

**BOROUGH OF AVALON
CAPE MAY COUNTY, NEW JERSEY**

COMMUNITY ID # 345279

ORDINANCE 757-2017

AN ORDINANCE AMENDING AND SUPPLEMENTING CHAPTER 19, FLOOD DAMAGE PREVENTION OF THE CODE OF THE BOROUGH OF AVALON, 2013 AND AMENDING VARIOUS OTHER ORDINANCES OF THE BOROUGH PERTAINING TO FLOOD DAMAGE PREVENTION TO WIT, ORDINANCE NOS. 682-2013, 688-2013, 710-2014, 749-2016, and 752-2016.

CHAPTER 19 FLOOD DAMAGE PREVENTION

WHEREAS, certain amendments to the Borough's Flood Damage Prevention Ordinance have been mandated by the Federal Emergency Management Agency (FEMA) as a condition for the Borough's continued participation in the National Flood Insurance Program (NFIP) and the following amendment and restatement of Chapter 19 of the Code of the Borough of Avalon, 2013 is intended to comply with such FEMA requirements;

NOW, THEREFORE, BE IT ORDAINED BY THE BOROUGH COUNCIL OF THE BOROUGH OF AVALON, IN THE COUNTY OF CAPE MAY, AND STATE OF NEW JERSEY AS FOLLOWS:

SECTION 1: Chapter 19 (Flood Damage Prevention) of the Code of the Borough of Avalon, 2013 is hereby amended, supplemented, and restated and shall hereby read and provide as follows:

19-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

19-1.1 Statutory Authorization Creation of Bureau of Flood Damage Prevention; Administrator; Deputy Administrator.

a. The Legislature of the State of New Jersey has in N.J.S.A. 40:48-1, et seq., delegated the responsibility to local governmental units to adopt regulations designed to promote public health, safety, and general welfare of its citizenry. Therefore, the Borough Council of the Borough of Avalon, of Cape May County, New Jersey does ordain as follows.

b. The provisions of this chapter shall be enforced by the Bureau of Flood Damage Prevention within the Division of Construction Code Enforcement which shall be directed by the Flood Plain Administrator who shall be assisted by the Deputy Flood Plain Administrator both of whom shall be appointed by the Mayor and approved by the Borough Council. The Bureau of Flood Damage Prevention shall be assigned to the Department of Administration. The Flood Plain Administrator and Deputy Flood Plain Administrator shall be qualified by training and experience to administer the provisions of this chapter and to perform all duties and discharge the responsibilities specified herein.

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 731-2015)

19-1.2 Findings of Fact.

a. The flood hazard areas of the Borough of Avalon are subject to periodic inundation which results in the threat of loss of life, loss of 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.

b. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazard which increase flood heights and velocities, and when inadequately anchored, causes damage in other areas. Structures that are inadequately anchored, flood-proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-1.3 Statement of Purpose.

It is the purpose of this chapter 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:

- a. Protect human life and health;
- b. Minimize expenditure of public money for costly flood control projects;
- c. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public and risk to those individuals who are providing rescue efforts;
- d. Minimize prolonged business interruptions;
- e. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, bridges located in areas of special flood hazard;
- f. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; (Ord. No. 757-2017)
- g. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- h. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 757-2017)

19-1.4 Methods of Reducing Flood Losses.

In order to accomplish its purposes, this chapter includes methods and provisions for:

- a. Restricting or prohibiting uses which are potentially 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;
- b. Requiring that uses vulnerable to floods including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- c. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
- d. Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- e. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.
(Ord. No. 682-2013; Ord. No. 688-2013)

19-2 DEFINITIONS.

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

Appeal - A request for a review of the Flood Plain Manager's interpretation of any provision of this chapter or a request for a variance.

Area of Shallow Flooding - A designated AO, AH, or VO Zone on a community's Digital Flood Insurance Rate Map (DFIRM) with a one (1%) percent annual or greater chance of flooding to an average depth of one (1) to three (3) 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. (Ord. No. 757-2017)

Area of Special Flood Hazard - The land in the floodplain within the community subject to a one (1%) percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone V, VE, V1-30, A, AO, A1-A30, AE, A99, or AH.

