

NOTICE OF PENDING ORDINANCE

ORDINANCE NO. 09-1275

The ordinance published herewith was introduced and passed upon first reading at a meeting of the Borough Council of the Borough of Tinton Falls, in the County of Monmouth, State of New Jersey, held on September 1, 2009. This Ordinance will be further considered for adoption, after the public hearing is held thereon, at a meeting of the Borough Council to be held on Tuesday, September 15, 2009, in the Municipal Center, 556 Tinton Avenue, Tinton Falls, NJ beginning at 7:30 o'clock P.M. During the week prior to and up to and including the date of such meeting, copies of said Ordinance will be made available in the Clerk's Office to the members of the general public who shall request the same.

KAREN MOUNT-TAYLOR, RMC, CMC

ORDINANCE AMENDING CHAPTER XIX (FLOOD DAMAGE PREVENTION) OF THE REVISED GENERAL ORDINANCES OF THE BOROUGH OF TINTON FALLS, COUNTY OF MONMOUTH, STATE OF NEW JERSEY

WHEREAS, pursuant to N.J.S.A. 40:48-1 et seq., the State of New Jersey delegates responsibility to local governments to adopt regulations governing the public health, safety and general welfare; and

WHEREAS, pursuant to 44 C.F.R. § 60.3 the Federal Emergency Management Agency ("FEMA") require municipalities to ensure that floodplain management regulations meet or exceed the minimally required standards for participation in the National Flood Insurance Program ("NFIP"); and

WHEREAS, the purpose of this ordinance, therefore, is to amend or add certain provisions of the Planning and Development regulations regarding flood hazard areas to adopt the revised Flood Insurance Study ("FIS") and Digital Flood Insurance Rate Map ("DFIRM") and DFIRM panel numbers and to enact changes as requested by the NJDEP in accordance herewith by September 25, 2009, at which time such new maps become effective; and

WHEREAS, municipalities that fail to enact the necessary floodplain management regulations by September 25, 2009 are subject to suspension from participation in the NFIP; and

WHEREAS, the adoption of this ordinance does not in any way preclude the Borough from participating in further administrative or legal actions challenging the FIS or newly adopted DFIRM maps.

NOW, THEREFORE, BE IT ORDAINED by the Borough Council of the Borough of Tinton Falls in the County of Monmouth, State of New Jersey that Chapter XIX (Flood Damage Prevention) of the General Ordinances of the Borough of Tinton Falls are hereby amended or supplemented as follows:

PURPOSE

The purpose of this ordinance is to amend or add certain provisions of the regulations regarding construction in flood hazard areas to adopt the revised Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) and DFIRM panel numbers and to enact changes to the Borough Flood Damage Prevention Ordinance as requested by the New Jersey Department of Environmental Protection.

Chapter XIX (Flood Damage Prevention) of the General Ordinances of the Borough of Tinton Falls is hereby amended or supplemented as follows (new text is double underlined, text to be deleted is ~~struck through~~ and notations to the reader and changes in subparagraph designations either with or without changes to content are italicized):

SECTION 1

Chapter XIX (Flood Damage Prevention) shall be amended, as follows:

CHAPTER XIX FLOOD DAMAGE PREVENTION

19-1 STATUTORY AUTHORIZATION.

The Legislature of the State of New Jersey has, in N.J.S.A. ~~40:41-4~~ 40:48-1 et seq., delegated the responsibility to local govern-mental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore the Mayor and Borough Council of the Borough of Tinton Falls, Monmouth County, New Jersey does ordain as follows:

19-2 FINDINGS OF FACT.

- a. The flood hazard areas of the Borough of Tinton Falls 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 hazards which increase flood heights and velocities and, when inadequately anchored, causes damage ~~uses~~ in other areas. Uses that are inadequately floodproofed, elevated or other-wise protected from flood damage also contribute to the flood loss.

19-3 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 the 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 and bridges, located in areas of special flood hazard.
- f. Help maintain a stable tax base by providing for the ~~sound~~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.
- h. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

19-4 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 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.
- e. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

19-5 WORD USAGE AND DEFINITIONS.

- a. 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.
- b. As used in this chapter, the following terms shall have the meanings indicated:

Appeal shall mean a request for a review of the Borough Engineer's interpretation of any provision of this chapter, or a request for a variance.

