Legistar File No. 86804 Body

DRAFTER'S ANALYSIS: This proposed ordinance creates a new Chapter 21 of the Madison General Ordinances, which will now contain the zoning floodplain regulations and maps. This change is in response to the Wisconsin Department of Natural Resources (DNR) notifying the City that our current floodplain regulations (in MGO Chapter 28) are no longer in compliance with the minimum standards required by the DNR and the federal FEMA code. Local communities must have minimum standards for development in the floodplain to be able to participate in FEMA's National Flood Insurance Program (NFIP). The DNR certifies to FEMA that City ordinances meet the state and federal requirements necessary for flood insurance.

The City has been a member of the NFIP since 1975 and currently has $77.1 million of property value within 246 individual insurance policies in force through the NFIP. If FEMA suspends the City from the NFIP, it will likely substantially affect the City economically:

- No resident will be able to purchase a federal flood insurance policy or renew their current policy. Private flood insurance is hard to get in Wisconsin.
- Federal officers and agencies are prohibited from approving financial assistance for acquisition, construction, repair, or maintenance purposes in an area of special flood hazard in the community. This affects sales of structures in the floodplain.
- Public facilities and citizen-owned structures, during a federally declared flood disaster, are not eligible for the full assistance that normally would be available to communities that are members of the NFIP.
- Development potential may be affected. FEMA will not approve a Letter of Map Revision based on Fill (LOMR-F) because the community acknowledgement form cannot be signed if the community is not a participant in the NFIP.

On October 9th, 2024, DNR notified the City that FEMA drew new floodplain maps and our local floodplain ordinances no longer met the statutory and federal minimum requirements. Under federal code, once FEMA releases their new maps, the maps must be adopted by the City within six (6) months or FEMA will automatically suspend the City from the NFIP. DNR has interpreted federal code to also require the City adopt updated zoning language, or DNR will not certify to FEMA that the City complies with federal floodplain regulations required for participation in the NFIP.

Staff has worked with DNR and concluded that creating a new Chapter 21, a stand-alone floodplain zoning ordinance, is the best practice to show compliance with state and federal standards. The new ordinance also includes language for participation in the FEMA CRS Community Rating System program, which has the effect of providing reduced insurance premiums for policyholders. The DNR has approved the proposed Chapter 21, that, if adopted as written and on schedule, will be able to keep the City as a member in good standing of NFIP. Any referral delays or language changes may compromise the schedule and jeopardize the City's flood insurance policy holders.

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The Common Council of the City of Madison do hereby ordain as follows:

1. Chapter 21 entitled "Floodplain Zoning Ordinance" of the Madison General Ordinances is created as follows:

CHAPTER 21 - FLOODPLAIN ZONING ORDINANCE

SUBCHAPTER 21A: STATUTORY AUTHORIZATION, FINDING OF FACT, STATEMENT OF PURPOSE, TITLE, AND GENERAL PROVISIONS

21.01 TITLE

This ordinance shall be known as the Floodplain Zoning Ordinance for Madison, Wisconsin.

21.02 STATUTORY AUTHORIZATION

This ordinance is adopted pursuant to the authorization in Wis. Stat. § 62.23, for cities; and the requirements in Wis. Stat. §. 87.30.

21.03 FINDING OF FACT

Uncontrolled development and use of the floodplains and rivers of the City would impair the public health, safety, convenience, general welfare, and tax base.

21.04 STATEMENT OF PURPOSE

This ordinance is intended to regulate floodplain development to:

(1) Protect life, health and property;

(2) Minimize expenditures of public funds for flood control projects;

(3) Minimize rescue and relief efforts undertaken at the expense of the taxpayers;

(4) Minimize business interruptions and other economic disruptions;

(5) Minimize damage to public facilities in the floodplain;

(6) Minimize the occurrence of future flood blight areas in the floodplain;

(7) Discourage the victimization of unwary land and homebuyers;

(8) Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners; and

(9) Discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

21.05 GENERAL PROVISIONS

(1) Areas to be Regulated. This ordinance regulates all areas of special flood hazard identified as zones A, AO, AH, A1-30, or AE on the Flood Insurance Rate Map. Additional areas identified on maps approved by the Department of Natural Resources (DNR) and the City may also be regulated under the provisions of this ordinance, where applicable.

(2) Official Maps and Revisions. Special Flood Hazard Areas (SFHA) are designated as zones A, A1-30, AE, AH, or AO on the Flood Insurance Rate Maps (FIRMs) based on flood hazard analyses summarized in the Flood Insurance Study (FIS) listed in subd. (a) below. Additional flood hazard areas subject to regulation under this ordinance are identified on maps based on studies approved by the DNR and listed in subd. (b) below. These maps and revisions are on file in the office of the Zoning Administrator in the Madison Municipal Building, Madison, WI.

(a) Official Maps. Based on the Flood Insurance Study (FIS):

1. Flood Insurance Rate Map (FIRM), panel numbers 55025C0415G, 55025C0402G, 55025C0404G, 55025C0557G, 55025C0428G, 55025C0394G, 55025C0576G, 55025C0379G, 55025C0384G, 55025C0439G, 55025C0418G, 55025C0267G, 55025C0390G, 55025C0395G, 55025C0403G, 55025C0419G, 55025C0436G,

55025C0438G, 55025C0393G, 55025C0383G, 55025C0407G, 55025C0406G, 55025C0417G, 55025C0389G, 55025C0401G, 55025C0408G, 55025C0413G, 55025C0416G, and 55025C0409G dated 01/02/2009;

2. Flood Insurance Rate Map (FIRM), panel numbers 55025C0463H, 55025C0461H, 55025C0444H, 55025C0453H, 55025C0429H, 55025C0451H, 55025C0432H, 55025C0431H, 55025C0427H, 55025C0426H, 55025C0288H, 55025C0266H, 55025C0262H, 55025C0261H, 55025C0242H, 55025C0269H, 55025C0268H, 55025C0264H, 55025C0263H, 55025C0244H, and 55025C0243H dated 09/17/2014
3. Flood Insurance Rate Map (FIRM), panel numbers 55025C0433H, 55025C0443J, 55025C0434J, 55025C0442H, 55025C0437H, and 55025C0441H dated 04/09/2025
4. Flood Insurance Study (FIS) for Dane County, dated 04/09/2025
5. 16-05-1781P Letter of Map Revision effective 09/14/2016
6. 16-05-3204P Letter of Map Revision effective 10/27/2016.
7. 16-05-6112P Letter of Map Revision effective 03/10/2017.
8. 21-05-2552P Letter of Map Revision effective 04/12/2022
9. 22-05-1179P Letter of Map Revision effective 02/01/2023.

(b) Official Maps. Based on other studies. 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.

1. Dane County and Incorporated Areas Flood Storage Districts, Panels, 11, 12, 17, 18 and 19 effective April 9, 2025, approved by the DNR.

