In order to prevent future loss of lives and property and to protect the ecological, scenic and recreational quality of stream belts, those areas identified as being subject to special flood hazards on the Flood Boundary and Floodway Map and "Flood Insurance Study for the Town of Killingly", effective January 3, 1985, and any revision thereto provided to the town by the Federal Insurance Administration of the U.S. Department of Housing and Urban Development, shall be considered as a zoning district. Where questions as to the exact boundaries arise, reference shall be made to the above referenced map and study on file at the Town Hall. Any revisions made to this map and study by the Federal Insurance Administration shall also apply to this zoning district, following a public hearing concerning such zoning map revisions.

a. No filling or other encroachment may take place within the floodway which would impair its ability to carry and discharge flood waters, except where such activity is fully offset by stream improvements. Plans for all filling or other encroachment and for all stream improvements done in conjunction with permitted uses shall be submitted to the Zoning Enforcement Officer and Town Engineer for their approval; plans for such activities done in conjunction with special permit uses shall be submitted to the Commission for approval.

b. The Commission shall review development proposals to determine whether such proposals will be reasonably safe from flooding. If a development proposal falls within the limits of the Flood Hazard District, such proposal shall be reviewed to assure that (i) all such proposals are consistent with the need to minimize flood damage within the flood prone area; (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and (iii) adequate drainage is provided to reduce exposure to flood hazards.

c. The Commission shall require all development proposals within this district greater than 50 lots or 5 acres, whichever is the lesser, to include within such proposals base flood elevation data.

d. The Commission shall require within this district (i) that all new construction and substantial improvements of residential structures to have the lowest floor (including basement) elevated to or above the base flood level; (ii) that all new construction and substantial improvements of nonresidential structures shall have the lowest floor (including basement) elevated or flood proofed to or above the base flood level; and (iii) that where the use of fill would result in an increase in flood levels due to a reduction in the storage capacity of the flood plain, or in the potential for negative impacts to sensitive ecological areas, the use of pilings or columns, rather than fill, shall be used for the elevation of structures.

e. In the absence of base flood elevation data which may be furnished by the Federal Insurance Administrator, the Commission shall, with the assistance of the applicant, obtain, review and reasonably utilize any base flood elevation data from a Federal, State or other source as criteria for requiring the provisions of the preceding paragraph. Also see Sections 460.1.2 and 530.4 supra.
f. The commission hereby advises the applicant that additional Federal or State permits may be required, and if specific Federal or State permit requirements are known, copies of such permits are to be provided and maintained on file with the development permit. Possible required permits include but are not limited to: Water Diversion, Dam Safety, and Corps of Engineers 404. (Effective 04-14-95).

440.1.1 Permitted uses.

The following uses of buildings and land shall be permitted by right in the Flood Hazard District, requiring only the securing of a zoning permit as specified in Article VI:

a. Outdoor events as defined by Council Ordinance Regulating Outdoor Event, Town of Killingly, provided that all conditions as set by said ordinance are met.

b. Cultivation and harvesting of crops in accordance with recognized soil conservation practices, but, including no facilities subject to damage by flooding.

c. Pasture and grazing land in accordance with recognized soil conservation practices.

d. Outdoor plant nursery or orchard in accordance with recognized soil conservation practices, but permitting no structures.

e. Harvesting of any wild crops such as marsh hay, ferns, moss, berries, or wild rice.

f. Wildlife sanctuary, woodland preserve, arboretum, and passive recreation areas or parks, including hiking, bicycle and bridle trail, but including no facilities subject to damage by flooding.

g. Forestry, lumbering, and reforestation in accordance with recognized natural resource conservation practices, but permitting no structures.

h. Utility transmission lines.

i. Sealed public water supply wells with the approval of the Town Engineer and all pertinent state authorities.

j. Sanitary sewers, with the approval of the Town Engineer and all pertinent state authorities.

k. Storm sewers or impoundment basins with the approval of the Town Engineer.

l. Culverts with the approval of the Town Engineer.
Any other similar uses not listed herein are to be considered special exceptions and subject to the requirements herein.

