

ORDINANCE NO. 12-2812

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
BLAINE, WASHINGTON, AMENDING THE BLAINE MUNICIPAL
CODE FLOOD HAZARD REGULATIONS AS REQUESTED BY THE
FEDERAL EMERGENCY MANAGEMENT AGENCY TO ACHIEVE
COMPLIANCE WITH THE ENDANGERED SPECIES ACT.**

WHEREAS, the National Marine Fisheries Services (NMFS) issued a Biological Opinion on September 22, 2008 and in that opinion NMFS outlined the reasonable and prudent alternative for implementing the National Flood Insurance Program (NFIP) in a manner that would comply with the Endangered Species Act (ESA); and

WHEREAS, the Federal Emergency Management Agency (FEMA) implements the NFIP through the local jurisdictions and requires the cooperation of the local jurisdictions to achieve compliance with the Biological Opinion; and

WHEREAS, the City of Blaine is the jurisdictional authority for the regulation of land use in the mapped flood hazard areas within the city limits; and

WHEREAS, the City, and its residents and property owners are benefited by the availability of flood insurance through the NFIP and participation in the NFIP is jeopardized by failure to comply with the ESA as outlined by the Biological Opinion; and

WHEREAS, on, January 26, 2012, after publication of legal notice in a newspaper of general circulation, the Planning Commission conducted a public hearing on the proposed amendment to the Blaine Municipal Code; and

WHEREAS, the Planning Commission has considered the public record and on March 8, 2012, recommended adoption of the proposed amendment to the Flood Hazard Regulations;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BLAINE, WASHINGTON, DO
ORDAIN** as follows:

SECTION 1: The Following **Findings of Fact** are hereby adopted:

1. The Code Amendment is consistent with FEMA's "Door 2" option for compliance with the NFIP Biological Opinion.
2. The City has complied with all administrative and notification requirements to conduct an amendment to the Blaine Municipal Code.
3. The Code Amendment has not been identified to conflict with any provisions of the Comprehensive Plan.
4. The Code Amendment has undergone SEPA review and a Determination of Non-Significance was issued January 11, 2012.

SECTION 2: The Blaine Municipal Code is hereby amended as stipulated in Exhibit A – Revision to the Blaine Municipal Code.

SECTION 3: Applicability. The revisions contained herein shall apply to future development and building permit applications.

SECTION 4: Severability. If any section, subsection, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance.

SECTION 5: Effective Date. This Ordinance shall take effect and be in force from and after its passage by the City Council and approval by the Mayor, if approved, otherwise, as provided by law and five days after the date of posting for publication.

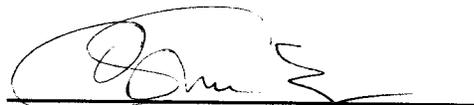
PASSED BY THE CITY COUNCIL OF THE CITY OF BLAINE, WASHINGTON on the 23rd day of April 2012, and approved by the Mayor.

CITY OF BLAINE, WASHINGTON



Harry Robinson, Mayor

ATTEST/AUTHENTICATE:



Sheri Sanchez, City Clerk

**Exhibit A - Revision to the Blaine Municipal Code
Chapter 17.86
FLOOD HAZARD REGULATIONS***

Sections:

- 17.86.010 Purpose.**
- 17.86.020 Definitions.**
- 17.86.030 Applicability.**
- 17.86.040 Areas of flood hazard – Study adopted.**
- 17.86.050 Development permit – Required.**
- 17.86.060 Development permit – Grant or denial.**
- 17.86.070 Duties of the director.**
- 17.86.075 Permit Application Requirements**
- 17.86.080 General standards for all areas of special flood hazards.**
- 17.86.085 Habitat Protection Standards**
- 17.86.090 Anchoring.**
- 17.86.100 Construction materials and methods.**
- 17.86.110 Utilities.**
- 17.86.120 Subdivision proposals.**
- 17.86.130 Review of building permits.**
- 17.86.140 Specific standards where base flood elevation is known.**
- 17.86.150 Elevation of residential construction.**
- 17.86.160 Nonresidential construction and substantial improvement.**
- 17.86.170 Manufactured homes.**
- 17.86.180 Recreational vehicles.**
- 17.86.190 Designated regulatory floodway.**
- 17.86.200 Coastal high hazard areas.**
- 17.86.210 Critical facility.**
- 17.86.220 Appeals.**

* Prior legislation: Prior code §§ 11-201 – 11-205 and Ord. 1535.