ASCE – American Society of Civil Engineers (Ord. No. 752-2016)

ASCE 24 – Document prepared by American Society of Civil Engineers and adopted by FEMA. At times referred to as ASCE 24-14. (Ord. No. 752-2016)

Attendant Utilities and Equipment – Utilities, mechanical, electrical, fuel gas, plumbing, HVAC, and related equipment, as well as services associated with new construction and substantial improvements. (Source ASCE 24-14 definition) (Ord. No. 752-2016)

Base Flood —A flood having a one percent chance of being equaled or exceeded in any given year. (Ord. No. 757-2017)

Base Flood Elevation (BFE) – The flood elevation shown on a published Flood Insurance Study (FIS) including the Flood Insurance Rate Map (FIRM). For zones AE, AH, AO, and A1-30 the elevation represents the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. For zones VE and V1-30 the elevation represents the stillwater elevation (SWEL) plus wave effect (BFE = SWEL + wave effect) resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year (Ord. No. 757-2017).

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

Breakaway Wall - A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or supporting foundation system.

Coastal High Hazard Area - An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.

Development - Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within the area of special flood hazard.

Digital Flood Insurance Rate Map (DFIRM) - The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Elevated Building - A non-basement building (i) built, in the case of a building in an area of special flood hazard, to have the top of the elevated floor or, in the case of a building in a coastal high-hazard area or Coastal A Zone, to have the bottom of the lowest horizontal structural member of the elevated floor, elevated above the base flood elevation plus freeboard by means of piling, columns (posts and piers), or shear walls parallel to the flow of the water, and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood up to the magnitude of the base flood. In an area of Coastal High Hazard and Coastal A Zone "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters. In areas of coastal high hazard or Coastal A Zone "elevated buildings" also includes a building otherwise meeting the definition of "elevated building" even though the lower area is enclosed by means of breakaway walls. (Ord. No. 752-2016)

Erosion - The process of gradual wearing away of land masses.

Existing Manufactured Home Park or Subdivision — A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community. (Ord. No. 757-2017)

FEMA – Federal Emergency Management Agency. (Ord. No. 752-2016)

Flood or Flooding - A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) The overflow of inland or tidal waters and/or
- (b) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Hazard Area (FHA) - The land in the floodplain within a community subject to flooding from the one (1%) percent annual chance event depicted on the Flood Hazard Map.

Flood Hazard Map - The official map on which the Federal Emergency Management Administration has delineated the areas of flood hazards applicable to the community.

Flood Insurance Rate Map (FIRM) - The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study (FIS) - The official report in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Insurance Rate Map(s) and the water surface elevation of the base flood.

Flood Zones -

AE- Areas subject to inundation by one (1%) percent annual chance flood event determined by detailed methods.

AO- Areas subject to inundation by one (1%) percent chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one (1) and three (3) feet.

AH Zone- Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown in this zone. (Ord. No. 757-2017)

COASTAL A ZONE – The portion of the Special Flood Hazard Area (SFHA) starting from a Velocity (V) Zone and extending up to the landward Limit of the Moderate Wave Action delineation. Where no V Zone is mapped the Coastal A Zone is the portion between the open coast and the landward Limit of the Moderate Wave Action delineation. Coastal A Zones may be subject to wave effects, velocity flows, erosion, scour, or a combination of these forces. Construction and development in Coastal A Zones is to be regulated the same as V Zones/Coastal High Hazard Areas. (Ord. No. 752-2016; Ord. No. 757-2017)

VE- Areas subject to inundation by the one (1%) percent chance flood event with additional hazards due to storm-induced velocity wave action.

Floodplain Management Regulations - Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such State or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood-Proofing - Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real estate, water or sanitary facilities and their contents.

