

**TOWNSHIP OF UPPER
CAPE MAY COUNTY
ORDINANCE**

ORDINANCE NO. 013-2017

**RE: AN ORDINANCE AMENDING REVISED GENERAL ORDINANCE
CHAPTER XVIII (FLOOD DAMAGE CONTROL) AND CHAPTER XIX (LAND
SUBDIVISION AND SITE PLAN) OF THE CODE OF UPPER TOWNSHIP**

WHEREAS, the FEMA has prepared a new Flood Study and Flood Insurance Rate Maps for Cape May County and the New Jersey Department of Environmental Protection has adopted new model ordinance for the Special Flood Hazard Zone; and

WHEREAS, the Township Committee finds it appropriate to amend Chapter XVIII (Flood Damage Control) of the Code of Upper Township; and

WHEREAS, the Township Committee also finds it is appropriate to amend Chapter XIX of the Code of Upper Township to clarify site plan requirements for mining, excavation and fill activities; and

WHEREAS, the Township Committee referred these ordinance amendments to the Upper Township Planning Board; and

WHEREAS, the Township Planning Board discussed and reviewed this proposed ordinance and determined it is consistent with the Upper Township Master Plan Reexamination; and

WHEREAS, the ordinance revisions and amendments herein are substantially consistent with the Upper Township Master Plan and the Master Plan Reexamination Report and Land Use Plan Amendment of January 2011, as amended; and

WHEREAS, the Township Committee finds that the ordinance revisions herein are substantially consistent with the Land Use Plan Element and Master Plan Reexamination to date;

BE IT ORDAINED by the Township Committee, in the Township of Upper, County of Cape May and State of New Jersey, as follows:

SECTION 1. Chapter 18 of the Revised General Ordinances of the Township of Upper, also known as the Code of Upper Township, shall be amended and supplemented as hereinafter provided:

Revise existing **Section 18-1.2 Statement of Purpose** with the following:

18-1.2 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:

- a. To protect human life and health.
- b. To minimize expenditure of public money for costly flood control projects.
- c. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- d. To minimize prolonged business interruptions.
- e. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, and streets and bridges located in areas of special flood hazard.
- f. To 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.
- g. To ensure that potential buyers are notified that property is in an area of special flood hazard.
- h. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Add the following to **Section 18-2 Definitions**:

AO Zone shall mean areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet.

AH Zone shall mean 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.

Coastal A Zone shall mean 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.

Cumulative substantial improvement shall mean any reconstruction, rehabilitation, addition, or other improvement of a structure that equals or exceeds forty (40%) percent of the market value of the structure at the time of the improvement or repair when counted cumulatively for 10 years.

Existing Manufactured Home Park or Subdivision shall mean 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.

Floodplain Management Regulations shall mean 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.

Freeboard shall mean 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 and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

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

Historic Structure shall mean 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.

New construction shall mean 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 shall mean 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.

Primary frontal dune shall mean 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 shall mean 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.

Sand dunes shall mean naturally occurring or man-made accumulations of sand in ridges or mounds landward of the beach.

Variance shall mean a grant of relief from the requirements of this ordinance that permits construction in a manner that would otherwise be prohibited by this ordinance.

Violation shall mean 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.

Replace existing **Section 18-2 Definitions** with the following:

Appeal shall mean a request for a review of the local administrator's interpretation of any provision of this Chapter or a request for a variance.

Area of special flood hazard shall mean the land in the floodplain within a 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.

Base flood elevation shall mean 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.

Best available flood hazard data shall mean the effective Flood Insurance Risk Maps or most recent Advisory Flood Hazard Area Maps FEMA has provided.

Best available flood hazard data elevation shall be depicted on the effective FIRM or FIS, or an Advisory Flood Hazard Area Map or Advisory FIS.

Coastal high hazard area shall mean 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 shall mean 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 located within the area of special flood hazard.

Elevated building shall mean a non-basement building (a) 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 pilings, columns (posts and piers), or shear walls parallel to the flow of the water; and (b) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In an area of special flood hazard, "elevated building" shall also include 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 and Coastal A Zones, "elevated building" shall also include a building otherwise meeting the definition of "elevated building" even though the lower area is enclosed by means of breakaway walls.

Flood Insurance Study shall mean the official report provided in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Insurance Rate Map and the water surface elevation of the base flood.

Flood protection elevation shall mean the elevation that a structure must be elevated to in all special flood hazard areas and advisory flood hazard areas. Said elevation shall be two (2') foot higher than the best available flood hazard data elevation.

Manufactured home shall mean a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles. The term "manufactured home" does not include a "Recreational vehicle".

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act [P.L. 97-348]) shall include substantial improvement, and 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. Permanent construction does not include land preparation such as a 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 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.

Substantial improvement shall mean any reconstruction, rehabilitation, addition, or other improvement of a structure during a 10-year period the cost of which equals or exceeds forty (40%) percent of the market value of the structure before the "start of construction"

of the improvement. Substantial improvement also means “cumulative substantial improvement.” This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed or “repetitive loss.” The term does not, however, include either:

- a. Any project for improvement of a structure to correct existing violations of State or local health, sanitary or safety code specifications which have been identified by the local Code Enforcement 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."

Replace existing **Section 18-3.2** with the following:

18-3.2 Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard for the Township of Upper, Community No. 340159 identified by the Federal Emergency Management Agency are identified and defined on the following documents:

- a. Scientific and engineering report entitled "The Flood Insurance Study (FIS) for the Cape May County, New Jersey (All Jurisdictions)" dated October 5, 2017, with accompanying Flood Insurance Rate Maps for Cape May County, New Jersey (All Jurisdictions)" as shown on Index and panels 34009C0017F, 34009C0028F, 34009C0029F, 34009C0036F, 34009C0037F, 34009C0039F, 34009C0041F, 34009C0042F, 34009C0043F, 34009C0044F, 34009C0061F, 34009C0062F, 34009C0063F, 34009C0064F, 34009C0066F, 34009C0067F, 34009C0068F, 34009C0069F, 34009C0086F, 34009C0088F, 34009C0131F, 34009C0132F, 34009C0134F, 34009C0151F, 34009C0152F, 34009C0153F, 34009C0154F, 34009C0156F, 34009C0157F, 34009C0158F, 34009C0159F, 34009C0162F, 34009C0166F, whose effective date is October 5, 2017, is hereby adopted and declared to be a part of this Chapter. The Flood Insurance Study and the Flood Insurance Rate Maps are on file in the office of the Township Clerk, Township Hall, 2100 Tuckahoe Rd, Petersburg, New Jersey.
- b. *Best Available Flood Hazard Data.* These documents shall take precedence over effective panels and FIS in construction and development regulations only. Where the Special Flood Hazard Area (SFHA) and the Advisory Flood Hazard Area (AFHA) maps conflict or overlap, whichever imposes the more stringent requirement shall prevail.

Replace existing **Section 18-3.3** with the following:

18-3.3 Penalties for Noncompliance.

No structure or land shall hereafter be constructed, re-located to, extended, converted, or altered without full compliance with the terms of this Chapter and other applicable 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 misdemeanor. Any person who violates this Chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than one thousand (\$1,000.00) dollars or imprisoned for not more than ninety (90) days, or both, for each violation and, in addition, shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the Township from taking such other lawful action as is necessary to prevent or remedy any violation.

Replace existing **Section 18-4.1 through 4.4** with the following:

18-4.1 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 18-3.2. Application for a development permit shall be made on forms furnished by the Construction Official and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the areas 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 relation to mean sea level, of the lowest floor (including basement) of all structures;

- b. Elevation in relation to mean sea level to which any structure has been floodproofed;
- c. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in subsection 18-5.2, paragraph b;
- d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

18-4.2 Designation of the Local Administrator.

The Construction Official and the Floodplain Manager are hereby each appointed as the Local Administrator to implement applicable portions of this Chapter by granting or denying development permit applications in accordance with its provisions.

18-4.3 Duties and Responsibilities of the Local Administrator.

Duties of the Local Administrator shall include, but not be limited to:

- a. Permit Review.
 1. Review all development permits to determine that the permit requirements of this ordinance 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 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.
 4. Review plans for walls to be used to enclose space below the base flood level in accordance with section 18-5.3b4).
- b. Use of Other Flood Data. When base flood elevation and floodway data has not been provided in accordance with subsection 18-3.2, Basis for Establishing the Areas of Special Flood Hazard, the Township 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 18-5.2, Specific Standards.
- c. *Information to Be Obtained and Maintained.*
 1. Obtain and record the actual elevation in relation to 1988 North American Vertical Datum (NAVD) of the lowest floor (including basement) of all new or substantially improved structures and whether or not the structure contains a basement.
 2. For all new or substantially improved floodproofed structures:
 - (a) Obtain and record the actual elevation actual elevation in relation to 1988 North American Vertical Datum (NAVD) to which the structure has been floodproofed.
 - (b) Maintain the floodproofing certifications required in subsection 18-4.1, paragraph c.
 3. Maintain for public inspection all records pertaining to the provisions of this Chapter.
 4. In Coastal High Hazard and Coastal A Zone areas, certification shall be obtained from a registered professional engineer or architect that the provisions of 18-5.3b 1. And 18-5.3b, 2(a) and 2(b).
- d. *Alteration of Watercourse.*
 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.
 2. Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood carrying capacity is not diminished.
- e. *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 subsection 18-4.4.

f. *Substantial Damage Review.*

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 and Flood Control Section.
3. Ensure substantial improvements meet the requirements of sections 18-5.2a SPECIFIC STANDARDS, RESIDENTIAL CONSTRUCTION, and 18-5.2b, SPECIFIC STANDARDS, NONRESIDENTIAL CONSTRUCTION.

