

City of Bismarck Floodplain Ordinance

14-04-19. FP Floodplain District. In any FP floodplain district, the following regulations shall apply:

1. Statement of purpose. It is the purpose of this section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
 - a. To protect human life and health;
 - b. To minimize expenditure of public money for costly flood control projects;
 - c. To minimize the need for rescue and relief efforts associated with flooding, generally undertaken at the expense of the general public;
 - d. To minimize prolonged business interruptions;
 - e. To minimize damage to public facilities and utilities located in special flood hazard areas such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges;
 - f. To help maintain a stable tax base by providing for the use and development of special flood hazard areas so as to minimize future flood blight areas;
 - g. To ensure that potential buyers are notified that property is located in a special flood hazard area;
 - h. To ensure that those who occupy the special flood hazard areas assume responsibility for their actions; and
 - i. To provide an increased level of protection in anticipation of future increases in the base flood elevation (BFE).
2. Methods of reducing flood losses. In order to accomplish its purposes, this section includes methods and provisions for:
 - a. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood water elevations or flow velocities;
 - b. Requiring that uses vulnerable to flooding, including attendant utilities and facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - c. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or convey flood waters;
 - d. Controlling filling, grading, dredging, and other development which may increase flood damage; and
 - e. Preventing or regulating the construction of flood barriers or obstructions which will unnaturally divert flood waters or which may increase flood hazards in other areas.
3. Definitions. Unless specifically defined below, words or phrases used in this section shall be interpreted so as to give them the meaning they have in common usage and to give this section its most reasonable application.

"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this section or a request for a variance.

"Attendant utilities and equipment" means utilities, electrical, plumbing, heating, ventilation, and air conditioning equipment, as well as facilities and services associated with new construction. "Base flood or 100-year flood" means the flood having a one percent (1%) chance of being equaled or exceeded in any given year.

"Base flood elevation (BFE)" means the height of the base flood or 100-year flood, usually in feet above mean sea level, as designated on a FEMA published digital flood insurance rate map (DFIRM) or as determined by the storm water management plan prepared for the area in which the property is located.

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

"Best available data (BAD)" means water elevation information from any source used to estimate or determine the base flood elevation (i.e., high water mark).

"Conveyance or hydraulic conveyance" means a geometric characteristic of a river or watercourse at a given location that determines the flow-carrying capacity at that location.

"Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the special flood hazard area.

"Fill" means materials such as soil, gravel, or crushed stone that is placed in an area and increases the ground elevation, whether or not that was the intention.

"Flood or flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters, and/or the unusual and rapid accumulation or runoff of surface waters from any source.

"Flood insurance rate map (FIRM) or digital flood insurance rate map (DFIRM)" means the official map issued by the Federal Emergency Management Agency (FEMA) where special flood hazard areas are designated as Zone A, AE, AO, AH, A1-A30 or A-99.

"Flood insurance study (FIS)" means the official report provided by the Federal Emergency Management Agency (FEMA) that includes flood profiles, the flood insurance rate map (FIRM), and the water surface elevation of the base flood.

"Floodplain or flood-prone area" means any land area susceptible to partial or complete inundation by water from any source.

"Floodplain Administrator" means the person designated by the City of Bismarck to administer the City's floodplain regulations.

"Floodproofing (dry)" means protection provided a structure, together with attendant utilities and sanitary facilities, which is watertight to two (2) feet above the base flood elevation with walls that are substantially impermeable to the passage of water.

"Floodway or regulatory floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

"Letter of map amendment (LOMA)" means an official amendment to the currently effective flood insurance rate map (FIRM) which establishes that a property is not located in a special flood hazard area. A letter of map amendment (LOMA) is issued by FEMA.

"Letter of map revision (LOMR)" means an official amendment to the currently effective flood insurance rate map (FIRM) which is issued by FEMA and changes flood zones, delineations and elevations. A letter of map revision based on fill (LOMR(f)) is a LOMR issued by FEMA based on the placement of fill.

"Lowest floor" means the lowest floor of a structure including the basement and/or crawl space.

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

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of this section.

"Non-residential" means any building or structure or portion thereof that is not classified as residential.

