

## CHAPTER 128. Floodplain Ordinance.

*Editor's Note: This is proposed as Page County Code Chapter 128, replacing the current Chapter 128 – Campgrounds which has been incorporated into the revised draft Zoning Ordinance.*

### Division 1. General Provisions

#### Section 128.1. – Authority.

This Chapter is adopted pursuant to the authority granted to localities by Code of Virginia. § 15.2-2280 et. seq., as amended, for the general purpose of promoting the health, safety, or general welfare of the public. To these ends, this chapter is designed to provide for safety from flood, to facilitate the provision of flood protection, and to protect against loss of life, health, or property from flood. This chapter may be referred to as the Page County Floodplain Ordinance, floodplain ordinance or chapter.

#### Section 128.2. – Purpose of Chapter.

- A. The purpose of these provisions is to prevent the loss of life, health, and property, creation of hazards to health and safety, disruption of commerce and governmental services, extraordinary and unnecessary expenditure of public funds for flood protection and relief, and impairment of the tax base by:
- (1) Regulating uses, activities and development which, 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 districts subject to flooding;
  - (3) Requiring all those uses, activities and development that do occur in flood prone districts to be protected and/or floodproofed against flooding and flood damage; and
  - (4) Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.

#### Section 128.3. – Applicability of Provisions.

These provisions shall apply to all privately and publicly owned lands within the jurisdiction of Page County that are identified as a special flood hazard areas (SFHA) according to the flood insurance rate map (FIRM) and flood insurance study (FIS) provided to the county by the Federal Emergency Management Association (FEMA) or as identified as floodplains by the county.

#### Section 128.4. – Compliance and Liability.

- A. No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged or structurally altered except in full compliance with the terms and provisions of this Chapter, applicable building code provisions relative to the design and construction of buildings and structures in flood hazard areas, and any other applicable ordinances and regulations which apply to uses within the scope of this Chapter.
- B. The degree of flood protection sought by the provisions of this Chapter is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study but does not imply total flood protection. Larger floods can and will likely occur. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. Enforcement of the provisions of this Chapter, applicable building code provisions or any other

applicable ordinances or regulations does not imply that districts outside the special flood hazard areas, or that land uses permitted within such areas, will be free from flooding or flood damages.

- C. This Chapter shall not create liability on the part of Page County or any officer or employee thereof for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.

**Section 128.5. – Records.**

Records of actions associated with administering this Chapter shall be kept on file and maintained by the Floodplain Administrator in perpetuity.

**Section 128.6. – Abrogation and Greater Restrictions; Other Laws.**

- A. To the extent that the provisions are more restrictive, this Chapter supersedes any ordinance currently in effect in flood-prone districts. To the extent that any other existing law or regulation is more restrictive or does not conflict, it shall remain in full force and effect.
- B. These regulations are not intended to repeal or abrogate any existing ordinances, including but not limited to subdivision regulations, zoning ordinances, or building codes. In the event of a conflict between this Chapter and any other ordinance, the more restrictive shall govern.
- C. The provisions of this Chapter shall not be deemed to nullify any provisions of local, state or federal law.

**Section 128.7. – Severability.**

If any division, section, subsection, paragraph, sentence, clause, or phrase of this Chapter shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of this Chapter. The remaining portions shall remain in full force and effect; and, for this purpose, the provisions of this Chapter are hereby declared to be severable.

**Section 128.8. – Penalties.**

- A. Any person who fails to comply with any of the requirements or provisions of this Chapter, or directions of the Floodplain Administrator, or any other authorized employee of the County of Page, shall be subject to the penalties pursuant to the Code of Virginia, and as outlined in the VA Uniform Statewide Building Code (USBC) for building code violations and shall be guilty of a misdemeanor of the first class and subject to the penalties of up to \$2,500 or imprisonment for not more than 12 months, or both.
- B. In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this Chapter. The imposition of a fine or penalty for any violation of, or noncompliance with, this Chapter shall not excuse the violation or noncompliance or permit it to continue; and all such persons shall be required to correct or remedy such violations within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this Chapter may be declared by the Page County Board of Supervisors to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this Chapter.

**Sections 128.9. – 128.19. – Reserved.**

Division 2. – Administration.

**Section 128.20. – Designation of the Floodplain Administrator.**

- A. Page County shall appoint a designee to administer and implement the regulations of this Chapter, referred to herein as the Floodplain Administrator. The Floodplain Administrator may:
- (1) Administer the duties and responsibilities herein.
  - (2) Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
  - (3) Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. 59.22.

**Section 128.21. – Duties and Responsibilities of the Floodplain Administrator.**

- A. The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:
- (1) Review applications for permits to determine whether proposed activities will be located in a SFHA.
  - (2) Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
  - (3) Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
  - (4) Review applications to determine whether all necessary permits have been obtained from the federal, state or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the 100-year frequency floodplain of free flowing non-tidal waters of the state.
  - (5) Verify that an applicant proposing to alter a watercourse has notified adjacent local governments, the Department of Conservation and Recreation Division of Dam Safety and Floodplain Management (DCR), the Virginia Department of Environmental Quality (DEQ) and the US Army Corp of Engineers (USACE), and has submitted copies of such notifications to FEMA.
  - (6) Approve applications and issue permits to develop in SFHA if the provisions of this Chapter have been met or disapprove applications if the provisions of this Chapter have not been met.
  - (7) Inspect, or cause to be inspected, prospective buildings, structures and other prospective development for which permits have been issued to determine compliance with this Chapter or to determine if noncompliance has occurred or violations have been committed.
  - (8) Review Elevation Certificates and require incomplete or deficient certificates to be corrected.

- (9) Submit to FEMA, or require to be submitted to FEMA, at the applicant's expense, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the County of Page, within six months after such data and information becomes available if the analysis indicates changes in base flood elevations.
- (10) Maintain and permanently keep records that are necessary for the administration of these regulations, including:
  - (a) Copies of FISs, FIRMs (including historic studies and maps and current effective studies and maps), and Letters of Map Change (LOMC); and
  - (b) Documentation supporting issuance and denial of permits, elevation certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been floodproofed, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- (11) Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- (12) Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- (13) Administer the requirements related to proposed work on existing buildings:
  - (a) Make determinations as to whether buildings and structures that are located in SFHA that are damaged by any cause have been substantially damaged.
  - (b) Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct the structure. Prohibit the repair of a substantially damaged building without a permit, except for temporary emergency protective measures necessary to secure a property or to stabilize a building or structure to prevent additional damage.
- (14) Undertake, as determined appropriate by the Floodplain Administrator due to the circumstances, other actions, which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other federal, state, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in SFHAs and assisting property owners with documentation necessary to file claims for increased cost of compliance coverage under National Flood Insurance Program (NFIP) flood insurance policies.
- (15) Notify FEMA when the corporate boundaries of the County of Page have been modified in accordance with Section 2.4. – Jurisdictional Boundary Changes of this Chapter.
- (16) Upon the request of FEMA, complete and submit a report concerning participation in the NFIP, which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.
- (17) It is the duty of the Floodplain Administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the County, whether

or not those hazards have been specifically delineated geographically (e.g., via mapping or surveying).

**Section 128.22. – Use and Interpretation of FIRMs.**

*\*Editor’s Note: This is a new section.*

- A. The Floodplain Administrator shall make interpretations, where needed, as to the exact location of SFHA, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:
  - (1) Where field surveyed topography indicates that adjacent ground elevations:
    - (a) Are below the base flood elevation, even in areas not delineated as a SFHA on a FIRM, the area shall be considered as a SFHA and subject to the requirements of these regulations;
    - (b) Are above the base flood elevation, the area shall be regulated as a SFHA unless the applicant obtains a LOMC that removes the area from the SFHA.
  - (2) In FEMA-identified SFHAs where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a federal, state, or other source shall be reviewed and reasonably used.
  - (3) Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
  - (4) Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
  - (5) If a preliminary FIRM and/or a preliminary FIS has been provided by FEMA:
    - (a) Upon the issuance of a Letter of Final Determination (LOFD) by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
    - (b) Prior to the issuance of a LOFD by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Division 3. Section 3.1.A.3 and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
    - (c) Prior to issuance of a LOFD by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

**Section 128.23. – Jurisdictional Boundary Changes.**

*Editor’s Note: This is a new section.*

- A. The County floodplain ordinance in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the NFIP. Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes SFHAs with flood zones that have regulatory requirements that are not set forth in these regulations, the governing

body shall prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to DCR Division of Dam Safety and Floodplain Management and FEMA.

- B. In accordance with the 44 CFR 59.22(a)(9)(v), all NFIP participating communities must notify the Federal Insurance Administration and optionally the state coordinating office in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.
- C. To ensure that all FIRMs accurately represent the community's boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be included with the notification.

### **Section 2.5. – District Boundary Changes.**

*Editor's Note: This is existing language reformatted into a new section for clarity and ease of use.*

The delineation of any of the floodplain district may be revised by the Board of Supervisors where natural or man-made changes have occurred and/or where more detailed studies have been conducted or undertaken by the United States Army Corps of Engineers or other qualified agency or an individual documents the need for a change. However, prior to any such change, approval must be obtained from FEMA. An approved Letter of Map Revision (LOMR) serves as record of this change.

### **Section 2.6. – Interpretation of District Boundaries.**

*Editor's Note: This is existing language reformatted into a new section for clarity and ease of use.*

Initial interpretations of the boundaries of the floodplain districts shall be made by the Floodplain Administrator or designee. Should a dispute arise concerning the boundaries of any of the districts, the Board of Zoning Appeals shall make the necessary determination. The person questioning or contesting the location of the district boundary shall be given a reasonable opportunity to present his case to the Board of Zoning Appeals and to submit his own technical evidence if he so desires.

### **Section 2.7. – Submitting Technical Data.**

*Editor's Note: This is a new section.*

A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify FEMA of the changes by submitting technical or scientific data. The data may be submitted via a LOMR. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

### **Section 2.8. – Use of Changed Technical Data.**

*Editor's Note: This is a new section from Page staff.*

The Floodplain Administrator and the applicant shall not use changed flood hazard area boundaries or base flood elevations for proposed buildings or developments unless the Floodplain Administrator or applicant has applied for a conditional FIRM revision and has received the approval of FEMA.

**Section 2.9. – Determination of Design Flood Elevations.**

*Editor's Note: This is a new section from Page staff.*

If design flood elevations are not specified, the Floodplain Administrator is authorized to require the applicant to:

- A. Obtain, review and reasonably utilize data from a federal, State, or other source; or,
- B. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering techniques. Such analyses shall be performed and sealed by a registered design professional. Studies, analyses, and computations shall be submitted in sufficient detail to allow review and approval by the Floodplain Administrator. The accuracy of data submitted for such determination shall be the responsibility of the applicant.

**Section 2.10. – Activities in Riverine Flood Hazard Areas.**

*Editor's Note: This is a new section from Page staff.*

In riverine flood hazard areas where design flood elevations are specified but floodways have not been designated, the Floodplain Administrator shall not permit any new construction, substantial improvement or other development, including fill, unless the applicant submits an engineering analysis prepared by a registered design professional that demonstrates that the cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachment, will not increase the design flood elevation more than one (1) foot at any point within the community.