(3) Establishment of Floodplain Zoning Districts. The flood hazard areas regulated by this ordinance are divided into districts as follows:

(a) 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, within AE Zones as shown on the FIRM, or within A Zones shown on the FIRM when determined according to this chapter.

(b) The Floodfringe District (FF) is that portion of a riverine special flood hazard area outside the floodway within AE Zones on the FIRM, or, when floodway limits have been determined according to this chapter, within A Zones shown on the FIRM.

(c) The General Floodplain District (GFP) is those riverine areas that may be covered by floodwater during the regional flood in which a floodway boundary has not been delineated on the FIRM and also includes shallow flooding areas identified as AH and AO zones on the FIRM.

(d) The Flood Storage District (FSD) is that area of the floodplain where storage of floodwaters is calculated to reduce the regional flood discharge.

(4) Locating Floodplain Boundaries. Discrepancies between the exterior boundaries of zones A1-30, AE, AH, or A on the official floodplain zoning map and actual field conditions may be resolved using the criteria in subd (a) or (b) below. If a significant difference exists, the map shall be amended according to subsection 21.29, Amendments. The Zoning Administrator can rely on a boundary derived from a profile elevation to grant or deny a zoning certificate, whether or not a map amendment is required. The Zoning Administrator shall be responsible for documenting actual pre-

development field conditions and the basis upon which the district boundary was determined. Disputes between the Zoning Administrator and an applicant over the district boundary line shall be settled according to subsection 21.25(3) and the criteria in (a) and (b) below**.** Where the flood profiles are based on established base flood elevations from a FIRM, FEMA must approve any map amendment or revision pursuant to subsection 21.29, Amendments.

(a) If flood profiles exist, the map scale and the profile elevations shall determine the district boundary. The regional or base flood elevations shall govern if there are any discrepancies.

(b) Where flood profiles do not exist for projects, including any boundary of zone A or AO, the location of the boundary shall be determined by the map scale.

(5) Removal of Lands from Floodplain.

(a) Compliance with the provisions of this ordinance shall not be grounds for removing land from the floodplain unless it is filled at least two (2) feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to subsection 21.29, Amendments.

(b) The delineation of any of the Floodplain Districts may be revised by the City where natural or human-made changes have occurred and/or where more detailed studies have been conducted. However, prior to any such change, approval must be obtained from the DNR and Federal Emergency Management Agency (FEMA). A completed Letter of Map Revision is a record of this approval. The Zoning Administrator shall not sign a City acknowledgement form unless all criteria set forth in the following paragraphs are met:

1. The land and/or land around the structure must be filled at least two (2) feet above the regional or base flood elevation.

2. The fill must be contiguous to land outside the floodplain; Applicant shall obtain floodplain development zoning certificate before applying for a LOMR or LOMR-F.

(c) Removal of lands from the floodplain may also occur by operation of Wis Stat. §87.30(1)(e), if a property owner has obtained a Letter of Map Amendment from FEMA under 44 C.F.R. 70.

(6) Compliance.

(a) No structure or use within areas regulated by this ordinance shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged, or altered without full compliance with the terms of these regulations and all other applicable regulations that apply to uses within the jurisdiction of these regulations.

(b) Failure to obtain a floodplain development zoning certificates shall be a violation of these regulations and shall be punishable in accordance with subsection 21.32.

(c) Floodplain development zoning certificates issued on the basis of plans and applications approved by the Zoning Administrator authorize only the use, and arrangement, set forth in such approved plans and applications, or amendments thereto if approved by the Zoning Administrator. Use, arrangement, or construction contrary to that authorized shall be deemed a violation of these regulations and punishable in accordance with subsection 21.32.

(7) Municipalities and State Agencies Regulated.

Unless specifically exempted by law, all cities, villages, towns, and counties are required to comply with this ordinance and obtain all necessary permits. State agencies are required to comply if Wis. Stat. § 13.48(13) applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation (DOT) is exempt when Wis. Stat. § 30.2022 applies. Although exempt from a local zoning certificate and permit fees, DOT must provide sufficient project documentation and analysis to ensure that the community is in compliance with Federal, State, and local floodplain standards. If a local transportation project is located within a Zone A floodplain and is not a DOT project under Wis. Stat. § 30.2022, then the road project design documents (including appropriate detailed plans and profiles) may be sufficient to meet the requirements for issuance of a local floodplain permit if the following apply: The applicant provides documentation to the Zoning Administrator that the proposed project is a culvert replacement or bridge replacement under twenty (20) feet span at the same location, the project is exempt from a DNR permit under Wis. Stat. § 30.123(6)(d), the capacity is not decreased, the top road grade is not raised, and no floodway data is available from a federal, state, or other source. If floodway data is available in the impacted area from a federal, state, or other source that existing data must be utilized by the applicant in the analysis of the project site.

(8) Abrogation and Greater Restrictions.

(a) This ordinance supersedes all the provisions of any municipal zoning ordinance enacted under Wis. Stat. § 62.23, which relate to floodplains. A more restrictive ordinance shall continue in full force and effect to the extent of the greater restrictions, but not otherwise.

(b) This ordinance is not intended to repeal, abrogate, or impair any existing deed restrictions, covenants, or easements. If this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail.

(9) Interpretation.

In their interpretation and application, the provisions of this ordinance are the minimum requirements liberally construed in favor of the City and are not a limitation on or repeal of any other powers granted by the Wisconsin Statutes. If a provision of this ordinance, required by ch. NR 116, Wis. Adm. Code, is unclear, the provision shall be interpreted in light of the standards in effect on the date of the adoption of this ordinance or in effect on the date of the most recent text amendment to this ordinance.

(10) Warning and Disclaimer of Liability.

The flood protection standards in this ordinance are based on engineering experience and research. Larger floods may occur, or the flood height may be increased by human made or natural causes. This ordinance does not imply or guarantee that non-floodplain areas or permitted floodplain uses will be free from flooding and flood damages. This ordinance does not 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 ordinance.

(11) Severability.

Should any portion of this ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected.

(12) Annexed Areas for Cities and Villages.

The Dane County floodplain zoning provisions in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality 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 Map. Dane 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.

SUBCHAPTER 21B: GENERAL STANDARDS APPLICABLE TO ALL FLOODPLAIN DISTRICTS

21.06 GENERAL

The City shall review all zoning certificate applications to determine whether proposed building sites will be reasonably safe from flooding and assure that all necessary permits have been received from those governmental agencies whose approval is required by federal or state law.

(1) If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:.

(a) Be designed and anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

(b) Be constructed with flood-resistant materials;

(c) Be constructed by methods and practices that minimize flood damages; and

(d) Mechanical and utility equipment must be elevated to or above the flood protection elevation.

(2) If a subdivision or other proposed new development is in a flood-prone area, the community shall assure that:

(a) Such proposed subdivision or other proposed new development is consistent with the need to minimize flood damage within the flood-prone area;

(b) Public utilities and facilities such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and

(c) Adequate drainage is provided to reduce exposure to flood hazards.