Freeboard — A factor of safety usually expressed in feet above a flood level for purposes of flood plain 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 conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed. (Ord. No. 757-2017)

Freeboard Elevations - The freeboard measurement for AE Zones shall be measured from base flood elevation vertically upward to the top of the masonry foundation a distance of three (3) feet. The freeboard measurement for VE Zones shall be measured from base flood

elevation vertically upward to the bottom of the lowest horizontal structural member a distance of three (3) feet. (See Figure 1 which may be found in the Borough offices.)

Highest Adjacent Grade - The highest natural elevation of the ground surface prior to construction next to the proposed or existing walls of a structure.

Historic Structure - Any structure that is:

- a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 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.

Increase Cost of Compliance (ICC) - The coverage by a standard flood insurance policy under the NFIP that provides for the payment of a claim for the cost to comply with the State of New Jersey and the Borough of Avalon floodplain management laws or ordinances after a direct physical loss by flood, or the Borough of Avalon declares the structure to be “substantially” or “repetitively” flood damaged, ICC coverage is provided for in every standard NFIP flood policy, and will help pay for the cost to floodproof, relocate, elevate, or demolish the structure.

Limit of Moderate Wave Action (LiMWA) – Inland limit of the area affected by waves greater than 1.5 feet during the Base Flood. Base Flood conditions between the V Zone and the LiMWA will be similar to, but less severe than those in the V Zone. (Source: ASCE 24 Definitions) (Ord. No. 752-2016)

Lowest Floor - The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement is not considered a building's lowest floor provided that such enclosure is not built so to render the structure in violation of other applicable non-elevation design requirements of 44 CFR Section 60.3. (Ord. No. 757-2017)

Manufactured Home — A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle". (Ord. No. 757-2017)

Manufactured Home Park or Manufactured Home Subdivision — A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale. (Ord. No. 757-2017)

New Construction - Structures for which the start of construction commenced on or after the effective date of a floodplain regulation adopted by a community and includes any subsequent improvements to such structures.

New Manufactured Home Park or Subdivision — A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the floodplain management regulations adopted by the municipality. (Ord. No. 757-2017)

Nonresidential – Any building or structure or any portion thereof that is not classified residential. (Source ASCE 24-14 definitions) (Ord. No. 752-2016)

Primary Frontal Dune - A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves from coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from the relatively steep slope to a relatively mild slope.

Recreational Vehicle — A vehicle which is [i] built on a single chassis; [ii] 400 square feet or less when measured at the longest horizontal projections; [iii] designed to be self-propelled or permanently towable by a light duty truck; and [iv] designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. (Ord. No. 757-2017)

Residential – (1) Buildings and structures and portions thereof where people live or that are used for sleeping purposes on a transient or nontransient basis; (2) structures including but not limited to one- and two-family dwellings, townhouses, condominiums, multifamily dwellings, apartments, congregate residences, boarding houses, lodging houses, rooming houses, hotels, motels, apartment buildings, convents, monasteries, dormitories, fraternity houses, sorority houses, vacation time-share properties; and (3) institutional facilities where people are cared for or live on a 24-hour basis in a supervised environment, including but not limited to board and care facilities, assisted living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers, convalescent facilities, hospitals, nursing homes, mental hospitals, detoxification facilities, prisons, jails, reformatories, detention centers, correctional centers, and prerelease centers. (Source ASCE 24-14 definitions) (Ord. No. 752-2016)

Sand Dunes — Naturally occurring or man-made accumulations of sand in ridges or mounds landward of the beach.

Start of Construction - For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. No. 97-348) this shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site such as the pouring of a slab or footings, the installation of pilings, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. (Ord. No. 757-2017)

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 or 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.

Structure - Any walled and roofed building, manufactured home or other structure, including gas and liquid storage tank that is principally above ground. (Source ASCE 24-14 definitions) (Ord. No. 752-2016; Ord. No. 757-2017)

Substantial Damage — Damage of any origin sustained by a structure whereby the cost of restoring the structure to its condition before damage would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. (ORD 757-2017)

Substantial Improvement - Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (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: (Ord. No. 757-2017)

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 officer and which are the minimum necessary to assure safe living conditions; or

b. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure." (Ord. No. 757-2017)

Variance - A grant of relief from the requirements of this chapter that permits construction in a manner that would otherwise be prohibited by this chapter.

