

**Revised Ordinances of the City of East Providence, Rhode Island
Chapter 19, Zoning**

DIVISION 12. SPECIAL FLOOD HAZARD AREAS AND FLOOD FRINGE LANDS

Sec. 19-306. Purpose.

The purpose of this Article is to ensure public safety; minimize hazards to persons and property from flooding, to protect watercourses from encroachment and to maintain the capability of floodplains to retain and carry off floodwaters.

Sec. 19-307. Applicability.

(a) The City elects to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended). The National Flood Insurance Program, established in the aforesaid act, provides that areas of the City having a special flood hazard be identified by the Federal Emergency Management Agency and that floodplain management measures be applied in such flood hazard areas. The requirements of this article shall apply to any construction or other development which lies wholly or partly within an area of special flood hazard, as identified as Zone A, AE, AH, AO, A1-30, A99, V, V1-30, VE on the Flood Insurance Rate Map and Flood Hazard Boundary Map prepared by Federal Emergency Management Agency dated March 2, 2009. Said Flood Map, including any amendments adopted after the date hereof, is hereby made part of this Article. The exact boundaries of the District may be defined by the 100-year base flood elevations shown on the FIRM and further defined by the Flood Insurance Study booklet revised March 2, 2009.

(b) The degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection. If any section, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court, the remainder of the ordinance shall control.

(c) For the purposes of this section, "other development" shall be defined as any action exclusive of that which requires the issuance of a building permit under the Rhode Island State Building Code. Such other development shall include, but not necessarily be limited to, the following:

- (1) Earth, gravel or mineral removal or extraction.
- (2) Alteration of the topography by cutting, filling or grading.
- (3) Storage of bulk materials outside of a structure.
- (4) Construction or placement of facilities or improvements not normally requiring a building permit.

(d) The requirements set forth in this Article shall be in addition to any applicable requirements in this chapter and in any other regulation which may be applicable. Additionally, more stringent requirements shall apply to coastal high-hazard areas which are defined as those special flood hazard areas along the City's coastline which are subject to high-velocity waters

from hurricane wave wash and wave run-up as designated as Zone V 1 - 30 on the Flood Map (hereinafter referred to as the "V-Zone").

Sec. 19-308. Definitions.

Unless specifically defined below, words and phrases used in this ordinance pertain to floodplain management, have the same meaning as they have in common usage and to give this ordinance it's most reasonable application.

Accessory Structure means a structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

Area of Shallow Flooding means a designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Flood Hazard. See *Special Flood Hazard Area*.

Base Flood means the flood having a one (1) percent chance of being equaled or exceeded in any given year, also referred to as the one hundred (100) year flood, as published by the Federal Emergency Management Agency (FEMA) as part of a Flood Insurance Study (FIS) and depicted on a Flood Insurance Rate Map (FIRM).

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.

Basement means any area of the building having its floor subgrade (below ground level) on all sides.

Building. See *Structure*.

Cost means as related to substantial improvements, the cost 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 elements, structural elements, 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, survey costs, permit fees, outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.

Development means any man-made change to improved or unimproved real estate, including but not limited to the construction of buildings or structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment; the storage, deposition, or extraction of materials; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

Dry Floodproofing means any combination of structural and non-structural protection measures incorporated in a building that is not elevated above the base flood elevation that keeps water from entering the building to prevent or minimize flood damage. **Note:** For insurance purposes, a dry floodproofed, non-residential structure is rated based on the elevation of its lowest floor unless it is floodproofed to one foot above the BFE.

Existing Manufactured Home Park or Manufactured Home Subdivision means a manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the lots on which the manufactured home are to be 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.

Expansion to an Existing Manufactured Home Park or Existing Manufactured Home Subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing 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).

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

Finished Living Space means Fully enclosed areas below the base flood elevation (BFE) that are not considered a basement cannot have finished living space and needs to be designed to be exposed to flood forces. These spaces can only to be used for parking, building access or limited storage. Finished living space can include, but is not limited to, a space that is heated and/or cooled, contains finished floors (tile, linoleum, hardwood, etc.), has sheetrock walls that may or may not be painted or wallpapered, and other amenities such as furniture, appliances, bathrooms, fireplaces and other items that are easily damaged by floodwaters and expensive to clean, repair or replace.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Boundary and Floodway Map (FBFM) means the official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated the limits of the regulatory floodway and 100-year floodplain.

