

# **FLOOD DAMAGE PREVENTION ORDINANCE**

## **SECTION 1. STATUTORY AUTHORIZATION FINDING OF FACT PURPOSE AND OBJECTIVES.**

### **1.1 STATUTORY AUTHORIZATION**

The Legislature of the State of Connecticut has in Section 7-148 (c) (7) of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the Town Council of the Town of Plainville, Connecticut, does ordain as follows:

### **1.2 FINDINGS OF FACT**

**1.2.1** The flood hazard areas of the Town of Plainville are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

**1.2.2** These flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities, and by the occupancy in flood hazard lands which are inadequately elevated, flood proofed, or otherwise unprotected from flood damages.

### **1.3 STATEMENT OF PURPOSE**

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

**1.3.1** Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

**1.3.2** Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

**1.3.3** Control the alteration of natural flood plains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;

**1.3.4** Control filling, grading, dredging and other development which may increase erosion or flood damage; and

**1.3.5** Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

#### **1.4 OBJECTIVES**

The objectives of this ordinance are:

**1.4.1** To protect human life and health;

**1.4.2** To minimize expenditure of public money for costly flood control project;

**1.4.3** To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

**1.4.4** To minimize prolonged business interruptions;

**1.4.5** To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;

**1.4.6** To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and

**1.4.7** To insure that potential home buyers are notified that property is in a flood area.

#### **SECTION 2. DEFINITIONS.**

**2.1** Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

**2.1.1 "Addition (to an existing building)"** means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other

than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is a new/separate structure.

**2.1.2 "Appeal"** means a request for a review of the Town Engineer's interpretation of any provision of this ordinance or a request for a variance.

**2.1.3 "Area of special flood hazard"** is the land in the flood plain within a community subject to one percent or greater chance of flooding in any given year.

**2.1.4 "Base flood"** means the flood having a one percent chance of being equaled or exceeded in any given year.

**2.1.5 "Base Flood Elevation (BFE)"** means the elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

**2.1.6 "Basement"** means that portion of a building having its floor subgrade (below ground level) on all sides.

**2.1.7 "Building"** means any structure built for support, shelter or enclosure for any occupancy or storage.

**2.1.8 "Cost"** as related to substantial improvements, the costs of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing components, structural components, utility and service equipment); sales tax on materials; building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit and grand total. Items to be excluded include cost of plans and specifications; surveys costs; permit fees; outside improvement such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems and detached structures such as garages, sheds and gazebos.

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

**2.1.10 "Elevated Building"** means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, piling, columns (posts and piers), shear walls, or breakaway walls.

**2.1.11 "Existing Manufactured Home Park or Subdivision"** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are affixed (including; as 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).

**2.1.12 "Expansion to an Existing Manufactured Home Park or Subdivision"** means 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).

**2.1.13 "Federal Emergency Management Agency (FEMA)"** means the federal agency that administers the National Flood Insurance Program (NFIP).

**2.1.14 "Flood" or "Flooding"** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland water;
2. the unusual and rapid accumulation or runoff of surface water from any source.

**2.1.15 "Flood Boundary and Floodway Map"** means an official map of a community on which the Federal Emergency Management Agency has delineated the boundaries of the floodway.

**2.1.16 "Flood Insurance Rate Map (FIRM)"** means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**2.1.17 "Flood Insurance Study"** is the official report by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary Floodway Map and the water surface elevation of the base flood.

**2.1.18 "Floodway"** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

**2.1.19 "Floor"** means the top surface of an enclosed area in a building (including basement) i.e.: top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

**2.1.20 "Functionally dependent facility"** means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, such as a docking or port facility necessary for the unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales or service facilities.

**2.1.21 "Highest Adjacent Grade (HAG)"** means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

**2.1.22 "Historic Structure"** means any structure that is: (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either : (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

**2.1.23 "Lowest floor"** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, is not considered a building's lowest floor.

**2.1.24 "Market Value"** means the market value of the structure determined by an independent appraisal by a professional appraiser.

**2.1.25. "Manufactured (Mobile) home"** means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

**2.1.26 "Manufactured home park or subdivision"** means a parcel, or contiguous parcels, of land divided into two or more manufactured home lots for rent or sale.

**2.1.27 "Mean Sea Level (MSL)"** means the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevation shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

**2.1.28 "National Geodetic Vertical Datum (NGVD)"** as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the flood plain.

**2.1.29 "New Construction"** Structures for which the "start of construction" commenced on or after September 26, 2008 the effective date of the floodplain management regulations, and includes any subsequent improvements to such structures.

