

Part 4

Technical Provisions

§401. General.

1. 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, and until all required permits or approvals have been first obtained from the Department of Environmental Resources, Bureau of Dams and Waterway Management. In addition, the Federal Insurance Administrator and Pennsylvania Department of Community Affairs, Bureau of Community Planning, shall be notified prior to any alteration or relocation of any watercourse.

2. Where a floodplain area has been identified which includes detailed flood profiles and elevation and a floodway area, the following provisions apply:

A. Within any FW (Floodway Area), no new construction, development, use, activity, or encroachment of any kind shall be allowed, except where the rise in flood heights caused by the proposed development is fully offset by accompanying improvements. The floodway area is based on the criteria that the portion of the floodplain selected must be capable of carrying the waters of the one hundred (100) year flood without increasing the water surface elevation of that flood more than one (1') foot at any point. The floodway is shown on the Flood Boundary and Floodway Map accompanying the Flood Insurance Study (FIS). The areas included are specifically defined in the Floodway Data Table of the FIS itself.

B. Within an FF (Flood-Fringe Area), new construction and other development, uses and activities shall be allowed, provided that they are undertaken in strict compliance with the provisions contained in this Chapter and any other applicable codes, ordinances and regulations.

3. Where a floodplain area has been identified which does not include detailed flood profiles and elevations, the following provision shall apply:

A. Within an FA (General Floodplain Area), new construction and other development, uses and activities, shall be allowed, provided that they are undertaken in strict compliance with the provisions contained in this Chapter, as well as any other applicable codes, ordinances, and regulations.

B. Within the floodway area which has been delineated by the applicant, no new construction, development, use, activity, or encroachment of any kind shall be allowed, except where any rise in flood heights caused by the proposed development is fully offset by accompanying improvements.

4. Within any identified floodplain area, no new construction or development shall be located within the area measured fifty (50') feet landward from the top-of-bank of any watercourse, unless a permit is obtained from the Department of Environmental Resources, Bureau of Dams and Waterways Management.

(Ord. 219, 6/2/1981, \$4.00)

§402. Elevation and Floodproofing Requirements.

1. Residential Structures. Within an FW, FF or FA the lowest floor (including basement) of any new or improved residential structures shall be at least one and one-half (1½') feet above the one hundred (100) year flood elevation.

2. Non-Residential Structures.

A. Within any FW, FF or FA the lowest flood (including basement) shall be at least one and one-half (1½') feet above the one hundred (100) year flood elevation, or be designed and constructed so that the space enclosed by such structure shall remain either completely or essentially dry during any flood up to that height.

B. Any non-residential structure, or part thereof, having a lowest floor which is not elevated to at least one and one-half (1 1/2) feet above the one hundred (100) year flood elevation, shall be floodproofed in a completely or essentially dry manner in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972), or with some other equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect with states that the proposed design and methods of construction are in conformance with the above referenced standards. [Ord. 263]

C. Within any identified floodplain area, fully enclosed spaces below the lowest floor of any new or substantially improved structure shall be prohibited. [Ord. 263]

(Ord. 210, 6/2/1981, \$4.01; as amended by Ord. 263, 4/7/1992)

§403. Design and Construction Standards. The following minimum standards shall apply for all construction proposed to be undertaken within any identified floodplain area:

A. Fill. If fill is used, it shall:

(1) Extend laterally at least fifteen (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 settling.

(4) Be no steeper than one (1) vertical to two (2) horizontal, unless substantiated data, justifying steeper slopes is submitted to, and approved by the Building Permit Officer.

(5) Be used to the extent to which it does not adversely affect adjacent properties.

B. Drainage. Storm drainage facilities shall be designed to convey the flow of storm water runoff in a safe and efficient manner. The system shall insure 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. Sanitary Sewer Facilities. All new or replacement sanitary sewer facilities, and private package sewage treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into the flood waters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment.