17.86.010 Purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by methods and provisions designed for:

- A. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. 2578 §2, 2004; Ord. 2565 § 4, 2004)

17.86.020 Definitions.

Unless specifically defined below in this section, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application:

A. "Area of special flood hazard" means the land in the floodplain within a given community subject to a one percent or greater chance of flooding in any given year.

B. "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year.

C. "Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

D. "Breakaway wall" means a wall that is not part of the structural support of a structure and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

E. "Coastal high hazard area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone VE or V.

F. "Critical facility" means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

G. "Development" means any manmade change to improved or unimproved real estate in the Regulatory Floodplain, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials, subdivision of land, removal of substantial amounts of native vegetation on the property, or alteration of natural site characteristics.

H. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters; and/or

2. The unusual and rapid accumulation of runoff of surface waters from any source.

I. "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

J. "Flood insurance study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood insurance rate maps, and the water surface elevation of the base flood.

K. "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

L. "Impervious Surface" means a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

L. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to

render the structure in violation of the applicable non-elevation design requirements of this chapter.

M. "Manufactured home" as defined in BMC 17.112.020(A).

N. "Native Vegetation" means any mix of grass, forbs, shrubs, and trees commonly found in Western Washington lowland areas, but does not mean lawn, landscaped areas, or incidental vegetation that has been introduced on or invaded an otherwise developed site.

O. "New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

P. "Protected Area" means the lands that lie within the boundaries of the floodway, the riparian habitat zone, and the channel migration area.

Q. "Regulatory Floodplain" means the area of the Special Flood Hazard Area.

R. "Start of construction" includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement of other improvements was within 180 days of the permit date.

The actual start means the first placement or permanent construction of a structure (other than a manufactured home) on a site, such as the pouring of slabs or footings, the installation of pilings, or any work beyond the stage of excavation. Permanent construction does not include land preparation such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

S. "Structure" means a walled and roofed building including a liquid or gas storage tank that is principally above ground.

T. "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

U. "Substantial improvement" as applied herein applies only in this section, and means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. Before the improvement or repair is started; or

2. 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. (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.030 Applicability.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city. (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.040 Areas of flood hazard – Study adopted.

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled The Flood Insurance Study, Whatcom County, Washington, All Jurisdictions, dated November 16, 2007. With accompanying Flood Insurance Rate Maps (FIRM), dated January 16, 2004 and November 16, 2007, the study is

adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at the community development services department, Blaine City Hall, 344 H Street, Blaine, Washington. (Ord. 2728 § 2 (Exh. A), 2009; Ord. 2686 § 1, 2007; Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.045 Protected Area Zones

- A. The protected area includes the following zones within the project site where a floodplain development permit is requested:
 - 1. The riparian habitat zone is the zone of native vegetation extending landward a distance of up to 200 feet from the ordinary high water mark within the regulatory floodplain, also including those aquatic areas that support vegetation below the ordinary high water mark, or such area as defined by a detailed study of the project site.
 - 2. The channel migration area is the area over which a dynamic river moves during the normal course of erosion, sedimentation and flooding events.
 - 3. The floodway is the channel of a stream or other water course in order to discharge the base flood without cumulatively increasing the surface water elevation more than one-foot at any point.

B.

17.86.050 Development permit – Required.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in BMC 17.86.040. The permit shall be for all structures, including manufactured homes, as defined in BMC 17.86.020, and for all other developments including fill and other activities, also set forth in BMC 17.86.020 Definitions. (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.060 Development permit – Grant or denial.

The director is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions. (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.070 Duties of the director.

Duties of the director shall include, but not be limited to:

A. Permit Review.

- 1. Reviewing all development permits to determine that the permit requirements of this chapter have been satisfied;
- 2. Reviewing all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

B. When base flood elevation data and floodway data has not been provided in accordance with BMC 17.86.040, the director shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer BMC 17.86.150 and 17.86.160.

C. Notice on Title.

- 1. The Director shall ensure that, prior to the issuance of a Floodplain Development Permit, the applicant records a notice on the title that the property contains land within the 100-year floodplain.

