

ARTICLE 8 – FLOODPLAIN MANAGEMENT

801 FLOOD HAZARD DEVELOPMENT PERMIT

801.1 ESTABLISHMENT (#4)

The City of Brewer, Maine elects to comply with the requirements of the National Flood Insurance Act of 1968 (P. L. 90-488, as amended). The National Flood Insurance Program, established in the aforesaid Act, provides that areas of the City having a special flood hazard be identified by the Federal Emergency Management Agency and that floodplain management measures be applied in such flood hazard areas. This Article establishes a Flood Hazard Development Permit system and review procedure for development, activities in the designated flood hazard area of the City of Brewer, Maine.

The areas of special flood hazard, Zones A, and A1-A30 identified by the Federal Emergency Management Agency in a report entitled “Flood Insurance Study – City of Brewer, Maine, Penobscot County,” dated December 1977 with accompanying “Flood Insurance Rate Map” and “Flood Boundary and Floodway Map” dated June 1978, is hereby adopted by reference and declared to be a part of this Article. [Any and all references made to sections 801-810 herein refer to this Article.]

801.2 PERMIT REQUIRED

Before any construction or other development (as defined in 809), including the placement of manufactured homes, begins within any areas of special flood hazard established in 801.1, a Flood Hazard Development Permit shall be obtained from the Code Enforcement Officer. This permit shall be in addition to any other building permits which may be required pursuant to the codes and ordinances of the City of Brewer, Maine.

801.3 APPLICATION FOR PERMIT (#4)

The application for a Flood Hazard Development Permit shall be submitted to the Code Enforcement Officer and shall include:

- A. The name, address and phone number of the applicant, owner and contractor;
- B. An address and a map indicating the location of the construction site;
- C. A site plan showing location of existing and/or proposed development, including but not limited to structures, sewage disposal facilities, water supply facilities, areas to be cut and/or filled, and the dimensions of the lot;)
- D. A statement of the intended use of the structure and/or development;
- E. A statement as to the type of sewage system proposed;

- F. Specification of dimensions of the proposed structure and/or development; (items G – K.5 apply only to new construction and substantial improvement).
- G. The elevation in relation to National Geodetic Vertical Datum (NGVD), or to a locally established datum in Zone A only, of the:
 - 1. base flood at the proposed site of all new or substantially improved structures, which is determined:
 - a. in Zone A1-30, from data contained in the “Flood Insurance Study – City of Brewer, Maine,” as described in 801.1; or
 - b. in Zone A
 - 1) from any base flood elevation data from federal, state, or other technical courses (such as FEMA Quick-2 model, FEMA 265/July 1995), including information contained pursuant to 802.K and 804.D.
 - 2) from the contour elevation extrapolated from a best fit analysis of the floodplain boundary when overlain onto a USGS Quadrangle Map or other topographic map prepared by a Professional Land Surveyor or registered professional engineer, if the floodplain boundary has a significant correlation to the elevation contour line(s), or in the absence of all other data.
 - 3) to be the elevation of the ground at the intersection of the floodplain boundary and a line perpendicular to the shoreline which passes along the ground through the site of the proposed building.
 - 2. highest and lowest grades at the site adjacent to the walls of the proposed building;
 - 3. lowest floor, including basement; and whether or not such structures contain a basement; and,
 - 4. level, in the case of non-residential structures only, to which the structure will be flood proofed.
- H. A description of an elevation reference point established on the site of all developments for which elevation standards apply as required in 802;
- I. A written certification by a registered professional Maine engineer, professional land surveyor or architect that the elevations shown on the application are accurate;
- J. The following certifications as required in 802 by a registered professional engineer or architect:

1. A flood proofing certificate (FEMA Form 81-65, 08/99 as amended to verify that the flood proofing methods for any non-residential structures will meet the flood proofing criteria of 801.3.G.4, 802.G and other applicable standards in 802L.
 2. A hydraulic openings certificate to verify that engineered hydraulic openings in foundation walls will meet the standards of 802.
 3. A certified statement that bridges will meet the standards of 802.M.
 4. A certificate that containment walls will meet the standards of 802.N.
- K. A description of the extent to which any water course will be altered or relocated as a result of the proposed development;
- L. A statement of construction plans describing in detail how each applicable development standard in 802 will be met.