"Reasonably safe from flooding" means base flood waters will not inundate the land or damage structures to be removed from the special flood hazard area, and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

"Recreational vehicle" means a vehicle which is built on a single chassis; four hundred (400) square feet or less when measured at the largest horizontal projection; designated to be self-propelled or permanently towable by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal uses. Recreational vehicles include, but are not limited to, travel trailers, trailers on wheels, park-model trailers and other similar vehicles.

"Residential" means:

- a. Buildings and structures and portions thereof where people live or that are used for sleeping purposes on a transient or non-transient basis;
- b. Residential structures, including but not limited to one and two-family dwellings, multifamily dwellings, group dwellings, bed and breakfast facilities, hotels and motels; and
- c. Institutional facilities where people are cared for or live on a 24-hour basis in a supervised environment, including but not limited to board and care facilities, assisted living facilities, nursing homes, group homes, congregate care facilities, hospitals, medical centers, jails and detention centers.

"Special flood hazard area (SFHA)" means an area of land that would be inundated by a flood having a one percent (1%) chance of being equaled or exceeded in any given year (100-year flood).

"Start of construction" includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of 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.

"Storage tank" means any closed vessel used to store gases or liquids.

"Storm water management plan" means a document prepared in accordance with the provisions of Title 14.1 of the City Code of Ordinances to evaluate surface water runoff and flood risks within a development, plat or watershed; to document special flood hazard areas; and to determine the systems required to convey or control flood flows within and through the area.

"Structure" means a walled and roofed building, including manufactured homes and gas or liquid above-ground storage tanks.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the building to its pre-damaged condition would equal or exceed fifty percent (50%) of the market value as assessed of the structure before the damage occurred.

"Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value as assessed of the structure either: before the improvement or repair is started; or if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either: any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

"Variance" means a grant of relief from the requirements of this section which permits construction in a manner that would otherwise be prohibited by this section.

4. General provisions.

- a Jurisdiction. This section shall apply to all special flood hazard areas within the jurisdiction of the City of Bismarck, including all lands within the corporate limits of the City of Bismarck and the extraterritorial jurisdiction as provided for in Section 40-47-01.1 of the North Dakota Century Code, including areas specifically included in the jurisdiction of the City of Bismarck through agreement as approved by the Board of City Commissioners.

- b. Basis for establishing the special flood hazard areas. The special flood hazard areas identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report titled "The Flood Insurance Study for Burleigh County, North Dakota and Incorporated Areas", dated July 19, 2005, with an accompanying flood insurance rate map (FIRM), and as subsequently updated by any Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR) and/or Letter of Map Revision Based on Fill (LOMR(f)) issued by the Federal Emergency Management Agency (FEMA), is hereby adopted by reference and declared to be a part of this section. The Flood Insurance Study (FIS) is on file in the office of the Floodplain Administrator. Special flood hazard areas may also be designated in a storm water management plan prepared for a development, plat or watershed.
- c. Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this section and other applicable regulations, unless a valid building permit was in place prior to July 27, 2010, except as provided for in subsection 6(b)(5) (additions to existing structures).
- d. Greater restrictions. This section is not intended to repeal, remedy, or impair any existing easements, covenants, or deed restrictions. However, where this section and another section of the City Code of Ordinances, an easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- e. Interpretation. In the interpretation and application of this section, all provisions shall be:
 - 1. Considered as minimum requirements;
 - 2. Liberally construed in favor of the City of Bismarck; and
 - 3. Deemed neither to limit nor repeal any other powers granted to the City under the North Dakota Century Code or the Home Rule Charter for the City of Bismarck.
- f. Warning and disclaimer of liability. The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This section does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This section shall not create liability on the part of the City of Bismarck, any officer or employee thereof, or the Federal Emergency Management Agency (FEMA) for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.
- g. Letter of Map Revision (LOMR). Development on any parcel for which a Letter of Map Revision (LOMR) has been issued shall comply with all of the requirements and recommendations as contained therein. Development on any parcel for which a LOMR has been issued shall be constructed in accordance with the provisions of FEMA Technical Bulletin 10-01.
- h. Non-conforming Status. Any structure constructed with the lowest floor elevated as required by the regulations in effect at the time of construction shall be considered a non-conforming structure for the purposes of this section, provided the lowest floor of said structure is elevated on fill and/or a permanent foundation to at least one (1) foot above the base flood elevation.