18-4.4 Variance Procedure.

a. *Appeal Board.*

1. The Zoning Board as established by N.J.S.A. 40:55D-1 et seq. (the Municipal Land Use Law) shall hear and decide appeals and requests for variances from the requirements of this Chapter, as this Chapter and Ordinance No. 014-2012 relate to the nature and extent of the uses of land and of buildings and structures thereon pursuant to N.J.S.A. 40:55D-6.
2. The Zoning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Local Administrator in the enforcement or administration of this Chapter.
3. Those aggrieved by the decision of the Zoning Board, or any taxpayer, may appeal such decision to the Superior Court of New Jersey, as provided in NJSA 40:55D-17h & 18.
4. In passing upon such applications, the Zoning Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Chapter, and:
 - (a) The danger that materials may be swept onto other lands to the injury of others;
 - (b) The danger to life and property due to flooding or erosion damage;
 - (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (d) The importance of the services provided by the proposed facility to the community;
 - (e) The necessity to the facility of a waterfront location, where applicable;
 - (f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (g) The compatibility of the proposed use with existing and anticipated development;
 - (h) The relationship of the proposed use to the comprehensive plan and floodplain management program of that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
 - (k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems, and streets and bridges.
5. Upon consideration of the factors of subsection 18-4.4a,4. and the purposes of this Chapter, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Chapter.
6. The Local Administrator shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Insurance Administration upon request.

b. *Conditions for Variances.*

1. 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 level, providing items in paragraphs (a)—(k) of subsection 18-4.4a 4., have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
2. 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.
3. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
 - (a) A showing of good and sufficient cause;
 - (b) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - (c) 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 18-4.4a 4., or conflict with existing local laws or ordinances.
6. 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.
7. Notwithstanding any provision contained within to the contrary, no variance shall be given unless the applicant/appellant can establish a factual basis therefor pursuant to N.J.S.A. 40:55D-70 as interpreted by applicable judicial decision.

Replace existing **Section 18-5.1a2** with the following:

2. 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 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.

Replace existing **Section 18-5.1c.4** with the following:

4. For all new construction and substantial improvement 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 or one (1') foot above grade if not part of substantial improvement or new construction.

Replace existing **Section 18-5.1e** with the following:

Enclosure Openings. For all new construction and substantial improvements, fully enclosed areas below the flood protection that are usable solely for parking of vehicles, building access or storage in an area other than a basement, level that 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 (2) 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 coverings or devices provided that they permit the automatic entry and exit of floodwaters.

Replace existing **Section 18-5.1f** with the following:

Enclosure Conversion. No enclosure below the flood protection level shall be converted to habitable living space and shall not be utilized for any use other than access, utility and storage. The owner shall file a deed restriction for this area agreeing to this subsection and shall be to the benefit of the Township of Upper.

Delete the existing **Section 18-5.1g**:

Replace existing **Section 18-5.2** with the following:

18-5.2 Specific Standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in subsections 18-3.2 and 18-4.3 b the following standards are required:

a. *Residential Construction.*

1. For Coastal A Zone construction see Section 18-5.3 Coastal High Hazard Area and Coastal A Zone.
2. New construction and substantial improvement of any residential structure located in an A or AE Zone shall be elevated so that the bottom of the lowest horizontal structural member of the lowest floor, including basement and utilities (electrical, heating, ventilation, plumbing, duct work and air-conditioning equipment), be elevated to or above the flood protection elevation.

b. *Nonresidential Construction.*

1. For Coastal A Zone construction see Section 18-5.3 Coastal High Hazard Area and Coastal A Zone.
2. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall be elevated so that the bottom of the lowest horizontal structural member of the lowest floor, including basement and utilities (electrical, heating, ventilation, plumbing, duct work and air-conditioning equipment), be elevated to or above the flood protection elevation; or together with attendant utility and sanitary facilities, shall:
 1. Be flood proofed so that below the flood protection elevation the structure is watertight with walls substantially impermeable to the passage of water;
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 3. 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 18-4.3, paragraph c, 2.

c. *Manufactured Homes.*

1. Manufactured homes shall be anchored in accordance with subsection 18-5.1, paragraph a, 2.
2. 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, and
 - iv. Be elevated on a permanent foundation such that the bottom of the lowest horizontal structural member of the lowest floor including utilities (electrical, heating, ventilation, plumbing, duct work and air-conditioning equipment), is at or above the flood protection elevation.
 - 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.