801.4 APPLICATION FEE AND EXPERT’S FEE (#4)

A non-refundable application fee, as set forth by the City Council and amended from time to time, shall be paid to the City Clerk and a copy of a receipt for the same shall accompany the application.

An additional fee may be charged if the Code Enforcement Officer and/or Board of Appeals need the assistance of a professional engineer or other expert. The expert’s fee shall be paid in full by the applicant within 10 days after the City submits a bill to the applicant. Failure to pay the bill shall constitute a violation of the ordinance and be grounds for the issuance of a stop work order. An expert shall not be hired by the municipality at the expense of an applicant until the applicant has either consented to such hiring in writing or been given an opportunity to be heard on the subject. An applicant who is dissatisfied with a decision of the Code Enforcement Officer may appeal that decision to the Board of Appeals.

801.5 REVIEW STANDARDS FOR FLOOD HAZARD DEVELOPMENT PERMIT APPLICATIONS (#4)

The Code Enforcement Officer shall:

- A. Review all applications for the Flood Hazard Development Permit to assure that proposed developments are reasonably safe from flooding and to determine that all pertinent requirements of 802 (Development Standards) have been or will be met;
- B. Utilize, in the review of all Flood Hazard Development Permit applications, the base flood data contained in the “Flood Insurance Study – City of Brewer, Maine,” as described in 801.1. In special flood hazard areas where base flood elevation data are not provided, the Code Enforcement Officer shall obtain,

review and reasonably utilize any base flood elevation and floodway data from federal, state or other sources, including information obtained pursuant to 801.3, paragraph G.1.b.; 802, paragraph K; and 804, paragraph D, in order to administer 802 of this Article; and (3) when the community establishes a base flood elevation in Zone A by methods outlined in 801.3.G.1.b., the community will submit the data to the Maine Floodplain Management Program c/o State Planning Office.

- C. Make interpretations of the location of boundaries of special flood hazard areas shown on the maps described in 801.1 of this Article;
- D. In the review of Flood Hazard Development Permit application, determine that all necessary permits have been obtained from those federal, state, and local government agencies from which prior approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334;
- E. Notify adjacent municipalities, the Department of Environmental Protection, and the Maine State Planning Office prior to any alteration or relocation of a water course and submit copies of such notifications to the Federal Emergency Management Agency;
- F. If the application satisfies the requirements of this ordinance, approve the issuance of one of the following Flood Hazard Development Permits, based on the type of development:
 - 1) A two part Flood Hazard Development Permit for elevated structures. Part I shall authorize the applicant to build a structure to and including the first horizontal floor only above the base flood level. At that time the applicant shall provide the Code Enforcement Officer with an application for Part II of the Flood Hazard Development Permit and shall include an Elevation Certificate completed by a registered Maine surveyor for compliance with the elevation requirements of 802, paragraphs F, G, or H. Following review of the application, which review shall take place within 72 hours of receipt of the application, the Code Enforcement Officer shall issue Part II of the Flood Hazard Development Permit, if elevation requirements are met. Part II shall authorize the applicant to complete the construction project; or,
 - 2) A Flood Hazard Development Permit for Flood proofing of Non Residential Structures that are new construction or substantially improved non-residential structures that are not being elevated but that meet the Flood proofing standards of 802. G.1.a.b. and c. Their application for this permit shall include a flood proofing certificate signed by a registered engineer or architect; or,
 - 3) A Flood Hazard Development Permit for minor development for all development that is not new construction of substantial improvement, such as repairs maintenance, renovations, or additions, whose value is less than 50%

of the market value of the structure. Minor development also includes, but is not limited to: accessory structures as provided for in 802.J., mining dredging, filling, grading paving, excavation, drilling operations, storage of equipment or materials, disposition or extraction of materials, public or private sewage disposal systems or water supply facilities that do not involve structures, and any structural, non-habitational projects including but not limited to: bridges, dams, towers, fencing, pipelines, wharves and piers.