Flood Insurance Rate Map (FIRM) means the official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the special flood hazard areas (100-year floodplain) and the insurance risk premium zones applicable to a community. FIRM published after January 1990 may also show the limits of the regulatory floodway.

Flood Insurance Study (FIS) means the official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

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 (1) foot. For the purposes of these regulations, the term "Regulatory Floodway" is synonymous in meaning with the term "Floodway".

Functionally Dependent Use or Facility means a use or facility that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities. The term does not include seafood processing facilities, long-term storage, manufacturing, sales or service facilities.

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

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 a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

Lowest Floor means the lowest floor of the lowest enclosed area (including basement).

Manufactured Home means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation

when attached to the required utilities. The term also includes park trailers, travel trailers, recreational vehicles and other similar vehicles or transportable structures placed on a site for one hundred and eighty (180) consecutive days or longer and intended to be improved property.

Manufactured Home Park or Manufactured Home Subdivision means a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

Market Value means market value is the price of a structure that a willing buyer and seller agree upon. This can be determined by an independent appraisal by a professional appraiser; the property's tax assessment, minus land value; the replacement cost minus depreciation of the structure; the structure's Actual Cash Value.

Mean Sea Level (MSL) means average height of the sea for all stages of the tide, usually determined from hourly height observations over a 19-year period on an open coast or in adjacent waters having free access to the sea. The North American Vertical Datum (NAVD) of 1988 (or other datum where specified) to which base flood elevations shown on a community Flood Insurance Rate Map (FIRM) are referenced.

New Construction means structures for which the "start of construction" commenced on or after effective date of floodplain regulations, and includes any subsequent improvements to such structures.

New Manufactured Home Park or Manufactured Home Subdivision means a manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain regulations adopted by the community.

Recreational Vehicle means a vehicle which is: (a) built on a single chassis; (b) four hundred (400) square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Floodway. see *Floodway.*

Sand Dunes means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Sheet Flow Area. See *Area of Shallow Flooding.*

Special Flood Hazard Area (SFHA) means 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 provided 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.

Start of Construction means for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement or other improvement was within one hundred and eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erections 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.

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

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.

Substantial Improvement means any combination of repairs, reconstruction, rehabilitation, alterations, additions or other improvements to a structure, taking place during a ten (10) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure as determined at the beginning of such ten (10) year period. This term includes structures that have incurred "substantial damage", regardless of the actual repair work performed. For 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 either: (1) 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 (2) Any alteration of a "historic" structure,

provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Variance means a grant of relief by a community from the terms of the floodplain management ordinance that allows construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.

Violation means 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, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

Water Surface Elevation means the height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Wet Floodproofing means measures designed to minimize damage to a structure or its contents by water that is allowed into a building.

Sec. 19-309. Permit required.

(a) Except where construction is covered by a building permit or by approval of a subdivision plat by the East Providence Planning Board, any other development shall require the issuance of a development permit by the Building Official or designee. Said permit shall be in a form authorized by the City Council.

(b) The application for a flood hazard development permit shall be submitted to the code enforcement officer and shall include:

- (1) The name and address of the applicant;
- (2) An address or a map indicating the location of the construction site;
- (3) A site plan showing location of existing and proposed structures, sewage disposal facilities, water supply facilities, areas to be cut and filled, and the dimensions of the lot;
- (4) A statement of the intended use of the structure;
- (5) A statement as to the type of sewage system proposed;
- (6) Specification of dimensions of the proposed structures;
- (7) The elevation (in relation to mean sea level) of the lowest floor, including basement, and if the lowest floor is below grade on one or more sides, the elevation of the floor immediately above;
- (8) Base flood elevation data for all new, relocated or substantially improved structures;
- (9) The elevation (in relation to mean sea level) to which the structure will be floodproofed;
- (10) The description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.

(c) Prior to the issuance of a building or development permit, the applicant shall submit evidence that all necessary permits and approvals have been received from all government agencies from which approval is required by federal or state law.

Sec. 19-310. Permit fee.

A permit fee (based on the cost of the construction) may be required to be paid to the City of East Providence and a copy of a receipt for the same shall accompany the application. An additional fee may be charged if the code enforcement officer and/or board of appeals requires the assistance of a professional engineer.

