requesting a denial of flood insurance to the property pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

C. Violations of the Accepted Agricultural Practices shall be enforced under this Section as violations of this bylaw. Such violations shall also be immediately reported to the Secretary of Agriculture for enforcement under 6 V.S.A. Section 4812.

XI. Definitions

For the purposes of these Regulations, meanings for the following words and phrases shall be as defined below. All other words shall retain their dictionary meaning unless such meanings run counter to the purposes and objectives of Ludlow's bylaws or Municipal Development Plan. The definitions of terms defined in Title 44 of the Code of Federal Regulations, Chapter 1, Subchapter B as well as Section 4303 of V.S.A. Title 24, Chapter 117, and not otherwise defined herein are made a part of these Regulations.

“Accessory Structure” means a structure which is: 1) detached from and clearly incidental and subordinate to the principal use of or structure on a lot, 2) located on the same lot as the principal structure or use, and 3) clearly and customarily related to the principal structure or use. For residential uses these include, but may not be limited to garages, garden and tool sheds, and playhouses.

“Area of Special Flood Hazard” is synonymous in meaning with the phrase “special flood hazard area” for the purposes of these regulations.

“Base Flood” means the flood having a one percent chance of being equaled or exceeded in any given year (commonly referred to as the “100-year flood”).

“Base Flood Elevation” (BFE) is the elevation of the water surface elevation resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year. On the Flood Insurance Rate Map the elevation is usually in feet, in relation to the National Geodetic Vertical Datum of 1929, the North American Vertical Datum of 1988, or other datum referenced in the Flood Insurance Study report, or the average depth of the base flood, usually in feet, above the ground surface.

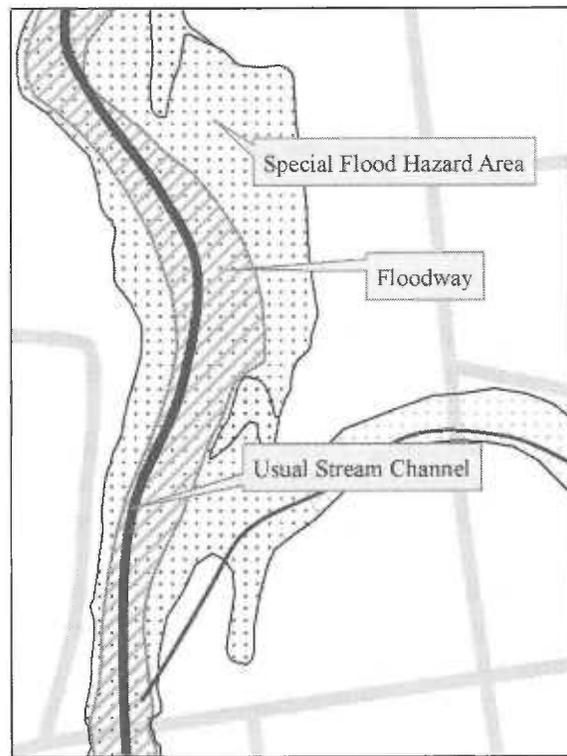
“Basement” is any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides. (see definition of “Lowest Floor” and Sections VII 5 and 15)

“BFE” see Base Flood Elevation

“Common plan of development” is where a structure will be refurbished over a period of time. Such work might be planned unit by unit.

“Critical facilities” - include police stations, fire and rescue facilities, hospitals, shelters, schools, nursing homes, water supply and waste treatment facilities, and other structures the community identifies as essential to the health and welfare of the population and that are especially important following a disaster. For example, the type and location of a business may raise its status to a Critical Facility, such as a grocery or gas station.

“Development” means any human-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.

“Elevated building” is a building that has no basement and has its lowest elevated floor raised above the ground level by foundation walls, shear walls, posts, piers, pilings or columns.

“Fill” means any placed material that changes the natural grade, increases the elevation, or diminishes the flood storage capacity at the site.

“FIRM” see Flood Insurance Rate Map

“Flood” means (a) a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and mudslides which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current. (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

“Flood Insurance Rate Map” (FIRM) means an official map of a community, on which the Federal Insurance Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community. In some communities the hazard boundaries are available in paper, pdf, or Geographic Information System formats as a Digital Flood Insurance Rate Map (DFIRM).