Replace existing **Section 18-5.3** with the following:

18-5.3 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 18-3.2. These areas have special flood hazards

associated with high velocity waters from tidal surges and hurricane wave wash; therefore, the following provisions shall apply:

- a. *Location of Structures.* All buildings or structures shall be located landward of the reach of the mean high tide. The placement of manufactured homes shall be prohibited, except in an existing manufactured home park or subdivision.
- b. *Construction Methods.*
 1. *Elevation.* All new construction and substantial improvements shall be elevated on pilings or columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the flood protection elevation, 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 for in subsection 18-5.3, paragraph b, 4.
 2. *Structural Support.*
 - (a) All new construction and substantial improvements shall be securely anchored on pilings or columns.
 - (b) 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 (100-year mean recurrence interval).
 - (c) There shall be no fill used for structural support of the building within the Zones V1-30, VE, V and Coastal A on the community's FIRM.
 3. *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 subsection 18-5.3, paragraph b, 1 and paragraph b, 2(a) and (b).
 4. *Space Below the Lowest Floor.*
 - (a) 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 subsection.
 - (b) Breakaway walls, open wood lattice-work or insect screening shall be allowed below the flood protection 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:
 - (1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - (2) 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 non-structural). 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.
 - (c) 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.
 - (d) Prior to construction, plans for breakaway walls must be submitted to the Construction Code Official or Building Sub-Code Official for approval.
 - (e) All construction below the flood protection elevation as detailed in paragraph b.1 shall be anchored and constructed of flood-resistant materials in accordance to NFIP requirements.
- c. *Enclosure Conversion.* No enclosure constructed in accordance with paragraph b.4 shall be converted to habitable living space and shall not be utilized for any use other than access,

utility and storage. The owner shall file a deed restriction for this area agreeing to this subsection and shall be to the benefit of the Township of Upper.

SECTION 2. Chapter 19 of the Revised General Ordinances of the Township of Upper, also known as the Code of Upper Township, shall be amended and supplemented as hereinafter provided:

Add the following to **Section 19-4.2a Site Plan Review Required:**

8. Any mining, excavation, dumping or deposit of fill or dredge spoils, or landfill activities.

SECTION 3. EFFECTIVE DATE: The amendment to Chapter XIX in this Ordinance shall take effect immediately upon final adoption and publication as required by law and the amendments to Chapter XVIII in this Ordinance shall take effect on October 5, 2017.

SECTION 4. REPEALER: All Ordinances or parts of Ordinances inconsistent herewith are hereby repealed to the extent of such inconsistency only.

SECTION 5. SEVERABILITY: If any section, paragraph, subdivision, subsection, clause or provision of this Ordinance shall be adjudged invalid, such adjudication shall apply only to the section, paragraph, subdivision, subsection, clause or provision declared invalid and the remainder of this Ordinance shall remain in full force and effect and shall be enforceable.

SECTION 6. CODIFICATION: This Ordinance shall be codified as indicated in Chapters 18 and 19 of the Upper Township Code.

ATTEST:


BARBARA L. YOUNG, Township Clerk


RICHARD PALOMBO, Mayor

NOTICE IS HEREBY GIVEN THAT THE FOREGOING ORDINANCE WAS INTRODUCED FOR FIRST READING AT A MEETING OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF UPPER HELD ON THE 28TH DAY OF AUGUST, 2017 AND WILL BE TAKEN UP FOR CONSIDERATION AS TO FINAL ADOPTION AT A PUBLIC HEARING OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF UPPER TO BE HELD ON THE 25TH DAY OF SEPTEMBER, 2017 AT 7:30 P.M. AT THE TOWNSHIP HALL, TUCKAHOE, NEW JERSEY.

BY ORDER OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF UPPER.

BARBARA L. YOUNG, TOWNSHIP CLERK
TOWNSHIP OF UPPER

Legislative History:

Introduced: August 28, 2017

Publication: September 13, 2017

Newspaper(s): The Press of Atlantic City

Second Reading and Public Hearing: September 25, 2017

Final Adoption: September 25, 2017

Final Publication Date: September 28, 2017

I certify that the foregoing Ordinance was finally adopted by the Township Committee of the Township of Upper on September 25, 2017 and notice of adoption was thereafter published pursuant to law in the Press of Atlantic City on September 28, 2017.


BARBARA L. YOUNG, Township Clerk