440.1.2 Special permit uses.

In addition to the above, the following may be permitted after the securing of a Special Permit as specified in Article VII:

a. **Commercial recreation uses**, whether open to the public or restricted to private membership, such as parks, camps, picnic areas, golf courses, fishing, sport or boating clubs, or beaches, provided:
   - said uses shall not include structures, except for sanitary facilities, provided these shall be connected to public water and sewage systems.
   - no accessory uses shall be allowed in the flood hazard area.
   - minimum lot size shall be sufficient to accommodate anticipated parking. Gravel or other permeable surfaces shall be used for parking areas in this district.

b. **Public service corporation, fire district or municipal land use**, provided:
   - The location of such use in this zone shall be necessary for the health, safety, or general welfare of resident of the Town of Killingly.
   - Any such use which in the opinion of the Commission is hazardous in nature shall be fenced (in accordance with g. below) and/or screened so as to avoid creation of a nuisance attractive to children. When required by the Commission, outdoor storage areas shall also be fenced and/or screened. (See Article III, Definitions, "planted screening").

c. **Sewage treatment plant**, outlet installations for sewage treatment plants and sewage pumping stations, with the approval of the Town Engineer and pertinent sewer authorities;

d. **Dams and bridges** with the approval of all pertinent State authorities;

e. **Paved roads and driveways, parking lots** where required by the regulations of the zoning district applicable to the property without consideration of this Article, provided that:

   1. In the case of roads and driveways, no such facilities shall be permitted if alternative, non-floodplain alignments are feasible.

   2. In the case of parking lots, no such lot shall be permitted unless satisfactory evidence is submitted that such parking will not be used during periods of flood flow, thus posing no threat to the safety of the vehicles, their occupants and/or to downstream properties. Temporary parking for periods not to exceed one hour, and/or parking for recreation uses would be examples of such exceptions.
3. Any road, driveway or parking lot located within the Flood Hazard District shall, to the extent feasible, upon the review and recommendation of the Town Engineer, be constructed of pervious paving materials in accordance with the provisions of Section 530 (Off Street Parking and Loading).

f. **Grading or re-grading of lands** (except in the floodway), including the deposit of topsoils and the grading thereof. The application for a special permit for such a use shall be accompanied by the following:

1. Detailed engineering studies indicating the effects on drainage and streams on all adjacent properties as well as the property in question, including the necessary data to determine whether the boundaries of the Flood Hazard District would be affected if the application was granted.

2. An application for amending the boundaries of the Flood District, if the boundaries are effected by the grading or re-grading of land.

3. A plan indicating the deposition of any fill or materials proposed to be deposited by the grading or re-grading of land; such fill or other materials shall be protected against erosion by rip-rap, vegetative cover or bulk-heading.

g. **Fences of wood**, wire or other materials which will not impede the flow of floodwaters.

h. **Single-family dwellings** on lots of 80,000 square feet or more, provided:
   - all dimensional and other requirements of Section 410 shall apply; and
   - The portion of the lot located within the Flood Hazard Zone is so great that is impossible to build without using the Flood Hazard area. The portion of the Flood Hazard area to be used is the minimum possible for adequate construction and landscaping.
   - the lowest floor of the dwelling (including the basement or cellar) and all accessory structures are elevated to or above the level of the 100 year flood.

i. **Expansion of existing industrial structures** on lots of 50,000 square feet or more, provided:
   - All dimensional and other requirements of Section 430 shall apply; and
   - every effort has been made by the applicant to locate the proposed expansion outside of the Flood Hazard District; and
   - The existing facility represents a substantial industrial investment; and
   - Substantial industrial investment shall be construed to mean structures, the total floor area of which amounts to no less than 5,000
square feet or $50,000 assessed valuation, and the computation of this minimum floor area expressly excludes the floor area of accessory structures such as small garages, sheds, and the like; and
• in order to maintain the storage capacity of the flood plain, the applicant shall, where practical elevate rather than flood-proof the expansion in accordance with Section 440d. (ii) and (iii); and
• no vacant sites shall be considered under this section.

j. **Expansion of existing commercial structures** on lots of 40,000 square feet or more, provided:

