

Chapter 102
FLOODPLAIN MANAGEMENT

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[HISTORY: Adopted by the Council of the Borough of Berwick 1-20-1986 by Ord. No. 1188. Amendments noted where applicable.]

GENERAL REFERENCES

Code enforcement and administration — See Ch. 9.

Zoning — See Ch. 165.

Building construction and fire prevention — See Ch. 70.

ARTICLE I
General Provisions

§ 102-1.¹ Purpose and intent.

The purpose and intent of this chapter is to:

- A. Promote the general health, welfare and safety of the community.
- B. Encourage the utilization of appropriate construction practice in order to prevent or minimize flood damage in the future.
- C. Minimize danger to public health by protecting water supply and natural drainage.
- D. Reduce financial burdens imposed on the community, its governmental units and its residents by preventing excessive development in areas subject to flooding.
- E. Comply with applicable federal and state floodplain management requirements, especially but not limited to the National Flood Insurance Program requirements and the Pennsylvania Flood Plain Management Act, ² as hereinafter lawfully amended, supplemented, modified or reenacted.

§ 102-2. Applicability.

- A. It shall be unlawful for any person, partnership, business, corporation or any other form of entity to undertake or cause to be undertaken any construction or development anywhere within the Borough of Berwick unless a building permit has been obtained from the Zoning Officer.
- B. A building permit shall not be required for minor repairs to existing buildings or structures, provided that no structural changes or modifications structural in nature are involved.

¹ Editor's Note: Former Sec. 1.01, Short title, which immediately preceded this section, was deleted at time of adoption of Code (see Ch. 1, General Provisions, Art. I).

² Editor's Note: See 32 P.S. § 679.01 et seq.

§ 102-3. Abrogation and greater restrictions.

This chapter supersedes any other conflicting provisions which may be in effect in identified floodplain areas. However, any other ordinance provisions shall remain in full force and effect to the extent that those provisions are more restrictive. If there is any conflict between any of the provisions of this chapter, the more restrictive shall apply.

§ 102-4. Word usage and definitions.

- A. For the purpose of this chapter, certain words, phrases and terms are herewith defined as follows. Words used in the present tense include the future; the singular number includes the plural number; and words in the plural number include the singular number. The word "shall" is always mandatory.
- B. The following terms shall have the meanings indicated unless a different meaning clearly appears from the context:

ACCESSORY USE OR STRUCTURE — A use or structure on the same lot with and of a nature customarily incidental and subordinate to the principal use or structure.

BUILDING — A combination of materials to form a permanent structure having walls and a roof. Included shall be all mobile homes and trailers to be used for human habitation.

COMPLETELY DRY SPACE — A space which will remain totally dry during flooding; the structure is designed and constructed to prevent the passage of water and water vapor into said structure.

CONSTRUCTION — The construction, reconstruction, renovation, repair, extension, expansion, alteration or relocation of a building or structure, including the placement of mobile homes.

DEVELOPMENT — Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, the placement of mobile homes, streets and other paving, utilities, filling, grading, excavation, mining, dredging or drilling operations and the subdivision of land.

ESSENTIALLY DRY SPACE — A space will remain dry during flooding, except for the passage of some water vapor or minor seepage into the structure; the structure is substantially impermeable to the passage of water.

FLOOD — A temporarily inundation of normally dry land areas.

FLOODPLAIN AREA — A relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river or watercourse and/or any area subject to the unusual and rapid accumulation of surface waters from any source.

FLOODPROOFING — Any combination of structural and nonstructural 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.

FLOODWAY — The designated area of a floodplain required to carry and discharge floodwaters of a given magnitude. For purposes of this chapter, the floodway should be

capable of accommodating a flood of the one-hundred-year magnitude. [Added 7-31-1989 by Ord. No. 89-4]

IDENTIFIED FLOODPLAIN AREA — The floodplain area specifically identified in this chapter as being inundated by the one-hundred-year flood. Included would be areas identified as "Floodway (FW)" and "Floodway Fringe (FF)."

LAND DEVELOPMENT:

- (1) The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving a group of two or more buildings or the division or allocation of land or space between or among two or more existing or prospective occupants by means of or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
- (2) Subdivision of land.

MANUFACTURED HOME — A transportable, single-family dwelling intended for permanent occupancy, office or place of assembly, contained in one or more sections, built on a permanent chassis which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations and constructed so that it may be used with or without a permanent foundation. The term includes park trailers, travel trailers and recreational and other similar vehicles which are placed on a site for more than 180 consecutive days. [Added 9-11-1989 by Ord. No. 89-5]

MANUFACTURED HOME PARK — A parcel of land under single ownership, which has been planned and improved for the placement of two or more manufactured homes for nontransient use. [Added 9-11-1989 by Ord. No. 89-5]

MINOR REPAIR — The replacement of existing work with equivalent materials for the purpose of its routine maintenance and upkeep, but not including the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or bearing support or the removal or change of any required means of egress or the rearrangement of parts of a structure affecting the exitway requirements; nor shall minor repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

MOBILE HOME — A transportable, single-family dwelling intended for permanent occupancy, office or place of assembly, contained in one or more sections, built on a permanent chassis, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations and constructed so that it may be used with or without a permanent foundation. The term does not include recreational vehicles or travel trailers.

MOBILE HOME PARK — A parcel of land under single ownership which has been planned and improved for the placement of two or more mobile homes for nontransient use.

ONE-HUNDRED-YEAR FLOOD — A flood that, on the average, is likely to occur once every 100 years (i.e., that has a one-percent chance of occurring each year, although the flood may occur in any year).

PERSON — An individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

REGULATORY FLOOD ELEVATION — The one-hundred-year-flood elevation, plus a freeboard safety factor of 1½ feet.

SPECIAL PERMIT — A special approval which is required for hospitals, nursing homes, jails and new mobile home parks and substantial improvements to such existing parks when such development is located in all or a designated portion of a floodplain.

STRUCTURE — Anything constructed or erected on the ground or attached to the ground, including but not limited to buildings, sheds, mobile homes and other similar items.

SUBDIVISION — The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines, for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than 10 acres not involving any new street or easement of access or residential dwellings shall be exempted.

SUBSTANTIAL IMPROVEMENT — Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure 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 state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions.
- (2) Any alteration of a structure listed on the National Register of Historic Places or State Inventory of Historic Places.

VARIANCE — A deviation from the strict application of a requirement of this chapter granted by the Berwick Borough Council as authorized by this chapter under the circumstances, terms, procedures and conditions prescribed herein.

ZONING OFFICER — The administrative officer charged with the duty of enforcing the provisions of this chapter.

ARTICLE II Administration and Permits

§ 102-5. Building permit required.

Building permits shall be required before any construction or development is undertaken within any area in the Borough of Berwick.

§ 102-6. Issuance of building permit.

- A. The Zoning Officer or any other officer designated by the Borough of Berwick with responsibility to issue permits under this chapter shall issue a building permit only after it has been determined that the proposed work to be undertaken will be in conformance with the requirements of this chapter and all other applicable codes and ordinances.
- B. Prior to the issuance of any building permit, the Zoning Officer shall review the application for a permit to determine if all other necessary government permits required by state and federal laws have been obtained, such as those required by the Pennsylvania Sewage Facilities Act (Act 1966-537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978-325, as amended); the Pennsylvania Clean Streams Act (Act 1937-394, as amended);³ the United States Clean Water Act, Section 404, 33 U.S.C. § 1344. No permit shall be issued until this determination has been made.
- C. No encroachment, alteration or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the Borough of Berwick and until all required permits or approvals have been first obtained from the Department of Environmental Protection, Bureau of Dams and Waterway Management.
- D. In addition, the Federal Insurance Administrator and Pennsylvania Department of Community and Economic Development, Bureau of Community Planning, shall be notified by the Borough of Berwick prior to any alteration or relocation of any watercourse.

§ 102-7. Application procedure and requirements.

- A. Application for such building permit shall be made, in writing, to the Zoning Officer or any other officer designated by the Borough of Berwick on forms supplied by the Borough of Berwick. Such application shall contain the following:
 - (1) The name and address of the applicant.
 - (2) The name and address of the owner of the land on which the proposed construction is to occur.
 - (3) The name and address of the contractor.
 - (4) The site location.
 - (5) A listing of other permits required.
 - (6) A brief description of the proposed work and estimated cost.
 - (7) A plan of the site showing the exact size and location of the proposed construction as well as any existing buildings or structures.

³ Editor's Note: See 35 P.S. § 750.1 et seq.; 32 P.S. § 693.1 et seq.; and 35 P.S. § 691.1 et seq.; respectively.

- B. If any proposed construction or development is located entirely or partially within any identified floodplain area, applicants for building permits shall provide all the necessary information in sufficient detail and clarity to enable the Zoning Officer to determine that:
- (1) All such proposals are consistent with the need to minimize flood damage and conform with the requirements of this chapter and all other applicable codes and ordinances.
 - (2) All utilities and facilities, such as sewer, gas, electrical and water systems, are located and constructed to minimize or eliminate flood damage.
 - (3) Adequate drainage is provided so as to reduce exposure to flood hazards.
- C. Applicants shall file the following minimum information, plus any other pertinent information (e.g., any or all of the technical information contained in § 102-27) as may be required by the Zoning Officer to make the above determination:
- (1) A completed building permit application form.
 - (2) A plan of the entire site, clearly and legibly drawn at a scale of one inch being equal to 100 feet or less, showing the following:
 - (a) North arrow, scale and date.
 - (b) Topographic contour lines, if available.
 - (c) All property and lot lines, including dimensions, and the size of the site expressed in acres or square feet.
 - (d) The location of all existing and proposed buildings, structures and other improvements, including the location of any existing or proposed subdivision and land development.
 - (e) The location of all existing streets, drives and other accessways.
 - (f) The location of any existing bodies of water or watercourses, identified floodplain areas and, if available, information pertaining to the floodway and the flow of water, including direction and velocities.
 - (3) Plans of all proposed buildings, structures and other improvements, drawn to suitable scale, showing the following:
 - (a) The proposed lowest floor elevation of any proposed building, based upon National Geodetic Vertical Datum of 1929.
 - (b) The elevation of the one-hundred-year flood.
 - (c) If available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a one-hundred-year flood.
 - (d) Detailed information concerning any proposed floodproofing measures.
 - (4) The following data and documentation may be required by the Zoning Officer with every application for a building permit acquired under this chapter:

