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# Chapter 466

## Floodplain and Shoreland-Wetland Zoning

**[HISTORY: Adopted by the Common Council of the City of Monona as Title 13, Ch. 2, of the 1994 Code; amended in its entirety 9-15-2014 by Ord. No. 9-14-664. Subsequent amendments noted where applicable.]**

### GENERAL REFERENCES

Erosion and stormwater control — See Ch. 216.

Waterways — See Ch. 450.

Subdivision and land development — See Ch. 473.

Zoning — See Ch. 480.

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### Article I

#### **Statutory Authorization, Finding of Fact, Statement of Purpose, Title and General Provisions**

##### **§ 466-1 Statutory authorization.**

This chapter is adopted pursuant to the authorization in § 62.23, Wis. Stats., and the requirements in § 87.30, Wis. Stats.

##### **§ 466-2 Finding of fact.**

Uncontrolled development and use of the shoreland-wetlands, floodplains and rivers or streams of Monona would impair the public health, safety, convenience, general welfare and tax base.

##### **§ 466-3 Statement of purpose.**

This chapter is intended to regulate floodplain development to:

- A. Protect life, health and property;
- B. Minimize expenditures of public funds for flood-control projects;
- C. Minimize rescue and relief efforts undertaken at the expense of the taxpayers;
- D. Minimize business interruptions and other economic disruptions;
- E. Minimize damage to public facilities in the floodplain;
- F. Minimize the occurrence of future flood blight areas in the floodplain;
- G. Discourage the victimization of unwary land and home buyers;
- H. Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners;
- I. Discourage development in a floodplain if there is any practicable alternative to locate the activity,

use or structure outside of the floodplain;

- J. Maintain the stormwater and floodwater storage capacity of wetlands;
- K. Prevent and control water pollution by preserving wetlands which filter or store sediments, nutrients, heavy metals or organic compounds that would otherwise drain into navigable waters;
- L. Protect fish spawning grounds, fish, aquatic life and wildlife by preserving wetlands and other fish and aquatic habitat;
- M. Prohibit certain uses detrimental to the shoreland-wetland area;
- N. Preserve shore cover and natural beauty by restricting shoreland-wetland excavation, filling and other earthmoving activities.

**§ 466-4 Title.**

This chapter shall be known as the "Floodplain and Shoreland-Wetland Zoning Ordinance for Monona, Wisconsin."

**§ 466-5 General provisions.**

- A. Areas to be regulated. This chapter regulates all areas that would be covered by the regional flood or base flood as shown on the Flood Insurance Rate Map (FIRM) or other maps approved by the Department of Natural Resources. Base flood elevations are derived from the flood profiles in the Flood Insurance Study (FIS) and are shown as AE, A1-30 and AH Zones on the FIRM. Other regulatory zones are displayed as A and AO Zones. Regional flood elevations (RFE) may be derived from other studies. If more than one map or revision is referenced, the most restrictive information shall apply.
- B. Official maps and revisions. The boundaries of all floodplain districts are designated as AE, AH, AO or A1-30 on the maps based on the Flood Insurance Study (FIS) listed below. Any change to the base flood elevations (BFE) or any changes to the boundaries of the floodplain or floodway in the FIS or on the Flood Insurance Rate Map (FIRM) must be reviewed and approved by the DNR and FEMA through the letter of map change process (see Article X, Amendments) before it is effective. No changes to RFEs on non-FEMA maps shall be effective until approved by the DNR. These maps and revisions are on file in the office of the Zoning Administrator. If more than one map or revision is referenced, the most restrictive information shall apply. Any maps referenced in this section must be approved by the DNR and be more restrictive than those based on the FIS at the site of the proposed development.

The maps designated below are hereby adopted and made part of this chapter. They are on file in the office of the Zoning Administrator of the City of Monona:

- (1) United States Geological Survey Madison East Quadrangle Map dated 1983.
- (2) Wisconsin Wetland Inventory Maps stamped "FINAL" on January 28, 1986.
- (3) Floodplain zoning maps entitled "The Flood Insurance Rate Map (FIRM) Dane County, Wisconsin, and Incorporated Areas," panels 55025C0428G, 55025C0436G, 55025C0437G and 55025C0441G, prepared by the Federal Emergency Management Agency (FEMA), dated January 2, 2009; panel 55025C0429H, dated September 17, 2014, with corresponding profiles that are based on the Dane County Flood Insurance Study, volumes 55025CV001D, 55025CV002D, 55025CV003D and 55025CV004D, dated June 16, 2016, prepared in connection therewith. **[Amended 5-2-2016 by Ord. No. 5-16-678]**
- (4) City of Madison, Village of Maple Bluff Flood Storage District, Panel 19 of 21, dated September 17, 2014. Prepared by the WDNR. Approved by the WDNR.

- (5) City of Fitchburg, City of Monona Flood Storage District, Panel 20 of 21, dated September 17, 2014. Prepared by the WDNR. Approved by the WDNR.
  - (6) Comprehensive zoning base maps titled "City of Monona Zoning Map" and dated November 17, 1980, or latest version.
  - (7) Flood Insurance Rate Map 55025C0437G and corresponding Flood Insurance Study data for West Unnamed Tributary to Lake Waubesa, as revised by FEMA Letter of Map Revision Case Number 16-05-3951P with effective date of December 30, 2016.
- C. Establishment of floodplain zoning districts. The regional floodplain areas are divided into four districts, as follows:
- (1) The floodway district (FW) is the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional floodwaters and are contained within AE Zones as shown on the FIRM.
  - (2) The flood-fringe district (FF) is that portion of the floodplain between the regional flood limits and the floodway.
  - (3) The general floodplain district (GFP) is those areas that have been or may be covered by floodwater during the regional flood.
  - (4) The flood storage district (FSD) is that area of the floodplain where storage of floodwaters is calculated to reduce the regional flood discharge.
- D. Locating floodplain boundaries.
- (1) Discrepancies between boundaries on the Official Floodplain Zoning Map and actual field conditions shall be resolved using the criteria in Subsection **D(1)(a)** or **(b)** below. If a significant difference exists, the map shall be amended according to Article **X**. The Zoning Administrator can rely on a boundary derived from a profile elevation to grant or deny a land use permit, whether or not a map amendment is required. The Zoning Administrator shall be responsible for documenting actual predevelopment field conditions and the basis upon which the district boundary was determined and for initiating any map amendments required under this section. Disputes between the Zoning Administrator and an applicant over the district boundary line shall be settled according to § **466-38C** and the criteria in Subsection **D(1)(a)** and **(b)** below.
    - (a) If flood profiles exist, the location of the district boundary line shall be determined by the Zoning Administrator using both the map scale and the profile elevations. The regional or base flood elevations shall govern if there are any discrepancies. A map amendment is required where there is a significant discrepancy between the map and actual field conditions. The Zoning Administrator shall have the authority to immediately grant or deny a land use permit on the basis of a district boundary derived from the elevations shown on the water surface profile of the regional flood, whether or not a map amendment is required. The Zoning Administrator shall be responsible for initiating any map amendments required under this section within a reasonable period of time.
    - (b) Where flood profiles do not exist, the location of the boundary shall be determined by the Zoning Administrator using the map scale. Where there is a significant difference between the district boundary line shown on the map and actual field conditions, the map shall be amended. Where a map amendment has been approved by both the Common Council and the Department, the Zoning Administrator shall have the authority to grant or deny a land use permit.
  - (2) Where the flood profiles are based on established base flood elevations from a FIRM, FEMA must approve any map amendment or revision pursuant to Article **X**, Amendments, § **466-44G**.

- E. Removal of lands from floodplain. Compliance with the provisions of this chapter shall not be grounds for removing land from the floodplain unless it is filled at least two feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to Article X, Amendments.
- F. Compliance. Any development or use within the areas regulated by this chapter shall be in compliance with the terms of this chapter and other applicable local, state and federal regulations. (However, see Article VIII of this chapter for the standards applicable to nonconforming uses.) It is the responsibility of the applicant to secure all other necessary permits from appropriate federal, state and local agencies, including those required by the U.S. Army Corps of Engineers under Section 404 of the Federal Water Pollution Control Act amendments of 1972, 33 U.S.C. § 1344.
- G. Municipalities and state agencies regulated. Unless specifically exempted by law, all cities, villages, towns and counties are required to comply with this chapter and obtain all necessary permits. State agencies are required to comply if § 13.48(13), Wis. Stats., applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation is exempt when § 30.2022, Wis. Stats., applies.
- H. Abrogation and greater restrictions.
  - (1) This chapter supersedes all the provisions of any zoning ordinance previously enacted under § 62.23 or 87.30, Wis. Stats., which relate to floodplains and shoreland-wetlands. A more restrictive ordinance than this chapter shall continue in full force and effect to the extent of the greater restrictions, but not otherwise. The more restrictive of either the shoreland-wetland district or floodplain district regulations shall apply when a property is located in both zoning districts.
  - (2) This chapter is not intended to repeal, abrogate or impair any existing deed restrictions, covenants or easements. If this chapter imposes greater restrictions, the provisions of this chapter shall prevail.
- I. Interpretation. In their interpretation and application, the provisions of this chapter are the minimum requirements liberally construed in favor of the Common Council and are not a limitation on or repeal of any other powers granted by the Wisconsin Statutes. If a provision of this chapter required by Ch. NR 116, Wis. Adm. Code, is unclear, the provision shall be interpreted consistent with the requirements of Ch. NR 116, Wis. Adm. Code, and in light of the standards in effect on the date of the adoption of this chapter or in effect on the date of the most recent text amendment to this chapter.
- J. Warning and disclaimer of liability. The flood protection standards in this chapter are based on engineering experience and research. Larger floods may occur or the flood height may be increased by man-made or natural causes. This chapter does not imply or guarantee that nonfloodplain areas or permitted floodplain uses will be free from flooding and flood damages. Nor does this chapter create liability on the part of or a cause of action against the City or any officer or employee thereof for any flood damage that may result from reliance on this chapter.
- K. Annexed areas. The Dane County floodplain zoning provisions in effect on the date of annexation shall remain in effect and shall be enforced by the City for all annexed areas until the City adopts and enforces an ordinance which meets the requirements of Ch. NR 116, Wis. Adm. Code, and 44 CFR 59-72, National Flood Insurance Program (NFIP). These annexed lands are described on the City's Official Zoning Map. County floodplain zoning provisions are incorporated by reference for the purpose of administering this section and are on file in the office of the Zoning Administrator. All plats or maps of annexation shall show the regional flood elevation and the floodway location.

## Article II

### **General Standards Applicable to All Floodplain Districts**

#### **§ 466-6 Review of permit applications; determination of flood safety.**

The Zoning Administrator shall review all permit applications to determine whether proposed building

sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall be designed and anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads; be constructed with flood-resistant materials; be constructed to minimize flood damages and to ensure that utility and mechanical equipment is designed and/or located so as to prevent water from entering or accumulating within the equipment during conditions of flooding. Subdivisions shall be reviewed for compliance with the above standards. All proposed plats and certified survey maps required by Chapter 480, Zoning, of this Code shall include regional flood elevation and floodway data. Adequate drainage shall be provided to reduce exposure to flood hazards, and all public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate flood damages.

**§ 466-7 Hydraulic and hydrologic analyses.**

A. No floodplain development shall:

- (1) Obstruct flow, defined as development which blocks the conveyance of floodwaters by itself or with other development, causing any increase in the regional flood height; or
- (2) Cause any increase in the regional flood height due to floodplain storage area lost.

B. The Zoning Administrator shall deny permits if it is determined the proposed development will obstruct flow or cause any increase in the regional flood height, based on the officially adopted FIRM or other adopted map, unless the provisions of Article X, Amendments, are met.

**§ 466-8 Watercourse alterations.**

No land use permit to alter or relocate a watercourse in a mapped floodplain shall be issued until the Zoning Administrator has notified in writing all adjacent municipalities, the Department and FEMA regional offices and required the applicant to secure all necessary state and federal permits. The standards of § 466-7 must be met and the flood-carrying capacity of any altered or relocated watercourse shall be maintained. As soon as is practicable, but not later than six months after the date of the watercourse alteration or relocation, and pursuant to Article X, Amendments, the Zoning Administrator shall apply for a letter of map revision (LOMR) from FEMA. Any such alterations must be reviewed and approved by FEMA and the DNR through the LOMC process.

**§ 466-9 Development requiring state permit.**

Development which requires a permit from the Department under Chs. 30 and 31, Wis. Stats., such as docks, piers, wharves, bridges, culverts, dams and navigational aids, may be allowed if the necessary permits are obtained and amendments to this chapter are made according to Article X, Amendments.

**§ 466-10 Public or private campgrounds.**

Public or private campgrounds shall have a low flood damage potential and shall meet the following provisions:

- A. The campground is approved by the Department of Health Services.
- B. A land use permit for the campground is issued by the Zoning Administrator.
- C. The character of the river system and the campground elevation are such that a seventy-two-hour warning of an impending flood can be given to all campground occupants.
- D. There is an adequate flood warning procedure for the campground that offers the minimum notice required under this section to all persons in the campground. This procedure shall include a written agreement between the campground owner, the municipal emergency government coordinator and the Police Chief which specifies the flood elevation at which evacuation shall occur, personnel responsible for monitoring flood elevations, types of warning systems to be used and the procedures for notifying at-risk parties, and the methods and personnel responsible for conducting the evacuation.

- E. This agreement shall be for no more than one calendar year, at which time the agreement shall be reviewed and updated – by the officials identified in Subsection **D** – to remain in compliance with all applicable regulations, including those of the State Department of Health Services.
- F. Only camping units that are fully licensed, if required, and ready for highway use are allowed.
- G. The camping units shall not occupy any site in the campground for more than 180 consecutive days, at which time the camping unit must be removed from the floodplain for a minimum of 24 hours.
- H. All camping units that remain on site for more than 30 days shall be issued a limited authorization by the campground operator, a written copy of which is kept on file at the campground. Such authorization shall allow placement of a camping unit for a period not to exceed 180 days and shall ensure compliance with all the provisions of this section.
- I. The Zoning Administrator shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section.
- J. All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in either Article **III**, Article **IV** or Article **V** for the floodplain district in which the structure is located.
- K. The campground shall have signs clearly posted at all entrances warning of the flood hazard and the procedures for evacuation when a flood warning is issued.
- L. All service facilities, including but not limited to refuse collection, electrical service, gas lines, propane tanks, sewage systems and wells, shall be properly anchored and placed at or floodproofed to the flood-protection elevation.

### Article III Floodway District (FW)

#### § 466-11 **Applicability.**

This article applies to all floodway areas on the Floodplain Zoning Maps and those identified pursuant to § **466-21**.

#### § 466-12 **Permitted uses.**

The following open space uses are allowed in the floodway district and the floodway areas of the general floodplain district, if they are not prohibited by any other ordinance; they meet the standards in §§ **466-13** and **466-14**; and all permits or certificates have been issued according to § **466-35**:

- A. Agricultural uses, such as farming, outdoor plant nurseries, horticulture, viticulture and wild crop harvesting.
- B. Nonstructural industrial and commercial uses, such as loading areas, parking areas and airport landing strips.
- C. Nonstructural recreational uses, such as golf courses, tennis courts, archery ranges, picnic grounds, boat ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting, trap and skeet activities, hunting and fishing areas, and hiking and horseback riding trails, subject to the fill limitations of § **466-13D**.
- D. Uses or structures accessory to open space uses, or classified as historic structures that comply with §§ **466-13** and **466-14**.
- E. Extraction of sand, gravel or other materials that comply with § **466-13D**.

- F. Functionally water-dependent uses, such as docks, piers or wharves, dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines that comply with Chs. 30 and 31, Wis. Stats.
- G. Public utilities, streets and bridges that comply with § **466-13C**.

§ 466-13 **Standards for developments in floodway.**

A. General.

- (1) Any development in the floodway shall comply with Article **II** and have a low flood damage potential.
- (2) Applicants shall provide the following data to determine the effects of the proposal according to § **466-6**:
  - (a) A cross-section elevation view of the proposal, perpendicular to the watercourse, showing if the proposed development will obstruct flow; or
  - (b) An analysis calculating the effects of this proposal on regional flood height.
- (3) The Zoning Administrator shall deny the permit application if the project will cause any increase in the flood elevations upstream or downstream, based on the data submitted for Subsection **A(2)** above.

B. Structures. Structures accessory to permanent open space uses or functionally dependent on a waterfront location may be allowed by permit if the structures comply with the following criteria:

- (1) Not designed for human habitation, does not have a high flood damage potential, and is constructed to minimize flood damage.
- (2) Shall have a minimum of two openings on different walls having a total net area not less than one square inch for every square foot of enclosed area, and the bottom of all such openings being no higher than one foot above grade. The openings shall be equipped with screens, louvers or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
- (3) Must be anchored to resist flotation, collapse and lateral movement.
- (4) Mechanical and utility equipment must be elevated or floodproofed to or above the regional flood elevation.
- (5) It must not obstruct flow of floodwaters or cause any increase in flood levels during the occurrence of the regional flood.

C. Public utilities, streets and bridges. Public utilities, streets and bridges may be allowed by permit, if:

- (1) Adequate floodproofing measures are provided to the flood-protection elevation; and
- (2) Construction meets the development standards of § **466-7**.

D. Fills or deposition of materials. Fills or deposition of materials may be allowed by permit, if:

- (1) The requirements of § **466-7** are met;
- (2) No material is deposited in navigable waters unless a permit is issued by the Department pursuant to Ch. 30, Wis. Stats., and a permit pursuant to § 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. § 1344 has been issued, if applicable, and all other requirements

have been met;

- (3) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading; and
- (4) The fill is not classified as a solid or hazardous material.

**§ 466-14 Prohibited uses.**

All uses not listed as permitted uses in § 466-12 are prohibited, including the following uses:

- A. Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses;
- B. Storing materials that are buoyant, flammable, explosive, injurious to property, water quality, or human, animal, plant, fish or other aquatic life;
- C. Uses not in harmony with or detrimental to uses permitted in the adjoining districts;
- D. Any private or public sewage systems, except portable latrines that are removed prior to flooding and systems associated with recreational areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and Ch. SPS 383, Wis. Adm. Code;
- E. Any public or private wells which are used to obtain potable water, except those for recreational areas that meet the requirements of local ordinances and Chs. NR 811 and NR 812, Wis. Adm. Code;
- F. Any solid or hazardous waste disposal sites;
- G. Any wastewater treatment ponds or facilities, except those permitted under § NR 110.15(3)(b), Wis. Adm. Code; and
- H. Any sanitary sewer or water supply lines, except those to service existing or proposed development located outside the floodway which complies with the regulations for the floodplain area occupied.

## Article IV Flood-Fringe District (FF)

**§ 466-15 Applicability.**

This article applies to all flood-fringe areas shown on the Floodplain Zoning Maps and those identified pursuant to § 466-21.

**§ 466-16 Permitted uses.**

Any structure, land use or development is allowed in the flood-fringe district if the standards in § 466-17 are met; the use is not prohibited by this or any other ordinance or regulation; and all permits or certificates specified in § 466-35 have been issued.