**2.1.30 "Recreational Vehicle"** (a.k.a. park trailers, travel trailers, camp trailers and similar transportable structures) means a vehicle which is:

1. Built on a single chassis;
2. 400 sq. feet or less when measured at the longest horizontal projection;
3. Designed to be self propelled or permanently towable by a light duty truck; and
4. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel or seasonal use.

**2.1.31 "Sand dunes"** means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

**2.1.32 "Special Flood Hazard Area (SFHA)"** – The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. SFHAs are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the

Flood Insurance Study (FIS) for a community. BFEs provide on Flood Insurance Rate Map (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. SFHAs include, but are not necessarily limited to, the land shown as Zones A, A1-30, AE, AO, AH, and the Coastal High Hazard Areas shown as Zones V, V1-30 and VE on a FIRM. The SFHA is also called the Area of Special Flood Hazard.

**2.1.33 "Start or construction"** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading or filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

For a "substantial improvement," the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**2.1.34 "Structure"** means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

**2.1.35 "Substantial Damage"** means damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**2.1.36 "Substantial improvement"** means any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place over a ten (10) year period in which the cumulative cost equals or exceeds fifty percent of the market value of the structure. The market value of the structure should be (1) the appraised value of the structure using the cost approach to value method prior to the start of initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling,

floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary or safety code specifications which are solely necessary to assure safe living conditions.

**2.1.37 "Variance"** is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance where specific enforcement would result in unnecessary hardship.

**2.1.38 "Violation"** is the failure of a structure or other development to be fully compliant with the community's Floodplain Management Ordinance. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates or required floodway encroachment calculations is resumed to be in violation until such time as that documentation is provided.

**2.1.39 "Water Surface Elevation"** means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of riverine areas.

### **SECTION 3. GENERAL PROVISIONS.**

#### **3.1 LANDS TO WHICH THIS ORDINANCE APPLIES**

This Ordinance shall apply to all areas of special flood hazard within the jurisdiction of the Town of Plainville

#### **3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD**

The areas of special flood hazard identified by the Federal Emergency Management Agency in its "The Flood Insurance Study for the Town of Plainville" effective September 26, 2008 with accompanying Flood Insurance Rate Maps September 26, 2008 subsequent revisions thereto, are adopted by reference and declared to be part of this regulations. Since mapping is legally adopted by reference into the regulation it must take precedence when more restrictive until such time as a map amendment is obtained, or any revision thereafter, with accompanying floodway maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this Ordinance.

### **3.3 ESTABLISHMENT OF FLOOD PLAIN MANAGEMENT**

A Development Permit shall be required in conformance with the provisions of this Ordinance prior to the commencement of any development activities.

### **3.4 COMPLIANCE**

No structure or land shall hereafter be located, extended, converted or structurally altered without full compliance with the terms of this Ordinance and other applicable regulations.

### **3.5 ABROGATION AND GREATER RESTRICTIONS**

This Ordinance is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

### **3.6 INTERPRETATION**

In the interpretation and application of this Ordinance all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed to neither limit nor repeal any other powers granted under State Statutes.

### **3.7 WARNING AND DISCLAIMER OF LIABILITY**

The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the Town of Plainville or an officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

### **3.8 SEVERABILITY**

If any section, subsection, paragraph sentence, clause or phase of this regulation should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions

of this regulation, which shall remain in full force and effect; and to this end the provisions of this regulation are hereby declared to be severable.

## **SECTION 4. ADMINISTRATION.**

### **4.1 DESIGNATION OF THE ORDINANCE ADMINISTRATOR**

The Town Engineer is hereby appointed to administer and implement the provisions of this ordinance.

### **4.2 PERMIT PROCEDURES**

Application for a development permit shall be made to the Town Engineer on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following: plans, in duplicate, drawn to scale, showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, the location of the foregoing and the appropriate filing fee. All submissions including plans, maps, reports and other pertinent data shall have an area for the signature of appropriate Town of Plainville Officials and shall be certified by the appropriate professionals. The following information is required for all applications:

#### **4.2.1 Application Stage**

**4.2.1 a.** Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures. See Section 5.3.1 a;

**4.2.1 b.** Elevation in relation to mean sea level to which any non-residential structure will be flood proofed. See Section 5.3.1 b. 2;

**4.2.1 c.** Description of the extent to which any watercourse will be altered or relocated as a result of proposed development;