All subdivision proposals (including manufactured home parks) shall include regional flood elevation and floodway data for any development that meets the subdivision definition of this ordinance and all other requirements in subsection 21.23(2).

21.07 HYDRAULIC AND HYDROLOGIC ANALYSES

(1) No floodplain development shall:

(a) 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

(b) Cause any increase in the regional flood height due to floodplain storage area lost.

(2) The Zoning Administrator shall deny zoning certificates 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 subsection 21.29, Amendments, are met.

21.08 WATERCOURSE ALTERATIONS

No zoning certificate 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 DNR and FEMA regional offices, and required the applicant to secure all necessary state and federal

permits. The standards of subsection 21.07 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 (6) months after the date of the watercourse alteration or relocation and pursuant to subsection 21.29, Amendments, the City 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.

21.09 CHAPTERS 30, 31, WIS. STATS., DEVELOPMENT

Development which requires a permit from DNR under Wis. Stats. § chs. 30 and 31, such as docks, piers, wharves, bridges, culverts, dams, and navigational aids, may be allowed if the necessary permits are obtained and amendments to the floodplain zoning ordinance are made according to subsection 21.29, Amendments.

21.10 PUBLIC OR PRIVATE CAMPGROUNDS

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

(1) The campground is approved by the Department of Agriculture, Trade and Consumer Protection;

(2) A zoning certificate for the campground is issued by the Zoning Administrator;

(3) The character of the river system and the campground elevation are such that a seventy-two (72)hour warning of an impending flood can be given to all campground occupants;

(4) 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 Building Inspection Division or Zoning Administrator, the municipal emergency government coordinator and the chief law enforcement official 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;

(5) This agreement shall be for no more than one (1) calendar year, at which time the agreement shall be reviewed and updated - by the officials identified in subsection(4) above - to remain in compliance with all applicable regulations, including those of the state Department of Agriculture, Trade and Consumer Protection and all other applicable regulations;

(6) All mobile recreational vehicles placed on site must meet one (1) of the following:

  (a) Be fully licensed, if required, and ready for highway use; or

  (b) Not occupy any site in the campground for more than one hundred and eighty (180) consecutive days, at which time the recreational vehicle must be removed from the floodplain for a minimum of twenty-four (24) hours; or

  (c) Meet the requirements in either subchapters 21C Floodway District or 21D Floodfringe District or subsection 21.18 for the floodplain district in which the structure is located;

  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.

(7) All camping units that remain on site for more than thirty (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 consistent with subsection 21.10 and shall ensure compliance with all the provisions of this section;

(8) The City shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section;

(9) 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; and

(10) 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; and

(11) Standards for structures in a campground:

(a) All structures must comply with subsection 21.10 or meet the applicable requirements in subchapters 21C Floodway District or 21D Floodfringe District or subsection 21.18 for the floodplain district in which the structure is located;

(b) Deck/landing. A portable landing may be allowed for a camping unit for each entry provided that the landing is not permanently attached to the ground or camping unit, is no more than two hundred (200) square feet in size, shall be portable, contain no walls or roof, and can be removed from the campground by a truck and/or trailer. Sections of such portable landings may be placed together to form a single deck not greater than two hundred (200) square feet at one (1) entry point. Provisions for the removal of these temporary landings during flood events must be addressed within the written agreement with the City compliant with subsection 21.10. Any such deck/landing structure may be constructed at elevations lower than the flood protection elevation but must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.

(c) Decks/patios that are constructed completely at grade may be allowed but must also comply with applicable shoreland zoning standards.

(d) Camping equipment and appurtenant equipment in the campground may be allowed provided that the equipment is not permanently attached to the ground or camping unit, is not used as a habitable structure, and must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood. Provisions for the removal of this equipment during flooding events shall be addressed within the written agreement with the City compliant with subsection 21.10(4).

(e) Once a flood warning in the written agreement has been issued for the campground, the campground owner or the designated operator shall ensure that all persons, camping units, decks, camping equipment and appurtenant equipment in the campground shall be evacuated within the timelines specified within the written agreement with the City compliant with subsection 21.10(4).

(12) A zoning certificate shall be obtained as provided under subsection 21.23(2) before any 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.

SUBSECTION 21C FLOODWAY DISTRICT (FW)

21.11 APPLICABILITY

This section applies to all floodway areas on the floodplain zoning maps and those identified pursuant to subsection 21.18(5).

21.12 PERMITTED USES

(1) 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; and meet the standards in subsections 21.13 and 21.14; and all permits and certificates have been issued according to subsection 21.23:

(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 subsection 21.13(4).

(d) Uses or structures accessory to open space uses or classified as historic structures that comply with subsections 21.13 and 21.14.

(e) Extraction of sand, gravel or other materials that comply with subsection 21.13(4).

(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 Wis. Stats. chs. 30 and 31.

(g) Public utilities, streets and bridges that comply with subsection 21.13(3).

(h) Portable latrines that are removed prior to flooding and systems associated with recreational areas and DNR-approved campgrounds that meet the applicable provisions of local ordinances and Ch. SPS 383, Wis. Adm. Code.

(i) Public or private wells used to obtain potable water for recreational areas that meet the requirements of local ordinances and chs. NR 811 and NR 812, Wis. Adm. Code.

(j) Wastewater treatment ponds or facilities permitted under s. NR 110.15(3)(b), Wis. Adm. Code.

(k) Sanitary sewer or water supply lines to service existing or proposed development located outside the floodway that complies with the regulations for the floodplain area occupied.

21.13 STANDARDS FOR DEVELOPMENT IN THE FLOODWAY

(1) General.

(a) Any development in the floodway shall comply with subchapter 21B General Standards and have a low flood damage potential.

(b) Applicants shall provide an analysis calculating the effects of this proposal on the regional flood height to determine the effects of the proposal according to subsections 21.07 and 21.23(2)(c). The analysis must be completed by a registered professional engineer in the state of Wisconsin.

(c) Any encroachment in the regulatory floodway is prohibited unless the data submitted for subsection (b) above demonstrates that the encroachment will cause no increase in flood elevations in flood events up to the base flood at any location or removes the encroached area from the regulatory floodway as provided in subsection 21.05(5).

(2) Structures. Structures accessory to permanent open space uses, including utility and sanitary facilities, or functionally dependent on a waterfront location may be allowed by permit if the structures comply with the following criteria:

(a) Not designed for human habitation, does not have a high flood damage potential and is constructed to minimize flood damage;

(b) Shall either have the lowest floor elevated to or above the flood protection elevation or shall meet all the following standards:

1. Have the lowest floor elevated to or above the regional flood elevation and be dry floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and completely dry to the flood protection elevation without human intervention during flooding;

2. Have structural components capable of meeting all provisions of subsection 21.13(2)(g) and;

3. Be certified by a registered professional engineer or architect, through the use of a FEMA Floodproofing Certificate, that the design and methods of construction are in accordance with subsection 21.13(2)(g).

(c) Must be anchored to resist flotation, collapse, and lateral movement;

(d) Mechanical and utility equipment must be elevated to or above the flood protection elevation; and

(e) Must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.

