

CHAPTER 16
FLOOD PLAIN DAMAGE PREVENTION

Chapter 16, Adopted 08/07/07, Effective 08/27/07

SECTION 1.0 - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES Level B(A zones)

16-101 STATUTORY AUTHORIZATION

The Legislature of the State of South Dakota has in SDCL 9-36 and 7-18-14 (State Statute delegating authority) delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council of the City of Philip, South Dakota, does ordain as follows:

16-102 FINDINGS OF FACT

- (1) The flood hazard areas of the City of Philip are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- (2) These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazard which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

B(FIRM)-1

16-103 STATEMENT OF PURPOSE

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

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (6) To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) To ensure that potential buyers are notified that property is in an area of special flood hazard; and,

- (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

16-104 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance includes methods and provisions for:

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

SECTION 2.0 - DEFINITIONS

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

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

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

"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 area of special flood hazard.

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

- (1) the overflow of waters, and/or
- (2) the unusual and rapid accumulation or runoff of surface waters from any source.

"Flood Insurance Rate Map (FIRM)" means an official map of the community on which the Federal Emergency Management Agency has delineated areas of special flood hazard designated as Zone A.

"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

attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

"Structure" means a walled and roofed building or manufactured home that is principally above ground.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, and/or safety code specifications which have been identified by the local code enforcement official as appointed by the City Council and which are the minimum necessary to assure safe living conditions or
- (2) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

SECTION 3.0 - GENERAL PROVISIONS

16-301 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the City of Philip.

16-302 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance Rate Map (FIRM) dated January 16, 1976 with an effective date of March 01, 1987, is adopted by reference and declared to be a part of this ordinance. The FIRM panel numbers are H 01. The FIRM is on file at City of Philip Finance Office.

16-303 COMPLIANCE

No structure or land shall hereafter be constructed, located, extended, or altered without full compliance with the terms of this ordinance and other applicable regulations.

16-304 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

16-305 INTERPRETATION

In the interpretation of this ordinance, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under State statute.

16-306

WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance 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 ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas of special flood hazards or uses permitted within such area will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Philip, any officer or employee thereof, or the Federal Emergency Management Agency for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

SECTION 4.0 - ADMINISTRATION

16-401

ESTABLISHMENT OF DEVELOPMENT PERMIT

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.2. A property receiving a Letter of Map Amendment or Letter of Map based upon fill must also obtain a development permit.

Application for a development permit shall be made on forms furnished by the City of Philip Finance Office 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.

Where base flood elevations are utilized, all new construction, substantial improvements and other development must comply with requirements of Section 4.3-2, Use of Other Base Flood Data.

16-402

DESIGNATION OF THE CITY COUNCIL

The City Council is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

16-403

DUTIES AND RESPONSIBILITIES OF THE CITY COUNCIL SHALL INCLUDE BUT NOT BE LIMITED TO:

16-403.1

PERMIT REVIEW

- (1) Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- (2) Review all development permits to determine that permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
- (3) Review all development permits to determine if the proposed development adversely affects the flood carrying capacity of the area of special flood hazard. For the purposes of this ordinance, "adversely affects" means damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent overbank areas.
 - (i) If it is determined that there is no adverse effect and the development is not a building, then the permit may be granted without further consideration.

- (ii) If it is determined that there is an adverse effect, then technical justification (i.e., a registered professional engineer's certification) for the proposed development shall be required.
- (iii) If the proposed development is a building, then the provisions of this ordinance shall apply.

16-403.2 USE OF OTHER BASE FLOOD DATA

When base flood elevation data has not been provided in accordance with Section 3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the City Council Building Committee shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source. Where base flood elevation data are utilized, all new construction, substantial improvements, or other development in Zone A are administered in accordance with Sections 4.3-3, Information to be Obtained and Maintained and 5.2, SPECIFIC STANDARDS.

16-403.3 INFORMATION TO BE OBTAINED AND MAINTAINED

- (1) Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
- (2) For all new or substantially improved floodproofed structures:
 - (i) Verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed.
 - (ii) Maintain the floodproofing certifications required in Section 4.3-1(3).

16-403.4 ALTERATION OF WATERCOURSES

- (1) Notify adjacent communities and the S.D. Office of Emergency Management prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (2) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

16-403.5 INTERPRETATION OF FIRM BOUNDARIES

Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard (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 Section 4.4.