- (a) A document certified by a registered professional engineer or architect which states that the proposed construction or development has been adequately designed to withstand the one-hundred-year-flood elevations, pressures, velocities and impact and uplift forces associated with the one-hundred-year flood. Such statement shall include a description of the type and extent of floodproofing measures which have been incorporated into the design of the structure and/or the development.
- (b) Detailed information needed to determine compliance with § 102-22F, Storage, and § 102-23, Development which may endanger human life, including:
 - [1] The amount, location and purpose of any dangerous materials or substances which are intended to be used, produced, stored or otherwise maintained on the site.
 - [2] A description of the safeguards incorporated into the design of the proposed structure to prevent leaks or spills of the dangerous materials or substances listed in § 102-23A, during a one-hundred-year flood.
- (c) The appropriate component of the Department of Environmental Protection's Planning Module for Land Development.
- (d) Where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection to implement and maintain erosion and sedimentation control.
- (e) Documentation, certified by a registered, professional engineer or architect, to show that the cumulative effect of any proposed development within an FE (Special Floodplain Area), when combined with all other existing and anticipated developments, will not increase the elevation of the one-hundred-year flood more than one foot at any one point. [Added 7-31-1989 by Ord. No. 89-4]

§ 102-8. Review by County Conservation District.

A copy of all applications and plans for any proposed construction or development in any identified floodplain area to be considered for approval shall be submitted by the Zoning Officer or other officer designated by the borough to review and issue permits under this chapter to the County Conservation District for review and comment prior to the issuance of a building permit. The recommendations of the Conservation District shall be considered by the Zoning Officer or any other Borough of Berwick official designated under this chapter for possible incorporation into the proposed plan.

§ 102-9. Review by other agencies.

A copy of all plans and applications for any proposed construction or development in any identified floodplain area to be considered for approval may be submitted by the Zoning Officer to any other appropriate agencies and/or individuals (e.g., Planning Commission, Municipal Engineer, etc.) for review and comment.

§ 102-10. Changes to application or permit.

After the issuance of a building permit by the Zoning Officer, no changes of any kind shall be made to the application, permit or any of the plans, specifications or other documents submitted with the application without the written consent or approval of the Zoning Officer. Requests for any such change shall be in writing and shall be submitted by the applicant to the Zoning Officer for consideration.

§ 102-11. Placards.

In addition to the building permit, the Zoning Officer shall issue a placard which shall be displayed on the premises during the time construction is in progress. This placard shall show the number of the building permit, the date of its issuance and be signed by the Zoning Officer.

§ 102-12. Start of construction.

- A. Work on the proposed construction and/or development shall begin within six months and shall be completed within 12 months after the date of issuance of the building permit or the permit shall expire unless a time extension is granted, in writing, by the Zoning Officer. Construction and/or development shall be considered to have started with the preparation of land, land clearing, grading, filling, excavation for basement, footings, piers or foundations, erection of temporary forms, the installation of piling under proposed subsurface footings or the installation of sewer, gas and water pipes or electrical or other service lines from the street.
- B. Time extensions shall be granted only if a written request is submitted by the applicant which sets forth sufficient and reasonable cause for the Zoning Officer to approve such a request.

§ 102-13. Inspections; revocation of permit.

- A. During the construction period, the Zoning Officer or other authorized official shall inspect the premises to determine that the work is progressing in compliance with the information provided on the permit application and with all applicable borough laws and ordinances. He shall make as many inspections during and upon completion of the work as are necessary.
- B. In the discharge of his duties, the Zoning Officer shall have the authority to enter any building, structure, premises or development in the identified flood-prone area, upon presentation of proper credentials, at any reasonable hour, to enforce the provisions of this chapter.
- C. In the event that the Zoning Officer discovers that the work does not comply with the permit application or any applicable laws and ordinances or that there has been a false statement or misrepresentation by any applicant the Zoning Officer shall revoke the building permit and report such fact to the Borough of Berwick Council for whatever action it considers necessary.

D. A record of all such inspections and violations of this chapter shall be maintained.

§ 102-14. Required number of copies.

All applicants for permits under this chapter shall provide nine copies of the information and documentation requested.

§ 102-15. Fees.

An application for a building permit shall be accompanied by a fee payable to the Borough of Berwick based upon the estimated cost of the proposed construction as determined by the Zoning Officer or other official appointed by the Borough of Berwick to administer this chapter pursuant to the fee schedule set forth herein or as may be amended from time to time by resolution of Borough Council of the Borough of Berwick:

Estimated Cost	Fee
\$0 to \$500	\$3.00
\$501 to \$1,000	\$5.00
\$1,001 to \$3,000	\$8.00
Over \$3,000	\$8.00 for first \$3,000, plus \$1.50 per thousand in excess over \$3,000 or any part thereof

§ 102-16. Enforcement.

