

**Title 19**  
**FLOOD DAMAGE PREVENTION**

**Chapter 19.03**

**STATUTORY AUTHORIZATION; FINDINGS OF FACT; PURPOSE AND OBJECTIVES**

**19.03.010: STATUTORY AUTHORIZATION:**

The legislature of the state of Nevada has in Nevada Revised Statutes chapters 278 and 278A delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the board of county commissioners of Churchill County, Nevada, does ordain the following provisions as codified in this title. (Bill 85-D § 2, 1985)

**19.03.020: FINDINGS OF FACT:**

- A. The flood hazard areas of Churchill County are subject to periodic inundation which may result 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 may adversely affect the public health, safety and general welfare.
- B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards 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. (Bill 85-D § 2, 1985)

**19.03.030: STATEMENT OF PURPOSE:**

It is the purpose of this title 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 to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. 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;
- F. Help maintain a stable tax base by providing for alternate uses and development of areas of special flood hazard so as to minimize future blight areas;
- G. Ensure that potential buyers are notified that property is in an area of special flood hazard;
- H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; and
- I. Maintain qualifying standards for participation in the national flood insurance program. (Bill 2006-O, 2006: Bill 85-D § 2, 1985)

**19.03.040: METHODS OF REDUCING FLOOD LOSSES:**

In order to accomplish its purposes, this title 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 or in flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel floodwaters;
- D. Controlling, filling, grading, dredging and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Bill 85-D § 2, 1985)

**Chapter 19.05**  
**DEFINITIONS**

**19.05.010: GENERALLY:**

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

**ACCESSORY USE:** A use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

**ALLUVIAL FAN:** A geomorphologic feature characterized by a cone or fan shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel mitigation.

**APEX:** The point of highest elevation on an alluvial fan, which on undisturbed fans is generally the point where the major stream that formed the fan emerges from the mountain front.

**APPEAL:** A request for a review of the floodplain administrator's interpretation of any provision of this title.

**AREA OF SHALLOW FLOODING:** A designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet (3'), a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

**AREA OF SPECIAL FLOOD HAZARD:** See definition of Special Flood Hazard Area.

**AREA OF SPECIAL FLOOD RELATED EROSION HAZARD:** An area within a community, which is most likely to be subject to flood related erosion losses. The area may be designated as zone AE on the flood insurance rate map.

**BASE FLOOD:** A flood which has a one percent (1%) chance of being equalled or exceeded in any given year (also called the 100-year flood). Base flood is the term used throughout this title.

**BASEMENT:** Any area of the building having its floor subgrade, i.e., below ground level on all sides.

**BUILDING:** See definition of Structure.

**CRITICAL STRUCTURES:** Any structure for which even a slight chance of flooding would reduce or eliminate its designated function of supporting a community in an emergency. Fire stations, hospitals, municipal airports, police stations, communication antennas or towers, elderly care facilities, fuel storage facilities, schools designated as emergency shelters, fresh water and sewage treatment facilities are some examples of critical structures.

**DEVELOPMENT:** Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials located in the area of special flood hazard.

**ENCROACHMENT:** The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain.

**EXISTING MANUFACTURED HOME PARK OR SUBDIVISION:** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

**EXPANSION OF AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION:** The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**FLOOD BOUNDARY AND FLOODWAY MAP (FBFM):** The official map on which the federal emergency management agency or federal insurance administration has delineated both the areas of special flood hazards and the floodway.

**FLOOD, FLOODING, OR FLOODWATER:** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD HAZARD BOUNDARY MAP:** The official map on which the federal emergency management agency or federal insurance administration has delineated the areas of flood hazards.

**FLOOD INSURANCE RATE MAP (FIRM):** The official map on which the federal emergency management agency or federal insurance administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY:** The official report provided by the federal insurance administration that includes flood profiles, the flood insurance rate map, the flood boundary and floodway map, and the water surface elevation of the base flood.

**FLOOD RELATED EROSION:** The collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly 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 flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

**FLOODPLAIN ADMINISTRATOR:** The individual appointed to administer and enforce the floodplain management regulations.

**FLOODPLAIN MANAGEMENT:** The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**FLOODPLAIN MANAGEMENT REGULATIONS:** This title and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood prone areas. This term describes federal, state or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage.

**FLOODPLAIN OR FLOOD PRONE AREA:** Any land area susceptible to being inundated by water from any source. See definition of Flood, Flooding, Or Floodwater.

**FLOODPROOFING:** Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved property, water and sanitary facilities, structures, and their contents.

**FLOODWAY:** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot (1'). Also referred to as regulatory floodway.

**FLOODWAY ENCROACHMENT LINES:** The lines marking the limits of floodways on federal, state and local floodplain maps.

**FLOODWAY FRINGE:** That area of the floodplain on either side of the regulatory floodway where encroachment may be permitted.

**FRAUD AND VICTIMIZATION:** As related to [chapter 19.13](#) of this title, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the governing body will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty (50) to one hundred (100) years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

**FUNCTIONALLY DEPENDENT USE:** A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.

**GOVERNING BODY:** The local governing unit, i.e., county or municipality, that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.

**HARDSHIP:** As related to [chapter 19.13](#) of this title, means the exceptional hardship that would result from a failure to grant the requested variance. The governing body requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a

variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

**HAZARD MITIGATION PLAN:** A plan that incorporates a process, whereby the potential of future loss due to flooding can be minimized by planning and implementing alternatives to floodplain management communitywide.

**HIGHEST ADJACENT GRADE:** The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

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**HISTORIC STRUCTURE:** Any structure that is:

- 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.

**LEVEE:** A manmade structure, usually an earthen embankment designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

**LEVEE SYSTEM:** A flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

**LOWEST FLOOR:** The lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area (see definition of Basement) is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this ordinance. (Note: This definition allows attached garages to be built at grade. Below grade garages are not allowed as they are considered to be basements).

**MANUFACTURED HOME OR MOBILE HOME:** 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.

**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.

**MEAN SEA LEVEL:** For purposes of the national flood insurance program, the national geodetic vertical datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

**NEW CONSTRUCTION:** For floodplain management purposes, means structures for which the "start of construction" commenced on or after the effective date of floodplain management regulations adopted by this community, and includes any subsequent improvements to such structures.

**NEW MANUFACTURED HOME PARK OR SUBDIVISION:** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by this community.

**OBSTRUCTION:** Includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

**100-YEAR FLOOD:** See definition of Base Flood.

**PRIMARY FRONTAL DUNE:** A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively mild slope.

**PRINCIPAL STRUCTURE:** A structure used for the principal use of the property as distinguished from an accessory use.

**PUBLIC SAFETY AND NUISANCE:** As related to [chapter 19.13](#) of this title means that the granting of a variance must not result in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

**RECREATIONAL VEHICLE:** A vehicle which is:

- A. Built on a single chassis;
- B. Four hundred (400) square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light duty truck; and
- D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**REGULATORY FLOODWAY:** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot (1').

**RIVERINE:** Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

**SAND DUNE:** Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

**SHEET FLOW AREA:** See definition of Area Of Shallow Flooding.

**SPECIAL FLOOD HAZARD AREA:** Area in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year. It is shown on the FIRM as zone A, AO, A1-30, AE, A99, AH or AR.

**START OF CONSTRUCTION:** Includes substantial improvement and other proposed new development and means 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 eighty (180) days from the date of the permit. The actual start means either 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; nor does it include the installation on the property of accessory buildings such as garages or sheds not occupied as a dwelling unit or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**STRUCTURE:** A walled and roofed building that is principally aboveground; this includes a gas or liquid storage tank or a manufactured home.

**STRUCTURE, RESIDENTIAL:** "Residential structure" means a structure utilized as a residence or incidental to a residence.

**SUBSTANTIAL DAMAGE:** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT:** A. 1. Any repair, reconstruction, rehabilitation, addition, or improvement to a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either:

- a. Before the improvement or repair is started; or
- b. If the structure has been damaged and is being restored, before the damage occurred.

2. 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 exterior dimensions of the structure.

B. The term substantial improvement does not, however, include either:

1. 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
2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

**VARIANCE:** A grant of relief from the requirements of this title, which permits construction in a manner that would otherwise be prohibited by this title.

**VIOLATION:** Failure of a structure or other development to be fully compliant with the county floodplain management regulation. A structure or other development without an elevation certificate or other certifications, or other evidence of compliance as required in this chapter, is presumed in violation until such time as that documentation is provided. (Bill 99-B, 1999; Bill 93-B § 3, 1993)

## **Chapter 19.07**

### **GENERAL PROVISIONS**

#### **19.07.010: LANDS TO WHICH THIS TITLE APPLIES:**

This title shall apply to all areas of special flood hazard within the jurisdiction of Churchill County. (Bill 85-D § 2, 1985)

**19.07.020: BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD:**

The areas of special flood hazard and X-shaded flood zone identified by the federal insurance administration, through the federal emergency management agency in the latest scientific and engineering report (entitled "The Flood Insurance Study For The County Of Churchill", dated November 15, 1985) with accompanying flood insurance rate map and all subsequent revisions and amendments, approved by the board of county commissioners, is adopted by reference and declared to be a part of this title. The latest flood insurance study and maps are on file in the office of the Churchill County planning department. (Bill 2006-O, 2006: Bill 99-B, 1999: Bill 85-D § 2, 1985)

**19.07.030: COMPLIANCE:**

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this title and other applicable regulations. Violations will constitute a misdemeanor. (Bill 99-B, 1999: Bill 85-D § 2, 1985)

**19.07.040: ABROGATION AND GREATER RESTRICTIONS:**

This title is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this title and any other ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Bill 85-D § 2, 1985)

**19.07.050: INTERPRETATION:**

In the interpretation and application of this title, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes. (Bill 85-D § 2, 1985)

**19.07.060: WARNING AND DISCLAIMER OF LIABILITY:**

The degree of flood protection required by this title 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 manmade or natural causes. This title does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This title shall not create liability on the part of Churchill County or any officer or employee thereof, for any flood damages that result in reliance upon this title or any administrative decision lawfully made thereunder. (Bill 85-D § 2, 1985)

**Chapter 19.09**

**ADMINISTRATION**

**19.09.010: ESTABLISHMENT OF DEVELOPMENT PERMIT:**

A development permit, including a grading permit, encroachment permit, dust control permit, placement of a manufactured home, or building permit shall be obtained before construction or development begins within any area of special flood hazard established in section [19.07.020](#) of this title. Application for a development permit or building permit shall be made on forms furnished by Churchill County and may include, but not be limited to, plans in duplicate of appropriate scale

showing the nature, location, dimensions and elevation 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:

- A. Proposed Elevation Of Structures In AO Zone: Proposed elevation, in relation to mean sea level, of the lowest floor (including basement) of all structures whether new or substantially improved in zone AO, elevation of existing grade and proposed elevation of lowest floor of all structures;
- B. Proposed Elevation Of Structures In A, A1-A30, AE And AH Zones: The proposed elevation in relation to mean sea level, of the lowest floor, including the basement, of all structures, whether new or substantially improved, to be located in zones A, A1-A30, AE, and AH, if base flood elevation data are available;
- C. Proposed Elevation Of Floodproofed, Nonresidential Structures: Proposed elevation in relation to mean sea level to which any new or substantially improved nonresidential structure will be floodproofed;
- D. Certificate Of Floodproofing Criteria: Certificate by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in subsection [19.11.010D3](#) of this title;
- E. Physical Changes That May Affect Flooding Conditions:
  1. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. Computations by a registered professional engineer in the state of Nevada must be submitted that demonstrate that the altered or relocated segment will provide equal or more capacity than the original stream segment. The applicant must submit any maps, computations or other material required by FEMA to the administrator for submittal to FEMA to revise the documents enumerated in section [19.05.010](#) of this title when notified by the administrator, and must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained.
  2. When base flood elevations either increase or decrease resulting from physical changes affecting flooding conditions, as soon as practicable, but not later than six (6) months after the date such information becomes available, Churchill County will submit the technical or scientific data to FEMA. Such submissions are necessary so that upon confirmation of the physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data;
- F. Technical Analysis: In certain circumstances the administrator will require a technical analysis, by a professional engineer licensed in the state of Nevada, showing that the proposed development located in the special flood hazard area will not cause physical damage to any other property;
- G. Base Flood Data Provided By Applicant: When there is no flood elevation data available for zone A from any source, the base flood data will be provided by the permit applicant and performed by a Nevada state licensed engineer or surveyor;
- H. Map Showing Limits Of Special Flood Hazard Area: A map produced by a professional engineer, licensed in the state of Nevada, or surveyor, which clearly shows the limits of the special flood hazard area as determined from the adopted FIRM, site topography, base flood elevation, and other best available information; and
- I. CLOMR And LOMR: When required by the administrator, the applicant shall be required to apply to FEMA for a conditional letter of map revision (CLOMR) and subsequent letter or map revision (LOMR) in order that a finding can be made regarding the impacts from proposed development.

J. Property Located On X-Shaded Flood Zone: Where property is located in the X-shaded flood zone or other flood prone areas, as determined by the administrator, the applicant shall provide at least the following information:

1. The proposed elevation above predeveloped adjacent grade of the lowest floor (including the basement) of all residential and nonresidential structures, whether new or substantially improved.
2. The proposed elevation above predeveloped adjacent grade to which any new or substantially improved nonresidential structure will be floodproofed.
3. In certain circumstances the administrator will require a technical analysis, by a professional engineer licensed in the state of Nevada, showing that the proposed development located in the X-shaded flood zone or flood prone area will not cause physical damage to any other property. (Bill 2011-E, 2011: Bill 2006-O, 2006)

**19.09.020: DESIGNATION OF THE ADMINISTRATOR:**

The planning director and building official are appointed to administer and implement this title by granting or denying development permit applications in accordance with its provisions. (Bill 2006-O, 2006)

**19.09.030: DUTIES AND RESPONSIBILITIES OF THE ADMINISTRATOR:**

The duties and responsibilities of the administrator shall include, but not be limited to:

A. Permit Requirements:

1. Review of all development permits to determine that the permit requirements of this title have been satisfied.
2. Ensure all other required state and federal permits have been received.

B. Flood Safety: Review of all permits to determine that the site is reasonably safe from flooding.

C. Development Effects: Review of all development permits to determine if the proposed development adversely affects the flood carrying capacity of the area of special flood hazard. For purposes of this title, "adversely affected" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will increase the water surface elevation of the base flood more than one foot (1') at any point.

D. Postconstruction Flood Discharge: Review of all proposals for the development of five (5) parcels or more to assure that the flood discharge exiting the development after construction is equal to or less than the flood discharge at the location prior to development.

E. Use Of Other Base Flood Data: When base flood elevation data has not been provided in accordance with section [19.07.020](#) of this title, the county shall obtain, review and reasonably utilize the best base flood data available from any source (federal, state or other), such as high water mark(s), floods of record, or private engineering reports, in order to administer [chapter 19.11](#) of this title and provide the developer with an estimated base flood elevation.

1. Single parcels will be required to elevate the lowest floor of any residential structure to no less than two feet (2') above natural grade when base flood data does not exist. Nonresidential structures may elevate or floodproof to meet this standard.
2. All new subdivision proposals and other proposed developments (including proposals for manufactured home parks, and second and subsequent parceling) greater than fifty (50) lots or five (5) acres, whichever is the lesser, will be required to include within such proposals the 100-year base flood elevation before consideration of the preliminary plan for development. The planning director and building official may, at their discretion, require standards exceeding those identified in section [19.11.050](#) of this title.

F. Information To Be Obtained And Maintained: The community shall obtain and maintain for public inspection and make available as needed for flood insurance policies:

1. The certification required in subsections [19.11.010](#)D1, D2 and D3, [19.11.050](#)E and [19.11.060](#)A of this title,
2. Certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the structure's lowest horizontal member is required at that point where the footings are set and slab poured. Failure to submit elevation certification shall be cause to issue a stop work order for the project. As built plans certifying the elevation of the lowest adjacent grade are also required,
3. If fill is used to elevate a structure above the base flood elevation, the permit holder may wish to apply for a letter of map amendment (LOMA), as set forth in [chapter 19.15](#) of this title.

G. Alteration Of Watercourses: It is the responsibility of the planning director to:

1. Notify adjacent communities and the state of Nevada prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the federal emergency management agency.
2. It is required that the flood carrying capacity of the altered or relocated portion of the watercourse be maintained by the community.
3. Within one hundred twenty (120) days following completion of construction of any flood control protective work which changes the rate of flow during a flood or the configuration of the floodplain up or down stream from or adjacent to the project, the person or agency responsible for installation of the project shall provide to the governing bodies of all jurisdictions affected by the project a new delineation of all floodplains affected by the project. The new delineation shall be done according to the criteria adopted by the division of water resources.

H. Interpretation Of Flood Insurance Rate Map (FIRM) Boundaries: The community will provide interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation, as provided in [chapter 19.13](#) of this title.

I. Maintenance Of Flood Protection Measures: The maintenance of any and all flood protection measures (levees, dikes, dams or reservoirs) will be required of the jurisdiction where such measures provide protection. If these measures are privately owned, an operation or maintenance plan will be required of the owner to be on file with the county clerk-treasurer. The community is required to acknowledge all maintenance plans by adoption of such plans by ordinance.

J. Hazard Mitigation Plan: The planning commission and board of county commissioners shall weigh all requests for future floodplain development against the community's master plan. Consideration of the following elements are required before approval:

1. Determine whether or not a proposed development is in, or affects, a known floodplain,
2. Inform the public of the proposed activity,
3. Determine if there is a practicable alternative or site for the proposed activity,
4. Identify impact of the activity on the floodplain,
5. Provide a plan to mitigate the impact of the activity with provisions in subsection D of this section. (Bill 2011-E, 2011: Bill 2006-O, 2006)

## **Chapter 19.11**

### **PROVISIONS FOR FLOOD HAZARD REDUCTION**

#### **19.11.010: STANDARDS OF CONSTRUCTION:**

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

A. Crawl Space Foundations: All new construction and substantial improvements located in special flood hazard areas which utilize crawl space foundations shall conform to the minimum requirements set forth in FEMA technical bulletin 11-01.

B. