BOROUGH OF SPRING LAKE
COUNTY OF MONMOUTH

ORDINANCE NO. 2013-002

AN ORDINANCE SUPPLEMENTING CHAPTER 186, FLOOD DAMAGE PREVENTION, OF THE BOROUGH CODE

Not Adopted

WHEREAS, Chapter 186, Flood Damage Prevention, of the Borough Code sets forth the regulations to promote the public health, safety, and general welfare of its citizenry and to minimize public and private losses due to flood conditions in specific areas within the Borough of Spring Lake; and

WHEREAS, Certain modifications to these regulations are necessary to permit the Borough of Spring Lake and its citizenry to comply and benefit from the National Flood Insurance Program and related State of New Jersey programs;

NOW, THEREFORE, BE IT HEREBY ORDAINED, by the Mayor and Borough Council of the Borough of Spring Lake, in the County of Monmouth and State of New Jersey, that Chapter 186, "Flood Damage Prevention" is amended and supplemented with deletions reflected in ~~strikethrough~~ and additions reflected in **bold underline** as follows:

§ 186-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

§ 186-1.1 STATUTORY AUTHORIZATION

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 Spring Lake, of Monmouth County, New Jersey does ordain as follows:

§ 186-1.2 FINDINGS OF FACT

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

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. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

§ 186-1.3 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;
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 second use and development of areas of special flood hazard so as to minimize future flood blight areas;
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.

§ 186-1.4 METHODS OF REDUCING FLOOD LOSSES

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

A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

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 flood waters;

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 flood waters or which may increase flood hazards in other areas.

§ 186-2 DEFINITIONS

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

Advisory Base Flood Elevation (ABFE) —The elevation shown on a community's Advisory Flood Hazard Map that indicates the advisory stillwater elevation plus wave effect (ABFE = SWEL + wave effect) resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

Advisory Flood Hazard Area (AFHA) —The land in the floodplain within a community subject to flooding from the 1% annual chance event depicted on the Advisory Flood Hazard Map.

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

Appeal — A request for a review of the Construction Official's interpretation of any provision of this ordinance 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 percent annual or greater chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Flood Hazard — The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

~~**Areas of Special Flood Related Erosion Hazard** — The land within a community which is most likely to be subject to severe flood related erosion losses. After a detailed evaluation of the special flood related erosion hazard area will be designated a Zone E on the Flood Insurance Rate Map.~~

Base Flood — The flood having a one percent chance of being equaled or exceeded in any given year.

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.

Cumulative Substantial Improvement – Any reconstruction, rehabilitation, addition, or other improvement of a structure that equals or exceeds 50% of the market value of the structure at the time of the improvement or repair when counted cumulatively for 10 years.

Development — Any man made 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, to have the bottom of the lowest horizontal structural member of the

elevated floor, elevated above the base flood elevation 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 Special Flood Hazard "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 flood waters. In Areas of Coastal High Hazard "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.

Erosion — The process of the gradual wearing away of land masses.

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 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.

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.

Floodway — The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 0.2 foot.

Highest Adjacent Grade — The highest natural elevation of the ground surface prior to construction next to the proposed 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.

Lowest Floor — The lowest floor of the lowest enclosed area [including basement]. An unfinished or flood resistant enclosure, useable 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.

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".

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.

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.

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.

Sand Dunes — Naturally occurring 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) includes substantial improvements and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation.

Permanent construction does not include land preparation, such as clearing, grading and filling nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings 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 — A walled and roofed building, a manufactured home, or a gas or liquid storage tank that is principally above ground.

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 50 percent of the market value of the structure before the damage occurred. **Substantial Damage also means flood-related damages sustained by a structure on two or more separate occasions during a 10-year period for which the cost of repairs at the time of each flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damages occurred.**

Substantial Improvement — Any reconstruction, rehabilitation, addition, or other improvement of a structure **during a 10-year period**, the cost of which **equals or** exceeds 50 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".

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

§ 186-3 GENERAL PROVISIONS

§ 186-3.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of the Borough of Spring Lake, Monmouth County, New Jersey.

§ 186-3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard for the Borough of Spring Lake, Community No. 340329, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:

(1) A scientific and engineering report "Flood Insurance Study, Monmouth County, New Jersey (All Jurisdictions)" dated September 25, 2009.