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

“Floodplain or flood-prone area” means any land area susceptible to being inundated by water from any source (see definition of “flood”).

“Flood proofing” means any combination of structural and non-structural 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” means 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 one foot at any point. Please note that Special Flood Hazard Areas and floodways may be shown on a separate map panels.

“Floodway, Regulatory in Town of Ludlow” means 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 one foot at any point.

“Functionally dependent use” means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water.

“Historic structure” means any structure that is: (a) 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; (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: (i) by an approved state program as determined by the Secretary of the Interior or (ii) directly by the Secretary of the Interior in states without approved programs.

“Letter of Map Amendment (LOMA)” is a letter issued by the Federal Emergency Management Agency officially removing a structure or lot from the flood hazard zone based on information provided by a certified engineer or surveyor. This is used where structures or lots are located above the base flood elevation and have been inadvertently included in the mapped special flood hazard area.

“Lowest floor” means the lowest floor of the lowest enclosed area, including basement, except 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 non-elevation design requirements of 44 CFR 60.3.

“Local Flood Hazard Area (or LFHA)” includes the land areas within 50 feet of streams as measured perpendicular to the top of bank, located outside of the SFHA, as shown on the LFHA Overlay District Map. (The land areas depicted on this Map are illustrative of the LFHA, as they are mapped based on stream centerlines, not top of bank.)

“Manufactured home (or Mobile home)” means 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. The term “manufactured home” does not include a “recreational vehicle”.

“New construction” for regulation under this bylaw, means structures for which the *start of construction* commenced on or after the effective date of the floodplain management

regulation adopted by the community and includes any subsequent improvements to such structures.

“Non-residential” includes, but is not limited to: small business concerns, churches, schools, nursing homes, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, government buildings, mercantile structures, agricultural and industrial structures, and warehouses.

“Public outdoor recreational facilities” outdoor recreation facilities that are open to the general public, such as bicycle paths, hiking trails and ball fields.

“Recreational vehicle” means a vehicle which is: (a) Built on a single chassis; (b) 400 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; and (d) Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

“Special Flood Hazard Area” is the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. For purposes of these regulations, the term “area of special flood hazard” is synonymous in meaning with the phrase “special flood hazard area”. This area is usually labeled Zone A, AO, AH, AE, or A1-30 in the most current flood insurance studies and on the maps published by the Federal Emergency Management Agency. Maps of this area are available for viewing in the municipal office or online from the FEMA Map Service Center: msc.fema.gov. Base flood elevations have not been determined in Zone A where the flood risk has been mapped by approximate methods. Base flood elevations are shown at selected intervals on maps of Special Flood Hazard Areas that are determined by detailed methods. Please note, where floodways have been determined they may be shown on separate map panels from the Flood Insurance Rate Maps.

“Start of construction” for purposes of floodplain management, determines the effective map or bylaw that regulated development in the Special Flood Hazard Area. The “start of construction” includes substantial improvement, and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition 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, footing, 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. 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, regardless whether that alteration affects the external dimensions of the building.

“Stream Setback” see Local Flood Hazard Area

“Structure” means, for regulatory purposes under this bylaw, a walled and roofed building, as well as a manufactured home, and any related built systems, including gas or liquid storage tanks.

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

“Substantial improvement” means any reconstruction, rehabilitation, addition, or other improvement of a structure after the date of adoption of this bylaw, the cost of which, over three years, or over a the period of a common plan of development, cumulatively 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 specification 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”.

“Violation” means the failure of a structure or other development to be fully compliant with this bylaw. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR 60.3 is presumed to be in violation until such time as that documentation is provided.

XII. Adoption; Effective Dates of Regulations

These Regulations were adopted by the Selectboard in accordance with 24 V.S.A. §4442.

These Flood Hazard Area Regulations hereby amend and supersede Article 6 of the *Town of Ludlow, Vermont Zoning and Flood Hazard Regulations*. These Regulations are effective 21 days after their adoption by a majority of the legislative body.

Date of Adoption: _____

Effective Date: _____