**§ 466-17 Standards for development in flood-fringe.**

Section 466-7 shall apply in addition to the following requirements according to the use requested. Any existing structure in the flood-fringe must meet the requirements of Article VIII, Nonconforming Uses:

- A. Residential uses. Any structure, including a manufactured home, which is to be newly constructed or moved into the flood-fringe, shall meet or exceed the following standards. Any existing structure in the flood-fringe must meet the requirements of Article VIII, Nonconforming Uses.
  - (1) The elevation of the lowest floor shall be at or above the flood-protection elevation on fill unless the requirements of § 466-17A(2) can be met. The fill shall be one foot or more above the regional flood elevation extending at least 15 feet beyond the limits of the structure. The Department may authorize

other floodproofing measures if the elevations of existing streets or sewer lines makes compliance with the fill standards impractical and the Board of Appeals grants a variance;

- (2) The basement or crawlway floor may be placed at the regional flood elevation if it is floodproofed to the flood-protection elevation. No basement or crawlway floor is allowed below the regional flood elevation;
  - (3) Contiguous dry land access shall be provided from a structure to land outside of the floodplain, except as provided in Subsection **A(4)**.
  - (4) In developments where existing street or sewer-line elevations make compliance with Subsection **A(3)** impractical, the City may permit new development and substantial improvements where roads are below the regional flood elevation, if:
    - (a) The City has written assurance from police, fire and emergency services that rescue and relief will be provided to the structure(s) by wheeled vehicles during a regional flood event; or
    - (b) The City has a DNR-approved emergency evacuation plan.
- B. Accessory structures or uses.** Accessory structures shall be constructed on fill with the lowest floor at or above the regional flood elevation.
- C. Commercial uses.** Any commercial structure which is erected, altered or moved into the flood-fringe shall meet the requirements of § **466-17A**. Subject to the requirements of Subsection **F**, storage yards, surface parking lots and other such uses may be placed at lower elevations. However, no such area in general use by the public shall be inundated to a depth greater than two feet or subjected to flood velocities greater than two feet per second upon the occurrence of the regional flood. Inundation of such yards or parking areas exceeding two feet may be allowed, provided an adequate warning system exists to protect life and property.
- D. Manufacturing, agricultural and industrial uses.** Any manufacturing, agricultural or industrial structure which is erected, altered or moved into the flood-fringe shall have the lowest floor elevation to or above the flood-protection elevation or meet the floodproofing standards in § **466-41**. On streams or rivers having prolonged flood durations, greater protection may be required to minimize interference with normal plant operations. Subject to the requirements of Subsection **E**, storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.
- E. Storage of materials.** Materials that are buoyant, flammable, explosive or injurious to property, water quality or human, animal, plant, fish or aquatic life shall be stored at or above the flood-protection elevation or floodproofed in compliance with § **466-41**. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.
- F. Public utilities, streets and bridges.** All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans; and
- (1) When failure of public utilities, streets and bridges would endanger public health or safety, or where such facilities are deemed essential, construction or repair of such facilities shall only be permitted if they are designed to comply with § **466-41**;
  - (2) Minor roads or nonessential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.
- G. Sewage systems.** All sewage disposal systems shall be designed to minimize or eliminate infiltration of floodwater into the system, pursuant to § **466-41**, to the flood-protection elevation and meet the provisions of all local ordinances and Ch. SPS 383, Wis. Adm. Code.

- H. Wells. All wells shall be designed to minimize or eliminate infiltration of floodwaters into the system, pursuant to § **466-41**, to the flood-protection elevation and shall meet the provisions of Chs. NR 811 and NR 812, Wis. Adm. Code.
- I. Solid waste disposal sites. Disposal of solid or hazardous waste is prohibited in flood-fringe areas.
- J. Deposition of materials. Any deposited material must meet all the provisions of this chapter.
- K. Manufactured homes.
  - (1) Owners or operators of all manufactured home parks and subdivisions shall provide adequate surface drainage to minimize flood damage, and prepare, secure approval and file an evacuation plan, indicating vehicular access and escape routes, with local emergency management authorities.
  - (2) In existing manufactured home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:
    - (a) Have the lowest floor elevated to the flood-protection elevation; and
    - (b) Be anchored so they do not float, collapse or move laterally during a flood.
  - (3) Outside of existing manufactured home parks, including new manufactured home parks and all single units outside of existing parks, all new, replacement and substantially improved manufactured homes shall meet the residential development standards for the flood-fringe in § **466-17A**.
- L. Mobile recreational vehicles. All mobile recreational vehicles that are on site for 180 consecutive days or more or are not fully licensed and ready for highway use shall meet the elevation and anchoring requirements in § **466-17K(2)**. A mobile 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 utilities and security devices and has no permanently attached additions.

## Article V General Floodplain District (GFD)

### § 466-18 **Applicability.**

The provisions for this district shall apply to all floodplains mapped as A, AO or AH Zone.

### § 466-19 **Permitted uses.**

Pursuant to § **466-21**, the Zoning Administrator shall determine whether the proposed use is located within the floodway or flood-fringe. Those uses permitted in the floodway (§ **466-12**) and flood-fringe (§ **466-16**) districts are allowed within the general floodplain district, according to the standards of § **466-20**, provided that all permits or certificates required under § **466-35** have been issued.

### § 466-20 **Standards for development in general floodplain district.**

Article **III** applies to floodway areas; Article **IV** applies to flood-fringe areas. The rest of this chapter applies to either district.

- A. In AO/AH Zones the structure's lowest floor must meet one of the conditions listed below, whichever is higher:
  - (1) At or above the flood-protection elevation; or
  - (2) Two feet above the highest adjacent grade around the structure; or
  - (3) The depth as shown on the FIRM.

- B. In AO/AH Zones, provide plans showing adequate drainage paths to guide floodwaters around structures.

**§ 466-21 Determining floodway and flood-fringe limits.**

Upon receiving an application for development within the general floodplain district, the Zoning Administrator shall:

- A. Require the applicant to submit two copies of an aerial photograph or a plan which shows the proposed development with respect to the general floodplain district limits, stream channel and existing floodplain developments, along with a legal description of the property, fill limits and elevations, building floor elevations and floodproofing measures, and the flood zone as shown on the FIRM.
- B. Require the applicant to furnish any of the following information deemed necessary by the Department to evaluate the effects of the proposal upon flood height and flood flows, regional flood elevation and to determine floodway boundaries:
- (1) A hydrologic and hydraulic study as specified in § 466-35B(3);
  - (2) Plan (surface view) showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and layout of all proposed and existing structures on the site; location and elevations of streets, water supply, and sanitary facilities; soil types and other pertinent information;
  - (3) Specifications for building construction and materials, floodproofing, filling, dredging, channel improvement, storage, water supply and sanitary facilities.

Article VI  
**Flood Storage District (FSD)**

**§ 466-22 District boundaries and purpose of flood storage.**

The flood storage district delineates that portion of the floodplain where storage of floodwaters has been taken into account and is relied upon to reduce the regional flood discharge. The district protects the flood storage areas and assures that any development in the storage areas will not decrease the effective flood storage capacity, which would cause higher flood elevations.

**§ 466-23 Applicability.**

The provisions of this article apply to all areas within the flood storage district (FSD), as shown on the Official Floodplain Zoning Maps.

**§ 466-24 Permitted uses.**

Any use or development which occurs in a flood storage district must meet the applicable requirements in § 466-17.

**§ 466-25 Standards for development in flood storage district.**

- A. Development in a flood storage district shall not cause an increase in the height of the regional flood.
- B. No development shall be allowed which removes flood storage volume unless an equal volume of storage as defined by the predevelopment ground surface and the regional flood elevation shall be provided in the immediate area of the proposed development to compensate for the volume of storage which is lost (compensatory storage). Excavation below the groundwater table is not considered to provide an equal volume of storage.
- C. If compensatory storage cannot be provided, the area may not be developed unless the entire area zoned as flood storage district – on this waterway – is rezoned to the flood-fringe district. This must include a revision to the floodplain study and map done for the waterway to revert to the higher regional flood discharge calculated without floodplain storage, as per Article X, Amendments, of

this chapter.

- D. No area may be removed from the flood storage district unless it can be shown that the area has been filled to the flood-protection elevation and is contiguous to other lands lying outside of the floodplain.

## Article VII Shoreland-Wetland Zoning District

### § 466-26 District boundaries of shoreland-wetland.

- A. The shoreland-wetland zoning district includes all wetlands in the City of Monona which are five acres or more in size and are shown on the final Wetland Inventory Map that has been adopted and made a part of this chapter in § **466-5**, and which are:
- (1) Within 1,000 feet of the ordinary high-water mark of navigable lakes, ponds or flowages. Lakes, ponds or flowages in the municipality shall be presumed to be navigable if they are listed in the Department publication "Surface Water Resources of Dane County" or are shown on the United States Geological Survey quadrangle maps or other Zoning Maps which have been made a part of this chapter in § **466-5**.
  - (2) Within 300 feet of the ordinary high-water mark of navigable rivers or streams or to the landward side of the floodplain, whichever distance is greater. Rivers and streams shall be presumed to be navigable if they are designated as either continuous or intermittent waterways on the United States Geological Survey quadrangle maps or other Zoning Maps which have been incorporated by reference and made a part of this chapter in § **466-5**. Floodplain Zoning Maps adopted in § **466-5** shall be used to determine the extent of floodplain areas.
- B. Determinations of navigability and ordinary high-water mark location shall initially be made by the Zoning Administrator. When questions arise, the Zoning Administrator shall contact the appropriate district office of the Department for a final determination of navigability or ordinary high-water mark.
- C. When an apparent discrepancy exists between the shoreland-wetland district boundary shown on the Official Zoning Maps and the actual field conditions at the time the maps were adopted, the Zoning Administrator shall contact the appropriate district office of the Department to determine if the shoreland-wetland district boundary as mapped is in error. If Department staff concur with the Zoning Administrator that a particular area was incorrectly mapped as a wetland, the Zoning Administrator shall have the authority to immediately grant or deny any land use or building permit in accordance with the regulations applicable to the correct zoning district. In order to correct wetland mapping errors shown on the Official Zoning Maps, the Zoning Administrator shall be responsible for initiating a map amendment within a reasonable period.
- D. Under § 281.31(2m), Wis. Stats., notwithstanding any other provision of law or administrative rule, wetland zoning ordinances required under § 62.231, Wis. Stats. and Ch. NR 117, Wis. Adm. Code, do not apply to lands adjacent to farm drainage ditches, if:
- (1) Such lands are not adjacent to a natural navigable stream or river;
  - (2) Those parts of the drainage ditches adjacent to such lands were not navigable streams before ditching; and
  - (3) Such lands are maintained in nonstructural agricultural use.
- E. The boundaries of the shoreland-wetland district as set forth in this § **466-26** above shall not apply to any wetlands on the landward side of a bulkhead line established by the City under § 30.11, Wis. Stats., prior to May 7, 1982, under the authority of § 62.231(2m), Wis. Stats.

**§ 466-27 Permitted uses in shoreland-wetland.**

The following uses are permitted, subject to the provisions of Chs. 30 and 31, Wis. Stats., and the provisions of other local, state and federal laws, if applicable:

- A. Activities and uses which do not require the issuance of a zoning permit, provided that no wetland alteration occurs:
  - (1) Hiking, fishing, trapping, hunting, swimming, snowmobiling and boating;
  - (2) The harvesting of wild crops, such as marsh hay, ferns, moss, wild rice, berries, tree fruits and tree seeds, in a manner that is not injurious to the natural reproduction of such crops;
  - (3) The practice of silviculture, including the planting, thinning and harvesting of timber;
  - (4) The pasturing of livestock;
  - (5) The cultivation of agricultural crops; and
  - (6) The construction and maintenance of duck blinds.
- B. Uses which do not require the issuance of a zoning permit and which may involve wetland alterations only to the extent specifically provided below:
  - (1) The practice of silviculture, included limited temporary water-level-stabilization measures which are necessary to alleviate abnormally wet or dry conditions that would have an adverse impact on the conduct of silviculture activities if not corrected;
  - (2) The cultivation of cranberries, including limited wetland alterations necessary for the purpose of growing and harvesting cranberries;
  - (3) The maintenance and repair of existing drainage systems, where permissible under § 30.20, Wis. Stats., to restore preexisting levels of drainage, including the minimum amount of filling necessary to dispose of dredged spoil, provided that the filling is permissible under Ch. 30, Wis. Stats., and that dredged spoil is placed on existing spoil banks where possible;
  - (4) The construction and maintenance of fences for the pasturing of livestock, including limited excavating and filling necessary for such construction or maintenance;
  - (5) The construction and maintenance of piers, docks and walkways, observation decks and trail bridges built on pilings, including limited excavating and filling necessary for such construction or maintenance;
  - (6) The installation and maintenance of sealed tiles for the purpose of draining lands outside the shoreland-wetland zoning district, provided that such installation or maintenance is done in a manner designed to minimize the adverse impact upon the natural functions of the shoreland-wetland listed in § **466-29A** of this chapter; and
  - (7) The maintenance, repair, replacement and construction of existing highways and bridges, including limited excavating and filling necessary for such maintenance, repair, replacement or reconstruction.
- C. Uses which are allowed upon the issuance of a conditional use permit and which may include wetland alterations only to the extent specifically provided below:
  - (1) The construction and maintenance of roads which are necessary for the continuity of the municipal street system, the provision of essential utility and emergency services or to provide access to uses permitted under this section, as provided below:

- (a) The road cannot, as a practical matter, be located outside the wetland;
  - (b) The road is designed and constructed to minimize the adverse impact upon the natural functions of the wetland listed in § **466-29A**;
  - (c) The road is designed and constructed with the minimum cross-sectional area practical to serve the intended use;
  - (d) Road construction activities are carried out in the immediate area of the roadbed only; and
  - (e) Any wetland alteration must be necessary for the construction or maintenance of the road.
- (2) The construction and maintenance of nonresidential buildings, provided that:
- (a) The building is used solely in conjunction with a use permitted in the shoreland-wetland district or for the raising of waterfowl, minnows or other wetland or aquatic animals;
  - (b) The building cannot, as a practical matter, be located outside the wetland;
  - (c) The building does not exceed 500 square feet in floor area; and
  - (d) Only limited filling and excavating necessary to provide structural support for the building is allowed.
- (3) The establishment and development of public and private parks and recreation areas, outdoor education areas, historic, natural and scientific areas, game refuges and closed areas, fish and wildlife habitat improvement projects, game bird and animal farms, wildlife preserves and public boat-launching ramps, provided that:
- (a) Any private development allowed under this paragraph shall be used exclusively for the permitted purpose;
  - (b) Only limited filling and excavating necessary for the development of public boat-launching ramps, swimming beaches or the construction of park shelters or similar structures is allowed;
  - (c) The construction and maintenance of roads necessary for the uses permitted under this paragraph are allowed only where such construction and maintenance meets the criteria in Subsection **C(3)(a)**, above; and
  - (d) Wetland alterations in game refuges and closed areas, fish and wildlife habitat improvement projects, game bird and animal farms and wildlife preserves shall be for the purpose of improving wildlife habitat or to otherwise enhance wetland values.
- (4) The construction and maintenance of electric and telephone transmission lines and water, gas and sewer lines and related facilities and the construction and maintenance of railroad lines, provided that:
- (a) The transmission and distribution lines and related facilities and railroad lines cannot, as a practical matter, be located outside the wetland;
  - (b) Only limited filling or excavating necessary for such construction or maintenance is allowed; and
  - (c) Such construction or maintenance is done in a manner designed to minimize the adverse impact upon the natural functions of the wetland listed in § **466-29A**.

§ 466-28 **Prohibited uses in shoreland-wetland.**

- A. Any use not listed in § **466-27** is prohibited, unless the wetland or a portion of the wetland has been rezoned by amendment of this chapter in accordance with § **466-29** and Article **X**.
- B. The use of a boathouse for human habitation and the construction or placement of a boathouse or fixed houseboat below the ordinary high-water mark of any navigable waters are prohibited.

§ 466-29 **Rezoning shoreland-wetland.**

- A. Rezoning of a shoreland-wetland shall require amendment of the Final Wisconsin Wetland Inventory Map adopted in § **466-5B** pursuant to procedures established in Article **X** of this chapter. In order to ensure that any amendment will be consistent with the shoreland protection objectives of § 281.31(2m), Wis. Stats., the City shall not rezone a wetland in a shoreland-wetland zoning district, or any portion thereof, where the proposed rezoning may result in a significant adverse impact upon any of the following:
  - (1) Stormwater and floodwater storage capacity;
  - (2) Maintenance of dry season stream flow or the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area or the flow of groundwater through a wetland;
  - (3) Filtering or storage of sediments, nutrients, heavy metals or organic compounds that would otherwise drain into navigable waters;
  - (4) Shoreline protection against soil erosion;
  - (5) Fish spawning, breeding, nursery or feeding grounds;
  - (6) Wildlife habitat; or
  - (7) Areas of special recreational, scenic or scientific interest, including scarce wetland types of habitat of endangered species.
- B. Upon notification of a proposed amendment as required by Article **X**, if the district office of the Department determines that a proposed rezoning may have a significant adverse impact upon any of the criteria listed in § **466-26**, the Department shall so notify the City of its determination either prior to or during the public hearing held on the proposed amendment.
- C. If the Department notifies the Plan Commission in writing that a proposed amendment may have a significant adverse impact upon any of the criteria listed in § **466-26**, that proposed amendment, if approved by the City, shall not become effective until more than 30 days have elapsed since written notice of the Council approval was mailed to the Department, as required by Article **X**. If within the thirty-day period the Department notifies the Common Council that the Department intends to adopt a superseding shoreland-wetland zoning ordinance for the municipality under § 62.231(6), Wis. Stats., the proposed amendment shall not become effective until that ordinance adoption procedure is completed or otherwise terminated. The record of the Common Council decision on the proposed amendment shall advise the petitioner of the provisions of this section.

Article VIII  
**Nonconforming Uses**

§ 466-30 **General.**

- A. Applicability. If these standards conform with § 62.23(7)(h), Wis. Stats., they shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was lawful before the passage of this chapter or any amendment thereto.
- B. The existing lawful use of a structure or its accessory use which is not in conformity with the

provisions of this chapter may continue, subject to the following conditions:

- (1) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this chapter. The words "modification" and "addition" include, but are not limited to, any alteration, addition, modification, structural repair, rebuilding or replacement of any such existing use, structure or accessory structure or use. Maintenance is not considered a modification; this includes painting, decorating, paneling and other nonstructural components and the maintenance, repair or replacement of existing private sewage or water supply systems or connections to public utilities. Any costs associated with the repair of a damaged structure are not considered maintenance. The construction of a deck that does not exceed 200 square feet and that is adjacent to the exterior wall of a principal structure is not an extension, modification or addition. The roof of the structure may extend over a portion of the deck in order to provide safe ingress and egress to the principal structure.
- (2) If a nonconforming use or the use of a nonconforming structure is discontinued for 12 consecutive months, it is no longer permitted and any future use of the property, and any structure or building thereon, shall conform to the applicable requirements of this chapter;
- (3) As requests are received for modifications or additions to nonconforming uses or nonconforming structures in the floodplain, the City shall keep a record which lists all nonconforming uses and nonconforming structures, their present equalized assessed value, the cost of all modifications or additions which have been permitted, and the percentage of the structure's total current value those modifications represent;
- (4) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this chapter. Contiguous dry land access must be provided for residential and commercial uses in compliance with § 466-17A. The costs of elevating the lowest floor of a nonconforming building or a building with a nonconforming use to the flood-protection elevation are excluded from the fifty-percent provisions of this paragraph;
- (5) No maintenance to any nonconforming structure or any structure with a nonconforming use, the cost of which would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this chapter. Contiguous dry land access must be provided for residential and commercial uses in compliance with § 466-17A.
- (6) If on a per-event basis the total value of the work being done under Subsection **B(4)** and **(5)** equals or exceeds 50% of the present equalized assessed value, the work shall not be permitted unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this chapter. Contiguous dry land access must be provided for residential and commercial uses in compliance with § 466-17A.
- (7) Except as provided in Subsection **B(8)**, if any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged, it cannot be replaced, reconstructed or rebuilt unless the use and the structure meet the current ordinance requirements. A structure is considered substantially damaged if the total cost to restore the structure to its predamaged condition equals or exceeds 50% of the structure's present equalized assessed value.
- (8) For nonconforming buildings that are substantially damaged or destroyed by a nonflood disaster, the repair or reconstruction of any such nonconforming building shall be permitted in order to restore it to the size and use in effect prior to the damage event, provided that the minimum federal code requirements below are met and all required permits have been granted prior to the start of construction.

(a) Residential structures;

- [1] Shall have the lowest floor, including basement, elevated to or above the base flood elevation using fill, pilings, columns, posts or perimeter walls. Perimeter walls must meet the requirements of § **466-41B**.
- [2] Shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, and shall be constructed with methods and materials resistant to flood damage.
- [3] Shall be constructed with electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.
- [4] In A Zones, obtain, review and utilize any flood data available from a federal, state or other source.
- [5] In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in § **466-20A**.
- [6] In AO Zones, shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.

(b) Nonresidential structures.

- [1] Shall meet the requirements of § **466-30B(8)(a)[1]** to **[6]**.
- [2] Shall either have the lowest floor, including basement, elevated to or above the regional flood elevation or, together with attendant utility and sanitary facilities, shall meet the standards in § **466-41A** or **B**.
- [3] In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in § **466-20A**.
- (9) A nonconforming historic structure may be altered if the alteration will not preclude the structure's continued designation as a historic structure; the alteration will comply with § **466-13A**; flood-resistant materials are used; and construction practices and floodproofing methods that comply with § **466-41** are used. Repair or rehabilitation of historic structures shall be exempt from the development standards of § **466-30B(8)(a)** if it is determined that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and is the minimum necessary to preserve the historic character and design of the structure.

§ 466-31 **Floodway district.**

A. No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in the floodway district, unless such modification or addition:

- (1) Has been granted a permit or variance which meets all ordinance requirements;
- (2) Meets the requirements of § **466-30**;
- (3) Shall not increase the obstruction to flood flows or regional flood height;
- (4) Any addition to the existing structure shall be floodproofed, pursuant to § **466-41**, by means other than the use of fill, to the flood-protection elevation; and
- (5) If any part of the foundation below the flood-protection elevation is enclosed, the following standards shall apply:

- (a) The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of floodwaters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;
  - (b) The parts of the foundation located below the flood-protection elevation must be constructed of flood-resistant materials;
  - (c) Mechanical and utility equipment must be elevated or floodproofed to or above the flood-protection elevation; and
  - (d) The use must be limited to parking, building access or limited storage.
- B. No new on-site sewage disposal system or addition to an existing on-site sewage disposal system, except where an addition has been ordered by a government agency to correct a hazard to public health, shall be allowed in the floodway district. Any replacement, repair or maintenance of an existing on-site sewage disposal system in a floodway area shall meet the applicable requirements of all municipal ordinances, § **466-41** and Ch. SPS 383, Wis. Adm. Code.
- C. No new well or modification to an existing well used to obtain potable water shall be allowed in the floodway district. Any replacement, repair or maintenance of an existing well in the floodway district shall meet the applicable requirements of all municipal ordinances, § **466-41** and Chs. NR 811 and NR 812, Wis. Adm. Code.

§ 466-32 **Flood-fringe district.**

- A. No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use unless such modification or addition has been granted a permit or variance by the City and meets the requirements of § **466-17**, except where Subsection **B** is applicable.
- B. Where compliance with the provisions of Subsection **A** would result in unnecessary hardship and only where the structure will not be used for human habitation or be associated with a high flood damage potential, the Board of Appeals, using the procedures established in § **466-38**, may grant a variance from those provisions of Subsection **A** for modifications or additions, using the criteria listed below. Modifications or additions which are protected to elevations lower than the flood-protection elevation may be permitted if:
  - (1) No floor is allowed below the regional flood elevation for residential or commercial structures;
  - (2) Human lives are not endangered;
  - (3) Public facilities, such as water or sewer, shall not be installed;
  - (4) Flood depths shall not exceed two feet;
  - (5) Flood velocities shall not exceed two feet per second; and
  - (6) The structure shall not be used for storage of materials as described in § **466-17E**.
- C. All new private sewage disposal systems or addition to, replacement, repair or maintenance of a private sewage disposal system shall meet all the applicable provisions of all local ordinances, § **466-41** and Ch. SPS 383, Wis. Adm. Code.
- D. All new wells or addition to, replacement, repair or maintenance of a well shall meet the applicable provisions of this chapter, § **466-41** and Ch. NR 811 and NR 812, Wis. Adm. Code.

§ 466-33 **Flood storage district.**

No modifications or additions shall be allowed to any nonconforming structure in a flood storage area unless the standards outlined in § 466-24 are met.

Article IX  
**Administration**

§ 466-34 **Administrators enumerated.**

The Zoning Administrator, Plan Commission and Zoning Board of Appeals shall administer this chapter.

§ 466-35 **Zoning Administrator.**

- A. Duties and powers. The Zoning Administrator is authorized to administer this chapter and shall have the following duties and powers:
- (1) Advise applicants of the chapter provisions, assist in preparing permit applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all permit applications.
  - (2) Issue permits and inspect properties for compliance with provisions of this chapter and issue certificates of compliance where appropriate.
  - (3) Inspect and assess all damaged floodplain structures to determine if substantial damage to the structures has occurred.
  - (4) Keep records of all official actions, such as:
    - (a) All permits issued, inspections made, and work approved;
    - (b) Documentation of certified lowest floor and regional flood elevations;
    - (c) Floodproofing certificates.
    - (d) Water surface profiles, Floodplain Zoning Maps and ordinances, nonconforming uses and structures, including changes, appeals, variances and amendments.
    - (e) All substantial damage assessment reports for floodplain structures.
    - (f) List of nonconforming structures and uses.
  - (5) Submit copies of the following items to the Department regional office:
    - (a) Within 10 days of the decision, a copy of any decisions on variances, appeals for map or text interpretations, and map or text amendments;
    - (b) Copies of case-by-case analyses and other required information, including an annual summary of floodplain zoning actions taken.
    - (c) Copies of substantial damage assessments performed and all related correspondence concerning the assessments.
  - (6) Investigate, prepare reports and report violations of this chapter to the Plan Commission and City Attorney for prosecution. Copies of the reports shall also be sent to the Department regional office.
  - (7) Submit copies of amendments and biennial reports to the FEMA regional office.
- B. Land use permit. A land use permit shall be obtained before any new development, repair,

modification or addition to an existing structure, or change in the use of a building or structure, including sewer and water facilities, may be initiated. Application to the Zoning Administrator shall include:

- (1) General information.
  - (a) Name and address of the applicant, property owner and contractor.
  - (b) Legal description, proposed use, and whether it is new construction or a modification.
- (2) Site development plan. A site plan drawn to scale shall be submitted with the permit application form and shall contain:
  - (a) Location, dimensions, area and elevation of the lot noted on a copy of the Wetland Inventory Map, if applicable;
  - (b) Location of the ordinary high-water mark of any abutting navigable waterways and boundaries of wetlands;
  - (c) Specifications and dimensions for areas of proposed wetland alteration;
  - (d) Existing and proposed topographic and drainage features and vegetative cover;
  - (e) Location of any structures with distances measured from the lot lines and street center lines;
  - (f) Location of any existing or proposed on-site sewage systems or private water supply systems;
  - (g) Location and elevation of existing or future access roads;
  - (h) Location of floodplain and floodway limits as determined from the Official Floodplain Zoning Maps;
  - (i) The elevation of the lowest floor of proposed buildings and any fill using National Geodetic and Vertical Datum (NGVD);
  - (j) Data sufficient to determine the regional flood elevation in NGVD at the location of the development and to determine whether or not the requirements of Article **III** or Article **IV** are met; and
  - (k) Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to § **466-6**. This may include any of the information noted in § **466-13A**.
- (3) Hydraulic and hydrologic studies to analyze development. All hydraulic and hydrologic studies shall be completed under the direct supervision of a professional engineer registered in the state. The study contractor shall be responsible for the technical adequacy of the study. All studies shall be reviewed and approved by the Department.
  - (a) Zone A floodplains.
    - [1] Hydrology. The appropriate method shall be based on the standards in § NR 116.07(3), Wis. Adm. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.
    - [2] Hydraulic modeling. The regional flood elevation shall be based on the standards in § NR 116.07(4), Wis. Adm. Code, Hydraulic Analysis: Determination of Regional Flood Elevation, and the following:

- [a] Determination of the required limits of the hydraulic model shall be based on detailed study information for downstream structures (dam, bridge, culvert) to determine adequate starting water surface elevation (WSEL) for the study.
  - [b] Channel sections must be surveyed.
  - [c] Minimum four-foot contour data in the overbanks shall be used for the development of cross-section overbank and floodplain mapping.
  - [d] A maximum distance of 500 feet between cross sections is allowed in developed areas with additional intermediate cross sections required at transitions in channel bottom slope, including a survey of the channel at each location.
  - [e] The most current version of the Hydrologic Engineering Center's River Analysis System (HEC-RAS) shall be used.
  - [f] A survey of bridge and culvert openings and the top of road is required at each structure.
  - [g] Additional cross sections are required at the downstream and upstream limits of the proposed development and any necessary intermediate locations based on the length of the reach if greater than 500 feet.
  - [h] Standard accepted engineering practices shall be used when assigning parameters for the base model such as flow, Manning's N values, expansion and contraction coefficients or effective flow limits. The base model shall be calibrated to past flooding data, such as high-water marks, to determine the reasonableness of the model results. If no historical data is available, adequate justification shall be provided for any parameters outside standard accepted engineering practices.
  - [i] The model must extend past the upstream limit of the difference in the existing and proposed flood profiles in order to provide a tie-in to existing studies. The height difference between the proposed flood profile and the existing study profiles shall be no more than 0.00 feet.
- [3] Mapping. A work map of the reach studied shall be provided, showing all cross section locations, floodway/floodplain limits based on best available topographic data, geographic limits of the proposed development, and whether the proposed development is located in the floodway.
- [a] If the proposed development is located outside of the floodway, then it is determined to have no impact on the regional flood elevation.
  - [b] If any part of the proposed development is in the floodway, it must be added to the base model to show the difference between existing and proposed conditions. The study must ensure that all coefficients remain the same as in the existing model, unless adequate justification based on standard accepted engineering practices is provided.
- (b) Zone AE floodplains:
- [1] Hydrology. If the proposed hydrology will change the existing study, the appropriate method to be used shall be based on § NR 116.07(3), Wis. Adm. Code, Hydrologic Analysis: Determination of Regional Flood Discharge.
  - [2] Hydraulic model. The regional flood elevation shall be based on the standards in § NR 116.07(4), Wis. Adm. Code, Hydraulic Analysis: Determination of Regional Flood Elevation, and the following:
    - [a] Duplicate effective model. The effective model shall be reproduced to ensure correct transference of the model data and to allow integration of the revised data to provide a continuous FIS model

upstream and downstream of the revised reach. If data from the effective model is available, models shall be generated that duplicate the FIS profiles and the elevations shown in the Floodway Data Table in the FIS report to within 0.1 foot.

- [b] Corrected effective model. The corrected effective model shall not include any man-made physical changes since the effective model date but shall import the model into the most current version of HEC-RAS for Department review.
  - [c] Existing (preproject conditions) model. The existing model shall be required to support conclusions about the actual impacts of the project associated with the revised (post-project) model or to establish more up-to-date models on which to base the revised (post-project) model.
  - [d] Revised (post-project conditions) model. The revised (post-project conditions) model shall incorporate the existing model and any proposed changes to the topography caused by the proposed development. This model shall reflect proposed conditions.
  - [e] All changes to the duplicate effective model and subsequent models must be supported by certified topographic information, bridge plans, construction plans and survey notes.
  - [f] Changes to the hydraulic models shall be limited to the stream reach for which the revision is being requested. Cross sections upstream and downstream of the revised reach shall be identical to those in the effective model and result in water surface elevations and top widths computed by the revised models matching those in the effective models upstream and downstream of the revised reach as required. The effective model shall not be truncated.
- [3] Mapping. Maps and associated engineering data shall be submitted to the Department for review which meet the following conditions:
- [a] Consistency between the revised hydraulic models, the revised floodplain and floodway delineations, the revised flood profiles, topographic work map, annotated FIRMs and/or Flood Boundary Floodway Maps (FBFMs), construction plans, bridge plans.
  - [b] Certified topographic map of suitable scale, contour interval, and a planimetric map showing the applicable items. If a digital version of the map is available, it may be submitted in order that the FIRM may be more easily revised.
  - [c] Annotated FIRM panel showing the revised 1% and 0.2% annual chance floodplains and floodway boundaries.
  - [d] If an annotated FIRM and/or FBFM and digital mapping data (GIS or CADD) are used, then all supporting documentation or metadata must be included with the data submission along with the Universal Transverse Mercator (UTM) projection and State Plane Coordinate System in accordance with FEMA mapping specifications.
  - [e] The revised floodplain boundaries shall tie into the effective floodplain boundaries.
  - [f] All cross sections from the effective model shall be labeled in accordance with the effective map and a cross section lookup table shall be included to relate to the model input numbering scheme.
  - [g] Both the current and proposed floodways shall be shown on the map.
  - [h] The stream center line or profile baseline used to measure stream distances in the model shall be visible on the map.
- (4) Expiration. All permits issued under the authority of this chapter shall expire no more than 180 days after issuance. The permit may be extended for a maximum of 180 days for good and sufficient

cause.

C. Certificate of compliance.

- (1) No land shall be occupied or used and no building which is hereafter constructed, altered, added to, modified, repaired, rebuilt or replaced shall be occupied until a certificate of compliance is issued by the Zoning Administrator, except where no permit is required, subject to the following provisions:
    - (a) The certificate of compliance shall show that the building or premises or part thereof and the proposed use conform to the provisions of this chapter;
    - (b) Application for such certificate shall be concurrent with the application for a permit;
    - (c) If all provisions of this chapter are met, the certificate of compliance shall be issued within 10 days after written notification that the permitted work is completed;
    - (d) The applicant shall submit a certification signed by a registered professional engineer, architect or land surveyor that the fill, lowest floor and floodproofing elevations are in compliance with the permit issued. Floodproofing measures also require certification by a registered professional engineer or architect that the requirements of § 466-41 are met.
  - (2) The Zoning Administrator may issue a temporary certificate of compliance for a building, premises or part thereof according to rules and regulations established by the City.
- D. Other permits. The applicant must secure all necessary permits from federal, state and local agencies, including, but not limited to, those required by the U.S. Army Corps of Engineers under § 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. § 1344.

§ 466-36 **Fees.**

All fees required under this chapter are set forth in the City's Fee Schedule.

§ 466-37 **Plan Commission.**

A. The Plan Commission shall:

- (1) Oversee the functions of the office of the Zoning Administrator; and
- (2) Review and advise the Common Council on all proposed amendments to this chapter, maps and text.

B. The Plan Commission shall not:

- (1) Grant variances to the terms of this chapter in place of action by the Zoning Board of Appeals; or
- (2) Amend the text or zoning maps in place of official action by the Common Council.

§ 466-38 **Board of Appeals.**

The Zoning Board of Appeals ("Board") shall exercise the following powers concerning the provisions of this chapter. The Zoning Administrator shall not be the Secretary of the Board.

A. Powers and duties. The Board of Appeals shall:

- (1) Appeals. Hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by an administrative official in the enforcement or administration of this chapter.
- (2) Boundary disputes. Hear and decide disputes concerning the district boundaries shown on the Official Floodplain Zoning Map.

- (3) Variances. Hear and decide, upon appeal, variances from the standards established by this chapter.
- (4) Conditional use. Hear and decide applications for any conditional use permits required by this chapter.

B. Appeals to the Board.

- (1) Appeals to the Board may be taken by any person aggrieved or by any officer or department of the City affected by any decision of the Zoning Administrator or other administrative officer. Such appeal shall be taken within 30 days, unless otherwise provided by the rules of the Board, by filing with the official whose decision is in question and with the Board a notice of appeal specifying the reasons for the appeal. The official whose decision is in question shall transmit to the Board all records regarding the matter appealed.
- (2) Notice and hearing for appeals including variances.
  - (a) Notice. The Board shall:
    - [1] Fix a reasonable time for the hearing;
    - [2] Publish adequate notice pursuant to Wisconsin Statutes, specifying the date, time, place and subject of the hearing;
    - [3] Assure that notice shall be mailed to the parties in interest and the Department regional office at least 10 days in advance of the hearing.
  - (b) Hearing. Any party may appear in person or by agent. The Board shall:
    - [1] Resolve boundary disputes according to § **466-38C**.
    - [2] Decide variance applications according to § **466-38D**.
    - [3] Decide appeals of permit denials according to § **466-40**.
  - (c) Decision. The final decision regarding the appeal or variance application shall:
    - [1] Be made within a reasonable time;
    - [2] Be sent to the Department regional office within 10 days of the decision;
    - [3] Be a written determination signed by the Chairperson or Secretary of the Board;
    - [4] State the specific facts which are the basis for the Board's decision;
    - [5] Either affirm, reverse, vary or modify the order, requirement, decision or determination appealed, in whole or in part, dismiss the appeal for lack of jurisdiction, or grant or deny the variance application;
    - [6] Include the reasons for granting an appeal, describing the hardship demonstrated by the applicant in the case of a variance, clearly stated in the recorded minutes of the Board proceedings.
- C. Boundary disputes. The following procedure shall be used by the Board in hearing disputes concerning floodplain district boundaries:
  - (1) If a floodplain district boundary is established by approximate or detailed floodplain studies, the flood elevations or profiles shall prevail in locating the boundary. If none exist, other evidence may be examined.

- (2) The person contesting the boundary location shall be given a reasonable opportunity to present arguments and technical evidence to the Board.
- (3) If the boundary is incorrectly mapped, the Board should inform the Plan Commission or the person contesting the boundary location to petition the Common Council for a map amendment according to Article X, Amendments.

D. Variance.

- (1) The Board may, upon appeal, grant a variance from the standards of this chapter if an applicant convincingly demonstrates that:
  - (a) Literal enforcement of the provisions this chapter will cause unnecessary hardship;
  - (b) The hardship is due to adoption of the floodplain ordinance and unique property conditions not common to adjacent lots or premises. In such case, the relevant provisions of this chapter or the map must be amended;
  - (c) The variance is not contrary to the public interest; and
  - (d) The variance is consistent with the purpose of this chapter in § 466-3.
- (2) In addition to the criteria in Subsection D(1), to qualify for a variance under FEMA regulations, the following criteria must be met:
  - (a) The variance shall not cause any increase in the regional flood elevation;
  - (b) Variances can only be granted for lots that are less than one-half acre and are contiguous to existing structures constructed below the RFE;
  - (c) Variances shall only be granted upon a showing of good and sufficient cause, shall be the minimum relief necessary, shall not cause increased risks to public safety or nuisances, shall not increase costs for rescue and relief efforts, and shall not be contrary to the purpose of this chapter.
- (3) A variance shall not:
  - (a) Grant, extend or increase any use prohibited in the zoning district.
  - (b) Be granted for a hardship based solely on an economic gain or loss.
  - (c) Be granted for a hardship which is self-created.
  - (d) Damage the rights or property values of other persons in the area.
  - (e) Allow actions without the amendments to this chapter or map(s) required in Article X, Amendments, § 466-44.
  - (f) Allow any alteration of a historic structure, including its use, which would preclude its continued designation as a historic structure.
- (4) When a floodplain variance is granted, the Board shall notify the applicant in writing that it may increase risks to life and property and flood insurance premiums could increase up to \$25 per \$100 of coverage. A copy shall be maintained with the variance record.

§ 466-39 **Conditional use permits.**

- A. Application. Any use listed as a conditional use in this chapter shall be permitted only after an

application has been submitted to the Zoning Administrator and a conditional use permit has been granted by the Board of Appeals, following the procedures in § **466-38**. To secure information upon which to base its determination, the Board of Appeals may require the applicant to furnish, in addition to the information required for a building/zoning permit, other pertinent information which is necessary to determine if the proposed use is consistent with the purpose of this chapter.

- B. Conditions. Upon consideration of the permit application and the standards applicable to the permitted uses in this chapter, the Board of Appeals shall attach such conditions to a conditional use permit, in addition to those required elsewhere in this chapter, as are necessary to further the purposes of this chapter as listed in § **466-3**. Such conditions may include specifications for, without limitation because of specific enumeration, type of shore cover; erosion-protection measures; increased side yard setbacks; specific sewage disposal and water supply facilities; landscaping and planting screens; period of operation; operational control; sureties; deed restrictions; location of piers, docks, parking areas and signs; and type of construction.

§ 466-40 **Review of appeals of permit denials.**

A. The Board shall review all data related to the appeal. This may include:

- (1) Permit application data listed in § **466-35B**.
- (2) Floodway/flood-fringe determination data in § **466-21**.
- (3) Data listed in § **466-13A(2)(b)** where the applicant has not submitted this information to the Zoning Administrator.
- (4) Other data submitted with the application or submitted to the Board with the appeal.

B. For appeals of all denied permits the Board shall:

- (1) Follow the procedures of § **466-38**;
- (2) Consider Plan Commission recommendations; and
- (3) Either uphold the denial or grant the appeal.