(2) Flood Insurance Rate Map for Monmouth County, New Jersey (All Jurisdictions) as shown on Index and panel(s) 34025C0341F, 34025C0342F, 34025C0343F, 34025C0344F; whose effective date is September 25, 2009.

(3) Advisory Base Flood Elevations and Advisory Flood Hazard Maps dated December 12, 2012. These documents shall take precedence over previous 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.

The above documents are hereby adopted and declared to be a part of this ordinance. The Flood Insurance Study, maps and advisory documents are on file at Fifth and Warren Avenues, Spring Lake, New Jersey 07762.

§ 186-3.3 PENALTIES FOR NONCOMPLIANCE

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance 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 subject to the penalties as specified in the General Ordinance of the Borough of Spring Lake, Chapter 2, Article II entitled "General Penalty."- Nothing herein contained shall prevent the Borough of Spring Lake from taking such other lawful action as is necessary to prevent or remedy any violation.

§ 186-3.4 ABROGATION AND GREATER RESTRICTIONS

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

§ 186-3.5 INTERPRETATION

In the interpretation and application of this ordinance, 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.

§ 186-3.6 WARNING AND DISCLAIMER OF LIABILITY

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

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

§ 186-4 ADMINISTRATION

§ 186-4.1 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 § 186-3.2. 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 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 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 § 186-5.2B; and,
D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

§ 186-4.2 DESIGNATION OF THE LOCAL ADMINISTRATOR

The Construction Official is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

§ 186-4.3 DUTIES AND RESPONSIBILITIES OF THE ADMINISTRATOR

Duties of the Construction Official 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 to determine if the proposed development is located in the floodway. **If located in the floodway, assure that the encroachment provisions of §186-5.3(1) are met.**
[4] Review all development permits in the coastal high hazard area of the area of special flood hazard to determine if the proposed development alters sand dunes so as to increase potential flood damage.
[5] Review plans for walls to be used to enclose space below the base flood level in accordance with § 186-5.3B(4).

B. USE OF OTHER BASE FLOOD AND FLOODWAY DATA

When base flood elevation and floodway data has not been provided in accordance with § 186-3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Construction Official 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 § 186-5.2A, SPECIFIC STANDARDS, RESIDENTIAL CONSTRUCTION, and § 186-5.2B, SPECIFIC STANDARDS, NONRESIDENTIAL CONSTRUCTION.

C. INFORMATION TO BE OBTAINED AND MAINTAINED

[1] Obtain and record the actual elevation (in relation to mean sea level) 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) verify and record the actual elevation (in relation to mean sea level); and

(b) maintain the floodproofing certifications required in § 186-4.1C.

[3] In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the provisions of §186-5.3B(1) and §186-5.3B(2)(a) and (b) are met.

[4] Maintain for public inspection all records pertaining to the provisions of this ordinance.

D. ALTERATION OF WATERCOURSES

[1] Notify adjacent communities and the New Jersey Department of Environmental Protection, Dam Safety and Flood Control Section 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 said watercourse so 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 §186-4.4.

§ 186-4.4 VARIANCE PROCEDURE

A. APPEAL BOARD

[1] The Planning Board as established by Borough Council shall hear and decide appeals and requests for variances from the requirements of this ordinance.

[2] The Planning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Construction Official in the enforcement or administration of this ordinance.

[3] Those aggrieved by the decision of the Planning Board, or any taxpayer, may appeal such decision to the Superior Court of New Jersey.

[4] In passing upon such applications, the Planning 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 § 186-4.4A(4) and the purposes of this ordinance, the Planning Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
[6] The Construction Official 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 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in § 186-4.4A(4)(a)–(k) 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 § 186-4.4A(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.

§ 186-5 PROVISIONS FOR FLOOD HAZARD REDUCTION

§ 186-5.1 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:

A. ANCHORING

[1] All new construction to be placed or substantially improved and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

[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 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.

B. CONSTRUCTION MATERIALS AND METHODS

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

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

C. UTILITIES

[1] All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

[2] New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;

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

[4] For all new construction and substantial improvements 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.

D. SUBDIVISION PROPOSALS

[1] All subdivision proposals **and other proposed new development** shall be consistent with the need to minimize flood damage;

[2] 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;

[3] All subdivision proposals **and other proposed new development** shall have adequate drainage provided to reduce exposure to flood damage; and,

[4] Base flood elevation data shall be provided for subdivision proposals **and other proposed new development** which contain at least fifty (50) lots or five (5) acres (whichever is less).