Area of shallow flooding shall mean a designated AO AH or VO Zone on the Communities Digital Flood Insurance Rate Map (DFIRM) with a one percent (1%) annual or greater chance of flooding to an average depth of one foot (1') to three feet (3') where ~~—The base flood depths range from one (1') foot to three (3') feet;~~ a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

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.

Base flood shall mean the flood having a one (1%) percent chance of being equaled or exceeded in any given year.

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

Breakaway wall shall mean 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* shall mean the area subject to high velocity waters, including but not limited to hurricane wave wash or tsunamis. The area is designated on a FIRM as Zone V1-V30.~~

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

Digital Flood Insurance Rate Map (DFIRM) means 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 shall mean 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 ground level 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 of 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 building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls.~~

Flood or flooding shall mean a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters; and/or
2. The unusual and rapid accumulation or runoff of surface waters from any source.

~~*Flood Insurance Rate Map (FIRM)* shall mean 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) shall mean the official report ~~provided~~ in which the Federal Insurance Administration has provided flood profiles, as well as the ~~Flood Boundary Floodway Map Flood Insurance Rate Map(s)~~ and the water surface elevation of the base flood.

Flood plain management regulations shall mean zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a flood plain 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 shall mean 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 two-tenths (0.2') foot.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure means any structure that is:

1. 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;
2. 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;
3. 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
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved State program as determined by the Secretary of the Interior;
or
 - (b) Directly by the Secretary of the Interior in States without approved programs.

Lowest floor shall mean 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.

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-attached~~ 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".~~

Manufactured home park or *manufactured home sub-division* shall mean a parcel, or contiguous parcels, of land divided into two (2) or more manufactured home lots for rent or sale.

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 flood plain management regulations adopted by the municipality.

Recreational vehicle means a vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the longest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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 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 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 shall mean a walled and roofed building, a manufactured home or a gas or liquid storage tank that is principally above ground.

Substantial Damage shall mean damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50%) percent of the market value of the structure before the damage occurred.

Substantial improvement shall mean any ~~repair~~, 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 ~~either before the improvement or repair is started or, if the structure has been damaged and is being restored, before the damage occurred.~~ For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:

1. Any project for improvement of a structure to ~~comply with existing~~ 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 are solely necessary to assure safe living conditions; or

2. Any alteration of a ~~structure listed on the National Register of Historic Places or a State Inventory of Historic Places~~ "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

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

19-6 APPLICABILITY.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the Borough of Tinton Falls, Monmouth County, New Jersey.

19-7 BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD.

~~The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study, Borough of Tinton Falls, New Jersey, Monmouth County," dated October 15, 1981, as prepared by the Federal Emergency Management Agency, with accompanying Flood Insurance Rate Maps (panels 1 through 7 inclusive effective April 15, 1982) as may from time to time be amended and supplemented, and delineation of floodway and flood hazard area prepared for the State of New Jersey, Department of Environmental Protection, Division of Water Resources, as may from time to time be amended and supplemented, are hereby adopted by reference and declared to be a part of this chapter. These items are on file with the Borough Clerk's Office, Borough of Tinton Falls, 556 Tinton Avenue, Tinton Falls, New Jersey 07724, and at the office of the Borough Engineer.~~

The areas of special flood hazard for the Borough of Tinton Falls, Community No.340318, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:

- a. A scientific and engineering report "Flood Insurance Study, Monmouth County, New Jersey (All Jurisdictions)" dated September 25, 2009.
- b. Flood Insurance Rate Map for Monmouth County, New Jersey (All Jurisdictions) as shown on Index and panel numbers 34025C0178F, 34025C0179F, 34025C0186F, 34025C0187F, 34025C0188F, 34025C0189F, 34025C0310F, 34025C0326F, 34025C0327F, 34025C0328F, 34025C0329F; whose effective date is September 25, 2009

The above documents are hereby adopted and declared to be a part of this ordinance. The Flood Insurance Study and maps are on file with the Borough Clerk's Office, Borough of Tinton 556 Tinton Ave, Tinton Falls, New Jersey 07724-3298, and at the office of the Borough Engineer.