• all dimensional and other requirements of Section 420.2 shall apply, and
• every effort has been made by the applicant to locate the proposed expansion outside of the Flood Hazard District, and
• the existing facility represents a substantial commercial investment; and
• substantial commercial investment shall be construed to mean structures, the total floor area of which amounts to no less than 2,500 square feet, and the computation of this minimum floor area expressly excludes the floor area of accessory structures such as small garages, sheds, and the like, and
• in order to maintain the storage capacity of the floodplain, the applicant shall, where practicable, elevate rather than flood-proof the expansion in accordance with Section 440d. (ii) and (iii); and
• no vacant sites shall be considered under this section.

k. **Expansion of existing village commercial structures** on lots of 20,000 square feet or more, provided:

• all dimensional and other requirements of Section 420.1.1 shall apply; and
• every effort has been made by the applicant to locate the proposed expansion outside of the Flood Hazard District; and
• the existing facility represents a substantial village commercial investment; and
• substantial village commercial investment shall be construed to mean structures, the total floor area of which amounts to no less than 1,000 square feet, and the computation of this minimum floor area expressly excludes the floor area of accessory structures such as small garages, sheds, and the like; and
• in order to maintain the storage capacity of the flood plain, the applicant shall, where practicable, elevate rather than flood-proof the expansion in accordance with Section 440e. (ii) and (iii); and
• no vacant sites shall be considered under this section.

l. **Parks and playgrounds, historic landmarks** provided:

• the purpose of such facility shall clearly be solely educational or recreational, and not for private gain;
said uses shall not include enclosed structures, except for sanitary facilities, in the flood hazard area. Any sanitary facilities provided shall be connected to public water and sewage systems;
• no accessory uses shall be allowed in the flood hazard area;
• minimum lot size shall be sufficient to accommodate anticipated parking. Gravel or other permeable surfaces shall be used for parking areas in this district.

m. Retaining or flood proofing walls, provided:

• The wall is utilized and necessary to protect existing buildings of a substantial investment, defined as principal structures used for commercial industrial or residential purposes and containing no less than 1,000 square feet total floor area and having an assessed value of no less than $25,000.
• No other feasible and prudent method of flood proofing the structure can be utilized as determined by a licensed professional and verified by the Town Engineer.
• The wall is constructed the minimum distance necessary from the existing building to accomplish flood proofing as determined by a licensed professional and verified by the Town Engineer.
• A detailed flood analysis performed by a Connecticut licensed professional engineer and acceptable to the Town Engineer, including water surface profiles for existing conditions, proposed conditions, and the change in the water surface profile is performed. This analysis shall include a determination of potential impacts to adjacent properties, as well as the applicant's property.
• No portion of the wall or its associated construction shall be placed within the floodway.
• The design of all retaining or flood proofing walls shall be by a Connecticut licensed professional engineer and shall include a stability analysis. Floodwalls can be constructed as cantilever/sheet piling walls, cellular walls, flat dams, buttress walls, or gravity walls, and shall be founded on and keyed into rock where suitable rock is encountered reasonably close to the founding elevations. Where the soil provides inadequate bearing capacity and removal of unsuitable material and replacement is costly, an adequately designed system of piling should be considered.
• All drainage features through walls must be equipped with the necessary devices to prevent backflow.
• Compliance with all provisions of Chapter 7 of the Killingly Code of Ordinances, "Flood Damage Prevention and Control must be demonstrated. (Effective 05/12/99, 12:01AM)

n. Cluster Developments.
440.1.3 **Prohibited uses.** The following, uses shall be specifically prohibited in the Flood Hazard District.

1. Structures, buildings and retaining walls (except where permitted by Special Permit), with the exception of flood retention dams and bridges, as approved by all pertinent State authorities.

2. On-site sewage disposal systems.

3. Private water supply wells.

4. Sanitary landfills, dumps, junkyards, outdoor storage of vehicles and materials, and any new or substantially improved structure which will be used for the production, storage or maintenance of a supply of toxic chemical.

5. The construction, enlargement, or expansion of all Mobile Homes, Mobile Home Parks, and Mobile Home Subdivisions: Hospitals (public or private); Nursing Homes (public or private).

6. Stripping of top soil, groundcover, vegetation, or removal of trees within twenty (20) feet of a stream bank if said distance falls within the floodway. (Amend. Of 07-14-80; Amend. Of 09-09-80; Amend of 12-10-84).