D. Water Facilities. All new or replacement water facilities shall be designed to minimize or eliminate infiltration of flood waters into the system, and be located and constructed to minimize or eliminate flood damages.

E. Streets. The finished elevation of proposed new streets shall be no more than one (1') foot below the regulatory flood elevation.

F. Utilities. All utilities such as gas lines, electrical and telephone systems being placed in identified floodprone areas should be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

G. Storage. All materials that are buoyant, flammable, explosive, or in times of flooding, could be injurious to human, animal or plant life, and not listed in §404, "Development Which May Endanger Human Life," shall be stored at or above the regulatory flood elevation and/or floodproofed to the maximum extent possible.

H. 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 flood water.

I. 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.

J. 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.

K. 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 quality.

(3) All wooden components (doors, trim cabinets, etc.) shall be finished with a "marine" or water-resistant paint or other finishing material.

L. Electrical Systems and Components.

(1) Electric water heaters, furnaces, air conditioning and ventilating systems, and other electrical equipment or apparatus shall not be located below the regulatory flood elevation.

(2) Electrical distribution panels shall be at least three (3') feet above the one-hundred (100) year flood elevation.

(3) Separate electrical circuits shall serve lower levels and shall be dropped from above.

M. Plumbing.

(1) Water heaters, furnaces, and other mechanical equipment or apparatus shall not be located below the regulatory flood elevation.

(2) No part of any on-site sewage disposal system shall be located within any identified floodplain area.

(3) Water supply systems and sanitary sewage systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the system into flood waters.

(4) All gas and oil supply systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the systems into flood waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.

§404. Development Which May Endanger Human Life.

1. In accordance with the Pennsylvania Floodplain Management Act, and the regulations adopted by the Department of Community Affairs as required by the Act, any new or substantially improved structure which will be used for the production or storage of any of the following materials or substances or which will be used for any activity requiring the maintenance of a supply (more than five hundred fifty (550) gallons or other comparable volume or any amount of radioactive substances) of any of the following materials or substances on the premises, shall be subject to the provisions of this Section, in addition to all other applicable provisions:

- A. Acetone.
- B. Ammonia.
- C. Benzene.
- D. Calcium carbide.
- E. Carbon disulfide.
- F. Celluloid.
- G. Chlorine.
- H. Hydrochloric acid.
- I. Hydrocyanic acid.
- J. Magnesium.
- K. Nitric acid and oxides of nitrogen.
- L. Petroleum products (gasoline, fuel oil, etc.).
- M. Phosphorus.
- N. Potassium.
- O. Sodium.
- P. Sulphur and sulphur products.
- Q. Pesticides (including insecticides, fungicides and rodenticides).
- R. Radioactive substances, insofar as such substances are not otherwise regulated.

2. Within any FW (Floodway Area), any structure of the kind described in Subsection (1) shall be prohibited.

3. Within any FF (Flood-Fringe Area) or FA (General Floodplain Area), any structure of the kind described in Subsection (1) shall be:

- A. Elevated or designed and constructed to remain completely dry up to at least one and one-half (1½') feet above the one hundred (100) year flood.
- B. Designed to prevent pollution from the structure or activity during the course of a one hundred (100) year flood. 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 completely dry floodproofing contained in the "Floodproofing Regulations" (U.S. Army Corps of Engineers, June 1972) or with some other equivalent watertight standard.

C. Prohibited within the area measured fifty (50') feet landward from the top-of-bank of any watercourse.

(Ord. 219, 6/2/1981, §4.03)

§405. Special Requirements for Manufactured Homes.

1. Within any FW (Floodway Area), manufactured homes shall be prohibited.

2. Within any FA (General Floodplain Area), manufactured homes shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.

3. 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 one and one-half (1 1/2) feet or more above the elevation of the one hundred (100) year flood.

C. Anchored to resist flotation, collapse, or lateral movement.

(Ord. 219, 6/2/1981, §4.04; as amended by Ord. 263, 4/7/1992)