(f) For a structure designed to allow the automatic entry of floodwaters below the Regional Flood Elevation, the applicant shall submit a plan that meets subsection 21.13(2)(a-e) and meets or exceeds the following standards:

1. The lowest floor must be elevated to or above the regional flood elevation;

2. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;

3. The bottom of all openings shall be no higher than one (1) foot above the lowest adjacent grade; openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters, otherwise must remain open.

4. The use must be limited to parking, building access or limited storage.

(g) Certification. Whenever floodproofing measures are required, a registered professional engineer or architect shall certify that the following floodproofing measures will be utilized, where appropriate, and are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the regional flood:

1. Reinforcement of floors and walls to resist rupture, collapse, or lateral movement caused by water pressures or debris buildup;

2. Construction of wells, water supply systems and waste treatment systems so as to prevent the entrance of flood waters in such systems and must be in accordance with provisions in subsections 21.14(4) and (5);
3. Subsurface drainage systems to relieve external pressures on foundation walls and basement floors;
4. Cutoff valves on sewer lines or the elimination of gravity flow basement drains; and
5. Placement of utilities to or above the flood protection elevation.

(3) Public Utilities, Streets and Bridges. Public utilities, streets and bridges may be allowed by permit, if:

(a) Adequate floodproofing measures are provided to the flood protection elevation; and

(b) Construction meets the development standards of subsection 21.07.

(4) Fills or Deposition of Materials. Fills or deposition of materials may be allowed by permit, if:

(a) The requirements of subsection 21.07 are met;

(b) No material is deposited in navigable waters unless a permit is issued by DNR pursuant to Wis. Stat. Ch. 30, and a permit pursuant to s. 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;

(c) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading; and

(d) The fill is not classified as a solid or hazardous material.

21.14 PROHIBITED USES

All uses not listed as permitted uses in subsection 21.12 are prohibited, including the following uses:

(1) Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses;

(2) Storing materials that are buoyant, flammable, explosive, injurious to property, water quality, or human, animal, plant, fish or other aquatic life;

(3) Uses not in harmony with or detrimental to uses permitted in the adjoining districts;

(4) Any private or public sewage systems, except portable latrines that are removed prior to flooding and systems associated with recreational areas and DNR-approved campgrounds that meet the applicable provisions of the Madison General Ordinances and ch. SPS 383, Wis. Adm. Code;

(5) 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;

(6) Any solid or hazardous waste disposal sites;

(7) Any wastewater treatment ponds or facilities, except those permitted under s. NR 110.15(3)(b), Wis. Adm. Code; and

(8) 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.

SUBCHAPTER 21D: FLOODFRINGE DISTRICT (FF)

21.15 APPLICABILITY

This section applies to all floodfringe areas shown on the floodplain zoning maps and those identified pursuant to subsection 21.18(5).

21.16 PERMITTED USES

Any structure, land use, or development is allowed in the Floodfringe District (FF) if the standards in subsection 21.17 are met, the use is not prohibited by this, or any other ordinance or regulation and all permits or certificates specified in subsection 21.23 have been issued.

21.17 STANDARDS FOR DEVELOPMENT IN THE FLOODFRINGE

Subchapter 21B General Standards shall apply in addition to the following requirements according to the use requested. Any existing structure in the FF District must meet the requirements of subchapter 21F;

(1) Residential Uses. Any structure, including a manufactured home, which is to be newly constructed or moved into the FF District, shall meet or exceed the following standards;

(a) All new construction, including placement of manufactured homes, and substantial improvement of residential structures, shall have the lowest floor elevated to or above the flood protection elevation on fill. The fill around the structure shall be one foot or more above the regional flood elevation extending at least fifteen (15) feet beyond the limits of the structure. No area may be removed from the FF district unless it can be shown to meet subsection 21.05(5).

(b) Notwithstanding subsection 21.17(1)(a), a basement or crawlspace floor may be placed two (2) feet above the regional flood elevation if the basement or crawlspace is designed to make all portions of the structure below the flood protection elevation watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. No floor of any kind is allowed below the regional flood elevation;

(c) Contiguous dryland access shall be provided from a structure to land outside of the floodplain, except as provided in subsection (d) below.

(d) In developments where existing street or sewer line elevations make compliance with subd. (c) impractical, the City may permit new development and substantial improvements where roads are below the regional flood elevation, if:

1. 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

2. The City has a DNR-approved emergency evacuation plan that follows acceptable hazard mitigation planning guidelines.

(2) Accessory Structures or Uses. In addition to subchapter 21B General Standards, new construction and substantial improvements of Accessory Structures shall be constructed on fill with the lowest floor at or above the regional flood elevation.

(3) Commercial Uses. In addition to subchapter 21B General Standards, any commercial structure which is erected, altered, or moved into the FF District shall meet the requirements of subsection 21.17(1). Subject to the requirements of subsection 21.17(5), 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.

(4) Manufacturing and Industrial Uses. In addition to subchapter 21B General Standards, any manufacturing or industrial structure which is erected, altered, or moved into the FF District shall have the lowest floor elevated to or above the flood protection elevation or meet the floodproofing standards in subsection 21.27. Subject to the requirements of subsection 21.17(5), 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.

(5) 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 subsection 21.27. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.

(6) Public Utilities, Streets and Bridges. All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans; and

(a) 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 subsection 21.27.

(b) Minor roads or non-essential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.

(7) Sewage Systems. All sewage disposal systems shall be designed to minimize or eliminate infiltration of flood water into the system, pursuant to subsection 21.27(3), to the flood protection elevation and meet the provisions of all local ordinances and ch. SPS 383, Wis. Adm. Code.

(8) Wells. All wells shall be designed to minimize or eliminate infiltration of flood waters into the system, pursuant to subsection 21.27(3), to the flood protection elevation and shall meet the provisions of chs. NR 811 and NR 812, Wis. Adm. Code.

(9) Solid Waste Disposal Sites. Disposal of solid or hazardous waste is prohibited in FF District.

(10) Deposition of Materials. Any deposited material must meet all the provisions of this ordinance.

(11) Manufactured Homes.

(a) 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.

(b) In existing manufactured home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:

1. Have the lowest floor elevated to the flood protection elevation; and

2. Be anchored so they do not float, collapse, or move laterally during a flood;

(c) 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 FF District in subsection 21.17(1).

(12) Mobile Recreational Vehicles. All mobile recreational vehicles must be on site for less than one hundred and eighty (180) consecutive days and be either:

(a) Fully licensed and ready for highway use; or

(b) Shall meet the elevation and anchoring requirements in subsection 21.17(11)(b) and (c).

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.

SUBCHAPTER 21E: OTHER FLOODPLAIN DISTRICTS

21.18 GENERAL FLOODPLAIN DISTRICT (GFP)

(1) Applicability. The provisions for the General Floodplain District (GFP) shall apply to development in all floodplains mapped as A, AO, AH, and in AE zones within which a floodway is not delineated on the Flood Insurance Rate Maps identified in subsection 21.05(2)(a).