D. Obtaining and Maintaining Information.

- 1. Obtaining and recording the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved

- structures, and whether or not the structure contains a basement;
- 2. For all new or substantially floodproofed non-residential structures:
 - a. Verifying and recording the actual elevation (in relation to mean sea level) to which the structure was floodproofed; and
 - b. Maintaining the floodproofing certifications required in BMC 17.86.160(C);
- 3. Maintain for public inspection all records pertaining to the provision of this chapter.

E. Alteration of Watercourses.

- 1. Notifying adjacent communities, the Department of Ecology and the Department of Natural Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;
- 2. Requiring that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.

F. Making interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards. For example, where there appears to be a conflict between a mapped boundary and actual field conditions the Director shall make a determination. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of Section 1910.6 of the rules and regulations of the National Flood Insurance Program (24 CFR 1909 et seq.). (Ord. 2602 §2, 2005; Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.075 Permit Application Requirements

Application for a floodplain development permit shall be made on forms furnished by the Director and shall include, but not be limited to,

- A. Three site plans, drawn to scale, showing:
 - 1. The nature, location, dimensions, and elevations of the property in question,
 - 2. Names and location of all water bodies within 300 feet of the site,
 - 3. The elevations of the 10-, 50-, 100-, and 500-year floods, where the data are available,
 - 4. The boundaries of the Regulatory Floodplain, SFHA, floodway, riparian habitat zone, and channel migration area,
 - 5. The proposed drainage system including, but not limited to storm sewers, overland flow paths, detention facilities and roads,
 - 6. Existing and proposed structures, fill, pavement and other impervious surfaces, and sites for storage of materials,
 - 7. All wetlands,
 - 8. Designated fish and wildlife habitat conservation areas, and habitat areas identified for conservation or protection under state or federal or local laws or regulations (e.g: Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, Growth Management Act, Shorelines Management Act, Priority Habitat and Species List,
 - 9. Existing native vegetation and proposed revegetation.
- B. If the proposed project involves grading, excavation, or filling, the site plan shall include proposed post-development terrain at one foot contour intervals.
- C. If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged structure that will be elevated, the application shall include the Flood Protection Elevation for the building site and the proposed elevations of

the following:

1. The top of bottom floor (including basement, crawlspace, or enclosure floor)
 2. The top of the next higher floor
 3. The bottom of the lowest horizontal structural member (in V Zones only)
 4. The top of the slab of an attached garage
 5. The lowest elevation of machinery or equipment servicing the structure
 6. The lowest adjacent (finished) grade next to structure
 7. The highest adjacent (finished) grade next to structure
 8. The lowest adjacent grade at the lowest elevation of a deck or stairs, including structural support
- D. If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged nonresidential structure that will be dry floodproofed, the application shall include the FPE for the building site and the elevation in relation to the datum of the effective FIRM to which the structure will be dry floodproofed and a certification by a registered professional engineer or licensed architect that the dry floodproofing methods meet the floodproofing criteria in BMC 17.86.160.
- E. The proposed project must be designed and located so that new structural flood protection is not needed
- F. The application shall include a description of the extent to which a stream or other water body, including its shoreline, will be altered or relocated as a result of the proposed development.
- G. The application shall include documentation that the applicant will apply for all necessary permits required by Federal, State, or local law. The application shall include written acknowledgment that the applicant understands that the final certification of use or certificate of occupancy will be issued only if the applicant provides copies of the required Federal, State, and local permits or letters stating that a permit is not required. The floodplain permit is not valid if those other permits and approvals are not obtained prior to any ground disturbing work or structural improvements.
- H. The application shall include acknowledgment by the applicant that representatives of any Federal, State or local unit of government with regulatory authority over the project are authorized to enter upon the property to inspect the development.

17.86.080 General standards for all areas of special flood hazards.

- A. If a lot has a buildable site outside the Special Flood Hazard Area or above the BFE, all new structures shall be located there, when feasible. If the lot is fully in the floodplain, structures must be located to have the least impact on salmon.
- B. Stormwater and drainage features shall incorporate low impact development techniques, when technically feasible, and shall at a minimum comply with the Western Washington Manual for Stormwater Management (current edition).
- C. Creation of new impervious surfaces shall not exceed 10-percent of the surface area of the portion of the lot within the floodplain unless mitigation is provided.
- D. Any loss of floodplain storage shall be avoided, rectified, or compensated for. Any compensation site must be in a priority floodplain restoration area in the ESU Recovery Plan for the listed species.
- E. Uses that are not permitted in the Protected Area unless shown not to affect water quality and habitat, include septic tanks and drain fields, dumping of any materials, hazardous or sanitary waste landfills, receiving areas for toxic or hazardous waste or

other contaminants.