**Section 2.11. – Letters of Map Revision.**

*Editor's Note: This is a new section.*

- A. When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a Conditional Letter of Map Revision (CLOMR) or a LOMR. Examples include:
  - (1) Any development that causes a rise in the base flood elevations within the floodway.
  - (2) Any development occurring in zone AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation.
  - (3) Alteration or relocation of a stream (including but not limited to installing culverts and bridges) 44 CFR 65.3 and 65.6(a)(12).

**Section 2.12. – Floodway Encroachment.**

*Editor's Note: This is a new section from Page staff.*

Prior to issuing a permit for any floodway encroachment, including fill, new construction, substantial improvements and other development or land-disturbing-activity, the Floodplain Administrator shall require submission of a certification prepared by a registered design professional, along with supporting technical data, which demonstrates that such development will not cause any increase in the base flood level.

- A. Floodway revisions. A floodway encroachment that increases the level of the base flood is authorized if the applicant has applied for a conditional Flood Insurance Rate Map (FIRM) revision and has received the approval of FEMA.

**Section 2.13. – Watercourse Alteration.**

*Editor's Note: This is a new section from Page staff.*

Prior to issuing a permit for any alteration or relocation of any watercourse, the Floodplain Administrator shall require the applicant to provide notification of the proposal to the appropriate authorities of all adjacent government jurisdictions, as well as the appropriate State agencies. A copy of the notification shall be maintained in the permit records and submitted to FEMA.

- A. Engineering analysis. The Floodplain Administrator shall require submission of an engineering analysis prepared by a registered design professional, demonstrating that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased. Such watercourses shall be maintained in a manner that preserves the channel's flood-carrying capacity.

#### **Section 2.14. – Substantial Improvement and Substantial Damage Determinations.**

*Editor's Note: This is a new section from Page staff.*

For applications for building permits to improve buildings and structures, including alterations, movement, repair, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

- A. Estimate the market value, or require the applicant to obtain a professional appraisal prepared by a qualified independent appraiser, of the market value of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made.
- B. Compare the cost to perform the improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements or repairs, where applicable, to the market value of the building or structure.
- C. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage.
- D. Notify the applicant when it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the building code is required and notify the applicant when it is determined that work does not constitute substantial improvement or repair of substantial damage.

#### **Division 3. – Establishment of Floodplain Districts.**

##### **Section 3.1. – Description of Districts.**

- A. The various special flood hazard districts shall include the SFHAs. The basis for the delineation of these districts shall be the FIS for Page County and the FIRM prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated January 5, 2007, and subsequent revisions or amendments thereto.
- B. Page County may identify and regulate local flood hazard or ponding areas that are not delineated on the FIRM. These areas may be delineated on a "Local Flood Hazard Map" using best available topographic data and locally derived information such as flood of record, historic high-water marks, or approximate study methodologies.
- C. The boundaries of the SFHA districts are established as shown on the FIRM, which is declared to be a part of this Chapter and which shall be kept on file at the Page County offices.

- (1) The Floodway District is in an AE Zone and is delineated, for purposes of this ordinance, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the one percent annual chance flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this District are specifically defined in Table 4 of the above-referenced FIS and shown on the accompanying FIRM.

The following provisions shall apply within the Floodway District of an AE zone [44 CFR 60.3 (d)]:

- (a) Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, 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 Floodplain Administrator.

Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies – with the County’s endorsement – for a Conditional Letter of Map Revision (CLOMR), and receives the approval of FEMA.

If Section C(1)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section C.

- (2) The AE, or AH Zones on the FIRM accompanying the FIS shall be those areas for which one-percent annual chance flood elevations have been provided and the floodway has not been delineated. The following provisions shall apply with an AE or AH Zone [44 CFR 60.3(c)] where FEMA has provided base flood elevations.

Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the areas of special flood hazard, designated as Zones A1-30, AE, or AH on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any one point within the County.

Development activities in Zones A1-30, AE or Ah on the County’s FIRM which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the applicant first applies – with the County’s endorsement – for a Conditional Letter of Map Revision, and receives the approval of FEMA.

- (3) The A Zone on the FIRM accompanying the FIS shall be those areas for which no detailed flood profiles or elevations have been provided, but the one percent annual chance floodplain boundary has been approximated. For these areas, the following provisions shall apply [44 CFR 60.3(b)]:

The Approximated Floodplain District shall be that floodplain area for which no detailed flood profiles or elevations have been provided, but where a one percent annual chance floodplain boundary has been approximated. Such areas are shown as Zone A on the maps accompanying the FIS. For these areas, the base flood elevations and floodway information

from Federal, State, and other acceptable sources, shall be used, when available. Where the specific one percent annual chance flood elevation cannot be determined for this area using other sources of data, such as 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 base flood elevation. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic or hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

The Floodplain Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood elevation plus 12" of freeboard.

During the permitting process, the Floodplain Administrator shall obtain:

- (a) The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,
- (b) If the structure has been floodproofed in accordance with the requirements of this section, the elevation (in relation to mean sea level) to which the structure has been floodproofed.

Base flood elevation data shall be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is lesser.

### **Section 3.2. – Overlay Concept.**

The Floodplain Districts described above shall be overlays to the existing underlying districts as shown on the Official Zoning Ordinance Map, and, as such, the provisions for the floodplain districts shall serve as a supplement to the underlying district provisions.

### **Division 4. – District Provisions.**

#### **Section 4.1. – Permit and Application Requirements.**

- A. All uses, activities and development occurring within any floodplain district, including placement of manufactured homes, 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 Chapter and with all other applicable codes and ordinances, such as the Virginia Uniform Statewide Building Code (VA USBC) and the Page County Zoning Ordinance, including Article IX, Subdivision of Land. Prior to the issuance of any such permit, the Floodplain Administrator or designee shall require all applications to include compliance with all applicable state and federal laws. Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch or any other drainage facility or system.
- B. 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) For structures to be elevated, 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.
- (4) Topographic information showing existing and proposed ground elevations.