(2) Floodway Boundaries. For proposed development in zone A, or in zone AE within which a floodway is not delineated on the Flood Insurance Rate Map identified in subsection 21.05(2)(a), the boundaries of the regulatory floodway shall be determined pursuant to subsection 21.18(5). If the development is proposed to encroach upon the regulatory floodway, the development is subject to the standards of subchapter 21C Floodway District. If the development is located entirely within the FF District, the development is subject to the standards of subchapter 21D Floodfringe District.

(3) Permitted Uses. Pursuant to subsection 21.18(5) it shall be determined whether the proposed use is located within the Floodway or Floodfringe. Those uses permitted in the Floodway (subsection 21.12) and Floodfringe (subsection 21.16) Districts are allowed within the General Floodplain District, according to the standards of subsection 21.18(4) provided that all permits or certificates required under subsection 21.23 have been issued.

(4) Standards for Development in the General Floodplain District. Subchapter 21C Floodway District applies to floodway areas, determined to pursuant to subsection 21.18(5); Subchapter 21D Floodfringe District applies to Floodfringe areas, determined to pursuant to subsection 21.18(5).

(a) New construction and substantial improvement of structures in zone AO shall have the lowest floor, including basement, elevated:

1. To or above the depth, in feet, as shown on the FIRM above the highest adjacent natural grade plus two (2) additional feet of freeboard; or

2. If the depth is not specified on the FIRM, five (5) feet above the highest adjacent natural grade or higher.

(b) New construction and substantial improvement of structures in zone AH shall have the lowest floor, including basement, elevated to or above the flood protection elevation

(c) In AO/AH zones, provide adequate drainage paths to guide floodwaters around structures.

(d) All development in zones AO and zone AH shall meet the requirements of subchapter 21D Floodfringe District applicable to flood fringe areas.

(5) Determining Floodway and Floodfringe Limits. Upon receiving an application for development within zone A, or within zone AE where a floodway has not been delineated on the Flood Insurance Rate Maps, the Zoning Administrator shall:

(a) Require the applicant to submit two (2) 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 flood proofing 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 DNR 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 subsection 21.23(2)(c).
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.

21.19 FLOOD STORAGE DISTRICT

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.

(1) Applicability. The provisions of this section apply to all areas within the Flood Storage District (FSD), as shown on the official floodplain zoning maps.

(2) Permitted Uses. Any use or development which occurs in a flood storage district must meet the applicable requirements in subsection 21.17.

(3) Standards for Development in Flood Storage Districts.

(a) Development in a flood storage district shall not cause an increase equal or greater than 0.00 of a foot 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 pre-development 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 floodfringe 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 subsection 21.29 Amendments of this ordinance.

(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.

SUBCHAPTER 21F: NONCONFORMING USES

21.20 GENERAL

(1) Applicability.

(a) The standards in this section shall apply to all uses and buildings that do not conform to the provisions contained within a floodplain zoning ordinance or with Wis. Stat. § 87.30, and §§ NR 116.12-14, Wis. Adm. Code and 44 CFR 59-72., these standards 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 ordinance or any amendment thereto. A party asserting existence of a lawfully established nonconforming use or structure has the burden of proving that the use or structure was compliant with the floodplain zoning ordinance in effect at the time the use or structure was created.

(b) As permit applications are received for additions, modifications, or substantial improvements to nonconforming buildings in the floodplain, the City shall develop a list of those nonconforming buildings, their present equalized assessed value, and a list of the costs of those activities associated with changes to those buildings.

(2) The existing lawful use of a structure or its accessory use which is not in conformity with the provisions of this ordinance may continue subject to the following conditions:

(a) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this ordinance. 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 two hundred (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.

(b) If a nonconforming use or the use of a nonconforming structure is discontinued for twelve (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 ordinance;

(c) 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;

(d) 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 fifty (50) percent 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 ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with subsection 21.17(1). 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 (50) percent provisions of this paragraph;

(e) No maintenance on a per event basis to any nonconforming structure or any structure with a nonconforming use, the cost of which would equal or exceed fifty (50) percent 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 ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with subsection 21.17(1). Maintenance to any nonconforming structure, which does not exceed fifty (50) percent of its present equalized assessed value on a per event basis, does not count against the cumulative calculations over the life of the structure for substantial improvement calculations.

(f) If on a per event basis the total value of the work being done under (d) and (e) equals or exceeds fifty (50) percent 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 ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with subsection 21.17(1).

(g) Except as provided in subd. (h), 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 pre-damaged condition equals or exceeds fifty (50) percent of the structure's present equalized assessed value.

(h) For nonconforming buildings that are substantially damaged or destroyed by a non-flood 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 following minimum requirements are met, and all required permits have been granted prior to the start of construction:

1. Residential Structures.

   a. Shall have the lowest floor, including basement, elevated to two (2) feet above the base flood elevation using fill, pilings, columns, posts, or perimeter walls. Perimeter walls must meet the requirements of subsection 21.27(2).

   b. 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.

   c. Shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated to two (2) feet above the base flood elevation so as to prevent water from entering or accumulating within the components during conditions of flooding.

   d. In A Zones, obtain, review, and utilize any flood data available from a federal, state or other source.

   e. In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in subsection 21.18(4).

   f. In AO Zones, shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.

2. Nonresidential Structures.

   a. Shall meet the requirements of subsection 21.20(2)(h)1.a-f.

b. Shall either have the lowest floor, including basement, elevated to two (2) feet above the regional flood elevation; or, together with attendant utility and sanitary facilities, shall meet the standards in subsection 21.27(1) or (2).

c. In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in subsection 21.18(4).

(3) 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 subsection 21.13(1), flood resistant materials are used, and construction practices and floodproofing methods that comply with subsection 21.27 are used. Repair or rehabilitation of historic structures shall be exempt from the development standards of subsection 21.20(2)(h)1. 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.

21.20 FLOODWAY DISTRICT

(1) 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:

(a) Has been granted a zoning certificate or variance which meets all ordinance requirements;

(b) Meets the requirements of subchapter 21F;

(c) Shall not increase the obstruction to flood flows or regional flood height;

(d) Any addition to the existing structure shall be floodproofed, pursuant to subsection 21.27, by means other than the use of fill, to the flood protection elevation; and,

(e) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:

1. The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two (2) openings must be provided with a minimum net area of at least one (1) square inch for every one (1) square foot of the enclosed area. The lowest part of the opening can be no more than twelve (12) inches above the adjacent grade;

2. The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;

3. Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and

4. The use must be limited to parking, building access or limited storage.

(2) No new onsite sewage disposal system, or addition to an existing onsite 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 onsite sewage disposal system in a floodway area shall meet the applicable requirements of all City ordinances, subsection 21.27(3) and Ch. SPS 383, Wis. Adm. Code.

(3) 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 City ordinances, subsection 21.27(3) and Chs. NR 811 and NR 812, Wis. Adm. Code.

