DIVISION 24. - FHO FLOODPLAIN OVERLAY DISTRICT

Sec. 3240 - Purpose.

- (a) The purpose of these floodplain provisions is to prevent the following hazards:
  - (1) The loss of life and property;
  - (2) The creation of health and safety hazards;
  - (3) The disruption of commerce and governmental services;
  - (4) The extraordinary and unnecessary expenditure of public funds for flood protection and relief; and,
  - (5) The impairment of the tax base.
- (b) These provisions are designed to accomplish the above purposes by:
  - Regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;
  - (2) Restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding;
  - (3) Requiring all those uses, activities, and developments that do occur in floodprone areas to be protected and/or floodproofed against flooding and flood damage;
  - (4) Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3241 - Applicability.

These provisions shall apply to all lands in the Town of Blacksburg. Floodplain areas shall be identified as follows:

- (a) Areas within the 100-year floodplain, as identified in the Flood Insurance Study Report
  (FIS) and accompanying maps prepared for the Town by the Federal Emergency
  Management Agency, Federal Insurance Administration.
- (b) Areas within the 100-year floodplain of a tributary with a drainage area of one hundred (100) acres or more, except in the Downtown Commercial or General Commercial zoning districts.

(Ord. No. 1529, § 1, 8-11-09)

- (a) No land shall hereafter be developed and no structure shall be located, relocated, constructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this Section and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this Section.
- (b) The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that areas outside the floodplain area or that land uses permitted within such area will be free from flooding or flood damages.
- (c) Records of actions associated with administering this ordinance shall be kept on file and maintained by the Department of Engineering and GIS.
- (d) This ordinance shall not create liability on the part of the Town of Blacksburg or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3243 - Delineation of areas.

- (a) The various floodplain areas defined in [sub]section <u>3241(a)</u> shall include areas subject to inundation by waters of the 100-year flood. The primary basis for the delineation of these areas shall be the flood insurance study for Montgomery County and Incorporated Areas as prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated September 25, 2009, as amended. These areas are more specifically defined as follows:
  - The floodway is delineated for purposes of this ordinance, using the criteria that a certain area within the floodplain must be capable of carrying the waters of the 100-year flood without increasing the water surface elevation of that flood more than one (1) foot at any point. These Floodways are specifically defined in Table 4 of the Flood Insurance Study (FIS) and shown on the accompanying Flood Insurance Rate Map (FIRM) (on file with the Blacksburg Engineering and GIS department).
  - (2) The Special Flood Hazard Area shall be that area of the 100-year floodplain not included in the Floodway. The basis for the outermost boundary of the Special Flood Hazard Area shall be the 100-year flood elevations contained in the flood profiles of the abovereferenced Flood Insurance Study and as shown on the Flood Insurance Rate Map accompanying the study.
  - (3) The Approximated Floodplain shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a 100-year floodplain boundary has been approximated. Such areas may be on the Flood Insurance Rate Map. For these areas,

the 100-year flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific 100-year flood elevation cannot be determined for this area using other sources of data, such the U.S. Army Corps of Engineers Floodplain Information Reports, U.S. Geological Survey Flood Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Town of Blacksburg.

(b) The various floodplain areas defined in [sub]section <u>3241(b)</u> shall include areas subject to inundation by the 100-year flood. The primary basis for delineation of these areas shall be submitted by the applicant, as established by a professional engineer using acceptable methods of study. If a previous study exists in the floodplain area that is no older than one (1) year from its date of recordation with the Town, and the conditions of the floodplain have remained unchanged since their recordation with the Town, the applicant may use this floodplain information for their delineation.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3244 - Creation of overlay.

- (a) The floodplain areas described in [sub]section <u>3241(a)</u> above shall be an overlay to the existing underlying zoning districts as shown on the FIRM map and as such, the provision for the floodplain areas shall serve as a supplement to the underlying zoning district provisions.
- (b) The floodplain areas described in [sub]section<u>3241(b)</u> above shall be an overlay to existing underlying zoning districts as shown on a recorded plat or plan on file in the Engineering and GIS Department.
- (c) In case of conflict between the provisions or requirements of this district and the underlying district, the more restrictive provisions shall apply.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3245 - Official zoning map.