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016)

Violation — The failure of a structure or other development to be fully compliant with this ordinance. A new or substantially improved structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR §60.3(b)(5), (c)(4), (c)(10), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided. (Ord. No. 757-2017)

19-3 GENERAL PROVISIONS.

19-3.1 Lands to Which This Chapter Applies.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the Borough of Avalon, Cape May County, New Jersey. (Ord. No. 682-2013; Ord. No. 688-2013)

19-3.2 Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard for the Borough of Avalon, Community No. 345279, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:

a. A scientific and engineering report "Flood Insurance Study, Cape May County, New Jersey, (All Jurisdictions)" dated October 5, 2017. (Ord. No. 757-2017)

b. Flood Insurance Rate Maps (FIRM) / Digital Flood Insurance Rate Maps (DFIRM) for Cape May County, New Jersey (All Jurisdictions) as shown on index panel numbers 34009C0234F, 34009C0261F, 34009C0251F, 34009C0252F, 34009C0253F, 34009C0254F, dated October 5, 2017 are hereby adopted. (Ord No. 757-2017)

The above documents are hereby adopted and declared to be part of this chapter. The Flood Insurance Study, maps and documents are on file at the Borough Hall located at 3100 Dune Drive, Avalon, New Jersey. (Ord. No. 757-2017)

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 749-2016; Ord. No. 752-2016; Ord No. 757-2017)

19-3.3 Penalties for Noncompliance.

No structure or land shall hereafter be constructed, located, relocated, extended, converted, or altered without full compliance with the terms of this chapter and other applicable codes and regulations. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a violation punishable as herein provided. Each day that a violation continues shall be deemed a separate and distinct offense. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof shall be subject to one or more of the following: a fine of not more than two thousand (\$2,000.00) dollars or imprisoned for not more than thirty (30) days, or a period of community service not to exceed thirty (30) days, for each violation and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the Borough of Avalon, from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 749-2016; Ord. No. 757-2017)

Cross Reference N.J.S.A. 40:49-5 (Penalties for violation of municipal ordinance).

19-3.4 Abrogation and Greater Restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. No. 682-2013; Ord. No. 688-2013)

19-3.5 Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- a. Considered as minimum requirements;
- b. Liberally construed in favor of the Governing Body; and,
- c. Deemed neither to limit nor repeal any other powers granted under State statutes.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-3.6 Warning and Disclaimer of Liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages.

This chapter shall not create liability on the part of the Borough of Avalon, any officer or employee thereof or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-4 ADMINISTRATION.

19-4.1 Establishment of Development Permit.

A development permit shall be obtained before construction or development begins, including placement of manufactured homes, within any area of special flood hazard established in subsection 19-3.2. Application for a development permit shall be made on forms furnished by the Flood Plain Manager and may include, but not be limited to: 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; and the location of the foregoing. Specifically, the following information is required:

- a. Elevation in the NAVD88 datum of the lowest floor (including basement) of all structures;
- b. Elevation in the NAVD88 datum to the top of the masonry foundation in AE Zones or the bottom of the lowest horizontal structural member in VE Zones.
- c. Elevation in the NAVD88 datum to which any structure has been flood-proofed.
- d. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in subsection 19-7.2; and,
- e. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 757-2017)

19-4.2 Designation of the Local Administrator.

The Flood Plain Manager is hereby appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions. (Ord. No. 682-2013; Ord. No. 688-2013)

19-4.3 Duties and Responsibilities of the Administrator.

Duties of the Flood Plain Manager shall include, but not be limited to:

a. *Permit Review.*

1. Review all development permits to determine that the permit requirements of this chapter have been satisfied.
2. Review all development permits to determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
3. Review all development permits in the coastal high hazard area and Coastal A Zone area of the area of special flood hazard to determine if the proposed development alters sand dunes or other natural coastal protections so as to increase potential flood damage. (Ord. No. 752-2016;
4. Review plans for walls to be used to enclose space below the base flood elevation in accordance with subsection 19-8.2d.

b. *Use of Other Base Flood and Floodway Data.*

When base flood elevation and floodway data has not been provided in accordance with subsection 19-3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Flood Plain Manager shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer subsection 19-7.1, SPECIFIC STANDARDS, RESIDENTIAL CONSTRUCTION, and subsection 19-7.2, SPECIFIC STANDARDS, NONRESIDENTIAL CONSTRUCTION. (Ord. No. 757-2017)

c. *Information to Be Obtained and Maintained.*

1. Obtain and record the actual elevation (in NAVD88 datum) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
2. Obtain and record elevation in the NAVD88 datum of the top of the masonry foundation in AE Zones or the bottom of the lowest horizontal structural member in VE Zones;
3. For all new or substantially improved flood-proofed structures:
 - (a) Verify and record the actual elevation (in NAVD88 datum)-and
 - (b) Maintain the flood-proofing certifications required by this chapter.
4. In coastal high hazard areas and Coastal A Zone areas, certification shall be obtained from a registered professional engineer or architect that the provisions of subsection 19-8.2 c. and subsection 19-8.2 (a) and (b) are met; (Ord. No. 752-2016; (Ord. No. 757-2017)
5. Maintain for public inspection all records pertaining to the provisions of this chapter.

d. *Alteration of Watercourses.*

1. Notify adjacent communities and the New Jersey Department of Environmental Protection, Bureau of Flood Control and the Land Use Regulation Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. (Ord. No. 757-2017)
2. Require that maintenance is provided within the altered or relocated portion of said watercourse so the flood-carrying capacity is not diminished.

e. *Substantial Damage Review.* (Ord. No. 757-2017)

1. After an event resulting in building damages, assess the damage to structures due to flood and non-flood causes.

2. Record and maintain the flood and non-flood damage of substantial damage structures and provide a letter of Substantial Damage Determination to the owner and the New Jersey Department of Environmental Protection, Dam Safety Bureau of Flood Control. (Ord. No. 757-2017)

3. Ensure substantial improvements meet the requirements of Sections 19-7.1 SPECIFIC STANDARDS, RESIDENTIAL CONSTRUCTION and 19-7.2 SPECIFIC STANDARDS NONRESIDENTIAL CONSTRUCTION 19-7.3 SPECIFIC STANDARDS MANUFACTURED HOMES. (Ord. No. 757-2017)

f. Interpretation of FIRM Boundaries.

Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 19-5.

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016)

19-5 VARIANCE PROCEDURE.

19-5.1 Appeal Board.

a. The Planning/Zoning Board of the Borough of Avalon as established by the Borough of Avalon shall hear and decide appeals and requests for variances from the requirements of this chapter.

b. The Planning/Zoning Board of the Borough of Avalon shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Flood Plain Manager in the enforcement or administration of this chapter.

c. Those aggrieved by the decision of the Planning/Zoning Board of the Borough of Avalon, or any taxpayer, may appeal such decision to the Superior Court of New Jersey, as provided in N.J.S.A. 40:55D-1 *et seq.*

d. In passing upon such applications, the Planning/Zoning Board of the Borough of Avalon, shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program of that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and,
11. 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.

e. Upon consideration of the factors of subsection 19-5.1 d. and the purposes of this chapter, the Planning/Zoning Board of the Borough of Avalon may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

f. The Flood Plain Manager shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Insurance Administration upon request.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-5.2 Conditions for Variances.

a. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, providing items in subsection 19-5.1d,1-11 have been fully considered. As the lot size increases beyond the one-half (1/2) acre, the technical justification required for issuing the variance increases.

b. Variances may be issued for the repair or rehabilitation of historic structures 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.

c. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

d. Variances shall only be issued upon:

1. A showing of good and sufficient cause;
2. A determination that failure to grant the variance would result in exceptional hardship to the applicant; 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 nuisances, cause fraud on or victimization of the public as identified in subsection 19-5.1d, or conflict with existing local laws or ordinances.

e. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-6 PROVISIONS FOR FLOOD HAZARD REDUCTION; GENERAL STANDARDS.