21.21 FLOODFRINGE DISTRICT

(1) 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 zoning certificate or variance by the City and meets the requirements of subsection 21.17 except where subsection 21.21(2) is applicable.

(2) Where compliance with the provisions of subsection (1) above 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 Zoning Board of Appeals, using the procedures established in subsection 21.25, may grant a variance from those provisions of subsection (1) above 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:

  (a) No floor is allowed below 2 (two) feet above the regional flood elevation for residential or commercial structures;

  (b) Human lives are not endangered;

  (c) Public facilities, such as water or sewer, shall not be installed;

  (d) Flood depths shall not exceed two (2) feet;

  (e) Flood velocities shall not exceed two (2) feet per second; and

  (f) The structure shall not be used for storage of materials as described in subsection 21.17(5).

(3) 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, subsection 21.27(3) and ch. SPS 383, Wis. Adm. Code.

(4) All new wells, or addition to, replacement, repair, or maintenance of a well shall meet the applicable provisions of this ordinance, subsection 21.27(3) and ch. NR 811 and NR 812, Wis. Adm. Code.

21.22 FLOOD STORAGE DISTRICTS

No modifications or additions shall be allowed to any nonconforming structure in a flood storage area unless the standards outlined in 21.19(3) are met.

SUBCHAPTER 21G: ADMINISTRATION

Where the Zoning Administrator or a Zoning Board of Appeals has already been appointed to administer a zoning ordinance adopted under Wis. Stat. § 62.23(7), Stats., these officials shall also administer this ordinance.

21.23 ZONING ADMINISTRATOR

(1) Duties and Powers. The Zoning Administrator is authorized to administer this ordinance and shall have the following duties and powers:

  (a) Advise applicants of the ordinance provisions, assist applicants in preparing zoning certificate applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all zoning certificate applications.

(b) Issue zoning certificates and inspect properties for compliance with provisions of this ordinance and issue certificates of compliance where appropriate

(c) Inspect and assess all damaged floodplain structures to determine if substantial damage to the structures has occurred.

(d) Keep records of all official actions such as:

1. All zoning certificates issued, inspections made, and work approved;
2. Documentation of certified lowest floor and regional flood elevations;
3. Floodproofing certificates.
4. Water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.
5. All substantial damage assessment reports for floodplain structures.
6. List of nonconforming structures and uses in the floodplain.

(e) Submit copies of the following items to the DNR Regional office if related to floodplain:

1. Within ten (10) days of the decision, a copy of any decisions on variances, appeals for map or text interpretations, and map or text amendments;
2. Copies of case-by-case analyses and other required information.
3. Copies of substantial damage assessments performed and all related correspondence concerning the assessments

(f) Investigate, prepare reports, and report violations of this ordinance to the Director of Building Inspection and Office of the City Attorney for prosecution. Copies of the reports shall also be sent to the DNR Regional office.

(g) Submit copies of amendments to the FEMA Regional office.

(2) Zoning Certificate. A zoning certificate shall be obtained before any 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 in the floodplain. Application to the Zoning Administrator shall include:

(a) General Information

1. Name and address of the applicant, property owner and contractor;
2. Address, proposed use, and whether it is new construction or a modification;

(b) Site Development Plan. A site plan drawn to scale shall be submitted with the zoning certificate application form and shall contain:

1. Location, dimensions, area and elevation of the lot;
2. Location of the ordinary highwater mark of any abutting navigable waterways;
3. Location of any structures with distances measured from the lot lines and street center lines;
4. Location of any existing or proposed on-site sewage systems or private water supply systems;
5. Location and elevation of existing or future access roads;
6. Location of floodplain and floodway limits as determined from the official floodplain zoning maps;

7. The elevation of the lowest floor of proposed buildings and any fill using the vertical datum from the adopted study – either National Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD);
8. Data sufficient to determine the regional flood elevation in NGVD or NAVD at the location of the development and to determine whether or not the requirements of subchapters 21C Floodway District or 21D Floodfringe District are met; and
9. Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to subsection 21.07. This may include any of the information noted in subsection 21.13(1).

(c) 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 DNR.

1. Zone A floodplains and in AE zones within which a floodway is not delineated:
   a. Hydrology
      i. The appropriate method shall be based on the standards in ch. NR 116.07(3), Wis. Admin. Code, *Hydrologic Analysis: Determination of Regional Flood Discharge.*
   b. Hydraulic Modeling. The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:
      i. 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 WSEL for the study.
      ii. Channel sections must be surveyed.
      iii. Minimum four (4) foot contour data in the overbanks shall be used for the development of cross section overbank and floodplain mapping.
      iv. A maximum distance of five hundred (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.
      v. The most current version of HEC-RAS shall be used.
      vi. A survey of bridge and culvert openings and the top of road is required at each structure.
      vii. 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 five hundred (500) feet.
      viii. 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.

ix. 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.

c. 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.

i. If the proposed development is located outside of the floodway, then it is determined to have no impact on the regional flood elevation.

ii. 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.

2. Zone AE Floodplains.

a. Hydrology. If the proposed hydrology will change the existing study, the appropriate method to be used shall be based on ch. NR 116.07(3), Wis. Admin. Code, *Hydrologic Analysis: Determination of Regional Flood Discharge.*

b. Hydraulic Model. The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:

i. 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.

ii. Corrected Effective Model. The Corrected Effective Model shall not include any human-made physical changes since the effective model date but shall import the model into the most current version of HEC-RAS for Department review.

iii. Existing (Pre-Project 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.

iv. 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.

v. All changes to the Duplicate Effective Model and subsequent models must be supported by certified topographic information, bridge plans, construction plans and survey notes.

vi. 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.

c. Mapping. Maps and associated engineering data shall be submitted to the DNR for review which meet the following conditions:

i. 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.

ii. 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.

iii. Annotated FIRM panel showing the revised 1% and 0.2% annual chance floodplains and floodway boundaries.

iv. 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.

v. The revised floodplain boundaries shall tie into the effective floodplain boundaries.

vi. 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.

vii. Both the current and proposed floodways shall be shown on the map.

viii. The stream centerline, or profile baseline used to measure stream distances in the model shall be visible on the map.

(d) Expiration. All zoning certificates issued under the authority of this ordinance shall expire no more than one hundred and eighty (180) days after issuance. The certificate may be extended for a maximum of one hundred and eighty (180) days for good and sufficient cause. If the permitted work has not started within one hundred and eighty (180) days of the zoning certificate date, the development must comply with any regulation, including any revision to the FIRM or FIS, that took effect after the certificate date.

(3) Certificate of Compliance. 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 zoning certificate 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 ordinance;

(b) Application for such certificate shall be concurrent with the application for a zoning certificate;

(c) If all ordinance provisions are met, the certificate of compliance shall be issued within ten (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 zoning certificate issued. Floodproofing measures also require certification by a registered professional engineer or architect that the requirements of subsection 21.27 are met.