F. In all areas of special flood hazards, the standards set out through BMC 17.86.130 are also required. (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.085 Habitat Protection Standards

A. Non-Development Activities

Activities that do not meet the definition of "development" are allowed in the Regulatory Floodplain without the need for a floodplain development permit under this ordinance, provided all other Federal, State, and local requirements are met. The following are examples of activities not considered development or "man-made changes to improved or unimproved real estate."

1. Routine maintenance of landscaping that does not involve grading, excavation, or filling;
2. Removal of noxious weeds and hazard trees and replacement of non-native vegetation with native vegetation;
3. Normal maintenance of structures, such as re-roofing and replacing siding, provided such work does not qualify as a substantial improvement;
4. Normal maintenance of above ground utilities and facilities, such as replacing downed power lines and utility poles;
5. Normal street and road maintenance, including filling potholes, repaving, and installing signs and traffic signals, but not including expansion of paved areas.

B. Activities Allowed With a Floodplain Permit

The following activities are allowed in the Regulatory Floodplain without a habitat impact assessment, providing all other requirements of this ordinance are met, including obtaining a floodplain development permit:

1. Repairs or remodeling of an existing structure, provided that the repairs or remodeling are not a substantial improvement or a repair of substantial damage.
2. Expansion of an existing structure that is no greater than ten percent beyond its existing footprint, provided that the repairs or remodeling are not a substantial improvement or a repair of substantial damage. This measurement is counted cumulatively from the effective date of this ordinance or September 22, 2011 whichever is earlier. If the structure is in the floodway, there shall be no change in the dimensions perpendicular to flow.
3. Activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat, and riparian areas that meet Federal and State standards, provided the activities do not include structures, grading, fill, or impervious surfaces.
4. Development of open space and recreational facilities, such as parks, trails, and hunting grounds, that do not include structures, fill, impervious surfaces or removal of more than 5% of the native vegetation on that portion of the property in the Regulatory Floodplain.
5. Repair to onsite Septic Systems provided the ground disturbance is the minimal necessary.

C. Other Activities

All other activities not listed in BMC 17.86.085.A and B that are allowed by the City of Blaine are allowed, provided they meet all the other requirements of this ordinance, and a floodplain development permit is issued.

D. Native Vegetation Protection

The site plan required in BMC 17.86.075.A shall show existing native vegetation.

1. In the riparian habitat zone, native vegetation shall be left undisturbed, except as provided in BMC 17.86.085.A and B.3.

2. For areas within the Regulatory Floodplain, but outside the riparian habitat zone, removal of native vegetation shall not exceed 35 percent of the surface area of the portion of the site in the Regulatory Floodplain. Native vegetation in the riparian habitat zone portion of the property can be counted toward this requirement.

3. If the proposed project does not meet the criteria of BMC 17.86.085.C.1 and 2, a habitat impact assessment shall be conducted and, if necessary, a habitat mitigation plan shall be prepared and implemented consistent with the habitat conservation areas detailed study requirements included in BMC 17.82.400. The purpose of this assessment and mitigation plan shall be to avoid a "take" of an endangered species as defined in the Endangered Species Act, but not necessarily to avoid all impacts on all species.

17.86.090 Anchoring.

The following applies in all areas of special flood hazards:

A. All new construction and substantial development shall be anchored to prevent flotation, collapse or lateral movement of the structure.

B. All manufactured homes shall be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and best installation practices available that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. Additional methods and practices are found in FEMA's latest edition of Guidebook FEMA-85 "Manufactured Home Installation in Flood Hazard Areas." (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.100 Construction materials and methods.

The following applies in all areas of special flood hazard:

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

C. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.110 Utilities.

The following applies in all areas of special flood hazard:

A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. (Ord. 2578 §2, 2004; Ord. 2565 §4, 2004)

17.86.120 Subdivision proposals.

In all areas of special flood hazards:

A. All subdivision proposals shall be consistent with the need to minimize flood damage.

B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

C. All subdivision proposals shall have adequate drainage provided to reduce

exposure to flood damage.

D. Base flood elevation data shall be provided for subdivision proposals and other proposed developments which contain at least 50 lots or five acres, whichever is less. (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.130 Review of building permits.