Sec. 19-311. Review of flood hazard development permit applications.

The Building Official or designee shall:

- (1) Review all applications for flood hazard development permits to determine that all pertinent requirements as described in Section 19-312 have been or will be met;
- (2) Utilize, in the review of all flood hazard development permit applications, the base flood data contained in the "Flood Insurance Study—City of East Providence, Rhode Island, Providence County," as described in Section 19-307.
- (3) Make interpretations of the location of boundaries of special flood hazard areas shown on maps described in Section 19-307;
- (4) In A Zones, in absence of FEMA BFE data and floodway data, obtain, review, and reasonably utilize other BFE and floodway data as a basis for elevating residential structures to or above the base flood level, and for floodproofing or elevating non-residential structures to or above the base flood level.
- (5) In review of flood hazard development permit applications, determine that all necessary permits have been obtained from those federal, state and local government agencies from which prior approval is required;
- (6) Notify adjacent municipalities, the Rhode Island Department of Environmental Management and the Rhode Island Emergency Management Agency prior to any alteration or relocation of a watercourse and submit copies of such notifications to the Federal Emergency Management Agency and maintain carrying capacity of altered watercourse; and
- (7) Maintain, as a permanent record, copies of all flood hazard development permits issued and data relevant thereto, including reports of the zoning board of review on variances.

Sec. 19-312. Development standards.

The following standards shall apply to any construction or other development located wholly or partly within an area of special flood hazard as defined in Section 19-307. Please also refer to the current Rhode Island State Building Code, One and Two Family Dwelling Code, Plumbing Code, Mechanical Code, and Electrical for state standards. The Coastal

Resource Management Council (CRMC) may also require special permits for development on the coastal feature.

(a) The use shall be permitted in the zone in which the property is located.

(b) Areas subject to hurricane tidal flooding lying ten feet or less above mean sea level shall not be used for any purpose except the following:

- (1) Parks operated by a government grant;
- (2) Nonbuilding uses such as farming, bathing beaches or picnic areas;
- (3) Beach cabanas, not intended for human occupancy;
- (4) Marinas, yacht clubs, boat docks, launching ramps, marine terminals and bulkheads;
- (5) Lighthouse, sea wall, breakwater, jetty or other protective structure;
- (6) Other similar uses to those contained in subsections (b)(1) through (b)(5) of this section.
- (7) Outdoor storage, provided that such material does not include water-soluble materials, volatile or flammable materials, acids or poisons; and provided that such business or industrial outdoor open storage of materials that are buoyant in water shall be adequately secured or protected so that they will not leave the premises upon the action of wind, wave or high water.

(c) No watercourse may be altered in a manner which will, in the opinion of the Building Official or designee, result in any decrease in the capacity of the watercourse, and no land shall be graded or altered in such a manner as to increase the base flood elevation within the City of East Providence. Any application for a zoning permit involving watercourse alterations under this section shall be accompanied by a duly certified affidavit by the applicant attesting that the Rhode Island Statewide Planning Program, Coastal Resources Management Council, Department of Environmental Management, Federal Insurance Administrator—U.S Dept. of Housing and Urban Development, Federal Emergency Management Agency, and neighboring communities have been notified of the pending watercourse alteration.

(d) In a regulatory floodway, any encroachment is prohibited which would cause any increase in the Base Flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the Base Flood discharge.

(e) The filling or excavation of land may be permitted only under the following conditions:

1. Said action will not encroach upon a watercourse.
2. Said action will not result in an increase in the potential flood level. Where it is determined that said action may result in an increase in the potential flood level, the Building Official or designee shall require appropriate measures to offset the potential

increase. Adequate drainage shall be provided so as to reduce the exposure of the site or any other land to flood hazard.

(f) Provision shall be made for anchoring facilities, equipment or yard features which are capable of movement or flotation in floodwaters. Such items shall include but shall not necessarily be limited to: fences, sheds, animal shelters, tanks, storage boxes, planters, vehicles, boats and other items normally positioned or stored on a site outside of a structure.

(g) The use of flood-resistant materials shall be used for structures within an area of special flood hazard as defined in Section 19-307.

(h) Construction methods and practices shall be used that minimize flood damage.

(i) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located to prevent water entry to accumulation.