**4.2.1 d.** A statement as to whether or not the proposed alterations to an existing structure meet the criteria of the Substantial Improvement definition, Section 2.1.36;

**4.2.1 e.** A statement as to whether there will be dry access to the structure during a 100-year storm event. Where applicable the following certifications by a registered engineer or architect are required, and must be provided to the Town Engineer. The design and methods of

construction must be certified to be in accordance with accepted standards of practice, and with the provisions of Section 5.3;

**4.2.1 f.** Non-residential flood proofing must meet the provisions of Section 5.3.1 (b) (2);

**4.2.1 g.** Enclosed areas below the base flood elevation - if the minimum design criteria in Sections 5.3.2 a - 5.3.2 c are not used then the design and construction methods must be certified as explained in Section 5.3.2;

**4.2.1 h.** No increase in flood heights may be allowed. Any development in a floodway must meet the provisions of Section 5.3.3.

#### **4.2.2 CONSTRUCTION STAGE**

As-built drawings shall be certified A-2 standard by a licensed surveyor. Upon completion of the applicable portion (foundation) of construction the applicant shall provide as-built verification to the Town Engineer of the following, as is applicable:

**4.2.2 a.** As-built elevation data to be provided:

1. For structures in A and A1-30 zones, provide as-built elevation of the top of the lowest floor (including basement).
2. For floodproofed structures, provide as-built elevation to which the floodproofing is effective.
3. Failure to comply with the provisions of this subsection shall

result in the revocation of the development permits issued pursuant to this Ordinance.

**4.2.2 b.** Deficiencies detected during the review of the post construction conditions and as-built records by the Town shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to comply in a timely manner shall result in the issuance of a stop-work order for the entire project.

#### **4.3 DUTIES AND RESPONSIBILITIES OF THE ENGINEERING AND BUILDING OFFICIALS**

**4.3.1** Duties of the Town Engineer shall include, but not be limited to:

**4.3.1 a.** Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.

**4.3.1 b.** Review all development permits to assure that the permit requirements of this ordinance have been satisfied.

**4.3.1 c.** Advise permittee that additional Federal or State permits may be required, and if specific Federal or State permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit. Possibly including but not limited to: Water Diversion, Dam Safety, Corps of Engineers 404.

**4.3.1 d.** Notify the Regional Planning Agency and the affected municipality at least 35 days prior to the public hearing if any change of regulation or use of a flood zone will affect an area within 500 feet of another municipality.

**4.3.1 e.** Notify adjacent communities and the Department of Environmental Protection, Water Resources Unit, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

**4.3.1 f.** Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

**4.3.1 g.** Record the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures in accordance with Section 5.3.1.a.

**4.3.1 h.** Record the as-built elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, in accordance with Section 5.3.1.b.

**4.3.1 i.** Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Town Engineer shall make the necessary interpretation. The Applicant may be required to provide survey and engineering information where not provided through other sources. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

**4.3.1 j.** When base flood elevation data or floodway data have not been provided in accordance with Section 3.2, then the Town Engineer shall obtain, review and reasonably administer any base flood elevation and floodway data available from a Federal, State or other source, including professionals retained by the Applicant, in order to administer the provisions of Section V.

**4.3.2** Duties of the Building Official shall include, but not be limited to:

**4.3.2 a.** When floodproofing is utilized for a particular structure the Building Official shall obtain certification from a registered professional engineer or architect, in accordance with Section 5.3.1.b.2.

**4.3.2 b.** All records pertaining to the provisions of this Ordinance shall be maintained in the office of the Building Official.

## **SECTION 5. PROVISIONS FOR FLOOD HAZARD REDUCTION**

### **5.1 GENERAL STANDARDS**

In all areas of special flood hazard the following provisions are required:

**5.1.1** New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;

**5.1.2** New construction and substantial improvements shall be constructed with materials resistant to flood damage;

**5.1.3** New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;

**5.1.4** Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

**5.1.5** New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

**5.1.6** New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems, and discharges from the system into flood waters, and shall be subject to review and approval by the Superintendent of the Plainville Water Pollution Control Authority.

**5.1.7** On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding and shall be subject to review and approval by the Plainville Town Sanitarian.

**5.1.8** In any portion of a watercourse which is altered or relocated, the flood carrying capacity shall be maintained; and

**5.1.9** A structure already in compliance with the provisions of this Ordinance shall not be made non-compliant by any alteration, repair, reconstruction or improvement to the structure.