C. For appeals concerning increases in regional flood elevation, the Board shall:

- (1) Uphold the denial where the Board agrees with the data showing an increase in flood elevation. Increases may only be allowed after amending the flood profile and map and all appropriate legal arrangements are made with all adversely affected property owners as per the requirements of Article **X**, Amendments; and
- (2) Grant the appeal where the Board agrees that the data properly demonstrates that the project does not cause an increase, provided no other reasons for denial exist.

§ 466-41 **Floodproofing.**

A. No permit or variance shall be issued for a nonresidential structure designed to be watertight below the regional flood elevation until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the flood-protection elevation and submits a FEMA floodproofing certificate.

B. For a structure designed to allow the entry of floodwaters, no permit or variance shall be issued until the applicant submits a plan either:

- (1) Certified by a registered professional engineer or architect; or

- (2) Meets or exceeds the following standards:
  - (a) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
  - (b) The bottom of all openings shall be no higher than one foot above grade; and
  - (c) Openings may be equipped with screens, louvers, valves or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
- C. Floodproofing measures shall be designed, as appropriate, to:
  - (1) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;
  - (2) Protect structures to the flood-protection elevation;
  - (3) Anchor structures to foundations to resist flotation and lateral movement;
  - (4) Minimize or eliminate infiltration of floodwaters; and
  - (5) Minimize or eliminate discharges into floodwaters.
- D. Floodproofing measures could include:
  - (1) Reinforcing walls and floors to resist rupture or collapse caused by water pressure or floating debris.
  - (2) Adding mass or weight to prevent flotation.
  - (3) Placing essential utilities above the flood-protection elevation.
  - (4) Installing surface or subsurface drainage systems to relieve foundation wall and basement floor pressures.
  - (5) Constructing water supply wells and waste treatment systems to prevent the entry of floodwaters.
  - (6) Putting cutoff valves on sewer lines or eliminating gravity-flow basement drains.

§ 466-42 **Public information.**

- A. Place marks on structures to show the depth of inundation during the regional flood.
- B. All maps, engineering data and regulations shall be available and widely distributed.
- C. All real estate transfers should show what floodplain zoning district any real property is in.

## Article X Amendments

§ 466-43 **Obstructions or increases.**

- A. Obstructions or increases may only be permitted if amendments are made to this chapter, the Official Floodplain Zoning Maps, floodway lines and water surface profiles, in accordance with § **466-44**.
- B. In AE Zones with a mapped floodway, no obstructions or increases shall be permitted unless the applicant receives a conditional letter of map revision from FEMA and amendments are made to this chapter, the Official Floodplain Zoning Maps, floodway lines and water surface profiles, in accordance with § **466-44**. Any such alterations must be reviewed and approved by FEMA and the

DNR.

- C. In A Zones, increases equal to or greater than 1.0 foot may only be permitted if the applicant receives a conditional letter of map revision from FEMA and amendments are made to this chapter, the official Floodplain Maps, floodway lines and water surface profiles, in accordance with § **466-44**.

§ 466-44 **General.**

The Common Council may change or supplement the floodplain zoning district boundaries and this chapter in the manner outlined in § **466-45** below. Actions which require an amendment to the ordinance and/or submittal of a letter of map change (LOMC) include, but are not limited to, the following:

- A. Any fill or floodway encroachment that obstructs flow causing any increase in the regional flood height;
- B. Any change to the floodplain boundaries and/or watercourse alterations on the FIRM;
- C. Any changes to any other officially adopted floodplain maps listed in § **466-5B**;
- D. Any floodplain fill which raises the elevation of the filled area to a height at or above the flood-protection elevation and is contiguous to land lying outside the floodplain;
- E. Correction of discrepancies between the water surface profiles and floodplain maps;
- F. Any upgrade to a floodplain zoning ordinance text required by § NR 116.05, Wis. Adm. Code, or otherwise required by law, or for changes by the City;
- G. All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the flood-fringe that is based on a base flood elevation from a FIRM require prior approval by FEMA.

§ 466-45 **Procedures.**

Ordinance amendments may be made upon petition of any party according to the provisions of § 62.23, Wis. Stats. The petitions shall include all data required by §§ **466-21** and **466-30B**. The land use permit shall not be issued until a letter of map revision is issued by FEMA for the proposed changes.

- A. The proposed amendment shall be referred to the Plan Commission for a public hearing and recommendation to the Common Council. The amendment and notice of public hearing shall be submitted to the Department regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of § 62.23, Wis. Stats.
- B. No amendments pursuant to this section shall become effective until reviewed and approved by the Department.
- C. All persons petitioning for a map amendment that obstructs flow, causing any increase in the regional flood height, shall obtain flooding easements or other appropriate legal arrangements from all adversely affected property owners and notify local units of government before the amendment can be approved by the Common Council.

## Article XI Enforcement

§ 466-46 **Violations and penalties.**

Any violation of the provisions of this chapter by any person shall be unlawful and shall be referred to the City Attorney, who shall expeditiously prosecute all such violators. A violator shall, upon conviction, be subject to a forfeiture as provided in § **1-4** of the Code, together with the taxable costs of such action.

Each day of continued violation shall constitute a separate offense. Every violation of this chapter is a public nuisance, and the creation may be enjoined and the maintenance may be abated by action at suit of the City, the state or any citizen thereof pursuant to § 87.30, Wis. Stats.

## **Article XII Definitions**

### **§ 466-47 Word usage.**

Unless specifically defined, words and phrases in this chapter shall have their common law meaning and shall be applied in accordance with their common usage. Words used in the present tense include the future; the singular number includes the plural; and the plural number includes the singular. The word "may" is permissive; "shall" is mandatory and is not discretionary.

### **§ 466-48 Terms defined.**

As used in this chapter, the following terms shall have the meanings indicated:

#### **ACCESSORY STRUCTURE OR USE**

A facility, structure, building or use which is accessory or incidental to the principal use of a property, structure or building.

#### **AH ZONE**

See "area of shallow flooding."

#### **ALTERATION**

An enhancement, upgrading or substantial change or modifications other than an addition or repair to a dwelling or to electrical, plumbing, heating, ventilating, air-conditioning and other systems within a structure.

#### **AO ZONE**

See "area of shallow flooding."

#### **AREA OF SHALLOW FLOODING**

A designated AO, AH, AR/AO, AR/AH or VO Zone on a community's Flood Insurance Rate Map (FIRM) with a one-percent or greater annual chance of flooding to an average depth of one to three feet, where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

#### **A ZONES**

Those areas shown on the Official Floodplain Zoning Map which would be inundated by the regional flood. These areas may be numbered or unnumbered A Zones. The A Zones may or may not be reflective of flood profiles, depending on the availability of data for a given area.

#### **BASE FLOOD**

The flood having a one-percent chance of being equaled or exceeded in any given year, as published by FEMA as part of a FIS and depicted on a FIRM.

#### **BASEMENT**

Any enclosed area of a building having its floor subgrade, i.e., below ground level, on all sides.

#### **BUILDING**

See "structure."

**BULKHEAD LINE**

A geographic line along a reach of navigable water that has been adopted by a municipal ordinance and approved by the Department pursuant to § 30.11, Wis. Stats., and which allows limited filling between this bulkhead line and the original ordinary high-water mark, except where such filling is prohibited by the floodway provisions of this chapter.

**CAMPGROUND**

Any parcel of land which is designed, maintained, intended or used for the purpose of providing sites for nonpermanent overnight use by four or more camping units, or which is advertised or represented as a camping area.

**CAMPING UNIT**

Any portable device, no more than 400 square feet in area, used as a temporary shelter, including but not limited to a camping trailer, motor home, bus, van, pickup truck, or tent that is fully licensed, if required, and ready for highway use.

**CERTIFICATE OF COMPLIANCE**

A certification that the construction and the use of land or a building, the elevation of fill or the lowest floor of a structure is in compliance with all of the provisions of this chapter.

**CHANNEL**

A natural or artificial watercourse with definite bed and banks to confine and conduct normal flow of water.

**CRAWLWAYS or CRAWL SPACE**

An enclosed area below the first usable floor of a building, generally less than five feet in height, used for access to plumbing and electrical utilities.

**DECK**

An unenclosed exterior structure that has no roof or sides, but has a permeable floor which allows the infiltration of precipitation.

**DEPARTMENT**

The Wisconsin Department of Natural Resources.

**DEVELOPMENT**

Any artificial change to improved or unimproved real estate, including, but not limited to, the construction of buildings, structures or accessory structures; the construction of additions or alterations to buildings, structures or accessory structures; the repair of any damaged structure or the improvement or renovation of any structure, regardless of percentage of damage or improvement; the placement of buildings or structures; subdivision layout and site preparation; mining, dredging, filling, grading, paving, excavation or drilling operations; the storage, deposition or extraction of materials or equipment; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

**DRY LAND ACCESS**

A vehicular access route which is above the regional flood elevation and which connects land located in the floodplain to land outside the floodplain, such as a road with its surface above regional flood elevation, and wide enough for wheeled rescue and relief vehicles.

**ENCROACHMENT**

Any fill, structure, equipment, use or development in the floodway.

**FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)**

The federal agency that administers the National Flood Insurance Program.

**FLOOD FREQUENCY**

The probability of a flood occurrence which is determined from statistical analyses. The frequency of a particular flood event is usually expressed as occurring, on the average, once in a specified number of years or as a percent chance of occurring in any given year.

**FLOOD-FRIDGE**

That portion of the floodplain outside of the floodway which is covered by floodwaters during the regional flood and associated with standing water rather than flowing water.

**FLOOD HAZARD BOUNDARY MAP**

A map designating approximate flood hazard areas. Flood hazard areas are designated as unnumbered A Zones and do not contain floodway lines or regional flood elevations. This map forms the basis for both the regulatory and insurance aspects of the National Flood Insurance Program (NFIP) until superseded by a Flood Insurance Study and a Flood Insurance Rate Map.

**FLOOD INSURANCE RATE MAP (FIRM)**

A map of a community on which the Federal Insurance Administration has delineated both the floodplain and the risk premium zones applicable to the community. This map can only be amended by the Federal Emergency Management Agency.