(j) Onsite waste disposal systems shall be located and designed so as to avoid impairment of them or contamination from them during flooding.

(k) The methods of water supply and sewage disposal system shall be adequate and floodproofed up to the level of the base flood elevation (BFE) in such a manner as to minimize or eliminate the infiltration of floodwaters into the systems and discharges from systems into floodwaters.

(l) Base flood elevation data is required for subdivision proposals or other development greater than 50 lots or five (5) acres.

(m) In addition to the foregoing, in a V-Zone, the following requirements shall apply to any proposed development:

1. The alteration of sand dunes, where existing, is prohibited.
2. All new construction shall be located landward of the reach of mean high tide.

Sec. 19-313. Specific Standards.

(a) *Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-30, and AE.*

(1) *Residential Construction.* All new construction, substantial improvements, and repair to structures that have sustained substantial damage shall have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE).

(2) *Non-Residential Construction.* All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall:

- a. Have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE); or
- b. In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1) foot above the BFE provided that together with all attendant utilities and sanitary facilities the areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A Rhode Island 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 of practice or meeting the provisions of this section. Such certification shall be provided to the Building Official or designee.

(3) *Fully Enclosed Areas Below The Base Flood Elevation Of Elevated Buildings.*

All new construction, substantial improvements, or repair of substantial damage to residential or non-residential structures that include fully enclosed areas formed by a foundation and other exterior walls below the base flood elevation (BFE) of an elevated building, shall be designed to preclude finished living space and be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a Rhode Island registered professional engineer or architect, or meet the following minimum criteria listed in sections a. through g. below:

- a. Provide a minimum of two (2) openings (hydraulic flood vents) having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding. These hydraulic openings must be located on at least two different walls. Only the area (square footage) that lies below the BFE can be used in the calculation of net area of vents required;
- b. The bottom of all openings shall be no higher than one (1) foot above grade. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the building. The foundation slab of a residential structure, including the slab of a crawlspace, must be set equal to the outside finished grade on at least one side of the building;
- c. The openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means. Other coverings may be designed and certified by an engineer or approved by the Building Official or designee.

- d. The area cannot be used as finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles, building access or limited storage. Access to the enclosed area shall be the minimum necessary to allow for the 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). The enclosed area shall not be used for human habitation or partitioned into separate rooms;
- e. All interior walls, floor, and ceiling materials located below the BFE shall be unfinished and resistant to flood damage.
- f. Electrical, plumbing, machinery or other utility equipment that service the structure (furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers, dryers, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area below the BFE. Utilities or service equipment located in this enclosed area, even if elevated above the BFE in the space, will subject the structure to increased flood insurance rates.
- g. A residential building with a structurally attached garage having the floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of Sections 19-313 (A.3). A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. The human intervention necessary to open garage doors when flooding occurs is not an acceptable means of meeting the openings requirements. In addition to the automatic entry of floodwaters, the areas of the garage below BFE must be constructed with flood resistant materials. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry floodproofed as per the requirements of Sections 19-313 (A.2).
- h. Plans concerning the means by which structures and all attendant utility and sanitary facilities shall be secured, protected and floodproofed shall be prepared by registered professional engineer, submitted to the Zoning Officer and approved by the City Engineer before any permit is issued or construction commenced.