**Section 4.2. – General Provisions.**

A. The following provisions shall apply to all zoning permits:

- (1) New construction and substantial improvements shall be in accordance with VA USBC and anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) Manufactured homes shall be anchored to prevent 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 standard shall be in addition to and consistent with applicable state anchoring requirements for resisting wind forces.
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (5) Electrical, heating, ventilation, plumbing, air-conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (7) New and replacement 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.
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (9) New construction proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- (10) New construction proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (11) The flood-carrying capacity within the altered or relocated portion of any watercourse shall be maintained.
- (12) Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this jurisdiction, a permit shall be obtained from USACE, DEQ, and the Virginia Marine Resources Commission. Furthermore, in riverine areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the DCR, other required agencies, and FEMA.

**Section 4.3. – Floodway District Uses.**

- A. In the Floodway District, 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 one-hundred-year flood elevation.
- B. Uses Permitted In the Floodway District. The following uses may be permitted, provided that they are in compliance with the provisions of Section 4.3 A. above, are in compliance with the Page County Zoning Ordinance, are not prohibited by any other ordinance, and provided that they do not require structures, fill or storage of materials and equipment:
  - (1) Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming and wild crop harvesting.
  - (2) Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, horseback riding and hiking trails, wildlife and nature preserves, game farms, fish hatcheries, trap and skeet game ranges and hunting and fishing areas.
  - (3) Accessory residential uses, such as yard areas, gardens, play areas and previous loading areas.
  - (4) Accessory industrial and commercial uses, such as yard areas, previous parking and loading areas, airport landing strips, etc.
- C. Uses Permitted by Special Use Permit. In the Floodway District, uses permitted by special use permit in accordance with the Page County Zoning Ordinance may be permitted as follows:
  - (1) Commercial recreational use, where open to the public or restricted to private membership, such as parks, camps, picnic areas, golf courses, fishing, sport or boating clubs; not to include enclosed structures, excepting toilet facilities, but permitting piers, docks, floats or shelters usually found in developed outdoor recreational areas. Any toilet facilities provided shall be connected to public water and sewerage systems.
  - (2) Outlet installations for sewage treatment plants or sewage pumping stations, with the approval of the County Engineer and/or the appropriate sewer authorities.
  - (3) Sealed public water supply wells, with the approval of the County Engineer and/or appropriate authorities.
  - (4) Dams, culverts and bridges, with the approval of appropriate authorities with jurisdiction with the Commonwealth of Virginia, such as the Department of Forestry or Department of Transportation.
  - (5) Sanitary or storm sewers impoundment basins, with the approval of the County Engineer and/or appropriate authorities.
  - (6) Roads, driveways or parking areas.
  - (7) Similar uses to the above which are in compliance with the intent of this section.
  - (8) All facilities required by electric utilities.

**Section 4.4. – Floodway Fringe and Approximated Floodplain Districts.**

- A. In the Floodway Fringe, the development and/or use of land shall be permitted in accordance with the regulations of the Page County Zoning Ordinance provided that all such uses, activities and/or development shall not increase the base flood elevation and they shall be undertaken in strict compliance with the floodproofing and related provisions contained in the VA USBC and all other applicable codes and ordinances.
- B. Within the Approximated Floodplain District, the applicant shall also delineate a floodway area based on the requirement that all existing and future development not increase the one-hundred-year flood elevation more than one foot at any one point. The engineering principal, equal reduction of conveyance, shall be used to make the determination of increased flood heights.
- C. Within the floodway area delineated by the applicant, the provisions of Section 4.1. – Permit and Application Requirements shall apply.
- D. In the approximated floodplain district, all development and uses shall be the same as permitted in the floodway district.

**Section 4.5. – Elevation and Construction Standards.**

- A. Residential Structures. New construction or substantial improvement of any residential structure (including manufactured homes) in Zones A1-30, AE, AH and A with detailed base flood elevations shall have the lowest floor, including basement, elevated to or above the base flood elevation plus 12” of freeboard.
- B. Space below the lowest floor. In Zones A1-30, AE, AH, A, and AO, fully enclosed areas of new construction or substantially improved structures which are below the regulatory flood protection elevation shall:
  - (1) Not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
  - (2) Be constructed entirely of flood-resistant materials below the regulatory flood protection elevation; and
  - (3) Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
    - (a) Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
    - (b) The total net area of all openings must be at least one square inch for each square foot of enclosed area subject to flooding.
    - (c) If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
    - (d) The bottom of all required openings shall not be higher than one foot or more above the adjacent grade.

- (e) Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
  - (f) Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.
- C. Nonresidential Structures.
- (1) New construction or substantial improvement of any commercial, industrial, or nonresidential building or manufactured home shall have the lowest floor, including basement, elevated to or above the base flood elevation plus 12” of freeboard.
  - (2) Buildings located in A1-30, AE, and AH Zones may be floodproofed in lieu of being elevated, provided that all areas of the building components below the elevation corresponding to the base flood elevation plus 12” of freeboard are watertight with walls substantially impermeable to the passage of water and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.
  - (3) A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to sea level) to which such structures are floodproofed, shall be maintained by the Page County Floodplain Administer or designee.
- D. Subdivision and Manufactured Home Parks. Base flood elevation data shall be obtained from other sources, including licensed surveyors, or developed using detailed methodologies comparable to those contained in a FIS, for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed 50 lots or five acres, whichever is the lesser. The following standards shall also apply:
- (1) All subdivision proposals shall be consistent with the need to minimize flood damage.
  - (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
  - (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- E. Standards for manufactured homes and recreational vehicles:
- (1) Manufactured homes that are placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation plus 12” of freeboard and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
  - (2) Recreational vehicles. Recreational vehicles placed on sites shall either:
    - (a) Be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use, meaning that it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices and has no permanently attached additions; or
    - (b) Meet the permit requirements for placement and elevation and anchoring requirements for manufactured homes in Division 4 – District Provisions.