- (a) The boundaries of the floodplain areas described in [sub]section<u>3241(a)</u> above are established as shown on the Flood Insurance Rate Map which is declared to be a part of this ordinance and which shall be kept on file at the Town of Blacksburg, Engineering and GIS Department.
- (b) The boundaries of the floodplain areas described in [sub]section<u>3241(b)</u> above are established as shown on plats or plans recorded and filed with the Planning and Building

Department.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3246 - Floodplain boundary changes and interpretation.

- (a) The delineation of any floodplain areas described in <u>Section 3241</u> above may be revised by Town Council where natural or manmade changes have occurred and /or where more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any such change of floodplain areas described in [sub]section <u>3241</u>(a), approval must be obtained from the Federal Insurance Administration.
- (b) Initial interpretations of the boundaries of the floodplain areas shall be made by the Administrator. Should a dispute arise concerning the boundaries of any of the floodplain areas, the Board of Zoning Appeals shall make the necessary determination. The person questioning or contesting the location of the floodplain area boundary shall be given an opportunity to present his or her case to the Board of Zoning Appeals and to submit technical evidence. Procedures for such appeals shall be as outlined in <u>Section 1243</u> of this ordinance.
- (c) Where floodplain areas described in [sub]section<u>3241(b)</u> above exist, initial interpretations of the boundary of the floodplain areas shall be made by the Administrator. If the boundary was recorded longer than one (1) year ago, or if floodplain changes have occurred, the Town Engineer may require the applicant to conduct a boundary study.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3247 - Floodplain area provisions, generally.

- (a) All uses, activities, and development occurring within any floodplain area shall be undertaken only upon the issuance of a zoning permit. Such development shall be undertaken only in strict compliance with the provisions of this Section and with all other applicable codes and ordinances such as the Virginia Uniform Statewide Building Code and the Town of Blacksburg Subdivision Ordinance. Prior to the issuance of any such permit, the Administrator shall require all applications to include compliance with all applicable state and federal laws.
- (b) Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways or any watercourse, drainage ditch, or any other drainage facility or system.
- (c) Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this district a permit shall be obtained from the U.S. Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission. (A joint permit application is available from any of these organizations.)

Furthermore, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Division of Dam Safety and Floodplain Management (Department of Conservation and Recreation) and the Federal Insurance Administration.

- (d) All applications for development within any floodplain district and all building permits issued for the floodplain shall incorporate the following information:
  - (1) The elevation of the base flood at the site.
  - (2) The elevation of the lowest floor (including basement).
  - (3) For structures to be floodproofed (nonresidential only), the elevation to which the structure will be floodproofed.
- (e) Recreational vehicles shall not be placed within this zoning district.
- (f) For areas described in [sub]section <u>3241(a)</u> and for floodplain areas described in [sub]section <u>3241(b)</u> no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the 100-year flood elevation.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3248 - Floodway development regulations.

- (a) In the Floodway, Special Flood Hazard Area, and Approximated Floodplain, no development shall be permitted except where the effect of such development on flood heights is fully offset by accompanying improvements which have been approved by all appropriate authorities as required above.
- (b) The placement of any manufactured home within the Floodway, Special Flood Hazard Area, and Approximated Floodplain is specifically prohibited. No manufactured home park within a flood hazard district may be expanded beyond the present capacity at the adoption date of this section.
- (c) In the Floodway, Special Flood Hazard Area, and Approximated Floodplain, the following Use Types and activities are permitted provided that they are permitted by the provisions of the underlying Zoning District, provided, that any structures associated with these uses are permitted only if they have no walls:

<u>Agriculture</u>

Agriculture

**Residential** 

Accessory residential uses such as yard areas, gardens, play areas, and parking areas.

<u>Civic</u>

**Community Recreation** 

**Public Recreation** 

**Open Space** 

**Commercial** 

Golf Course

- (d) The following uses and activities may be permitted by conditional use pursuant to Article I, Division 8 of this ordinance [Appendix] provided that they are in compliance with the provisions of the underlying Zoning District and are not prohibited by this or any other ordinance:
- (1) Certain utilities and public facilities and improvements such as pipe lines, water and sewage treatment plants, and other similar or related uses.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3249 - Variances.