19-8 VIOLATIONS AND PENALTIES.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and any 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 Borough of Tinton Falls from taking such other lawful action as is necessary to prevent or remedy any violation.

19-9 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 any other ordinance, easement, covenant or deed restriction conflicts or overlaps, whichever imposes the more stringent restrictions shall prevail.

19-10 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 Borough of Tinton Falls.
- c. Deemed neither to limit nor repeal any other powers granted under State Statutes.

19-11 WARNING AND DISCLAIMER OF LIABILITY.

- a. 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 out-side the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages.
- b. This chapter shall not create liability on the part of the Borough of Tinton Falls, 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 there-under.

19-12 DEVELOPMENT PERMIT.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 19-7.

- a. Application for a development permit shall be made on forms furnished by the Borough Engineer and may include but not be limited to plans in duplicate drawn to scale and 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.
- b. Specifically, the following information is required:
 1. The elevation, in relation to mean sea level, of the lowest floor, including basement, of all structures.
 2. The elevation, in relation to mean sea level, to which any structure has been floodproofed.
 3. A certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 19-16b.
 4. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

19-13 ENFORCING OFFICER.

- a. The Borough Engineer is hereby appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.
- b. *Duties and Responsibilities of the Enforcing Officer.* Duties of the Borough Engineer shall include but not be limited to:
 1. Permit Review. The Borough Engineer shall:
 - (a) Review all development permits to determine that the permit requirements of this chapter have been satisfied.
 - (b) 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.
 - ~~(c) Review all development permits in the coastal high hazard area of the area of special flood hazard to determine if the proposed development alters mangrove stands or sand dunes so as to increase potential flood damage.~~
 - (c) Review all development permits to determine if the proposed development is located in the floodway, and assure that the encroachment provisions of Section 19-18a. are met.

- ~~(e) Review plans for walls to be used to enclose space below the base flood level in accordance with paragraph b, 4. of Section 19-17.~~
2. Use of Other Base Flood and Floodway Data. When base flood elevation data and floodway has not been provided in accordance with Section 19-7, Basis for Establishing Areas of Special Flood Hazard, the Borough Engineer 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 Section 19-16a., Specific Standards for Residential Construction, and Section 19-16b., Specific Standards for Nonresidential Construction.
 3. Information To Be Obtained and Maintained. The Borough Engineer shall:
 - (a) 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.
 - (b) For all new or substantially improved flood-proofed structures:
 - (1) Verify and record the actual elevation, in relation to mean sea level.
 - (2) Maintain the floodproofing certifications required in Section 19-12.b.3.
 - ~~(c) In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the provisions of Section 19-17b, 1. and 2(a) and (b) are met.~~
 - ~~(c)~~ (d) Maintain for public inspection all records pertaining to the provisions of this chapter.
 4. Alteration of Watercourses. The Borough Engineer shall:
 - (a) 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.
 - (b) Require that maintenance is provided within the altered or relocated portion of the said watercourse so that the flood capacity is not diminished.
 5. Interpretation of FIRM Boundaries. The Borough Engineer shall 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 19-14.

19-14 VARIANCE PROCEDURE.

- a. Appeal Board.
 1. The Zoning Board of Adjustment as established by the Borough of Tinton Falls shall hear and decide appeals and requests for variances from the requirements of this chapter.
 2. The Zoning Board of Adjustment shall hear and decide appeals when it is alleged there is an error of any requirements, decisions, or determination made by the Borough Engineer in the enforcement or administration of this chapter.
 - ~~3~~2. Any person aggrieved by the decision of the Zoning Board of Adjustment, or any Borough taxpayer, may appeal such decision to the Superior Court of New Jersey as provided by law.
 - ~~4~~3. In passing upon such applications, the Zoning Board ~~or Board~~ of Adjustment 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 individual owners.
 - (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, not subject to flooding or erosion damage, for the proposed use.
 - (g) The compatibility of the proposed use with existing and anticipated development.
 - (h) The relationship of the proposed use to the ~~C~~-comprehensive ~~P~~-plan and floodplain management program for 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 floodwaters and the effects of wave action, if applicable, expected at the site.
 - (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.
4. Upon consideration of the factors in paragraph a, ~~3-4~~ and the purposes of this chapter, the Zoning Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
 5. The Borough Engineer 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, provided that the items in paragraphs a, ~~3-4~~ (a) through (k) 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.
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 reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section.
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 not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.~~ 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 paragraph a, ~~3-4~~ 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 the 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.

