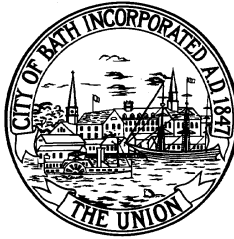


**CITY OF BATH, MAINE**

City Hall 55 Front Street

Bath, Me 04530

[www.cityofbath.com](http://www.cityofbath.com)



**CODES ENFORCEMENT OFFICE**

Phone (207) 443-8334

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TDD (207) 443-8368

## FLOOD HAZARD AREA DEVELOPMENT PERMIT

Project location: \_\_\_\_\_ Map: \_\_\_\_\_ Lot: \_\_\_\_\_

Owner: \_\_\_\_\_

Owner's address: \_\_\_\_\_

Description and/or intended use: \_\_\_\_\_

Flood zone designation: \_\_\_\_\_ 100 year flood elevation  
(related to mean sea level): \_\_\_\_\_

The following will need to be submitted with this application:

1. A site plan, drawn to scale, showing the location of all existing and proposed structures, water bodies, sewerage disposal facilities, water supply facilities, areas to be cut and filled, and property lines and dimensions.
2. Associated drawings and/or specifications detailing:
  - a. water and sewerage facilities;
  - b. construction and dimensions of all structures;
  - c. floodproofing techniques and materials;
  - d. elevations (related to mean sea level) to which structures will be floodproofed;
  - e. certifications required by the attached Performance Standards;
  - f. description of the extent to which any watercourse will be altered or relocated as a result of the proposed development;
  - g. base flood elevation data for all new, relocated, or substantially improved structures;
  - h. quantities and methods utilized for any cutting and/or filling;
  - i. flood zone boundaries; and
  - j. elevations (related to mean sea level) of the lowest floor, including basements of the structure, and whether or not the structure contains basements.
3. \$150.00 application fee.

No development may begin in an area of special flood hazard without the appropriate permits, of which the permit herein applied for is one. To begin development without these permits is against the law, and violators will be subject to legal action and penalties as outlined in Article 1 of the Land Use Code of the City of Bath.

Applicant's signature: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Date permit issued \_\_\_\_\_ Codes Enforcement Officer \_\_\_\_\_

Planning Board approval needed? \_\_\_\_ Date approved: \_\_\_\_ Date denied: \_\_\_\_\_

If approved, conditions attached? \_\_\_\_\_

\_\_\_\_\_

## SECTION 15.06 DEVELOPMENT STANDARDS

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

- A. **All Development** - All development shall:
1. be designed or modified and adequately anchored to prevent flotation (excluding piers and docks), 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 flooding conditions.
- B. **Water Supply** - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.
- C. **Sanitary Sewage Systems** - 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 system into flood waters.
- D. **On Site Waste Disposal Systems** - On site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during floods.
- E. **Watercourse Carrying Capacity** - 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 watercourse.
- F. **Residential** - New construction or substantial improvement of any residential structure located within:
1. Zones AE 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 Section 15.03.H.1.b.; Section 15.05.B; or Section 15.09.D.
- G. **Non Residential** - New construction or substantial improvement of any non-residential structure located within:
1. Zones AE 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 floodproofed to at least one foot above the base flood elevation so that below that elevation the structure is watertight with walls substantially impermeable to the 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 floodproofing 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 Section 15.03.K. and shall include a record of the elevation above mean sea level to which the structure is floodproofed.
  - 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 Section 15.03.H.1.b.; Section 15.05.B; or Section 15.09.D., or
    - a. together with attendant utility and sanitary facilities meet the floodproofing standards of Section 15.06.G.1.
- H. **Manufactured Homes** - New or substantially improved manufactured homes located within:
  - 1. Zones AE 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;
    - 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:
      - (1) 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,
      - (2) 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).
      - (3) all components of the anchoring system described in Section 15.06.H.1.c.(1) & (2) shall be capable of carrying a force of 4800 pounds.
  - 2. Zone A shall:
    - a. be elevated on a permanent foundation, as described in Section 15.06.H.1.b., such that the lowest floor (including basement) of the manufactured home is at least one foot above the base flood elevation utilizing information obtained pursuant to Section 15.03.H.1.b.; Section 15.05.B; or Section 15.09.D.; and
    - b. meet the anchoring requirements of Section 15.06.H.1.c.
- I. **Recreational Vehicles** - Recreational Vehicles located within:

1. Zones A and AE, shall either:
  - a. be on the site for fewer than 180 consecutive days,
  - b. be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or,
  - c. be permitted in accordance with the elevation and anchoring requirements for "manufactured homes" in Section 15.06.H.1.
- J. **Accessory Structures** - Accessory Structures, as defined in Section 15.14, located within Zones A and AE, shall be exempt from the elevation criteria required in Section 15.06.F. & G. above, if all other requirements of Section 15.06 and all the following requirements are met. Accessory Structures shall:
  1. be 500 square feet or less and have a value less than \$3000;
  2. have unfinished interiors and not be used for human habitation;
  3. have hydraulic openings, as specified in Section 15.06.L.2., in at least two different walls of the accessory structure;
  4. be located outside the floodway;
  5. when possible be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters and be placed further from the source of flooding than is the primary structure; and,
  6. have only ground fault interrupt electrical 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 Zone AE riverine areas, encroachments, including fill, new construction, substantial improvement, and other development shall not be permitted within a regulatory floodway which is designated on the community's Flood Insurance Rate 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 A and AE riverine areas, 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 Section 15.06.K.3. unless a technical evaluation certified 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 FEMA's guidelines and standards for flood risk analysis and mapping.
- 3. In Zones A and AE 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. **Enclosed Areas Below the Lowest Floor** - New construction or substantial improvement of any structure in Zones A and AE that meets the development standards of Section 15.06, including the elevation requirements of Section 15.06, paragraphs F, G, or H and is elevated on posts, columns, piers, piles, "stilts," or crawlspaces may be enclosed below the base flood elevation requirements provided all the following criteria are met or exceeded:
  - 1. Enclosed areas are not "basements" as defined in Section 15.14;
  - 2. Enclosed areas shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must either:
    - a. be engineered and certified by a registered professional engineer or architect; or,
    - b. meet or exceed the following minimum criteria:
      - (1) a minimum of two openings 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;
  - 3. The enclosed area shall not be used for human habitation; and,
  - 4. The enclosed areas are usable solely for building access, parking of vehicles, or storage.
- M. **Bridges** - New construction or substantial improvement of any bridge in Zones A and AE shall be designed such that:
  - 1. when possible, the lowest horizontal member (excluding the pilings, or columns) is elevated to at least one foot above the base flood elevation; and
  - 2. a registered professional engineer shall certify that:
    - a. the structural design and methods of construction shall meet the elevation requirements of this section and the floodway standards of Section 15.06.K.; and

- b. 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 structural components. Water loading values used shall be those associated with the base flood.

**N. Containment Walls** - New construction or substantial improvement of any containment wall located within:

1. Zones A and AE shall:

- a. have the 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 Section 15.03.K.

**O. Wharves, Piers and Docks** - New construction or substantial improvement of wharves, piers, and docks are permitted in Zones A and AE, in and over water and seaward of the 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.

**P. Coastal Floodplains** -

- 1. All new construction located within Zones A and AE shall be located landward of the reach of mean high tide except as provided in Section 15.06.P.2.
- 2. Conditional Use - Lobster sheds and fishing sheds may be located seaward of mean high tide and shall be exempt from the elevation requirement in Section 15.06.G. only if permitted as a Conditional Use following review and approval by the Planning Board, as provided in Section 15.07, and if all the following requirements and those of Section 15.06.A., 15.06.K., and 15.06.L. are met:
  - a. The conditional use shall be limited to low value structures such as metal or wood sheds 200 square feet or less and shall not exceed more than one story.
  - b. The structure shall be securely anchored to the wharf or pier to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components.

- c. The structure will not adversely increase wave or debris impact forces affecting nearby buildings.
- d. The structure shall have unfinished interiors and shall not be used for human habitation.
- e. Any mechanical, utility equipment and fuel storage tanks must be anchored and either elevated or floodproofed to one foot above the base flood elevation.
- f. All electrical outlets shall be ground fault interrupt type. The electrical service disconnect shall be located on shore above the base flood elevation and when possible outside the Special Flood Hazard Area.

1-16-2018