## **5.2. STANDARDS FOR STREAM WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS FLOODWAYS AND/OR MAPPED FLOODING**

Base flood elevations for flood prone areas without established information shall be determined by using the scaling method. The designated A Zone from the FIRM map at the particular location shall be transposed onto the Town's topographical map. The Applicant may supplement the Town's topographical map upon approval of the Town Engineer. Any supplemental topographical information shall be certified by a surveyor registered in the State of Connecticut.

The flood elevation shall be determined by the ground elevation of the transposed A Zone area. The highest ground elevation between both A Zone boundaries shall be the base flood elevation in the absence of established information.

## **5.3 SPECIFIC STANDARDS**

**5.3.1.a** In all areas of special flood hazard A1-30, AE, and AH where base flood elevation data has been provided, as set forth in Sections 3.2 or 4.3.1.k, the following provisions are required:

**5.3.1.a.1 Residential Construction.** New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to two (2) feet above the base flood elevation. (See also Section 6.4.)

**5.3.1.a.2 Manufactured homes** shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above BFE and be securely anchored to an adequately anchored foundation system. Manufactured homes placed or substantially improved within Zones A1-30, AH, AE shall meet one of the following location criteria: outside of a manufactured home park or subdivision; in a new manufactured home park or subdivision; in an expansion to an existing manufactured home park or subdivision or in an existing manufactured home park or subdivision in which a manufactured home has incurred substantial damage as a result of a flood.

**5.3.1.b Non-residential Construction.**

**5.3.1.b.1** New construction or substantial improvement of any commercial, industrial, or non-residential structure located in Zone A1-30, AE and AH shall have the lowest floor, including basement, elevated to two (2) feet above the base flood elevation; or

**5.3.1.b.2** Non-residential structures located in all A zones may be flood-proofed to two (2) feet above base flood elevation in lieu of the lowest as-built elevation being elevated two (2) feet above base flood elevation provided that together with all attendant utilities and sanitary facilities the areas of the structure below the base flood elevation are water tight 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. A registered professional engineer or architect shall review and/or develop structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards or practices for meeting the provisions of this subsection. Such certification shall be provided to the official as set forth in Section 4.2.1.f.

**5.3.1.b.3** All manufactured homes to be placed or substantially improved shall be installed using methods and practices which minimize flood damage. They shall also be elevated and anchored to resist flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties.

**5.3.1.b.4** Elevation construction standards shall include piling foundations placed no more than ten (10) feet apart, and the provision of reinforcement for piers more than six (6) feet above ground level. Adequate access and drainage shall also be provided.

**5.3.2 Enclosed Areas Below Base Flood Elevation.**

New construction or substantial improvements to buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls.

**5.3.2.a** Designs for complying with the requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:

**5.3.2.a.1** Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

**5.3.2.a.2** The bottom of all openings shall be no higher than one (1) foot above grade; and

**5.3.2.a.3** Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of flood waters in both directions.

**5.3.2.b** Electrical, plumbing and other utility connections are prohibited below the base flood elevation.

**5.3.2.c** Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).

**5.3.3 Floodways.** Located within areas of special flood hazard established in Section 3.2 are areas designated as floodways on the community's Flood Boundary and Floodway Map. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and have erosion potential, the following provisions shall apply:

**5.3.3.a** Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any (0.00) increase in flood levels during occurrence of the base flood discharge.

**5.3.3.b** In zones where base flood elevations have been determined, but before a floodway is designated, no new construction, substantial improvement or other development (including fill) shall be permitted which will increase base flood elevations more than one (1) foot at any point

along the watercourse when all anticipated development is considered cumulatively with proposed development.

**5.3.3.c** The Town may request floodway data of an Applicant for watercourses without FEMA-published floodways. When such data is provided by an Applicant or whenever such data is available from any other source in response to the Town's request or not, the Town shall adopt a regulatory floodway based on the principle that the floodway must be able to convey the waters of the base flood without increasing the water surface elevation more than one (1) foot at any point along the watercourse.

**5.3.3.d.** The water holding capacity of the floodplain, except those areas that are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction, or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and the 100 year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.

**5.3.3.e** Within the floodplains, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic analyses performed in accordance with standard engineering practice, that such encroachment shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

**5.3.3.f** Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad or be securely anchored with tie-down straps to prevent floatation or lateral movement, have the top of

the fill pipe extended above the BFE, and have a screw fill cap that does not allow for the infiltration of flood water.

**5.3.3.g** If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be in the SFHA. The structure includes any attached additions, garages, decks, sunrooms or any other structure attached to the main structure. (Decks or porches that extend into a more restrictive zone will require the entire structure to meet the requirements of the more restrictive zone.)