- G. Maintain, as a permanent record, copies of all Flood Hazard Development Permits issued and data relevant thereto, including reports of the Board of Appeals on variances granted under the provisions of 805 of this Article, and copies of Elevation Certificates, Certificates of Compliance, Flood proofing Certificates and certification of design standards required under the provisions of 801,802 and 803 of this Article.

802 DEVELOPMENT STANDARDS (#4)

All developments in areas of special flood hazard shall meet the following applicable standards:

- A. All developments shall:
 - 1. be designed or modified and adequately anchored to prevent flotation, (excluding docks and piers) collapse or lateral movement of the development resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
 - 2. use construction materials that are resistant to flood damage;
 - 3. use construction methods and practices that will minimize flood damage; and,
 - 4. use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- B. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.
- C. All new and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the system and discharges from the systems into flood waters.
- D. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- E. All development associated with altered or relocated portions of a watercourse shall be constructed and maintained in such a manner that no reduction occurs in the flood carrying capacity of the water course.

F. New construction or substantial improvement of any residential structure located within:

1. Zones A1-30 shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation.
2. Zone A shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation utilizing information obtained pursuant to 801.3 paragraph G.1.b.; 801.5, paragraph B; or 804 paragraph D.

G. New construction or substantial improvement of any non-residential structure located within:

1. Zones A1-30 shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation, or together with attendant utility and sanitary facilities shall:
 - a. be flood proofed to at least one foot above the base flood level so that below that elevation the structure is watertight with walls substantially impermeable to passage of water;
 - b. have structural components capable of resisting hydrostatic and hydrodynamic loads and the 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 provisions of this section. Such certification shall be provided with the application for a Flood Hazard Development Permit, as required by 801.3 paragraph J. and shall include a record of the elevation above mean sea level to which the structure is flood proofed.
2. Zone A shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation utilizing information obtained pursuant to 801.3, paragraph G.1.b.; 801.5, paragraph B; or 804, paragraph D.

H. New or substantially improved manufactured homes located within:

1. Zones A1-30 shall:
 - a. be elevated such that the lowest floor (including basement of the manufactured home) is at least one foot above the base flood elevation; and
 - b. be on a permanent foundation, which may be poured masonry slab or foundation walls with hydraulic openings, or may be reinforced piers or block supports, any of which support the manufactured home so that no weight is supported by its wheels and axles, and;

- c. be securely anchored to an adequately anchored foundation system to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to:
 - d. over-the-top ties anchored to the ground at the four corners of the manufactured home, plus two additional ties per side at intermediate points (manufactured homes less than 50 feet long require one additional tie per side); or by,
 - e. frame ties at each corner of the home, plus five additional ties along each side at intermediate points (manufactured homes less than 50 feet long require four additional ties per side).
 - f. all components of the anchoring system described in 802, paragraph H.1.c. (1) (2) shall be capable of carrying a force of 4800 pounds.
2. Zone A shall have to be erected on a permanent foundation as described in 802.H.b such that the lowest floor (including basement) elevated to at least one foot above the base flood elevation utilizing information obtained pursuant to 801.3, paragraph G.1.b.; 801.5, paragraph B; or 804, paragraph D.
- I. Recreational Vehicles – Rec. Vehicles located within Zones A1-A30 shall either:
1. Be on the site less than 180 consecutive days in any calendar year;
 2. Be fully licensed and ready for highway use; or
 3. Be permitted in accordance with the elevation and anchoring requirements for manufactured homes in 802.H.1.
- J. Accessory structures as defined in 809, located within Zones A1-A30 and A shall be exempt from the elevation criteria required in 802 F and G above if all other requirements of 802 and the following requirements are met. Accessory structures shall:
1. Be 500 square feet or less and have a value of less than \$3000.
 2. Have unfinished interiors and not be used for human habitation.
 3. Have hydraulic openings, as specified in 802.L.2. in at least two walls of the structure.
 4. Be located outside the floodway.
 5. When possible, located on the site so as to offer the minimum resistance to the flow of floodwaters and be placed no further from the source of flooding than is the primary structure.