16-404 VARIANCE PROCEDURE

16-404.1 APPEAL BOARD

- (1) The Building Committee, as established, shall hear and decide appeals and request for variances from the requirements of this ordinance.

- (2) The Building Committee shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the City Council in the enforcement or administration of this ordinance.
- (3) Those aggrieved by the decision of the City Council, or any taxpayer, may appeal such decisions to the Sixth Judicial Circuit Court, as provided in South Dakota Codified Law(s).
- (4) In passing upon such applications, the City Council shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
 - (i) the danger that materials may be swept onto other lands to the injury of others;
 - (ii) the danger to life and property due to flooding or erosion damage;
 - (iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;
 - (iv) the importance of the services provided by the proposed facility to the community;
 - (v) the necessity to the facility of a waterfront location, where applicable;
 - (vi) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (vii) the compatibility of the proposed use with the existing and anticipated development;
 - (viii) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (x) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 - (xi) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, streets and bridges.
- (5) Upon consideration of the factors of Section 4.4-1(4) and the purposes of this ordinance, the City Council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (6) The City of Philip Finance Office shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Emergency Management Agency and the SD Office of Emergency Management.

- (1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (i-xi) in Section 4.4-1(4) have been fully considered. As the lot size increases beyond the one-half acre, the technical justifications required for issuing the variance increases.
- (2) 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 section.
- (3) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (5) Variances shall only be issued upon:
 - (i) a showing of good and sufficient cause;
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expenses, create nuisances, cause fraud on or victimization of the public as identified in Section 4.4-1(4) or conflict with existing local laws or ordinances.
- (6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk from the reduced lowest floor elevation.

SECTION 5.0 - PROVISIONS FOR FLOOD HAZARD REDUCTION

16-501 GENERAL STANDARDS

In all areas of special flood hazard, the following standards are required:

16-501.1 ANCHORING

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure and capable of resisting hydrostatic and hydrodynamic loads.
- (2) All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement and capable of resisting the hydrostatic and hydrodynamic loads. 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. Specific requirements may be:
 - (i) over-the-top ties be provided at each of the four corners of the manufactured home, with two additional ties per side at intermediate locations, with manufactured homes less than 50 feet long requiring one additional tie per side.

- (ii) frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with manufactured homes less than 50 feet long requiring four additional ties per side;
- (iii) all components of the anchoring system be capable of carrying a force of 4,800 pounds; and
- (iv) any additions to the manufactured home be similarly anchored.

16-501.2 CONSTRUCTION MATERIALS AND METHODS

- (1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (3) 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.

16-501.3 UTILITIES

- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (2) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
- (3) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

16-501.4 SUBDIVISION PROPOSALS

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or 5 acres (whichever is less).

16-501.5 ENCROACHMENTS

Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited in any floodway unless a technical evaluation demonstrates that the encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge.

16-502 SPECIFIC STANDARDS

In all areas of special flood hazard where base flood elevation data has been provided as set forth in Section 4.3-2, Use of Other Base Flood Data, the following standards are required:

16-502.1 RESIDENTIAL CONSTRUCTION

- (1) New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to or above the base flood elevation. Properties that have received a Letter of Map Amendment or Letter of Map Revision based upon fill must still have their lowest floor elevated to or above the base flood elevation.

16-502.2 NONRESIDENTIAL CONSTRUCTION

- (1) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated one foot about to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
 - (a) be floodproofed so that below the base flood 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 design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this paragraph. Such certifications shall be provided to the official as set forth in Section 4.3-3(2).
 - (d) Properties that have received a Letter of Map Amendment or Letter of Map Revision based upon fill must still have their lowest floor elevated to one foot above the base flood elevation.

16-502.3 BELOW-GRADE RESIDENTIAL CRAWLSPACE CONSTRUCTION

New construction and substantial improvement of any below-grade crawlspace shall:

- (1) Have the interior grade elevation, that is below base flood elevation, no lower than two feet below the lowest adjacent grade;
- (2) Have the height of the below grade crawlspace measured from the interior grade of the crawlspace to the top of the foundation wall, not exceed four feet at any point;
- (3) Have an adequate drainage system that allows floodwaters to drain from the interior area of the crawlspace following a flood;
- (4) Meet the provisions of Section 5.1-1, Anchoring; 5.1-2, Construction Materials and Methods; and 5.2-3, Openings in Enclosures Below the Lowest Floor.