(4) *Manufactured (Mobile) Homes and Recreational Vehicles (RVs).*

- a. In all Special Flood Hazard Areas (SFHA), any manufactured (mobile) homes to be newly placed, substantially improved or repaired as a result of substantial damage, shall be elevated so that the bottom of the lowest floor is at or above the base flood elevation (BFE). This includes SFHAs outside 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 on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood.
 - b. All manufactured (mobile) homes within a SFHA shall be placed on a permanent foundation which itself is securely anchored and to which the structure is securely anchored so that it will resist flotation, lateral movement and hydrostatic pressures. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors.
 - c. All manufactured (mobile) homes within a SFHA shall be installed using methods and practices which minimize flood damage. Adequate access and drainage should be provided. Elevation construction standards include piling foundations placed no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level.
 - d. Recreational vehicles placed on sites within a SFHA shall either (i) be on the site for fewer than 180 consecutive days, and (ii) be fully licensed and ready for highway use, OR (iii) be elevated and anchored. A recreational vehicle is ready for highway use if 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.
 - e. Public utilities and facilities in manufactured (mobile) homes or subdivisions with a SFHA shall be constructed so as to minimize flood damage.
- (5) *Accessory Structures.* Detached accessory structures in Zones A, AE, A1-30, AO, and AH (i.e., garages, sheds) do not have to meet the elevation or dry flood-proofing requirement if the following standards are met:
- a. The structure is no more than 500 square feet and has a value less than \$3000.
 - b. The structure has unfinished interiors and must not be used for human habitation. An apartment, office or other finished space over a detached garage is considered human habitation and would require the structure to be elevated.
 - c. The structure is used solely for parking of vehicles and/or limited storage.
 - d. The accessory structure must be wet-floodproofed and designed to allow for the automatic entry and exit of flood water.
 - e. The accessory structure shall be firmly anchored to prevent flotation, collapse and lateral movement.
 - f. Service facilities such as electrical, mechanical and heating equipment must be elevated or floodproofed to or above the base flood elevation.

- g. The structure must comply with the floodway encroachment provision in Section 19-312 (B).

(b) *Additional Construction Standards in Coastal V-Zones.*

(1) *Residential and Non-Residential Construction.*

In V1-30, VE, and V-Zones, the elevation of the bottom of the lowest horizontal structural member of the lowers floor of all new and substantially improved structures shall be obtained and maintained. Further, all new construction, substantial improvements:

- a. Shall be elevated and secured to anchored pilings or columns so that the bottom of the lowest horizontal structural member is at or above the Base Flood Elevations (BFE);
- b. Shall be certified by a registered professional engineer that the design and methods of construction meet elevation and anchoring requirements;
- c. Shall have space below the lowest floor either free of obstruction or constructed with breakaway walls. Any enclosed space shall be used solely of building, building access, or storage;
- d. Shall not utilize fill for structural support.

(2) *Manufactured Homes.* Manufactured homes placed or substantially improved within V1-V30, VE, and V-Zones, which meet one of the following criteria, shall meet the V-Zones standards.

- a. Outside a manufactured home park or manufactured home subdivision;
- b. In a new manufactured home park or manufactured home subdivision;
- c. In an expansion to an existing manufactured home park or manufactured home subdivision;
- d. On a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood.

In V1-30, VE, and V-Zones, manufactured homes shall be placed or substantially improved in an existing manufactured home park to be elevated so that:

- a. The lowest floor is at or above the Base Flood Elevations; OR
- b. The chassis is supported by reinforced piers no less than 36 inches in height above grade and securely anchored.

(3) *Recreational Vehicles.* In V1-30, VE, and V-Zones, all recreational vehicles to be placed on a site must:

- a. Be elevated and anchored; OR
- b. Be on the site for less than 180 consecutive days; OR
- c. Be fully licensed and highway ready.

Sec. 19-314. Variance.

(a) The Zoning Board of Review may hear and grant a variance as prescribed in this section subject to the prerequisites contained therein. In addition to applying the criteria and requirements of said section, the Board shall undertake the following in granting a variance from the provisions of this Article:

- (1) Describe in its decision the exact extent of the variance granted.
- (2) Indicate in its decision that the granting of such variance may affect the flood insurance rates as they apply to the subject property up to amounts as high as \$25 per \$100 of insurance coverage, and further, that construction or other development below the base flood elevation may increase risk to life and property.
- (3) Forward a copy of its written decision and findings to the applicant, the Building Official or designee, the Rhode Island Statewide Planning Program and the Federal Insurance Administration in the annual report of the Town to the Administration.

(b) No variance may be granted which will result in any increase in flood levels.

Sec. 19-315. Enforcement.

(a) It shall be the duty of the Building Official or designee to enforce the provisions of this article. If the code enforcement officer finds that any provisions of this article are being violated, he shall notify, in writing, the person responsible for such violation indicating the nature of the violation and ordering the action necessary to correct it.

(b) When the above action does not result in the correction or abatement of the violation, the municipal officers, upon notice from the code enforcement officer, are hereby authorized and directed to institute any and all actions, whether legal or equitable, necessary to the enforcement of this article. Any person who continues to violate any provision of this article after receiving notice of such violation shall be guilty of a violation of this chapter and subject to a fine of \$500.00 for each violation. Each day such a violation is continued is a separate offense.