6. Have only ground fault interrupt outlets. The electric service disconnect shall be located above the base flood elevation and when possible outside the Special Flood Hazard Area.

K. Floodways:

1. In Zones A1-30, riverine areas encroachments, including fill, new construction, substantial improvement, and other development shall not be permitted within a regulatory floodway which is designed on the community's "Flood Boundary" and "Floodway Map" unless a technical evaluation certified by a registered professional engineer is provided demonstrating that such encroachments will not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
 2. In Zones A1- A30 and A for which no regulatory floodway is designated, encroachments including fill, new construction substantial improvement and other development shall not be permitted in the floodway as determined in 802.K.3 unless a technical evaluation by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development when combined with all other existing development and anticipated development:
 - a. will not increase the water surface elevation of the base flood more than one foot at any point within the community; and
 - b. is consistent with the technical criteria contained in Chapter 5 entitled "Hydraulic Analyses" (sic) Flood Insurance Study – Guidelines for Study Contractors (FEMA 37/Jan 1995, as amended).
 3. In Zone A1-A30 and A riverine areas, for which no regulatory floodway is designated, the regulatory floodway is determined to be the channel of the river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain as measured from the normal high water mark to the upland limit of the floodplain.
- L. New construction or substantial improvement of any structure in Zones A1-30 and A that meets the development standards of 802, including the elevation requirements of 802, paragraphs F, G or H and is elevated on posts, columns, piers, piles, "stilts," or crawl spaces may be enclosed below the base flood elevation provided all the following criteria are met or exceeded:
1. Enclosed areas are not "basements" as defined in 809; and,
 2. Enclosed areas 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:

- a. be certified by a registered professional engineer or architect; or,
 - b. meet or exceed the following minimum criteria:
 - 1) a minimum of two openings of approximately equal size having a total net area of not less than one square inch for every square foot of the enclosed area;
 - 2) the bottom of all openings shall be below the base flood elevation and no higher than one foot above the lowest grade; and,
 - 3) openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the entry and exit of flood waters automatically without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means; and,
 3. The enclosed area shall not be used for human habitation; and,
 4. The enclosed area may only be used for building access, parking vehicles, or storage.
- M. Bridges -- new construction or substantial alteration of any bridge in Zone A1-A30 and A shall be designed such that:
1. when possible, the lowest horizontal member (excluding pilings or columns) is elevated at least one foot above the base flood elevation, and
 2. a registered professional engineer shall certify that:
 3. the structural design and methods of construction shall meet the elevation requirements of this section and the floodway standards of 802 K and
 4. the foundation and superstructure attached thereto are designed to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all structure components. Water loading values shall be those associated with the base flood.
- N. Containment Walls – new construction or substantial improvement of any containment wall located within Zones A1-A30 and A shall:
- a. have containment wall elevated to at least one foot above the base flood elevation;
 - b. have structural components capable of resisting hydrostatic and hydrodynamic loads and the 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 provisions of this section. Such certification shall be provided with the application for a Flood Hazard Development Permit as required by 801.3.J.

- O. Wharves, Piers, and Dock – new construction or substantial alteration of wharves, piers and docks are permitted in Zones A and A1-A30 in and over water and seaward of mean high tide if the following requirements are met:
 - 1. wharves, piers and docks shall comply with all applicable local, state and federal regulations; and
 - 2. for commercial wharves, piers and docks, a registered professional engineer shall develop or review the structural design, specifications and plans for the construction.