E. 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 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.

§ 186-5.2 SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data have been provided as set forth in §186-3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or in § 186-4.3B, USE OF OTHER BASE FLOOD DATA, the following standards are required:

A. RESIDENTIAL CONSTRUCTION

[1] New construction and substantial improvement of any residential structure shall have the lowest floor, including basement together with the attendant utilities and sanitary facilities, elevated at or above the base flood elevation **or advisory base flood elevation whichever is more restrictive, plus one foot** ~~*(optional: or more)*~~**;**

[2] Require within any AO zone on the municipality's FIRM that all new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated above the highest adjacent grade **one foot above** ~~*(optional: or more)*~~ the depth number specified in feet (at least ~~two~~ **three** feet if no depth number is specified**) or at or above the advisory base flood elevation plus one foot, whichever is more restrictive.** And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

B. NONRESIDENTIAL CONSTRUCTION

In an Area of Special Flood Hazard, all new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall:

(1) (a) Either have the lowest floor, including basement together with the attendant utilities and sanitary facilities, elevated to **or above** ~~the level of~~ the base flood elevation **or advisory base flood elevation whichever is more restrictive, plus one foot** ~~*(optional: or more)*~~**;** and

(b) Require within any AO zone on the municipality's ~~FIRM~~ **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 ~~at least as high as the depth number is specified in feet (at least two feet if no depth number is specified).~~**one foot above** ~~*(optional: or more)*~~ **the depth number specified in feet (at least three feet if no depth number is specified) or at or above the advisory base flood elevation plus one foot, whichever is more restrictive.** And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures;

or

(2) (a) Be floodproofed so that below the base flood level **plus one foot** ~~*(optional: or more)*~~**, or advisory base flood elevation plus one foot** ~~*(optional: or more)*~~**, (whichever is more restrictive)** the structure is watertight with walls substantially impermeable to the passage of water;

(b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,

(c) 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 §186-4.3C(2)(b).

C. MANUFACTURED HOMES

[1] Manufactured homes shall be anchored in accordance with § 186-5.1A(2).

[2] All manufactured homes to be placed or substantially improved within an area of special flood hazard shall be elevated on a permanent foundation such that the top of the lowest floor is at or above the base flood elevation **or advisory base flood elevation, plus one foot** ~~*(optional: or more)*~~ **(whichever is more restrictive).**

§ 186-5.3 FLOODWAYS

Located within areas of special flood hazard established in section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

[1] Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless a technical evaluation demonstrates that encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.

[2] If section 5-D[1] is satisfied, all new construction and substantial improvements must comply with section 5.0 PROVISIONS FOR FLOOD HAZARD REDUCTION.

[3] In all areas of special flood hazard in which base flood elevation data has been provided and no floodway has been designated, the cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than two-tenths (0.2) of a foot at any point.

§ 186-5.4 COASTAL HIGH HAZARD AREA

Coastal high hazard areas (V or VE Zones) are located within the areas of special flood hazard established in §186-3.2. 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

[1] All buildings or structures shall be located landward of the reach of the mean high tide.

[2] The placement of manufactured homes shall be prohibited, except in an existing manufactured home park or manufactured home subdivision.

B. CONSTRUCTION METHODS

[1] **ELEVATION**

All new construction and substantial improvements shall be elevated on piling or columns so that 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 ~~level~~ **elevation, advisory base flood elevation or as required by the Uniform Construction Code (NJAC 5:23), whichever is more restrictive,** 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 § 186-5.3B(4).

[2] **STRUCTURAL SUPPORT**

(a) All new construction and substantial improvements shall be securely anchored on piling 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 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.

[3] **CERTIFICATION**

A ~~registered~~ **licensed** 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 §186-5.3B(1) and § 186-5.3B(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 ordinance 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.

(b) 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 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading of 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 any breakaway wall must be submitted to the ~~Construction Official~~ **Building Sub-Code Official** for approval.

C. SAND DUNES

Prohibit man-made alteration of sand dunes within Zones VE and V on the community's DFIRM which would increase potential flood damage. ~~All proposed alterations require an approved CAFRA Individual Permit from the New Jersey Department of Environmental Protection.~~

INTRODUCED:

ADOPTED: NOT ADOPTED

APPROVED: _____
JENNIFER NAUGHTON, Mayor

Attest:

_____
JANE L. GILLESPIE, Borough Clerk