**Section 4.6. – Construction Standards for Utilities and Facilities.**

*Editor's Note: This section was revised with language provided by Page staff.*

- A. Sewer facilities. All new and replaced sanity sewer facilities, private sewage treatment plants (including all pumping stations and collector systems) and on-site was disposal systems shall be designed in accordance with state code and Chapter 7, ASCE 24, to minimize or eliminate infiltration of floodwater into the facilities and discharge from the facilities into flood waters, or impairment of the facilities and systems.
- B. Water facilities. All new and replacement water facilities shall be designed in accordance with State code and the provisions of Chapter 7, ASCE 24, to minimize or eliminate infiltration of floodwater into the systems.
- C. Storm drainage. Storm drainage shall be designed to convey the low of surface waters to minimize or eliminate damage to persons or property.
- D. All utilities, such as gas lines and electrical and telephone systems, placed in flood-prone areas should be located, elevated (where possible) and constructed to minimize the chance of impairment during a flooding occurrence.
- E. Streets and sidewalks should be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings shall be required to sufficiently discharge flood flows without unduly increasing flood heights.

**Division 5. – Site Improvement.**

*Editor's Note: This is a new division by Page staff.*

**Section 5.1. – Site Improvement.**

- A. Encroachment in Floodways. Development, land disturbing activity, and encroachments in floodways shall not be authorized unless it is demonstrated through hydrologic and hydraulic analyses required in accordance with Section 9.1 D. of these regulations, that the proposed encroachment will not result in any increase in the base flood level during occurrence of the base flood discharge.
- B. Limitations on Placement of Fill. Subject to the limitations of these regulations, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwater, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, when intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the building code.

**Division 6. – Other Development and Building Work.**

*Editor's Note: This is a new division by Page staff.*

**Section 6.1. – General Requirements for Other Development and Building Work.**

All development and building work, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in these regulations or the building code, shall:

- A. Be located and constructed to minimize flood damage;
- B. Meet the limitation of Section 9.1 D. of this ordinance when located in the regulatory floodway;
- C. Be anchored to prevent flotation, collapse, or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

- D. Be constructed of flood damage-resistant materials; and,
- E. Have mechanical, plumbing, and electrical systems above the base flood elevation or meet the requirements of ASCE 24, except that minimum electric service required to address life safety and electric code requirements is permitted below the base flood elevation provided it conforms to the provisions of the electrical part of building code for wet locations.

**Section 6.2. – Fences.**

Fences in floodways that have the potential to block the passage of floodwater, such as stockade fences and wire mesh fences, shall meet the requirements of Section 9.1 D. of these regulations.

**Section 6.3. – Retaining Walls, Sidewalks, and Driveways.**

Retaining walls, sidewalks, and driveways that involve placement of fill in floodways shall meet the requirements of Section 9.1 D. of these regulations.

**Section 6.4. – Swimming Pools.**

Swimming pools shall be designed and constructed in accordance with ASCE 24. Above-ground swimming pools, on-ground swimming pools, and in-ground swimming pools that involve placement of fill in floodways shall also meet the requirements of Section 9.1 D. of these regulations.

**Section 6.5. – Roads and Watercourse Crossings in Regulated Floodways.**

Roads and watercourse crossings that encroach into regulated floodways or riverine waterways with base flood elevations where floodways have not been designated, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, shall meet the requirements of Section 9.1 D. of these regulations.

**Division 7. – Temporary Structures and Temporary Storage.**

**Section 7.1. – Temporary Structures.**

Temporary structures shall be erected for a period of less than 180 days. Temporary structures shall be anchored to prevent flotation, collapse, or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the base flood. Fully enclosed temporary structures shall have flood openings that are in accordance with ASCE 24 to allow for the automatic entry and exit of flood waters.

**Section 7.2. – Temporary Storage.**

Temporary storage includes storage of goods and materials for a period of less than 180 days. Stored materials shall not include hazardous materials.

**Section 7.3. – Floodway Encroachment.**

Temporary structures and temporary storage in floodways shall meet the requirements of Section 9.1(D) of these regulations.

**Division 8. – Utility and Miscellaneous Group U.**

**Section 8.1. – Utility and Miscellaneous Group U.**

In accordance with Section 312 of the building code, utility and miscellaneous Group U includes buildings and structures that are accessory in character and miscellaneous structures not classified in

any specific occupancy in the Building Code, including, but not limited to, agricultural buildings, aircraft hangars (accessory to a one- or two-family residence), barns, carports, communication equipment structures (gross floor area less than 1,500 sq. ft.), fences more than 6 feet high, grain silos (accessory to a residential occupancy), livestock shelters, private garages, retaining walls, sheds, stables, tanks, and towers.

**Section 8.2. – Accessory Structures.**

In addition to the other requirements of this section, accessory structures that are not elevated or dry floodproofed shall be:

- A. Be wet floodproofed, via variance, for structures no more than 600 sq. ft. Accessory structures more than 600 sq. ft. must be elevated or dry floodproofed.
- B. Not be used for human habitation;
- C. Be useable only for parking of vehicles and limited storage.

**Section 8.3. – Flood Loads.**

Utility and miscellaneous Group U buildings and structures, including substantial improvement of such buildings and structures, shall be anchored to prevent flotation, collapse, or lateral movement resulting from flood loads, including the effects of buoyancy, during conditions of the base flood.