803 CERTIFICATION OF COMPLIANCE (#4)

No land in a special flood hazard area shall be occupied or used and no structure which is constructed or substantially improved shall be occupied until a Certificate of Compliance is issued by the Code Enforcement Officer subject to the following provisions:

- A. For new construction or substantial improvement of any elevated structure the applicant shall submit to the Code Enforcement Officer:
- B. an Elevation Certificate completed by a Professional Land Surveyor, registered engineer or architect for compliance with 802 F., G, or H.
- C. The applicant shall submit written notification to the Code Enforcement Officer that the development is complete and complies with the provisions of this ordinance.
- D. The Code Enforcement Officer shall review the application within 10 working days of receipt of the application and shall issue a Certificate of Compliance, provided the building conforms with the provisions of this Article and other pertinent provisions of the City of Brewer Ordinances.

804 REVIEW OF SUBDIVISION AND DEVELOPMENT PROPOSALS

The Planning Board shall, when reviewing subdivisions and other proposed developments that require review under other federal law, state law or local ordinances or regulations and all projects on 5 or more acres, or in the case of manufactured home parks divided into two or more lots, assure that:

- A. All such proposals are consistent with the need to minimize flood damage.
- B. All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damages.
- C. Adequate drainage is provided so as to reduce exposure to flood hazards.

- D. All proposals include base flood elevation, flood boundaries, and in a riverine floodplain, floodway data. These determinations shall be based on engineering practices recognized by the Federal Emergency Management Agency.
- E. Any proposed development plan must include a condition that structures on any lots in the development having any portion of its land within a Special Flood Hazard Area are to be constructed in accordance with 802 of this Article. Such requirement will be included in any deed, lease, purchase and sale agreement, or document transferring or expressing intent to transfer any interest in real estate or structure, including but not limited to a time share interest. The statement shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed on any other document previously described. The construction requirement shall also be clearly stated on any map, plat, or plan to be signed by the Planning Board or local reviewing authority as part of the approval process.

805 APPEALS AND VARIANCES (#4)

The Board of Appeals of the City of Brewer may, upon written application of an aggrieved party, hear and decide appeals from determinations of the Code Enforcement Officer or the Planning Board in the administration of the provision of this Article. The Board of Appeals may grant a variance from the requirements of this Article consistent with state law and the following criteria:

- A. Variances shall not be granted within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
- B. Variances shall be granted only upon:
 - 1. a showing of good and sufficient cause; and,
 - 2. a determination that should be a flood comparable to the base flood occur, the granting of a variance will not result in increased flood heights, additional threats to public safety, public expense, or create nuisances, cause fraud or victimization of the public or conflict with existing local laws and ordinances; and,
 - 3. a showing that the existence of the variance will not cause a conflict with other state, federal or local laws or ordinances; and,
 - 4. a determination that failure to grant the variance would result in “undue hardship,” which in this subsection means:
 - a. that the land in question cannot yield a reasonable return unless a variance is granted; and,
 - b. that the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood; and,

- c. that the granting of a variance will not alter the essential character or the locality; and
 - d. that the hardship is not the result of action taken by the applicant or a prior owner.
- C. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief, and the Board of Appeals may impose such conditions to a variance as it deems necessary.
- D. Variances may be issued for new construction, substantial improvements, or other development for the conduct of a functionally dependent use provided that:
 - 1. other criteria of 805 and 802. K are met; and,
 - 2. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- E. Variances may be issued for the repair, reconstruction, rehabilitation, or restoration of Historic Structures upon the determination that:
 - 1. the development meets the criteria of 805, paragraphs A. thru D. above; and,
 - 2. the proposed repair, reconstruction, rehabilitation, or restoration 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.
- F. Any applicant who meets the criteria of 805 paragraphs A through E shall be notified by the Board of Appeals in writing over the signature of the Chairman of the Board of Appeals that:
 - 1. The issuance of a variance to construct a structure below the base flood level will result in greatly increased premium rates for flood insurance up to amounts as high as \$25 per \$100 of insurance coverage;
 - 2. Such construction below the base flood level increase risks to life and property; and,
 - 3. The applicant agrees in writing that the applicant is fully aware of all the risks inherent in the use of land subject to flooding, assumes those risks and agrees to indemnify and defend the municipality against any claims filed against it that are related to the applicant's decision to use land located in a floodplain and that the applicant individually releases the municipality from any claims the applicant may have against the municipality that are related to the use of land located in a floodplain.
- G. The Board of Appeals shall submit to the Code Enforcement Officer a report of all variance actions, including justification for the granting of the variance and an authorization for the Code Enforcement Officer to issue a Flood Hazard Development Permit, which includes any conditions to be attached to said permit.