In all areas of special flood hazards, compliance with the applicable requirements of the Uniform Construction Code (N.J.A.C. 5:23) and the following standards, whichever is more restrictive, is required. (Ord. No. 682-2013; Ord. No. 688-2013)

19-6.1 Anchoring.

a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure. (Ord. No. 682-2013; Ord. No. 688-2013)

b. All manufactured homes to be placed or substantially improved shall be anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces. (Ord. No. 757-2017)

19-6.2 Construction Materials and Methods.

a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(Ord. No. 682-2013; Ord. No. 688-2013)

19-6.3 Utilities.

a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters;

c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and

d. For all new construction and substantial improvements the attendant utilities and the electrical, heating, ventilation, plumbing and 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. (Ord. No. 752-2016)

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016 Ord No. 757-2017)

19-6.4 Subdivision Proposals.

a. All subdivision proposals and other proposed new development shall be consistent with the need to minimize flood damage;

b. All subdivision proposals and other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

c. All subdivision proposals and other proposed new development shall have adequate drainage provided to reduce exposure to flood damage; and,

d. Base flood elevation data shall be provided for all subdivision proposals and other proposed new development. (Ord. No. 757-2017)

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 757-2017)

19-6.5 Enclosure Openings.

All new construction and substantial improvements having fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two (2) openings in at least two exterior walls of each enclosed area, having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, or other covering or devices provided that they permit the automatic entry and exit of floodwaters. (Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 757-2017)

19-7 SPECIFIC STANDARDS.

In all areas of special flood hazards where base flood elevation data have been provided as set forth in subsection 19-3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or in subsection 19-4.3b. USE OF OTHER BASE FLOOD DATA, the following standards are required. (Ord. No. 682-2013; Ord. No. 688-2013)

19-7.1 Residential Construction.

a. For Coastal A Zone construction see section 19-8 COASTAL HIGH HAZARD AREA AND COASTAL A ZONE. (Ord. No. 757-2017)

b. New construction and substantial improvement of any residential structure located in an A or AE Zone shall have the top of masonry foundation, including basement, together with the attendant utilities equipment and sanitary facilities elevated at or above the base flood elevation, plus three (3) feet, or as required by ASCE/SEI 24-14 Table 2-2 whichever is more restrictive. (Ord. No. 752-2016; Ord. No. 757-2017)

c. Require within any AO or AH Zone on the municipality's DFIRM that all new construction and substantial improvement of any residential structure shall have the top of masonry foundation, together with the attendant utilities and sanitary facilities elevated above the highest adjacent grade three (3) feet above the depth number specified in feet (at least three (3) feet if no depth number is specified) or at or above the base flood elevation plus freeboard, three (3) feet, whichever is more restrictive and require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures. (Ord. No. 757-2017)

d. The provisions of paragraphs. b., c., and d of this subsection shall apply only to the principal or primary structure where people live or which are used for sleeping purposes on a transient or nontransient basis. All other structures, except attached garages, are accessory structures. Accessory structures that are unoccupied and pose minimal risk to the public or minimal disruption to the community should they be damaged or fail due to flooding shall be classified as Flood Design Class 1, and such accessory structures may be built or constructed below DFE (design flood elevation) (Ord. No. 752-2016)
[See definition of "Residential" ASCE 24-14 at page 5]

Any such accessory structure shall be constructed in compliance with ASCE 24 which requires that any such structure, including anchorage and connections, shall be designed to resist effects of vertical loads, including uplift and lateral loads in accordance with the load combinations specified in ASCE 24.

Stringers or beams shall be attached to the substructure or directly to piles, columns, piers, and walls with bolted or welded connections such that a continuous load path is maintained.

Washers shall be used under all nuts and bolt heads bearing directly on wood. All nuts, bolts, and washers shall be corrosion resistant. Notches at the tops of timber posts and piles shall not exceed 50% of the cross section of the post or pile.

Adequate anchorage shall be provided for storage tanks, sealed conduits and pipes, lined pits, sumps, and all other similar structures that are subject to flotation or lateral movement during the design flood. (Ord. No. 752-2016)

Only those accessory structures that meet the definition of Flood Design Class 1 may be built or constructed at or below base flood elevation. Any structure that poses a moderate risk to the public or moderate disruption to the community should they be damaged or fail, shall be classified as Flood Design Class 2 and if such accessory structure should pose a high risk, it shall be classified as Flood Design Class 3. Flood Design Class 2 and 3 shall be built or constructed at the design flood elevation, that is, base flood elevation plus three (3) feet. (Ord. No. 752-2016)

Attendant utilities and equipment for accessory structures meeting the definition of Flood Design Class I shall be constructed or installed at Base Flood Elevation plus one (1) foot unless waterproofed and constructed or installed strictly in accordance with ASCE 24. (Ord. No. 752-2016)

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016)

19-7.2 Nonresidential Construction.

In an Area of Special Flood Hazard, all new construction and substantial improvement of any commercial, industrial or other nonresidential structure located in an A or AE Zone (for Coastal A Zone construction see Section 19-8 COASTAL HIGH HAZARD AREA COASTAL A ZONE) shall have the lowest floor, including basement together with the attendant utilities and sanitary facilities as well as all electrical, heating, ventilating, air-conditioning and other service equipment. (Ord. No. 752-2016; Ord. No. 757-2017)

a. Elevated to or above the base flood elevation, plus freeboard, three (3) feet, or as required by ASCE/SEI 24-14 Table 2-1, whichever is more restrictive; (Ord. No. 757-2017) and

b. Require within any AO or AH Zone on the municipality's DFIRM that all new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall have the lowest floor, including basement, elevated above the highest adjacent grade three (3) feet above the depth number specified in feet (at least three (3) feet if no depth number is specified) or at or above the base flood elevation plus freeboard, three (3) feet, whichever is more restrictive; and, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures; or

c. Be flood-proofed so that below the base flood elevation plus freeboard, three (3) feet, or as required by ASCE/SEI 24-14 Table 6-1 whichever is more restrictive the structure is watertight with walls substantially impermeable to the passage of water; (Ord. No. 757-2017)

d. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,

e. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of this subsection. Such certification shall be provided to the official as set forth in subsection 19-4.3c, 3 and to be updated as needed. (Ord. No. 757-2017)

(Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016)

19-7.3 MANUFACTURED HOMES

- a) Manufactured homes shall be anchored in accordance with section 19-6.1
- b) All manufactured homes to be placed or substantially improved within an area of special flood hazard shall:
 - i. Be consistent with the need to minimize flood damage,
 - ii. Be constructed to minimize flood damage,
 - iii. Have adequate drainage provided to reduce exposure to flood damage;
 - iv. Be elevated on a permanent foundation such that the top of the masonry foundation is at or above the base flood elevation plus THREE (3) FEET or as required by ASCE/SEI 24-14, Table 2-1, whichever is more restrictive; and,
 - v. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement. (Ord. No. 757-2017)

19-8 COASTAL HIGH HAZARD AREA AND COASTAL A ZONE.

Coastal high hazard areas (V or VE Zones) and Coastal A Zones are located within the areas of special flood hazard established in subsection 19-3.2. These areas have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash; therefore, the following provisions shall apply. (Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 752-2016)

19-8.1 Location of Structures.

- a. All new buildings or structures shall be located landward of the reach of the mean high tide. (Ord. No. 682-2013; Ord. No. 688-2013)
- b. The placement of manufactured homes shall be prohibited, except in an existing manufactured home park or subdivision. (Ord. No. 757-2017)

19-8.2 Construction Methods.

a. Elevation.