**FLOOD INSURANCE STUDY**

A technical engineering examination, evaluation and determination of the local flood hazard areas. It provides maps designating those areas affected by the regional flood and provides both flood insurance rate zones and base flood elevations and may provide floodway lines. The flood hazard areas are designated as numbered and unnumbered A Zones. Flood Insurance Rate Maps that accompany the Flood Insurance Study form the basis for both the regulatory and the insurance aspects of the National Flood Insurance Program.

**FLOOD or FLOODING**

A general and temporary condition of partial or complete inundation of normally dry land areas caused by one of the following conditions:

- A. The overflow or rise of inland waters;
- B. The rapid accumulation or runoff of surface waters from any source;
- C. The inundation caused by waves or currents of water exceeding anticipated cyclical levels along the shore of Lake Michigan or Lake Superior; or
- D. The sudden increase caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a seiche, or by some similarly unusual event.

**FLOODPLAIN**

Land which has been or may be covered by floodwater during the regional flood. It includes the floodway and the flood-fringe and may include other designated floodplain areas for regulatory

purposes.

### **FLOODPLAIN ISLAND**

A natural geologic land formation within the floodplain that is surrounded but not covered by floodwater during the regional flood.

### **FLOODPLAIN MANAGEMENT**

Policy and procedures to ensure wise use of floodplains, including mapping and engineering, mitigation, education and administration and enforcement of floodplain regulations.

### **FLOOD PROFILE**

A graph or a longitudinal profile line showing the relationship of the water surface elevation of a flood event to locations of land surface elevations along a stream or river.

### **FLOODPROOFING**

Any combination of structural provisions, changes or adjustments to properties and structures, water and sanitary facilities and contents of buildings subject to flooding for the purpose of reducing or eliminating flood damage.

### **FLOOD-PROTECTION ELEVATION**

An elevation of two feet of freeboard above the water surface profile elevation designated for the regional flood. (Also see "freeboard.")

### **FLOOD STORAGE**

Those floodplain areas where storage of floodwaters has been taken into account during analysis in reducing the regional flood discharge.

### **FLOODWAY**

The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.

### **FREEBOARD**

A safety factor expressed in terms of a specified number of feet above a calculated flood level. Freeboard compensates for any factors that cause flood heights greater than those calculated, including ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways, the effects of watershed urbanization, loss of flood storage areas due to development and aggregation of the river or stream bed.

### **HABITABLE STRUCTURE**

Any structure or portion thereof used or designed for human habitation.

### **HEARING NOTICE**

Publication or posting meeting the requirements of Ch. 985, Wis. Stats. For appeals, a Class 1 notice, published once at least one week (seven days) before the hearing, is required. For all zoning ordinances and amendments, a Class 2 notice, published twice, once each week consecutively, the last at least a week (seven days) before the hearing. Local ordinances or bylaws may require additional notice exceeding these minimums.

### **HIGHEST ADJACENT GRADE**

The highest natural elevation of the ground surface prior to construction next to the proposed walls

of a structure.

### **HIGH FLOOD DAMAGE POTENTIAL**

Damage that could result from flooding that includes any danger to life or health or any significant economic loss to a structure or building and its contents.

### **HISTORIC STRUCTURE**

Any structure that is either:

- A. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program, as determined by the Secretary of the Interior, or by the Secretary of the Interior in states without approved programs.

### **INCREASE IN REGIONAL FLOOD HEIGHT**

A calculated upward rise in the regional flood elevation greater than 0.00 foot, based on a comparison of existing conditions and proposed conditions, which is directly attributable to development in the floodplain but not attributable to manipulation of mathematical variables such as roughness factors, expansion and contraction coefficients, and discharge.

### **LAND USE**

Any nonstructural use made of unimproved or improved real estate. (Also see "development.")

### **LOWEST ADJACENT GRADE**

Elevation of the lowest ground surface that touches any of the exterior walls of a building.

### **LOWEST FLOOR**

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 44 CFR 60.3.

### **MAINTENANCE**

The act or process of restoring to original soundness, including redecorating, refinishing, nonstructural repairs, or the replacement of existing fixtures, systems or equipment with equivalent fixtures, systems or structures.

### **MANUFACTURED HOME**

A structure transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities. The term "manufactured home" includes a mobile home but does not include a "mobile recreational vehicle."

**MOBILE/MANUFACTURED HOME PARK, EXPANSION TO EXISTING**

The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed. This includes installation of utilities, construction of streets and either final site grading or the pouring of concrete pads.

**MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION**

A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION, EXISTING**

A parcel of land, divided into two or more manufactured home lots for rent or sale, on which the construction of facilities for servicing the lots is completed before the effective date of this chapter. At a minimum, this would include the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads.

**MOBILE RECREATIONAL VEHICLE**

A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection; designed to be self-propelled, carried or permanently towable by a licensed, light-duty vehicle; is licensed for highway use if registration is required and is designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use. Manufactured homes that are towed or carried onto a parcel of land, but do not remain capable of being towed or carried, including park model homes, do not fall within the definition of "mobile recreational vehicles."

**MODEL, CORRECTED EFFECTIVE**

A hydraulic engineering model that corrects any errors that occur in the duplicate effective model, adds any additional cross sections to the duplicate effective model, or incorporates more detailed topographic information than that used in the current effective model.

**MODEL, DUPLICATE EFFECTIVE**

A copy of the hydraulic analysis used in the effective FIS and referred to as the "effective model."

**MODEL, EFFECTIVE**

The hydraulic engineering model that was used to produce the current effective Flood Insurance Study.

**MODEL, EXISTING (PREPROJECT)**

A modification of the duplicate effective model or corrected effective model to reflect any man-made modifications that have occurred within the floodplain since the date of the effective model but prior to the construction of the project for which the revision is being requested. If no modification has occurred since the date of the effective model, then this model would be identical to the corrected effective model or duplicate effective model.

**MODEL, REVISED (POST-PROJECT)**

A modification of the existing or preproject conditions model, duplicate effective model or corrected effective model to reflect revised or post-project conditions.

**MUNICIPALITY or MUNICIPAL**

The City of Monona.

## **NEW CONSTRUCTION**

For floodplain management purposes, "new construction" means structures for which the start of construction commenced on or after the effective date of floodplain zoning regulations adopted by this community and includes any subsequent improvements to such structures. For the purpose of determining flood insurance rates, it includes any structures for which the start of construction commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures.

## **NGVD or NATIONAL GEODETIC VERTICAL DATUM**

Elevations referenced to mean sea level datum, 1929 adjustment.

## **NONCONFORMING STRUCTURE**

An existing lawful structure or building which is not in conformity with the dimensional or structural requirements of this chapter for the area of the floodplain which it occupies. (For example, an existing residential structure in the flood-fringe district is a conforming use. However, if the lowest floor is lower than the flood-protection elevation, the structure is nonconforming.)

## **NONCONFORMING USE**

An existing lawful use or accessory use of a structure or building which is not in conformity with the provisions of this chapter for the area of the floodplain which it occupies. (Such as a residence in the floodway.)

## **OBSTRUCTION TO FLOW**

Any development which blocks the conveyance of floodwaters such that this development alone or together with any future development will cause an increase in regional flood height.

## **OFFICIAL FLOODPLAIN ZONING MAP**

That map, adopted and made part of this chapter, as described in § 466-5B, which has been approved by the Department and FEMA.

## **OPEN SPACE USE**

Those uses having a relatively low flood damage potential and not involving structures.

## **ORDINARY HIGH-WATER MARK**

The point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark, such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

## **PERSON**

An individual or group of individuals, corporation, partnership, association, municipality or state agency.

## **PRIVATE SEWAGE SYSTEM**

A sewage treatment and disposal system serving one structure, with a septic tank and soil absorption field located on the same parcel as the structure. It also means an alternative sewage system approved by the Department of Safety and Professional Services, including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure.

## **PUBLIC UTILITIES**

Those utilities using underground or overhead transmission lines such as electric, telephone and telegraph, and distribution and collection systems such as water, sanitary sewer and storm sewer.

### **REASONABLY SAFE FROM FLOODING**

Means base floodwaters will not inundate the land or damage structures to be removed from the floodplain and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

### **REGIONAL FLOOD**

A flood determined to be representative of large floods known to have occurred in Wisconsin. A regional flood is a flood with a one-percent chance of being equaled or exceeded in any given year and, if depicted on the FIRM, the RFE is equivalent to the BFE.

### **START OF CONSTRUCTION**

The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond initial excavation, or the placement of a manufactured home on a foundation. 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 part of the main structure. For an alteration, 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.

### **STRUCTURE**

Any man-made object with form, shape and utility, either permanently or temporarily attached to, placed upon or set into the ground, streambed or lake bed, including, but not limited to, roofed and walled buildings, gas or liquid storage tanks, bridges, dams and culverts.

### **SUBDIVISION**

Has the meaning given in § 236.02(12), Wis. Stats.

### **SUBSTANTIAL DAMAGE**

Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its predamaged condition would equal or exceed 50% of the equalized assessed value of the structure before the damage occurred.

### **SUBSTANTIAL IMPROVEMENT**

Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50% of the equalized assessed value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the work performed. The term does not, however, include either any project for the improvement of a building required to correct existing health, sanitary or safety code violations identified by the Building Official and that are the minimum necessary to assure safe living conditions or any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

### **UNNECESSARY HARDSHIP**

Where special conditions affecting a particular property, which were not self-created, have made

strict conformity with restrictions governing areas, setbacks, frontage, height or density unnecessarily burdensome or unreasonable in light of the purposes of the ordinance.

### **VARIANCE**

An authorization by the Board of Appeals for the construction or maintenance of a building or structure in a manner which is inconsistent with dimensional standards (not uses) contained in the Floodplain Zoning Ordinance.

### **VIOLATION**

The failure of a structure or other development to be fully compliant with this chapter. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

### **WATERSHED**

The entire region contributing runoff or surface water to a watercourse or body of water.

### **WATER SURFACE PROFILE**

A graphical representation showing the elevation of the water surface of a watercourse for each position along a reach of river or stream at a certain flood flow. A water surface profile of the regional flood is used in regulating floodplain areas.

### **WELL**

An excavation opening in the ground made by digging, boring, drilling, driving or other methods to

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