**Section 8.4. – Elevation.**

Utility and miscellaneous Group U buildings and structures, including substantial improvement of such buildings and structures, shall be elevated such that the lowest floor, including basement, is elevated to or above the base flood elevation in accordance with ASCE 24.

**Section 8.5. – Enclosure Below Design Flood Elevation.**

Fully enclosed areas below the design flood elevation shall be constructed in accordance with ASCE 24.

**Section 8.6. – Flood Damage-resistant Materials.**

Flood damage-resistant materials shall be used below the design flood elevation.

**Section 8.7. – Protection of Mechanical, Plumbing, and Electrical Systems.**

- A. Mechanical, plumbing and electrical systems, including plumbing fixtures, shall be elevated to or above the base flood elevation.
- B. Exceptions. Electrical systems, equipment and components, and heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall be permitted to be located below the base flood elevation provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the base flood elevation in compliance with the flood-resistant construction requirements of this code. Electrical wiring systems shall be permitted to be located below the base flood elevation provided they conform to the provisions of NFPA 70 (National Electric Code).

Division 9. – Site Plans and Construction Documents.

Section 9.1. – Information for Development in Flood Hazard Areas.

- A. The plan or construction documents for any development subject to the requirements of this ordinance shall be drawn to scale and shall include, as applicable to the proposed development:
  - (1) Delineation of flood hazard areas, floodway boundaries and flood zone(s), base flood elevations, and ground elevations when necessary, for review of the proposed development.
  - (2) Where base flood elevations or floodway data are not included on the FIRM or in the Flood Insurance Study, they shall be established in accordance with Section 9.1 C.
  - (3) Where the parcel on which the proposed development will take place will have more than 50 lots or is larger than 5 acres and base flood elevations are not included on the FIRM or in the Flood Insurance Study, such elevations shall be established in accordance with Section 9.1 C (2) of these regulations.
  - (4) Location of the proposed activity and proposed structures, and locations of existing structures.
  - (5) Location, extent, amount, and proposed final grades of any filling, grading, or excavation.
  - (6) Where the placement of fill is proposed, the amount, type, and source of fill material; compaction specifications; a description of the intended purpose of the fill area; and evidence that the proposed fill areas are the minimum necessary to achieve the intended purpose.
  - (7) Existing and proposed alignment of any proposed alteration of a watercourse.
- B. The Floodplain Administrator is authorized to waive the submission of site plans, construction documents, and other data that are required by these regulations but that are not required to be prepared by a registered design professional when it is found that the nature of the proposed development is such that the review of such submission is not necessary to ascertain compliance.
- C. Information in Flood Hazard Areas without Base Flood Elevations (approximate Zone A). Where flood hazard areas are delineated on the FIRM and base flood elevation data have not been provided, the applicant shall consult with the Floodplain Administrator to determine whether to:
  - (1) Obtain, review, and reasonably utilize data available from a federal, State, or other source when those data are deemed acceptable to the Floodplain Administrator to reasonably reflect conditions.
  - (2) Determine the base flood elevation in accordance with accepted hydrologic and hydraulic engineering techniques. Such analyses shall be performed and sealed by a registered design professional. Studies, analyses and computations shall be submitted in sufficient detail to allow review and approval by the Floodplain Administrator. The accuracy of the data submitted for such determination shall be the responsibility of the applicant. Where the data are to be used to support a Letter of Map Change from FEMA, the applicant shall be responsible for satisfying the submittal requirements and pay the processing fees.
- D. Additional Analyses and Certifications. As applicable to the location and nature of the proposed development activity, and in addition to the requirements of this section, the applicant shall have the following analyses signed and sealed by a registered professional engineer for submission with the site plan and construction documents:

- (1) For development activities proposed to be located in a regulatory floodway, a floodway encroachment analysis that demonstrates that the encroachment of the proposed development will not cause any increase in base flood elevations; where the applicant proposes to undertake development activities that do increase base flood elevations, the applicant shall submit such analysis to FEMA as specified in Section D(10)(d) of these regulations and shall submit the Conditional Letter of Map Revision, if issued by FEMA, with the site plan and construction documents.
- (2) For development activities proposed to be located in a riverine flood hazard area where base flood elevations are included in the FIS or FIRM but floodways have not been designated, hydrologic and hydraulic analyses that demonstrate that cumulative effect of the proposed development, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the base flood elevation more than one (1) foot at any point within the jurisdiction. This requirement does not apply in isolated flood hazard areas not connected to riverine flood hazard area or in flood hazard areas identified as Zone AO or Zone AH.
- (3) For alteration of a watercourse, an engineering analysis prepared in accordance with standard engineering practices which demonstrates the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased, and certification that the altered watercourse shall be maintained in a manner which preserves the channel's flood-carrying capacity. The applicant shall submit the analysis to FEMA as specified in Section D(10)(d) of these regulations. The applicant shall notify the chief executive officer/county administrator of all affected adjacent jurisdictions and appropriate state agencies and shall provide documentation of such notifications.

**E. Submission of Additional Data.**

- (1) When additional hydrologic, hydraulic or other engineering data, studies, and additional analyses are submitted to support an application, the applicant has the right to seek a Letter of Map Change from FEMA to change the base flood elevations, change floodway boundaries, or change boundaries of flood hazard areas shown on FIRMs, and to submit such data to FEMA for such purposes. The analyses shall be prepared by a registered professional engineer in a format required by FEMA. Submittal requirements and processing fees shall be the responsibility of the applicant.

**Division 10. – Inspections.**

**Section 10.1. – General.**

Development for which a permit is required shall be subject to inspection. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of these regulations or the building code. Inspections presuming to give authority to violate or cancel the provisions of these regulations or the building code or other ordinances shall not be valid.