(e) Where applicable pursuant to subsection 21.18(4), the applicant must submit a certification by a registered professional engineer or surveyor of the elevation of the bottom of the lowest horizontal structural member supporting the lowest floor (excluding pilings or columns), and an indication of whether the structure contains a basement.

(f) Where applicable pursuant to subsection 21.18(4), the applicant must submit certifications by a registered professional engineer or architect that the structural design and methods of construction meet accepted standards of practice as required by subsection 21.18(4).

(4) Other Permits. Prior to obtaining a floodplain development zoning certificate 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 s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344.

21.24 BUILDING INSPECTION DIVISION

(1) The Director of Building Inspection shall:

(a) Oversee the functions of the office of the Zoning Administrator; and

(b) Review and advise the Common Council on all proposed amendments to this ordinance, maps, and text.

(c) Publish adequate notice pursuant to Wis. Stat. Ch. 985, specifying the date, time, place, and subject of the public hearing.

(2) The Director of Building Inspection shall not:

(a) Grant variances to the terms of the ordinance in place of action by the Zoning Board of Appeals; or

(b) Amend the text or zoning maps in place of official action by the Common Council.

21.25 ZONING BOARD OF APPEALS

The Zoning Board of Appeals created under Wis. Stat. § 62.23(7)(e), is hereby authorized or shall be appointed to act for the purposes of this ordinance. The Zoning Board of Appeals shall exercise the powers conferred by Wisconsin Statutes and adopt rules for the conduct of business. The Zoning Administrator shall not be the secretary of the Zoning Board of Appeals.

(1) Powers and Duties. The Zoning Board of Appeals shall:

(a) Appeals - Hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by the Zoning Administrator in the enforcement or administration of this ordinance;

(b) Boundary Disputes - Hear and decide disputes concerning the district boundaries shown on the official floodplain zoning map; and

(c) Variances - Hear and decide, upon appeal, variances from the ordinance standards.

(2) Appeals to the Zoning Board of Appeals.

(a) Appeals to the Zoning Board of Appeals may be taken by any person aggrieved, or by any officer or department of the municipality affected by any decision of the Zoning Administrator or their designee. Such appeal shall be taken within thirty (30) days unless otherwise provided by the rules of the board, by filing with the official whose decision is in question, and with the Zoning Board of Appeals, a notice of appeal specifying the reasons for the appeal. The Zoning Administrator shall transmit to the Zoning Board of Appeals all records regarding the matter appealed.

(b) Notice and Hearing for Appeals Including Variances

1. Notice - The Zoning Board of Appeals 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; and

3. Assure that notice shall be mailed to the parties in interest and the DNR Regional office at least ten (10) days in advance of the hearing.

2. Hearing - Any party may appear in person or by agent. The board shall:

1. Resolve boundary disputes according to subsection 21.25(3);

2. Decide variance applications according to subsection 21.25(4); and

3. Decide appeals of zoning certificate denials according to subsection 21.26.

(c) Decision. The final decision regarding the appeal or variance application shall:

1. Be made within a reasonable time;

2. Be sent to the DNR Regional office within ten (10) days of the decision;

3. Be a written determination signed by the chairman or secretary of the Zoning Board of Appeals;

4. State the specific facts which are the basis for the Zoning Board of Appeal’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; and

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 Zoning Board of Appeals proceedings.

(3) Boundary Disputes. The following procedure shall be used by the Zoning Board of Appeals in hearing disputes concerning floodplain district boundaries:

(a) If a floodplain district boundary is established by approximate or detailed floodplain studies, the flood elevations or profiles shall prevail in locating the boundary.

(b) The person contesting the boundary location shall be given a reasonable opportunity to present arguments and technical evidence to the Zoning Board of Appeals; and

(c) If the boundary is incorrectly mapped, the Zoning Board of Appeals should inform the Plan Commission or the person contesting the boundary location to petition the Common Council for a map amendment according to subsection 21.29, Amendments.

(4) Variance.

(a) The Zoning Board of Appeals may, upon appeal, grant a variance from the standards of this ordinance if an applicant convincingly demonstrates that:

1. Literal enforcement of the ordinance will cause unnecessary hardship;

2. 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 ordinance or map must be amended;

3. The variance is not contrary to the public interest; and

4. The variance is consistent with the purpose of this ordinance in subsection 21.04.

(b) In addition to the criteria in subsection (a) above, to qualify for a variance under FEMA regulations, the Zoning Board of Appeals must find that the following criteria have been met:

1. The variance shall not cause any increase in the regional flood elevation;

2. The applicant has shown good and sufficient cause for issuance of the variance;

3. Failure to grant the variance would result in exceptional hardship;

4. Granting the variance will not result in additional threats to public safety, extraordinary expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;

5. The variance granted is the minimum necessary, considering the flood hazard, to afford relief.

(c) A variance shall not:

1. Grant, extend or increase any use prohibited in the zoning district;

2. Be granted for a hardship based solely on an economic gain or loss;

3. Be granted for a hardship which is self-created.

4. Damage the rights or property values of other persons in the area;

5. Allow actions without the amendments to this ordinance or map(s) required in subsection 21.29, Amendments; and

6. Allow any alteration of an historic structure, including its use, which would preclude its continued designation as an historic structure.

(d) When a floodplain variance is granted, the Zoning Board of Appeals shall notify the applicant in writing that it may increase risks to life and property and flood insurance premiums could increase up to twenty-five (25) dollars per one hundred (100) dollars of coverage. A copy shall be maintained with the variance record.

21.26 REVIEW APPEALS OF ZONING CERTIFICATE DENIALS

(1) The Zoning Board of Appeals shall review all data related to the appeal. This may include:

(a) Zoning certificate application data listed in subsection 21.23(2);

(b) Floodway/floodfringe determination data in subsection 21.18(5);

(c) Data listed in subsection 21.13(1)(b) where the applicant has not submitted this information to the Zoning Administrator; and

(d) Other data submitted with the application or submitted to the Zoning Board of Appeals with the appeal.

(2) For appeals of all denied zoning certificates the Zoning Board of Appeals shall:

(a) Follow the procedures of subsection 21.25;

(b) Consider the Zoning Administrator's recommendations; and

(c) Either uphold the denial or grant the appeal.

(3) For appeals concerning increases in regional flood elevation the Board shall:

(a) Uphold the denial where the Zoning Board of Appeals 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 subsection 21.29, Amendments; and

(b) Grant the appeal where the Zoning Board of Appeals agrees that the data properly demonstrates that the project does not cause an increase provided no other reasons for denial exist.

21.27 FLOODPROOFING STANDARDS

(1) No zoning certificate or variance shall be issued for a non-residential 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 or above the flood protection elevation and submits a FEMA Floodproofing Certificate. Floodproofing is not an alternative to the development standards in subchapters 21B General Standards, 21C Floodway District, 21D Floodfringe District or subsection 21.18.