A. Notices. Whenever the Zoning Officer or other authorized municipal representative determines that there are reasonable grounds to believe that there has been a violation of any provision of this chapter or of any regulation adopted pursuant thereto, the Zoning Officer shall give notice of such alleged violation as hereinafter provided. Such notice shall:

- (1) Be in writing.
- (2) Include a statement of the reasons for its issuance.
- (3) Allow a reasonable time, not to exceed a period of 30 days, for the performance of any act it requires.
- (4) Be served upon the property owner or his agent as the case may require; provided, however, that such notice or order shall be deemed to have been properly served upon such owner or agent when a copy thereof has been served with such notice by any other method authorized or required by the laws of this state.
- (5) Contain an outline of remedial action which, if taken, will effect compliance with the provisions of this chapter.

- B. Penalties. Any person who fails to comply with any or all of the requirements or provisions of this chapter or who fails or refuses to comply with any notice, order or direction of the Zoning Officer or any other authorized employee of the municipality shall be guilty of an offense and, upon conviction, shall pay a fine to the borough of not less than \$25 nor more than \$300, plus costs of prosecution. In default of such payment, such person shall be imprisoned in the county prison for a period not to exceed 30 days. Each day during which any violation of this chapter continues shall constitute a separate offense. In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this chapter. The imposition of a fine or penalty for any violation of or noncompliance with this chapter shall not excuse the violation or noncompliance or permit it to continue, and all such persons shall be required to correct or remedy such violations and noncompliance within a reasonable time. Any development initiated or any structure or building constructed, reconstructed, enlarged, altered or relocated in noncompliance with this chapter may be declared by the Borough of Berwick Council to be a public nuisance and abatable as such.⁴

§ 102-17. Appeals.

- A. Any person aggrieved by an action or decision of the Zoning Officer concerning the administration of the provisions of this chapter may appeal to the Borough of Berwick Council. Such appeal must be filed, in writing, within 30 days after the decision or action of the Zoning Officer.
- B. Upon receipt of such appeal, the Borough of Berwick Council shall set a time and place within not less than 10 days nor more than 30 days for the purpose of considering the appeal. Notice of the time and place at which the appeal will be considered shall be given to all parties.
- C. Any person aggrieved by any decision of the Council may seek relief therefrom by appeal to court as provided by the laws of the commonwealth, including the Pennsylvania Flood Plain Management Act.

ARTICLE III

Identification of Floodplain Areas [Amended 7-31-1989 by Ord. No. 89-4]

§ 102-18. Identification.

The identified floodplain area shall be those areas of the Borough of Berwick, which are subject to the one-hundred-year flood, as identified in the Flood Insurance Study (FIS) prepared for the borough, etc. by the Federal Emergency Management Agency (FEMA), dated August 3, 1989, or the most recent revision thereof.

⁴ Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).

§ 102-19. Description.

The identified floodplain area shall consist of the following specific areas:

- A. **FW (Floodway Area):** the areas identified as "floodway" in the AE Zone in the Flood Insurance Study prepared by the FEMA. The term shall also include floodway areas which have been identified in other available studies or sources of information for those floodplain areas where no floodway has been identified in the Flood Insurance Study. For the purposes of this chapter, the floodway is based upon the criteria that a certain area within the floodplain would be capable of carrying the waters of the one-hundred-year flood without increasing the water surface elevation of that flood more than one foot at any point.
- B. **FF (Flood-Fringe Area):** the remaining portions of the one-hundred-year floodplain in those areas identified as an AE Zone in the Flood Insurance Study, where a floodway has been delineated. The basis for the outermost boundary of this area shall be the one-hundred-year-flood elevations as shown in the flood profiles contained in the Flood Insurance Study.
- C. **FE (Special Floodplain Area):** the areas identified as Zone AE in the Flood Insurance Study, where one-hundred-year-flood elevations have been provided, but no floodway has been delineated.
- D. **FA (General Floodplain Area):** the areas identified as Zone A in the FIS for which no one-hundred-year-flood elevations have been provided. When available, information from other federal, state and other acceptable sources shall be used to determine the one-hundred-year-flood elevation, as well as a floodway area, if possible. When no other information is available, the one-hundred-year-flood elevation shall be determined by using a point on the boundary of the identified floodplain area which is nearest the construction site in question.

ARTICLE IV
Technical Requirements

§ 102-20. General provisions.

- A. In the identified floodplain area, the development and/or use of any land shall be permitted, provided that the development and/or use complies with the restrictions and requirements of this chapter and all other applicable codes and ordinances in force in the Borough of Berwick.
- B. No encroachment, alteration or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the Borough of Berwick and until all required permits or approvals have been first obtained from the Department of Environmental Protection, Bureau of Dams and Waterway Management, and, in addition to the permit requirements, notice prior to any relocation of any watercourse shall be given to the Federal Emergency Management Agency and the Department of Community and Economic Development, Bureau of Community Planning.

- C. Within any identified floodplain area, no new construction or development shall be located within the area measured 50 feet landward from the top of the bank of any watercourse unless a permit is obtained from the Department of Environmental Protection, Bureau of Dams and Waterway Management.
- D. Within any identified floodplain area, the elevation of the lowest floor (including basement) of any new or substantially improved residential structure shall be 1½ feet or more above the one-hundred-year-flood elevation.
- E. Within any identified floodplain area, the elevation of the lowest floor (including basement) of any new or substantially improved nonresidential structure shall be 1½ feet or more above the one-hundred-year-flood elevation or be floodproofed up to that height.
- F. Any nonresidential structure or part thereof which will not be completely or adequately elevated shall be floodproofed in accordance with the provisions of this article. Additional information may be obtained from the publication entitled "Floodproofing Regulations (United States Army Corps of Engineers, June 1972)."
- G. Enclosed areas below the lowest floor (including basement) are prohibited. [Added 9-11-1989 by Ord. No. 89-5]

§ 102-21. Requirements for floodways.