**Section 10.2. – Inspections of Development.**

The Floodplain Administrator shall inspect all development in flood hazard areas authorized by issuance of permits under these regulations. The Floodplain Administrator shall inspect flood hazard areas from time to time to determine if development is undertaken without issuance of a permit.

## Division 11. – Existing Structures in Floodplain Areas.

### Section 11.1. – Existing Structures in Floodplain Areas.

- A. Any structure or use of a structure or premises must be brought into conformity with these provisions when it is changed, repaired, or improved unless one of the following exceptions is established before the change is made:
- (1) The Floodplain Administrator determines that:
    - (a) Change is not a substantial repair or substantial improvement;
    - (b) No new square footage is being built in the floodplain that is not complaint;
    - (c) No new square footage is being built in the floodway; and
    - (d) The change complies with this ordinance and the VA USBC.
  - (2) The changes are required to comply with a citation for a health and safety violation.
  - (3) The structure is a historic structure and the change required would impair the historic nature of the structure.

## Division 12. – Variances.

### Section 12.1. – General.

The Board of Zoning Appeals shall hear and decide requests for variances. The Board of Zoning Appeals shall base its determination on technical justifications submitted by applicants, the considerations for issuance in Section 12.4, the conditions of issuance set forth in Section 12.5, and the comments and recommendations of the Floodplain Administrator and, as applicable, the Building Official. The Board of Zoning Appeals has the right to attach such conditions to variances as it deems necessary to further the purposes and objectives of these regulations, Section R322 of the Residential Code, and Section 1612 of the Building Code.

### Section 12.2. – Historic Structures.

A variance is authorized to be issued for the repair or rehabilitation of a historic structure upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure, the historic structure is eligible for the exception in the section in Chapter 12 of the Existing Building code applicable to historic structures in flood hazard areas, and the variance is the minimum necessary to preserve the historic character and design of the structure.

### Section 12.3. – Functionally Dependent Uses.

A variance is authorized to be issued for the construction or substantial improvement necessary for the conduct of a functionally dependent use provided the variance is the minimum necessary to allow the construction or substantial improvement, and that all due consideration has been given to use of methods and materials that minimize flood damage during the base flood and create no additional threats to public safety.

### Section 12.4. – Considerations.

In reviewing requests for variances, all technical evaluations, all relevant factors, all other portions of these regulations, and the following shall be considered:

- A. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity

- within any Floodway District that will cause any increase in the one percent (1%) chance flood elevation.
- B. The danger that materials and debris may be swept onto other lands resulting in further injury or damage.
  - C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
  - D. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners.
  - E. The importance of the services provided by the proposed development to the community.
  - F. The availability of alternate locations for the proposed development that are not subject to flooding or erosion and the necessity of a waterfront location, where applicable.
  - G. The compatibility of the proposed development with existing and anticipated development.
  - H. The relationship of the proposed development 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 or emergency vehicles.
  - J. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwater.
  - K. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation 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.
  - L. 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, streets, and bridges.
  - M. No variance shall be granted for an accessory structure exceeding 600 square feet. (Note: See Section 8.2).

**Section 12.5. – Conditions for Issuance.**

Variances shall only be issued upon:

- A. Submission by the applicant of a showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site limit compliance with any provision of these regulations or renders the elevation standards of the building code inappropriate.
- B. A determination that failure to grant the variance would result in exceptional hardship due to the physical characteristics of the land that render the lot undevelopable.
- C. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- D. A determination that the variance is the minimum necessary, considering the hazard, to afford relief.

- E. Notification to the applicant in writing over the signature of the Floodplain Administrator that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and that such construction below the base flood level increases risks to life and property.

#### Section 12.6. – Recordation of Variances.

A record shall be maintained of the above notification, as well as all variance actions, including justification for the issuance of the variances. Any variances which are issued shall be noted in the annual or biennial report submitted to the Federal Insurance Administrator.

### Division 13. – Violations.

#### Section 13.1. – Violations.

Any development in any flood hazard areas that is performed without an issued permit or that is in conflict with an issued permit shall be deemed a violation. A building or structure without the documentation of elevation of the lowest floor, other required design certifications, or other evidence of compliance required by the building code is presumed to be a violation until such time as that documentation is provided.

#### Section 13.2. – Authority.

The Floodplain Administrator is authorized to serve notices of violation or stop work orders to owners of property involved, to the owner's agent, or to the person or persons doing the work for development that is not within the scope of the building codes, but is regulated by these regulations and that is determined to be a violation.

#### Section 13.3. – Unlawful Continuance.

Any person who shall continue any work after having been served with a notice of violation or a stop work order, except such work as that person is directed to perform to remove or remedy a violation or unsafe condition, shall be subject to penalties as prescribed by law.

### Division 14. – Definitions.

*Editor's Note: This division was revised from comments by Page staff.*

- A. The following words, terms, and phrases, when used in this Chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:
  - (1) ACCESSORY BUILDING OR STRUCTURE: A building subordinate to and located on the same lot with a main building, the use of which is clearly incidental to that of the main building or to the use of the land, and which is not attached by any part of a common wall or roof to the main building. The term "accessory building" also includes, but is not limited to, gazebos, carports, private greenhouses, and sheds which may be modular in nature and are delivered to the site and which may or may not have a foundation. Accessory structures are considered walled and roofed where the structure includes at least two rigid walls and a fully secured roof.
  - (2) AGRICULTURAL STRUCTURE: A structure that is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock; an agricultural structure specifically excludes any structure used for human habitation. Agricultural structures are considered "walled and roofed" when the structure includes at least two outside rigid walls and a fully secured roof.