In all areas of special flood hazards, where elevation data is not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high-water marks, photographs of past flooding, etc., where available. (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.150 Elevation of residential construction.

A. In areas described in BMC 17.86.140, new construction and substantial development of any residential structure shall have the lowest floor, including basement, elevated one foot above the base flood elevation.

B. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

1. A minimum of two openings having a total net area of no less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
2. The bottom of all openings shall be no higher than one foot above grade.
3. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters. (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.160 Nonresidential construction and substantial improvement.

In areas described in BMC 17.86.140, new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to one foot above the level of the base flood elevation, or, together with attendant utility and sanitary facilities, shall:

A. Be floodproofed so that below one foot above the base flood level 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 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 provisions of this section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the director as set forth in BMC 17.86.070(C)(2).

D. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in BMC 17.86.150(B).

E. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to the base flood level will be rated as one foot below the base flood level). (Ord. 2578 § 2, 2004; Ord. 2565 § 4, 2004)

17.86.170 Manufactured homes.

A. Manufactured homes shall be anchored in accordance with BMC 17.86.090.

17.86.180 Recreational vehicles.

Recreational vehicles placed on sites are required to either:

- A. Be on the site for fewer than 180 consecutive days;
- B. Be fully licensed and ready for highway use, on their wheels or jacking systems, are attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
- C. Meet the requirements of BMC 17.86.170 and the elevation and anchoring requirements for manufactured homes. (Ord. 2578 §2, 2004)

17.86.190 Designated regulatory floodway.

Located within areas of special flood hazard established in BMC 17.86.040 are areas designated as floodways. Since the floodway is an extremely hazardous area due to velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.

B. Construction or reconstruction of residential structures is prohibited within designated floodways, except for: (1) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (2) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either (a) before the repair, or reconstruction is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations or state or local health, sanitary, or safety code specifications which have been identified by the diector and which are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the 50 percent.

C. If subsection A of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions, BMC 17.86.090 through 17.86.190. (Ord. 2578 § 2, 2004)

17.86.200 Coastal high hazard areas.

Located within areas of special flood hazard established in BMC 17.86.040 are coastal high hazard areas, designated as Zones VE and/or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this chapter, the following provisions shall also apply:

A. All new construction and substantial improvements in Zones VE and V, if base flood elevation data is available on the city's FIRM, shall be elevated on pilings and columns so that:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated one foot or more above the base flood elevation; and

2. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and

water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

B. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsection A of this section.

C. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones VE and V on the city's FIRM and whether or not such structures contain a basement. The director shall maintain a record of all such information.

D. All new construction within Zones VE and V on the city's FIRM shall be located landward of the reach of mean high tide.

E. Provide that all new construction and substantial improvements within Zones VE and V on the city's FIRM have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls or similar, intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 or no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

1. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

2. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one-percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).

F. If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

G. Prohibit the use of fill for structural support of buildings within Zones VE and V on the city's FIRM.

H. Prohibit manmade alteration of sand dunes within Zones VE and V on the city's FIRM which would increase potential flood damage.

I. All manufactured homes to be placed or substantially improved within Zones VE and V on the city's FIRM on sites:

1. Outside of a manufactured home park or subdivision;
2. In a new manufactured home park or subdivision;
3. In an expansion to an existing manufactured home park or subdivision;

or

4. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood; meet the standards, delineated in subsections A through H of this section and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision within Zones VE and V on the

city's FIRM meet the requirements of BMC 17.86.170.

J. Recreational vehicles placed on sites within Zones VE and V on the city's FIRM shall either:

1. Be on the site for fewer than 180 consecutive days;
2. Be fully licensed and ready for highway use, on their wheels or jacking systems, are attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
3. Meet the requirements of BMC 17.86.050 and subsections A through H of this section. (Ord. 2602 § 2, 2005; Ord. 2578 § 2, 2004)

17.86.210 Critical facility.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area. Construction of new critical facilities shall be permissible with the special flood hazard area if no feasible alternative site is available. Critical facilities constructed within the special flood hazard area shall have the lowest floor elevated three feet or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible. (Ord. 2578 § 2, 2004)

17.86.220 Appeals.

Appeals of a final decision shall be submitted pursuant to BMC 17.06.180, Appeals. (Ord. 2673 § 2, 2007)