806 ENFORCEMENT AND PENALTIES

- A. It shall be the duty of the Code Enforcement Officer to enforce the provisions of this Article pursuant to 30-A MRSA sec. 4452. (#4)
- B. The penalties contained in 30-A MRSA sec. 4452 shall apply to any violation of this Article.
- C. In addition to any other actions, the Code Enforcement Officer, upon determination that a violation exists, shall submit a declaration to the Administrator of the Federal Insurance Administration requesting a denial of flood insurance. the valid declaration shall consist of:
 - 1. the name of the property owner and address or legal description of the property sufficient to confirm its identity or location;
 - 2. a clear and unequivocal declaration that the property is in violation of a cited state or local law, regulation, or ordinance;
 - 3. a clear statement that the public body making the declaration has authority to do so and a citation to that authority;
 - 4. evidence that the property owner has been provided notice of the violation and the prospective denial of insurance; and,
 - 5. a clear statement that the declaration is being submitted pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

807 VALIDITY AND SEVERABILITY

If any section or provision of this Article is declared by the courts to be invalid, such decision shall not invalidate any other section or provision of this Article.

808 CONFLICT WITH OTHER ORDINANCES

This Article shall not in any way impair or remove the necessity of compliance with any other applicable rule, ordinance, regulation, bylaw, permit, or provision of law. Where this Article imposes a greater restriction upon the use of land, buildings, or structures, the provisions of this Article shall control.

809 DEFINITIONS (#4)

Unless specifically defined below, words and phrases used in this Article shall have the same meaning as they have at common law and to give this Article its most reasonable application. Words used in the present tense include the future, the singular number includes the plural, and the plural number includes the singular. The word "may" is permissive; "shall" is mandatory and not discretionary.

- 1. "Accessory Structure" – means a small detached structure that is incidental and subordinate to the principal structure.

2. "Adjacent Grade" - means the natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
3. "Area of Special Flood Hazard" - means the land in the floodplain having a one percent or greater chance of flooding in any given year, as specifically identified in the Flood Insurance Study cited in 801 of this Article.
4. "Base Flood" - means the flood having a one percent chance of being equaled or exceeded in any given year, commonly called the 100-year flood.
5. "Basement" - means any area of the building having its floor subgrade (below ground level) on all sides.
6. "Building" - see "structure."
7. "Certificate of Compliance" - A document signed by the Code Enforcement Officer stating that a structure is in compliance with all of the provisions of this Article.
8. "Code Enforcement Officer" - is the person who is appointed as an Executive Officer of the Department of Inspections pursuant to the Brewer, ME, Building Code, Article 16, Section 109.
9. "Development" - means any change caused by individuals or entities to improved or unimproved real estate, including but not limited to the construction of buildings or other structures; the construction of additions or substantial improvements to buildings or other structures; mining, dredging, filling, grading, paving, excavation, or drilling operations or the storage of equipment or materials; and the storage, deposition, or extraction of materials, public or private sewage disposal systems or water supply facilities.
10. "Elevated Building" - means a non-basement building (i) built, in the case of a building in Zones A1-A30, and A, to have the top of the elevated floor, elevated above the ground level by means of pilings, columns, posts, piers, or "stilts;" and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to one foot above the magnitude of the base flood. In the case of Zones A1-A30, or A, "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 as required in 802.L.
11. "Elevation Certificate" - An official form (FEMA Form 81-31, 08/99, as amended) that (i) is used to verify compliance with the floodplain management regulations of the National Flood Insurance Program; and, (ii) is required for purchasing flood insurance.
12. "Flood" or "Flooding" - means:
 - a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