(2) For a structure designed to allow the entry of floodwaters, no zoning certificate or variance shall be issued until the applicant submits a plan either:

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

(b) Meeting or exceeding the following standards:

1. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
2. The bottom of all openings shall be no higher than one (1) foot above grade; and
3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(3) Floodproofing measures shall be designed, as appropriate, to:

(a) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;

(b) Protect structures to the flood protection elevation;

(c) Anchor structures to foundations to resist flotation and lateral movement;

(d) Minimize or eliminate infiltration of flood waters;

(e) Minimize or eliminate discharges into flood waters;

(f) Placement of essential utilities to or above the flood protection elevation; and

(g) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:

1. The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two (2) openings must be provided with a minimum net area of at least one (1) square inch for every one (1) square foot of the enclosed area. The lowest part of the opening can be no more than twelve (12) inches above the adjacent grade;
2. The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;
3. Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and
4. The use must be limited to parking, building access or limited storage.

21.28 PUBLIC INFORMATION

(1) Place marks on structures to show the depth of inundation during the regional flood.

(2) All maps, engineering data and regulations shall be available and widely distributed.

(3) Real estate transfers should show what floodplain district any real property is in.

21.29 AMENDMENTS

Obstructions or increases may only be permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with subsection 21.30.

(1) 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 ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with subsection 21.30 Any such alterations must be reviewed and approved by FEMA and the DNR.

(2) 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 ordinance, the official floodplain maps, floodway lines, and water surface profiles, in accordance with subsection 21.30.

21.30 GENERAL

The governing body shall change or supplement the floodplain zoning district boundaries and this ordinance in the manner outlined in subsection 21.31 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:

(1) Any fill or floodway encroachment that obstructs flow causing any increase in the regional flood height;

(2) Any change to the floodplain boundaries and/or watercourse alterations on the FIRM;

(3) Any changes to any other officially adopted floodplain maps listed in subsection 21.05(2)(b);

(4) 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;

(5) Correction of discrepancies between the water surface profiles and floodplain maps;

(6) Any upgrade to a floodplain zoning ordinance text required by s. NR 116.05, Wis. Adm. Code, or otherwise required by law, or for changes by the City; and

(7) All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood elevation from a FIRM requires prior approval by FEMA.

21.31 PROCEDURES

Ordinance amendments may be made upon petition of any party according to the provisions of Wis. Stat. § 62.23 The petitions shall include all data required by subsections 21.18(5) and 21.23(2). A zoning certificate shall not be issued until a Letter of Map Revision is issued by FEMA for the proposed changes.

(1) 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 DNR Regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of Wis. Stat. § 62.23.

(2) No amendments shall become effective until reviewed and approved by the DNR.

(3) 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 governing body.

21.32 ENFORCEMENT AND PENALTIES

Any violation of the provisions of this ordinance by any person shall be unlawful and shall be referred to the municipal attorney who shall expeditiously prosecute all such violators. A violator shall, upon conviction, forfeit to the municipality a penalty of not more than fifty dollars ($50.00), together with a taxable cost of such action. Each day of continued violation shall constitute a separate offense. Every violation of this ordinance is a public nuisance, and the creation may be enjoined, and the maintenance may be abated by action at suit of the municipality, the state, or any citizen thereof pursuant to Wis. Stat. § 87.30.

SUBCHAPTER 21H: DEFINITIONS

Unless specifically defined, words and phrases in this ordinance 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.

A Zone. 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.

AH Zone. See “AREA OF SHALLOW FLOODING”.

AO Zone. See “AREA OF SHALLOW FLOODING”.

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. An accessory structure shall not be used for human habitation.

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

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 (1) percent or greater annual chance of flooding to an average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flood may be evident. Such flooding is characterized by ponding or sheet flow.

Base Flood. Means the flood having a one (1) 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 sub-grade 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 DNR pursuant to Wis. Stat. § 30.11, and which allows limited filling between this bulkhead line and the original ordinary highwater mark, except where such filling is prohibited by the floodway provisions of this ordinance.

Campground. Any parcel of land which is designed, maintained, intended, or used for the purpose of providing sites for nonpermanent overnight use by four (4) or more camping units, or which is advertised or represented as a camping area.

Camping Unit. Any portable device, no more than four hundred (400) square feet in area, used as a temporary shelter, including but not limited to a camping trailer, motor home, bus, van, pick-up 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 ordinance.

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 (5) feet in height, used for access to plumbing and electrical utilities.

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

Department. The Wisconsin Department of Natural Resources, or DNR.

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.

Dryland 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 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 *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.

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.

Floodfringe. That portion of the floodplain outside of the floodway which is covered by flood waters 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 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.

Floodplain. Land which has been or may be covered by flood water during the regional flood. It includes the floodway and the floodfringe 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 Regional Flood Elevation. (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 Wis. Stats. Ch. 985. For appeals, a Class 1 notice, published once at least one week (7 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 (7 days) before the hearing. Local ordinances or bylaws may require additional notice, exceeding these minimums.

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.

Highest Adjacent Grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

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).

Maintenance. The act or process of ordinary upkeep and repairs, 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 (1) 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 or Subdivision. A parcel (or contiguous parcels) of land, divided into two (2) or more manufactured home lots for rent or sale.

Mobile/Manufactured Home Park or Subdivision, Existing. A parcel of land, divided into two (2) 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 ordinance. 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/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 Recreational Vehicle. A vehicle which is built on a single chassis, four hundred (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 (Pre-Project). A modification of the Duplicate Effective Model or Corrected Effective Model to reflect any human-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 Pre-Project Conditions Model, Duplicate Effective Model or Corrected Effective Model to reflect revised or post-project conditions.

Municipality *or* Municipal. The county, city or village governmental units enacting, administering, and enforcing this zoning ordinance.

NAVD (North American Vertical Datum). Elevations referenced to mean sea level datum, 1988 adjustment.

NGVD (National Geodetic Vertical Datum). Elevations referenced to mean sea level datum, 1929 adjustment.

New Construction. Structures for which the start of construction commenced on or after the effective date of a floodplain zoning regulation adopted by this community and includes any subsequent improvements to such structures.

Non-Flood Disaster. A fire or an ice storm, tornado, windstorm, mudslide, or other destructive act of nature, but excludes a flood.

Nonconforming Structure. An existing lawful structure or building which is not in conformity with the dimensional or structural requirements of this ordinance for the area of the floodplain which it occupies. (For example, an existing residential structure in the floodfringe 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 ordinance 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 ordinance, as described in subsection 21.05(2), which has been approved by the DNR and FEMA.

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

Ordinary Highwater 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 flood waters 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 one hundred and eighty (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 humanmade object with form, shape and utility, either permanently or temporarily attached to, placed upon or set into the ground, stream bed or lakebed, including, but not limited to, roofed and walled buildings, gas or liquid storage tanks, bridges, dams and culverts.

Subdivision. Has the meaning given in Wis. Stat. §. 236.02(12).

Substantial Damage. Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed fifty (50) percent 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 fifty (50) percent 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 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 Zoning 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 the floodplain zoning ordinance. A structure or other development without required permits, zoning certificate, 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 obtain groundwater regardless of its intended use.