All new construction and substantial improvements shall be elevated on piling or columns so that:

- 1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the piling or columns) is elevated to or above the base flood elevation, plus freeboard, three (3) feet or as required by the Uniform Construction Code (N.J.A.C. 5:23) or

as required by ASCE / SEL 24-14, Table 4-1, whichever is more restrictive, Ord No. 757-2017)and,

2. All electrical, heating, ventilating, air conditioning, mechanical equipment and other equipment servicing the building is elevated at base flood elevation plus three (3) feet. (Ord. No. 757-2017)

3. With all space below the lowest floor's supporting member open so as not to impede the flow of water, except for breakaway walls as provided or in subsection 19-8.2d.

4. All fill is prohibited within the regulatory floodplain.

5. No Conditional Letter of Map Revision with fill (CLOMR-F) or Letter of Map Revision with fill (LOMR-F) shall be accepted or approved based on fill, including fill as a part of the reason for requesting a map change.

b. *Structural Support.*

1. All new construction and substantial improvements shall be securely anchored on piling or columns.

2. The pile or column foundation and structure attached thereto shall be anchored to resist flotation, collapse or lateral movement due to the effects of wind and water loading values each of which shall have a one (1%) percent chance of being equaled or exceeded in any given year (one hundred (100)-year mean recurrence interval).

3. There shall be no fill used for structural support of buildings within Zones V1-30, VE, V, and Coastal A on the municipality's FIRM. (Ord. No. 757-2017)

c. *Certification.*

A registered professional engineer or architect shall develop or review the structural design specifications and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for compliance with the provisions of subsections 19-8.2a. and 19-8.2b,1 and 2.

d. *Space Below the Lowest Floor.*

1. Any alteration, repair, reconstruction or improvement to a structure started after the enactment of this chapter shall not enclose the space below the lowest floor unless breakaway walls, open wood lattice-work or insect screening are used as provided for in this section.

2. Breakaway walls, open wood lattice-work or insect screening shall be allowed below the base flood elevation provided that they are intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Breakaway walls shall be designed for a safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which exceed a design safe loading of twenty (20) pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

(a) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and

(b) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water load acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards.

3. If breakaway walls are utilized, such enclosed space shall be used solely for parking of vehicles, building access, or storage and not for human habitation.

4. Prior to construction, plans for any breakaway wall must be submitted to the Construction Code Official or Building Sub-Code Official for approval. (Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 710-2014; Ord. No. 757-2017)

19-8.3 Sand Dunes.

Prohibit manmade alteration of sand dunes within Coastal A Zones VE and V Zones on the community's DFIRM which would increase potential flood damage. (Ord. No. 682-2013; Ord. No. 688-2013; Ord. No. 757-2017)

SECTION 2. OTHER ORDINANCES

The following Ordinances of the Borough of Avalon pertaining to Flood Damage Prevention are hereby amended and supplemented to conform to the provisions of Section 1 hereof:

- Ordinance No. 682-2013
- Ordinance No. 688-2013
- Ordinance No. 710-2014
- Ordinance No. 749-2016
- Ordinance No. 752-2016

To the extent that any of the above designated Ordinances conflict with the provisions of Section 1 hereof, or with Ordinance 757-2017, such Ordinance or part thereof is hereby repealed to the extent of such conflict or inconsistency in accordance with Section 3 hereof.

SECTION 3. SEVERABILITY

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

SECTION 4. REPEALER.

All Ordinances or parts of Ordinances which are in conflict or inconsistent herewith are hereby repealed to the extent of such inconsistency or conflict only.

SECTION 5. EFFECTIVE DATE

This Ordinance shall take effect immediately upon final adoption and publication as required by law.

NOTICE OF PENDING ORDINANCE

The Ordinance published herewith was introduced and passed on first reading of the Municipal Council of the Borough of Avalon on September 13, 2017. It will be further considered for second reading, public hearing and final adoption at a meeting of said Council to be held on the 27th day of September, 2017 in the Meeting Room of the Municipal Building, Avalon, New Jersey at 4:15 p.m. and during the week prior to and up to and including the date of such meeting, copies of said Ordinance will be made available at the Clerk's Office in said Municipal Building to the members of the general public who shall request the same.

MARIE J. HOOD
Borough Clerk