- (3) ASCE 24: The current standard for Flood Resistant Design and Construction, referenced by the building code, developed and published by the American Society of Civil Engineers, Reston, VA.
- (4) BASE FLOOD/ONE-HUNDRED-YEAR FLOOD: The flood having a one-percent chance of being equaled or exceeded in any given year.
- (5) BASE FLOOD ELEVATION: The water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year. The water surface elevation of the base flood in relation to the datum specified on the community's Flood Insurance Rate Map. For the purposes of this ordinance, the base flood is the one percent annual chance flood.
- (6) BASEMENT: Any area of the building having its floor subgrade (below ground level) on all sides.
- (7) BOARD OF ZONING APPEALS: The Board appointed to review appeals made by individuals with regard to decisions of the Floodplain Administrator in the interpretation of this Chapter.
- (8) DEVELOPMENT: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, tanks, temporary structures, the placement of manufactured homes, streets and other paving, utilities, filling, grading, excavation, mining, dredging, drilling operations or temporary or permanent storage of equipment or materials.
- (9) ELEVATED BUILDING: A non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, or columns (posts and piers).
- (10) 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.
- (11) EXISTING CONSTRUCTION: Structures for which the start of construction commenced before the effective date of the FIRM. "Existing construction" may also be referred to as "existing structures" and "pre-FIRM."
- (12) EXISTING MANUFACTURED HOME PARK OR SUBDIVISION: A manufactured home or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are 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 August 20, 2013.
- (13) 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 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 August 20, 2013.
- (14) EXISTING STRUCTURE: See EXISTING CONSTRUCTION.
- (15) FLOOD OR FLOODING:
  - (a) A general or temporary condition of partial or complete inundation of normally dry land areas from:

- [1] The overflow of inland or tidal waters;
  - [2] The unusual and rapid accumulation or runoff of surface waters from any source; or
  - [3] Mudflows which are proximately caused by flooding as defined in Subsection (10)(a)[2] of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land area, 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 similar 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 Subsection (a) of this definition.
- (11) FLOOD INSURANCE RATE MAP (FIRM): An official map of a community on which the Federal Emergency Management Agency has delineated the special hazard areas, the base flood elevations, and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).
- (12) FLOOD INSURANCE STUDY (FIS): A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards.
- (13) FLOODPLAIN OR FLOOD-PRONE AREA: Any land area susceptible to being inundated by water from any source.
- (14) FLOODPROOFING: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate the risk of flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- (15) 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 one foot at any point within the community.
- (16) FREEBOARD: A factor of safety usually expressed in inches or feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed. When a freeboard is included in the height of a structure, the flood insurance premiums may be less expensive.
- (17) HIGHEST ADJACENT GRADE: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
- (18) HISTORIC STRUCTURE: 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 historical 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:
    - 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.
- (19) **HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSIS:** Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation (DCR) and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.
- (20) **LETTERS OF MAP CHANGE (LOMC):** An official FEMA determination, by letter, that amends or revises an effective FIRM or FIS. Letters of map change include:
- a. **LETTER OF MAP AMENDMENT(LOMA):** An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective FIRM and establishes that a land as defined by metes and bounds or structure is not located in a special flood hazard area.
  - b. **LETTER OF MAP REVISION (LOMR):** A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A letter of map revision based on fill (LOMR-F) is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.
  - c. **CONDITIONAL LETTER OF MAP REVISION (CLOMR):** A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective FIRM or FIS.
- (21) **LOWEST FLOOR:** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR § 60.3.
- (22) **MANUFACTURED HOME:** A structure subject to federal regulations which is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a foundation, when connected to the required utilities; and includes the plumbing, heating, air conditioning and electrical systems contained in the structure.
- (23) **MANUFACTURED HOME PARK/SUBDIVISION:** Manufactured home park means any site, lot, field or tract of land upon which is located three or more manufactured homes for residential

- use, or which is held out for the location of any mobile home or any motor vehicle which is used for living or sleeping purposes and which is or may be transported from one place to another, whether motive power or other means shall be required, and shall include any building, structure, tent, vehicle or enclosure used or intended for use as part of the equipment of any such park.
- (24) **NEW CONSTRUCTION:** For the purposes of determining insurance rates, structures for which the start of construction commenced on or after the effective date of the initial FIRM or after August 19, 1991, whichever is later, and includes any subsequent improvements to such structures; for floodplain management purposes, new 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.
- (25) **POST-FIRM STRUCTURES:** A structure for which construction or substantial improvement occurred on or after January 5, 2007.
- (26) **PRE-FIRM STRUCTURES:** A structure for which construction or substantial improvement occurred on or before January 5, 2007.
- (27) **RECREATIONAL VEHICLE:** 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; and
  - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel or seasonal use.
- (28) **REPETITIVE LOSS STRUCTURE:** A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions in a 10-year period, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.
- (29) **SPECIAL FLOOD HAZARD AREA (SFHA):** The land in the floodplain subject to a one percent or greater chance of being flooded in any given year as determined in Section 3.2. – Overlay Concept, of this Chapter.
- (30) **START OF CONSTRUCTION:** The date the building permit was issued, provided that 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 any 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 on any wall, ceiling,

- floor or other structural part of a building, whether or not the alteration affects the external dimensions of the building.
- (31) **STRUCTURE:** For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above the ground, as well as a manufactured home.
- (32) **SUBSTANTIAL DAMAGE:** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. It also means flood-related damages sustained by a structure on two occasions in a 10-year period, in which the cost of the repair, on the average, equals or exceeds 25 percent of the market value of the structure at the time of each such flood event.
- (33) **SUBSTANTIAL IMPROVEMENT:** 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 an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.
- (34) **VIOLATION, FLOODPLAIN:** 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 this ordinance is presumed to be in violation until such time as that documentation is provided.
- (35) **WATERCOURSE:** A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. "Watercourse" includes specifically designated areas in which substantial flood damage may occur.