**5.3.3.h** If a structure lies within two or more flood zones, the construction standards of the most restrictive zone shall apply to the entire structure (i.e., V zone is more restrictive than A zone; structure must be built to the highest BFE). The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. (Decks or porches that extend into a more restrictive zone will require the entire structure to meet the requirements of the more restrictive zone.)

**5.3.3.i** New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water.

**5.4 Recreational Vehicle** All recreational vehicles placed on sites within Zones A1-30, AH or AE must be either: on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use or meet the elevation and anchoring requirements of a manufactured home.

## **SECTION 6. STANDARDS FOR SUBDIVISION PROPOSALS.**

In all special flood hazard areas the following requirements shall apply:

**6.1** All subdivision proposals shall be consistent with the need to minimize flood damage;

**6.2** All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

**6.3** All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazard; and

**6.4** In Zone A, base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which are five acres or fifty lots, whichever occurs first.

## **SECTION 7. VARIANCE PROCEDURES.**

**7.1** The Zoning Board of Appeals as established by the Town of Plainville shall hear and decide appeals and requests for variances from the requirements of this Ordinance.

**7.2** The Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Town Engineer or Building Official in the enforcement or administration of this Ordinance.

**7.3** Any person aggrieved by the decision of the Zoning Board of Appeals or any person owning land which abuts or is within a radius of one hundred (100) feet of the land in question may appeal within fifteen (15) days after such decision to the State Superior Court of the Judicial District of New Britain at New Britain, as provided in Section 8-8 of the General Statutes.

## **7.4 SPECIFIC SITUATION VARIANCES**

**7.4.1 Buildings on an Historic Register.** Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section, except for Section 7.5.3.a - 7.5.3.d, and provided the proposed reconstruction, rehabilitation or restoration will not result in the structure losing its historical character.

**7.4.2 Pre-existing small lot location.** Variances may be issued by a community for new construction and substantial improvements to be erected on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with Section 7.5.3.a - 7.5.3.d.

**7.4.3 Functional dependent uses.** Variances may be issued for new construction and substantial improvement and other development necessary for the conduct of a functionally dependent use provided the structure or other development is protected by methods that minimize flood damage, create no additional threat to public safety and meet the requirements of Section 7.5.3.a -7.5.3.d.

**7.4.4 Floodway prohibition.** Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

## **7.5 CONSIDERATIONS FOR GRANTING OF VARIANCES**

**7.5.1** In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance; and:

**7.5.1 a.** The danger that materials may be swept onto other lands to the injury of others;

**7.5.1 b.** The danger to life and property due to flooding or erosion damage;

**7.5.1 c.** The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

**7.5.1 d.** The importance of the services provided by the proposed facility to the community;

**7.5.1 e.** The necessity of the facility to waterfront location, in the case of a functionally dependent facility;

**7.5.1 f.** The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

**7.5.1 g.** The compatibility of the proposed use with existing and anticipated development;

**7.5.1 h.** The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;

**7.5.1 i.** The safety of access to the property in times of flood and for ordinary and emergency vehicles;

**7.5.1 j.** The expected heights, velocity, duration, rate of rise and sediment transport of flood waters and the effects of wave action, if applicable, expected at the site; and

**7.5.1 k.** The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

**7.5.2** Upon consideration of the factors listed above, and the purposes of this Ordinance, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Ordinance.

**7.5.3 Conditions for Variances**

**7.5.3 a.** Variances shall be issued only upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as to not destroy the historic character and design of the building.

**7.5.3 b.** Variances shall be issued only upon (1) a showing of good and sufficient cause, (2) a determination that failure to grant the variance will result in exceptional hardship, and (3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

**7.5.3 c.** Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built, and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation up to amounts as high as \$25 for \$100 of insurance.

**7.5.3 d.** The Building Official shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

**7.6 Penalties for Violation.** Violation of the provisions of this Ordinance or failure to comply with any of its requirements, including violation of condition and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$250.00 per day if proven done willfully and \$100.00 per day if not, or imprisoned for not more than ten (10) days for each day of violation, or both and, in addition, shall pay all costs and reasonable legal fees involved in the case. Nothing herein contained shall prevent the Town of Plainville from taking such other lawful action as is necessary to prevent or remedy any violation.

**SECTION 8. REPEAL.**

Upon the effective date of this Ordinance, the prior Flood Damage Prevention Ordinance is hereby repealed.

Adopted by the Town Council June 21, 1993

Amended August 4, 2008