- (a) The following guidelines and conditions will be considered by the Board of Zoning Appeals in granting or denying variances to the requirements of this section, in addition to the conditions contained in Article I of this ordinance [Appendix]:
  - (1) Variance requests may be granted for the reconstruction, rehabilitation, or restoration of historic structures upon a determination that the proposed work will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
  - (2) Variances shall not be granted within any floodway for any use, development or activity that will cause any increase in the 100-year flood elevation.
  - (3) Variances may be granted only after the Board of Zoning Appeals has determined that the granting of a variance will not result in:
    - (a) Unacceptable or prohibited increases in flood heights,
    - (b) Additional threats to public safety;
    - (c) Extraordinary public expense; and will not
    - (d) Create nuisances,
    - (e) Cause fraud or victimization of the public, or
    - (f) Conflict with local laws or ordinances.
  - (4) Variances shall only be issued after the Board of Zoning Appeals has determined that the variance will be the minimum relief to any hardship.
- (b) The Board of Zoning Appeals may refer any application and accompanying documentation

pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for protection and other related matters. The Board of Zoning Appeals shall consider the following factors, in making its determinations under subsection (a), above:

- (1) The danger that materials may be swept on to other lands or downstream to the injury of others;
- (2) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The requirements of the facility for a waterfront location;
- (6) The availability of alternative locations not subject to flooding for the proposed use;
- (7) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for the area;
- (9) The safety of access by ordinary and emergency vehicles to the property in time of flood;
- (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.
- (c) The Board of Zoning Appeals shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the 100-year flood elevation (a) increases the risks to life and property, and (b) will result in increased premium rates for flood insurance. A record of the above notification as well as all variance actions, including justification for their issuance, shall be maintained and any variances which are issued shall be noted in the annual report submitted to the Federal Insurance Administration.

(Ord. No. 1529, § 1, 8-11-09)

- Sec. 3249.1 Existing structures in floodplain areas.
  - (a) A structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, shall be considered a "nonconforming" use or structure, governed by the provisions of Article I, Division 13 of this ordinance {Appendix].
  - (b) Any modification, alteration, repair, reconstruction, or improvement of any kind to a

structure and/or use located in any floodplain areas to an extent or amount of less than fifty (50) percent of its market value shall conform to the Virginia Uniform Statewide Building Code.

(c) The modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use, regardless of its location in a floodplain area to an extent or amount of fifty (50) percent or more of its market value shall be undertaken only in full compliance with this ordinance and shall require the entire structure to conform to the Virginia Uniform Statewide Building Code.

(Ord. No. 1529, § 1, 8-11-09)

Sec. 3249.2 - Supplemental definitions (Floodplain Overlay District only).

For the purposes of this Division, certain terms and words used herein shall be interpreted as follows:

BASEMENT—Any area of the building having its floor sub-grade (below ground level) on all sides.

ELEVATED BUILDING—A nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, or columns (posts and piers).

ENCROACHMENT—The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION—A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION—The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

# FLOOD OR FLOODING:

- A general or temporary condition of partial or complete inundation of normally dry land areas from (a) the overflow of inland or tidal water, or (b) the unusual and rapid accumulation or runoff of surface waters from any source;
- (2) The collapse or subsistence 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 an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in [paragraph] (1)(a) of this definition;

(3) Mudflows which are proximately caused by flooding as defined in paragraph (a)(2) of this definition 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.

MANUFACTURED HOME—A structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. Manufactured home also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days.

MANUFACTURED HOME PARK OR SUBDIVISION—A parcel (or contiguous parcels) or land divided into two (2) or more manufactured home lots for rent or sale.

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 Flood Insurance Rate Map on 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 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.

SHALLOW FLOODING AREA—A special flood hazard area with base flood depths from one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

SPECIAL FLOOD HAZARD AREA—The land in the floodplain subject to a one (1) percent or greater chance of being flooded in any given year.

START OF CONSTRUCTION—The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within one hundred eighty (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 on the property of accessory building, 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 the construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

WATERCOURSE—A lake, river, creek, stream, wash, channel or other topographic feature on or over which water flows at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

(Ord. No. 1529, § 1, 8-11-09)