Within any floodway area, the following provisions apply:

- A. Any new construction, development, use, activity or encroachment that would cause any increase in flood heights during the one-hundred-year flood shall be prohibited.
- B. No new construction or development shall be allowed unless a permit is obtained from the Department of Environmental Protection, Bureau of Dams and Waterway Management.

§ 102-22. Design and construction specifications.

The following minimum standards shall apply for all construction and development proposed within any identified floodplain area:

- A. Fill. If fill is used, it shall:
 - (1) Extend laterally at least 15 feet beyond the building line from all points.
 - (2) Consist of soil or small rock materials only. Sanitary landfills shall not be permitted.
 - (3) Be compacted to provide the necessary permeability and resistance to erosion, scouring or setting.
 - (4) Be no steeper than one vertical and three horizontal feet unless substantiated data justifying steeper slopes is submitted to and approved by the Zoning Officer.
 - (5) Be used to the extent to which it does not adversely affect adjacent properties.
- B. Drainage facilities. Storm drainage facilities shall be designed to convey the flow of stormwater runoff in a safe and efficient manner. The system shall ensure proper drainage

along streets and provide positive drainage away from buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties.

C. Water and sanitary sewer facilities and systems.

- (1) All new or replacement water and sanitary sewer facilities and systems shall be located, designed and constructed to minimize or eliminate flood damages and the infiltration of floodwaters.
- (2) Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into floodwaters.
- (3) No part of any on-site sewage system shall be located within any identified floodplain area except in strict compliance with all state and local regulations for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it or contamination from it during a flood.

D. Other utilities. All other utilities such as gas lines and electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

E. Streets. The finished elevation of all new streets shall be no more than one foot below the regulatory flood elevation.

F. Storage. All materials that are buoyant, flammable, explosive or, in times of flooding, could be injurious to human, animal or plant life and are not listed in § 102-23, Development which may endanger human life, shall be stored at or above the regulatory flood elevation and/or floodproofed to the maximum extent possible.

G. Placement of buildings and structures. All buildings and structures shall be designed, located and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of floodwaters.

H. Anchoring.

- (1) All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse or lateral movement.
- (2) All air ducts, large pipes, storage tanks and other similar objects or components located below the regulatory flood elevation shall be securely anchored or affixed to prevent flotation.

I. Floors, walls and ceilings.

- (1) Wood flooring used at or below the regulatory flood elevation shall be installed to accommodate a lateral expansion of the flooring perpendicular to the flooring grain without causing structural damage to the building.
- (2) Plywood used at or below the regulatory flood elevation shall be of a marine or water-resistant variety.
- (3) Walls and ceilings at or below the regulatory flood elevation shall be designed and constructed of materials that are water-resistant and will withstand inundation.

- (4) Windows, doors and other components at or below the regulatory flood elevation shall be made of metal or other water-resistant material.

J. Paints and adhesives.

- (1) Paints or other finishes used at or below the regulatory flood elevation shall be of a marine or water-resistant quality.
- (2) Adhesives used at or below the regulatory flood elevation shall be of a marine or water-resistant variety.
- (3) All wooden components (doors, trim, cabinets, etc.) shall be finished with a marine or water-resistant paint or other finishing material.

K. Electrical components.

- (1) Electrical distribution panels shall be at least three feet above the one-hundred-year-flood elevation.
- (2) Separate electrical circuits shall service lower levels and shall be dropped from above.

L. Equipment. Water heaters, furnaces, air-conditioning and ventilating units and other mechanical or utility equipment or apparatus shall not be located below the regulatory flood elevation.

M. Fuel-supply systems. All gas- and oil-supply systems shall be designed to prevent the infiltration of floodwaters into the system and discharges from the system into floodwaters. Additional provisions shall be made for the drainage of these systems in the event that floodwater infiltration occurs.

§ 102-23. Development which may endanger human life.

- A. In accordance with the Pennsylvania Flood Plain Management Act and the regulations adopted by the Department of Community and Economic Development as required by the Act,⁵ any new or substantially improved structure which will be used for the production or storage of any of the following dangerous materials or substances or will be used for any activity requiring the maintenance of a supply of more than 550 gallons or other comparable volume of any of the following dangerous materials or substances on the premises or will involve the production, storage or use of any amount of radioactive substances shall be subject to the provisions of this § 102-23 in addition to all of the applicable provisions. The following list of materials and substances are considered dangerous to human life:

⁵ Editor's Note: See 32 P.S. § 679.101 et seq.

Acetone
 Ammonia
 Benzene
 Calcium carbide
 Carbon disulfide
 Celluloid
 Chlorine
 Hydrochloric acid
 Hydrocyanic acid
 Magnesium
 Nitric acid and oxides of nitrogen
 Pesticides (including insecticides, fungicides and rodenticides) Petroleum products
 (gasoline, fuel oil, etc.)
 Phosphorus
 Potassium
 Radioactive substances, insofar as such substances are not otherwise regulated
 Sodium
 Sulphur and sulphur products

- B. Within any identified floodplain area, any new or substantially improved structure of the kind described in Subsection A above shall be prohibited within the area measured 50 feet landward from the top of the bank of any other watercourse.
- C. Where permitted within any identified floodplain area, any new or substantially improved structure of the kind described in Subsection A above shall be:
- (1) Elevated or designed and constructed to remain completely dry up to at least 1½ feet above the one-hundred-year flood.
 - (2) Designed to prevent pollution from the structure or activity during the course of a one-hundred-year flood.
- D. Any such structure or part thereof that will be built below the regulatory flood elevation shall be designed and constructed in accordance with the standards for complete floodproofing contained in the publication "Floodproofing Regulations (United States Army Corps of Engineers, June 1972)" or with some other equivalent watertight standard.

§ 102-24. Mobile homes.

- A. Within any identified floodplain area, all mobile homes and any additions thereto shall be prohibited within the area measured 50 feet landward from the top-of-bank of any watercourse.
- B. Where permitted within any identified floodplain area, all mobile homes and additions thereto shall be:
- (1) Anchored to resist a flotation, collapse or lateral movement by providing over-the-top and frame ties to ground anchors in accordance with the American National Standards Institute as specified in the Standard for the Installation of Mobile Homes Including Mobile Home Park Requirements [NFPA No. 501A-1974 (ANSI A119.3 – 1975)], as

amended for Mobile Homes in Hurricane Zones, or other appropriate standards such as the following:

- (a) Over-the-top ties shall be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations for units 50 feet or more in length and one additional tie per side for units less than 50 feet in length.
 - (b) Frame ties shall be provided at each corner of the mobile home, with five additional ties per side at intermediate locations for units 50 feet or more in length and four additional ties per side for units less than 50 feet in length.
 - (c) All components of the anchoring system shall be capable of carrying a force of 4,800 pounds.
- (2) Elevated in accordance with the following requirements:
- (a) The stands or lots shall be elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be 1½ feet or more above the elevation of the one-hundred-year flood.
 - (b) Adequate surface drainage is provided.
 - (c) Adequate access for a hauler is provided.
 - (d) Where pilings are used for elevation, the lots shall be large enough to permit steps. Piling foundations shall be placed in stable soil no more than 10 feet apart. Reinforcement shall be provided for pilings that will extend for six feet or more above the ground level.
- C. An evacuation plan indicating alternate vehicular access and escape routes shall be filed with the appropriate borough officials for mobile home parks.

§ 102-25. Special requirements for manufactured homes. [Added 9-11-1989 by Ord. No. 89-5]

Where permitted within any floodplain area, all manufactured homes, and any additions thereto, shall be:

- A. Placed on a permanent foundation.
- B. Elevated so that the lowest floor of the manufactured home is 1½ feet or more above the elevation of the one-hundred-year flood.
- C. Anchored to resist flotation, collapse or lateral movement.

ARTICLE V
Special Permits

§ 102-26. Activities requiring special permits.

In accordance with the administrative regulations promulgated by the Department of Community and Economic Development to implement the Pennsylvania Flood Plain Management Act,⁶ the following activities shall be prohibited within any identified floodplain area unless a special permit has been issued by the borough:

- A. The commencement of any of the following activities or the construction, enlargement or expansion of any structure used or intended to be used for any of the following activities:
 - (1) Hospitals.
 - (2) Nursing homes.
 - (3) Jails or prisons.
- B. The commencement of or any construction of a new mobile home park or mobile home subdivision or substantial improvement to an existing mobile home part or mobile home subdivision.

§ 102-27. Application requirements.

Applicants for special permits shall provide five copies of the following items:

- A. A written request, including a completed building permit application form.
- B. A small-scale map showing the vicinity in which the proposed site is located.
- C. A plan of the entire site, clearly and legibly drawn at a scale of one inch being equal to 100 feet or less, showing the following:
 - (1) North arrow, scale and date.
 - (2) Topography based upon the National Geodetic Vertical Datum of 1929, showing existing and proposed contours at intervals of two feet.
 - (3) All property and lot lines, including dimensions, and the size of the site expressed in acres of square feet.
 - (4) The location of all existing streets, drives, other accessways and parking areas, with information concerning widths, pavement types and construction and elevations.
 - (5) The location of any existing bodies of water or watercourses, buildings, structures and other public or private facilities, including railroad tracks and facilities, and any other natural and man-made features affecting or affected by the proposed activity or development.

⁶ Editor's Note: See 32 P.S. § 679.101 et seq.