- 1) The overflow of inland or tidal waters.
 - 2) The unusual and rapid accumulation or runoff of surface waters from any source.
- b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.
13. "Flood Elevation Study" - means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.
 14. "Flood Insurance Rate Map" (FIRM) - means an official map of a community, on which the Administrator of the Federal Insurance Administration has delineated both the special hazard areas and the risk premium zones applicable to the community.
 15. "Flood Insurance Study" see "Flood Elevation Study."
 16. "Floodplain" or "Flood-prone Area" - means any land area susceptible to being inundated by water from any source (see definition of "flooding").
 17. "Floodplain Management" - means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.
 18. "Floodplain Management Regulations" - means 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.
 19. "Flood Proofing" - means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
 20. "Floodway" - "see Regulatory Floodway."
 21. "Floodway Encroachment Lines" - mean the lines marking the limits of floodways on federal, state, and local floodplain maps.
 22. "Freeboard" - means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many

unknown factors, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions.

23. "Functionally Dependent Use" - means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
24. "Historic Structure – means 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 of the Interior 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.
25. "Locally Established Datum" - means, for purposes of this ordinance, an elevation established for a specific site to which all other elevations at the site are referenced. This elevation is generally not referenced to the National Geodetic Vertical Datum (NGVD) or any other established datum and is used in areas where Mean Sea Level data is too far from a specific site to be practically used.
26. "Lowest Floor" - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements 802 of this ordinance.
27. "Manufactured Home" - means 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 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 180 consecutive days.

28. "Manufactured Home Park or Subdivision" - means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
29. "Mean Sea Level" - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum NGVD) of 1929, other datum, to which base flood elevations shown on a community's Flood Insurance Rate map are referenced.
30. Minor Development – means all development that is not new construction or substantial improvements such as repairs, maintenance renovations or additions, whose value is less than 50% of the market value of the structure. It also includes, but is not limited to: accessory structures as provided for in 802.J., mining, dredging, filling, grading, paving, excavation, drilling operations, storage of equipment or materials, deposition or extraction of materials, public or private sewage disposal systems or water supply facilities that do not involve structures; and non-structural projects such as bridges, dams, towers, fencing, pipelines, wharves and piers.
31. "New Construction" - means structures for which the "start of construction" commenced on or after the effective date of floodplain management regulations adopted by a community. (1978)
32. "100-year flood" see "Base Flood."
33. Recreational Vehicle – means a vehicle which is:
 - a. built on a single chassis
 - b. 400 square feet or less when measured at the largest horizontal projection not including slide outs
 - c. designed to be self-propelled or permanently towable by a vehicle
 - d. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.
34. "Regulatory Floodway" - (i) means the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot, and (ii) in Zone A is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain as measured from the normal high water mark to the upland limit of the floodplain.
35. "Riverine" - means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.
36. "Start of Construction" - means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, substantial improvement 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 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 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 substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, or modification of any construction element, whether or not that alteration affects the external dimensions of the building.

37. "Structure" - means, for floodplain management purposes, a walled and roofed building. A gas or liquid storage tank that is principally above ground is also a structure.
38. Substantial Damage – means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed 50% of the market value of the structure before the damage occurred.
39. "Substantial Improvement" - means any repair, reconstruction, or improvement of a structure, the value of which equals, or exceeds 50% of the market value of the structure either before the improvement or repair is started or, if the structure has been damaged and is being restored, before the damage occurred. For purposes of this definition "substantial improvement" is considered to occur at the time of the first alteration of any wall, ceiling, floor, or structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local Code Enforcement Official and which are the minimum necessary to assure safe living conditions or (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places provided that such alteration would not preclude the structure's continued designation as a historic structure and a variance is obtained by the community's Board of Appeals.
40. "Variance" - means a grant of relief by a community from the terms of a floodplain management regulation.
41. "Violation" - means the failure of a structure or other development to fully comply with a community's floodplain management regulations or ordinance.

810 ABROGATION

This article repeals and replaces any municipal Article previously enacted to comply with the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).