19-15 GENERAL STANDARDS.

In all cases of special flood hazard, the following standards are required:

- a. *Anchoring.*
 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
 2. All manufactured homes 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 floodwaters into the system; ~~and~~.
 2. 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; ~~and~~.
 3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; ~~and~~.
 4. 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. *Subdivisions Proposals.*
 1. All subdivision proposals shall be consistent with the need to minimize flood damage; ~~and~~.
 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems, located and constructed to minimize flood damage; ~~and~~.
 3. All subdivision proposals 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 development which contain at least fifty (50) lots or five (5) acres, whichever is less.
- e. *Enclosure Openings.* For all new construction and substantial improvements, 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:
 1. 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.
 2. The bottom of all openings shall be no higher than one (1') foot above grade
 3. Openings may be equipped with screens, louvers or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

19-16 SPECIFIC STANDARDS.

In all areas of special flood hazards where base flood elevation data have been provided as set forth in Section 19-7, Basis for Establishing Areas of Special Flood Hazard, or in Section 19-13b, 2, Use of Other Base Flood and Floodway Data, the following standards are required:

- a. *Residential Construction.* New construction and substantial improvement of any residential structure shall have the lowest floor, including basement together with the attendant utility and sanitary facilities, elevated to or above base flood elevation and 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 at least as high as the depth number specified in feet (at least two (2') feet if no depth number is specified). And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- b. *Nonresidential Construction.* New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement together with the attendant utility and sanitary facilities, elevated to the level of the base flood elevation ~~or, together with attendant utility and sanitary facilities; and within any AO 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 at least as high as the depth number specified in feet (at least two (2') feet if no depth number is specified), and require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures; or together with the attendant utility and sanitary facilities;~~ shall:
 1. Be floodproofed so that below the base flood level 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 Section 19-13b, 3(b).
- c. *Manufactured Homes.*
 1. Manufactured homes shall be anchored in accordance with Section 19-15a, 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.

~~19-17 COASTAL HIGH HAZARD AREAS.~~

~~Coastal high hazard areas (V Zones) are located within the areas of special flood hazard established in Section 19-7. These areas have special flood hazard 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 land ward 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, 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 paragraph b, 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 (1%) percent chance of being equaled or exceeded in any given year (one hundred (100) year mean recurrence interval).
 - (c) There shall be no fill used for structural support.~~
- ~~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 paragraph b, 1. and 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 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 waterloads 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 waterload less than that which would occur during the base flood.
 - (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 waterload acting simultaneously on all building components (structural and nonstructural).
 - (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 break away wall must be submitted to the local administrator for approval.~~
- ~~e. Sand Dunes and Mangrove Stands. There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.~~

19-1817 FLOODWAYS.

Located within areas of special flood hazard established in Section 19-7 are areas designated as "floodways." Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

- a. Encroachments, including fill, new construction; substantial improvements and other development shall be prohibited, unless a technical evaluation demonstrates that encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- b. If paragraph a. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 19-15 through 19-1817.
- c. ~~The placement of any mobile homes shall be prohibited, except where existing at the date of this chapter.~~
- d. 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') foot at any point.

19-1918 FEES.

Fees for various reviews and actions, including appeals, set forth in this chapter shall be set by administrative directive issued pursuant to the Municipal Charter and the Administrative Code of the Borough of Tinton Falls.

SECTION 2

If any section, subsection, clause, or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the remaining portions of this ordinance. All ordinances or parts of ordinances inconsistent with this ordinance are hereby repealed to the extent of such inconsistency.

SECTION 3

The Borough Clerk is hereby directed, upon adoption of the Ordinance after public hearing thereon, to publish notice of the passage thereof and to file a copy of this Ordinance as finally adopted with the Monmouth County Planning Board as required by N.J.S.40:55D-16. The Clerk shall also forthwith transmit a copy of this Ordinance after final passage to the Borough Tax Assessor as required by N.J.S. 40:49-2.1.

SECTION 4

This Ordinance shall take effect immediately upon final passage and publication according to law and filing with the Monmouth County Planning Board.