- (6) The location of the floodplain boundary line, information and spot elevations concerning the one-hundred-year-flood elevations and information concerning the flow of water, including direction and velocities.
 - (7) The location of all proposed buildings, structures, utilities and any other improvements.
 - (8) Any other information which the municipality considers necessary for adequate review of the application.
- D. Plans of all proposed buildings, structures and other improvements clearly and legibly drawn to suitable scale showing the following:
- (1) Sufficiently detailed architectural or engineering drawings including floor plans, sections and exterior building elevations, as appropriate.
 - (2) For any proposed building, the elevation of the lowest floor (including basement) and, as required, the elevation of any other floor.
 - (3) Complete information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with the one-hundred-year flood.
 - (4) Detailed information concerning any proposed floodproofing measures.
 - (5) Cross-section drawings for all proposed streets, drives and vehicular accessways, including existing and proposed grades.
 - (6) Profile drawings for all proposed streets, drives and vehicular accessways, including existing and proposed grades.
 - (7) Plans and profiles of all proposed sanitary and storm sewer systems, water supply systems and any other utilities and facilities.
- E. The following data and documentation:
- (1) Certification from the applicant that the site upon which the activity or development is proposed is an existing separate and single parcel, owned by the applicant for the client he represents.
 - (2) Certification from a registered professional engineer, architect or landscape architect that the proposed construction has been adequately designed to protect against damage from the one-hundred-year flood.
 - (3) A statement, certified by a registered professional engineer, architect, landscape architect or other qualified person, which contains a complete and accurate description of the nature and extent of pollution that might possibly occur from the development during the course of a one-hundred-year flood, including a statement concerning the effects such pollution may have on human life.
 - (4) A statement, certified by a registered professional engineer, architect or landscape architect, which contains a complete and accurate description of the effects the proposed development will have on one-hundred-year-flood elevations and flows.

- (5) A statement, certified by a registered professional engineer, architect or landscape architect, which contains a complete and accurate description of the kinds and amounts of any loose buoyant materials or debris that may possibly exist or be located on the site below the one-hundred-year-flood elevation and the effects such materials and debris may have on one-hundred-year-flood elevations and flows.
- (6) The appropriate component of the Department of Environmental Protection Planning Module for Land Development.
- (7) Where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection to implement and maintain erosion and sedimentation control.
- (8) Any other applicable permits such as, but not limited to, a permit for any activity regulated by the Department of Environmental Protection under Section 302 of Act 1978-166.⁷
- (9) An evacuation plan which fully explains the manner in which the site will be safely evacuated before or during the course of a one-hundred-year flood.

§ 102-28. Review of application.

Upon receipt of an application for a special permit by the borough, the following procedures shall apply, in addition to those of Article II:

- A. Within three working days following receipt of the application, a complete copy of the application and all accompanying documentation shall be forwarded to the County Planning Commission by registered or certified mail for its review and recommendations. Copies of the application shall also be forwarded to the Borough of Berwick Engineer and Planning Commission for review and comment.
- B. If any application is received that is incomplete, the Borough of Berwick shall notify the applicant, in writing, stating in what respect the application is deficient.
- C. If the Borough of Berwick decides to disapprove an application, it shall notify the applicant, in writing, of the reasons for the disapproval.
- D. If the Borough of Berwick approves an application, it shall file written notification, together with the application and all pertinent information, with the Department of Community and Economic Development by registered or certified mail within five working days after the date of approval.
- E. Before issuing the special permit, the Borough of Berwick shall allow the Department of Community and Economic Development 30 days after receipt of the notification by the Department to review the application and decision made by the borough.
- F. If the Borough of Berwick does not receive any communication from the Department of Community and Economic Development during the thirty-day review period, it may issue a special permit to the applicant.

⁷ Editor's Note: See 32 P.S. § 679.302.

- G. If the Department of Community and Economic Development should decide to disapprove an application, it shall notify the Borough of Berwick and the applicant, in writing, of the reasons for the disapproval, and the borough shall not issue the special permit.

§ 102-29. Special technical requirements.

- A. In addition to the requirements of Article IV of this chapter, the following minimum requirements shall also apply to any proposed development requiring a special permit. If there is any conflict between any of the following requirements and those in Article IV of this chapter or in any other code, ordinance or regulation, the more restrictive provision shall apply.
- B. No application for a special permit shall be approved unless it can be determined that the structure or activity will be located, constructed and maintained in a manner which will:
- (1) Fully protect the health and safety of the general public and any occupants of the structure. At a minimum, all new structures shall be designed, located and constructed so that.
 - (a) The structure will survive inundation by waters of the one-hundred-year flood without any lateral movement or damage to either the structure itself or any of its equipment or contents below the one-hundred-year-flood elevation.
 - (b) The lowest floor elevation will be at least 1½ feet above the one-hundred-year-flood elevation.
 - (c) The occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during the one-hundred-year flood.
 - (2) Prevent any significant possibility of pollution, increased flood levels or flows or debris endangering life and property.
- C. All hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough technical review by the Borough of Berwick and the Department of Community and Economic Development.

ARTICLE VI

Existing Structures in Identified Floodplains

§ 102-30. Continuation.

Structures existing in any identified floodplain area prior to the enactment of this chapter may continue, subject to the following provisions:

- A. When any improvements are made to any existing structure, the provisions of § 102-31 shall apply.

§ 102-31. Improvements. [Amended 7-31-1989 by Ord. No. 89-4]

The following provisions shall apply whenever any improvements are made to an existing structure located within any identified floodplain area:

A. Expansion or enlargement.

- (1) No expansion or enlargement of an existing structure shall be allowed within any floodway area that would cause any increase in the elevation of the one-hundred-year-flood elevation.
- (2) No expansion or enlargement of an existing structure shall be allowed within any FE area that would, together with all other existing and anticipated development, increase the one-hundred-year-flood elevation more than one foot at any point.