5. Administration.

- a. Establishment of a development permit. A development permit shall be obtained before construction or development begins within any special flood hazard area established in subsection 4(b) (basis for establishing the special flood hazard areas). Application for a development permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:
 1. Elevation in relation to mean sea level (NAVD88), of the lowest floor (including basements and/or crawl spaces) of all structures;
 2. Elevation in relation to mean sea level (NAVD88) to which any structure has been floodproofed;
 3. Certification by a registered professional engineer or architect that the floodproofing methods for any non-residential structure meet the floodproofing criteria in subsection 6(b)(2) (nonresidential construction); and
 4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- b. Establishment of a non-structural development permit. A non-structural development permit shall be obtained before any land disturbing activity begins within any special flood hazard area established in subsection 4(b)(basis for establishing the special flood hazard areas). Application for a non-structural development permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; proposed elevations upon completion of the land disturbing activity; the type of fill being used, if fill is proposed; and a description of the extent to which any watercourse will be altered or relocated as a result of proposed land disturbing activity.
- c. Designation of the Floodplain Administrator. The Building Official is hereby appointed to administer and implement this section by granting or denying development permit and non-structural development permit applications in accordance with its provisions.
- d. Duties and Responsibilities of the Floodplain Administrator. Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to:
 1. Permit application review.
 - a. Review all development permit applications and non-structural development permit applications to determine that the permit requirements of this section have been satisfied.
 - b. Review all development permit applications and non-structural development permit applications to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
 - c. Review all development permit applications and non-structural development permit applications to determine if the proposed development or land disturbing activity is located in the floodway. If located in the floodway, assure that the encroachment provisions of this section are met.

2. Use of other base flood data. When base flood elevation data has not been provided in accordance with subsection 4(b) (basis for establishing the special flood hazard areas), the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data available (known as best available data (BAD)) from a federal, state or other source, as criteria for requiring that new construction, substantial improvements, or other development in the floodplain are administered in accordance with subsection 6(b) (specific standards).
3. Information to be obtained and maintained.
 - a. Obtain and record the actual elevation (in relation to mean sea level in NAVD88) of the lowest floor (including basement and/or crawl space) of all new or substantially improved structures, and whether or not the structure contains a basement and/or crawl space.
 - b. For all new or substantially improved floodproofed structures:
 - i. Obtain and record the actual elevation (in relation to mean sea level in NAVD88) to which the structure has been floodproofed; and
 - ii. Maintain the floodproofing certifications required in subsection 5(a)(3).
 - c. Maintain for public inspection all records pertaining to the provisions of this section.
4. Alteration of watercourses. The Floodplain Administrator shall:
 - a. Notify nearby communities, water resource districts, and the North Dakota State Engineer, as necessary, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
 - b. Require that maintenance is provided within the altered or relocated portion of Title 14 & 14.1 192 said watercourse so that the flood-carrying capacity is not diminished; and
 - c. Notify the appropriate water resource district prior to removal or placement of fill within two hundred (200) feet of the ordinary high water mark of a body of water during normal flow or stage.
5. Interpretation of flood insurance rate map (FIRM) or digital flood insurance rate map (DFIRM) boundaries. Make interpretations where needed, as to the exact location of the boundaries of the special flood hazard areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in subsection 7 (variance procedure). The Floodplain Administrator may require information be submitted by a registered land surveyor.
6. Provisions for flood hazard reduction.
 - a. General standards. In all special flood hazard areas the following standards are required:
 1. Anchoring.
 - a. All new construction and substantial improvements, including additions, shall be anchored to prevent flotation, collapse or lateral movement of the structure.

- b. All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
2. Construction materials and methods.
- a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
 - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage; and
 - c. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Such facilities shall be located in areas that have been elevated on fill and/or a permanent foundation to at least two (2) feet above the base flood elevation for residential structures and manufactured homes.
3. Utilities.
- a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - b. All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters; and
 - c. All new and replacement on-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
4. Subdivision proposals.
- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
 - b. All subdivision proposals shall have utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
 - c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
 - d. Base flood elevation data shall be provided for all subdivision proposals and other proposed developments. Elevation data must be provided in NAVD88 for areas with a flood insurance rate map (FIRM) or other base flood elevation data in that datum.
- b. Specific standards. In all special flood hazard areas where base flood elevation data have been provided as set forth in subsection 4(b) (basis for establishing the special flood hazard areas) or subsection 5(d)(2) (use of other base flood data), the following provisions are required:

1. Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement and/or crawl space, elevated on fill and/or a permanent foundation to at least two (2) feet above the base flood elevation.
2. Nonresidential construction. Construction and substantial improvement of any nonresidential structure shall either have the lowest floor, including basement and/or crawl space, elevated on fill and/or a permanent foundation to at least two (2) feet above the base flood elevation or, together with attendant utility and sanitary facilities, shall:
 - a. Be floodproofed to at least two (2) feet above the base flood elevation, so that below this elevation the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Floodplain Administrator as set forth in subsection 5(d)(3) (information to be obtained and maintained).
3. Manufactured homes.
 - a. Manufactured homes shall be anchored in accordance with subsection 6(a)(1) (anchoring).
 - b. All manufactured homes or those to be substantially improved shall be on a permanent foundation, have the lowest floor of the manufactured home elevated on fill and/or a permanent foundation to at least two (2) feet above the base flood elevation, and be securely anchored to an adequately anchored foundation system.
4. Attached garages, decks and landings providing primary access, and accessory buildings.
 - a. Garages attached to any residential structure, non-residential structure or manufactured home shall be subject to the same construction requirements as the residential structure, non-residential structure or manufactured home to which it is attached.
 - b. Decks and landings providing access to the primary entrance of a residential structure, non-residential structure or manufactured home shall be subject to the same construction requirements as the residential structure, non-residential structure or manufactured home to which it provides access.
 - c. Accessory buildings over one hundred twenty (120) square feet in area for residential structures, non-residential structures and manufactured homes shall be subject to the same construction requirements as the residential structure, non-residential structure or manufactured home to which it is accessory.

5. Additions to existing structures.

- a. Any addition to any existing residential structure, non-residential structure, manufactured home, garage, deck, landing or accessory building that is not deemed a substantial improvement may be constructed with the lowest floor at the same elevation as the existing structure, provided the lowest floor of the existing structure is elevated on fill and/or a permanent foundation to at least one (1) foot above the base flood elevation.
- c. Floodways. Floodways are designated areas located within the special flood hazard areas established in subsection 4(b) (basis for establishing the special flood hazard areas). Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 2. If the preceding subsection is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of subsection 6 (provisions for flood hazard reduction).

7. Variance procedure.

- a. Board of Adjustment. The Board of Adjustment, as established in Chapter 14-06 of the City Code of Ordinances (Board of Adjustment), shall hear and decide appeals and requests for variances from the requirements of this section.
- b. Appeals. An appeal may be filed by any person, firm, or corporation aggrieved, or by any governmental officer, department or board affected by any decision or determination made by the Floodplain Administrator in the enforcement or administration of this section, in accordance with the provisions of Sections 14-06-02 (Powers and Duties) and 14-06-03 (Appeal Procedures).
- c. Variances. An application for a variance may be made by any person, firm, or corporation with a legal interest in the property for which the variance is being sought, in accordance with the provisions of Sections 14-06-02 (Powers and Duties) and 14-06-03 (Appeal Procedures).
- d. In considering appeals and variance applications, and in addition to the requirements outlined in Section 14-06-02 (Powers and Duties), the Board of Adjustment shall consider all technical evaluations, all relevant factors, and the standards specified in this section, including:
 1. The danger to life and property due to flooding or erosion damage;
 2. The danger that materials may be swept onto other lands to the injury of others;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;

6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with the existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- e. Upon consideration of the factors in subsection (7)(d) and the purposes of this section, the Board of Adjustment may attach such conditions to the granting of a variance as it deems necessary to further the purpose of this section.
- f. Conditions for variances.
1. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this subsection.
 2. Variances shall not be issued within the identified floodplain if any increase in flood levels during the base flood discharge would result.
 3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 4. Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. A determination that the granting of the variance will not result in increased flood heights, additional threats to public safety, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- g. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation lower than two (2) feet above the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- h. The Floodplain Administrator shall maintain the records of all appeal actions and report any variances granted to the Federal Emergency Management Agency (FEMA) upon request.
8. Penalties for Violations. Penalties for violation of this section shall be in accordance with the provisions of Chapter 14-05 (Enforcement) of the City Code of Ordinances.