B. Modification, alteration, reconstruction or improvement.

- (1) Any modification, alteration, reconstruction or improvement of any kind to an existing structure to an extent or amount of 50% or more of its market value shall constitute a substantial improvement and shall be undertaken only in full compliance with the provisions of this chapter.
- (2) Any modification, alteration, reconstruction or improvement of any kind to an existing structure to an extent or amount of less than 50% of its market value, but at least 25% of market value either to extent or amount, shall be elevated and/or floodproofed to the greatest extent possible.

§ 102-32. Construal.

The term "substantial improvement," as herein set forth, 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:

- A. Any project for improvement of a structure to comply with existing state or local health, sanitary building or safety code specifications which are solely necessary to assure safe living conditions.
- B. Any alteration of a structure listed on the National Register of Historic Places or State Inventory of Historic Places.

**ARTICLE VII
Variances****§ 102-33. Authorization.**

If compliance with any of the requirements of this chapter would result in an exceptional hardship to a prospective builder, developer or landowner, the Borough of Berwick may, upon request, grant relief from the strict application of the requirements.

§ 102-34. Procedures and conditions.

Request for variances shall be considered by the Borough of Berwick in accordance with the procedure and requirements as herein set forth:

- A. A written application for variance from terms of this chapter shall be filed with the Zoning Officer and/or other official appointed by the Borough of Berwick to administer this chapter, and it shall state:
- (1) The name and address of the applicant.
 - (2) The location of the site and/or improvement or improvements for which the proposed variance is sought.
 - (3) A statement of the provision of this chapter from which a variance is being requested.
 - (4) The nature of the change to be made under the variance.
 - (5) The reasons why such variance should be granted, including a statement of alternative safeguards to preserve the intent of the chapter.
 - (6) Such other information or materials pertinent to the issue of variance which the applicant may feel the Borough Council of the Borough of Berwick would wish to consider in relation to the request for variance.
- B. Upon receipt of an application for a variance, the Borough Council of the Borough of Berwick shall initially determine if the information contained in the application is sufficient for consideration of a variance and, if so, shall further grant or deny the variance. In the event that Council of the Borough of Berwick determines that the information contained in the application is insufficient for Council to make a proper determination or in the event that Borough Council wishes additional information, it shall either:
- (1) Request that the applicant present such additional material in writing; or
 - (2) Schedule a hearing at which time the applicant shall be entitled to present such additional information, including direct testimony which is pertinent and germane to the issue of the variance.
- C. Council of the Borough of Berwick shall notify the applicant, in writing, of the determination which it has made in regard to the request for variance, either that the variance has been granted or denied, within 30 days of Council's decision on granting or denying said application.
- D. Increases in one-hundred-year-flood elevation. [Amended 7-31-1989 by Ord. No. 89-4]
- (1) No variance shall be granted for any construction, development, use or activity within any floodplain area that would cause any increase in the one-hundred-year-flood elevation.
 - (2) No variance shall be granted for any construction, development, use or activity within any FE area that would, together with all other existing and anticipated development, increase the one-hundred-year-flood elevation more than one foot at any point.

- E. Except for possible modification of the freeboard requirements involved, no variance shall be granted for any of the other requirements pertaining specifically to development regulated by Article V, Special Permits, or to § 102-23, Development which may endanger human life.
- F. If granted, a variance shall involve only the least modification necessary to provide relief.
- G. In granting any variance, Council of the Borough of Berwick shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public's health, safety and welfare and to achieve the objectives of this chapter.
- H. Whenever a variance is granted, Council of the Borough of Berwick shall notify the applicant, in writing, that:
 - (1) Granting of the variance may result in increased premium rates for flood insurance.
 - (2) Such variance may increase the risk to life and property.
- I. In reviewing any request for variance, Council of the Borough of Berwick shall consider but not be limited to the following:
 - (1) That there is good and sufficient cause.
 - (2) That failure to grant the variance would result in exceptional hardship to the applicant.
 - (3) That the granting of the variance will not:
 - (a) Result in any unacceptable or prohibited increase in flood heights, additional threats to public safety or extraordinary public expense.
 - (b) Create nuisances, cause fraud on or victimize the public or conflict with any other applicable state statute or regulation or other local ordinance or regulation.
- J. A complete record of all variances requested and related actions shall be maintained by the Borough of Berwick. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Emergency Management Agency and the Department of Community and Economic Development.
- K. Notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capability of resisting the one-hundred-year flood.
- L. Notwithstanding any of the above, however, any variance from the terms of this chapter relating to land use permitted in the area subject to regulation by this chapter shall be additionally submitted to the Zoning Hearing Board as zoning variances to be considered and granted by said Board under the procedural and substantive regulations governing zoning appeals.

ARTICLE VIII**Interpretation****§ 102-35. Warning and disclaimer of liability.**

- A. The degree of flood protection sought by the provision of this chapter is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur. Flood heights may increase by man-made or natural causes such as ice jams and bridge openings restricted by debris. This chapter does not imply that areas outside any identified floodplain area or that land uses permitted within such areas will be free from flooding or flood damages.
- B. This chapter does not create liability on the part of the Borough of Berwick or any elected officer or employee thereof for any flood damage that may result from reliance on this chapter or any administrative decision lawfully made thereof.

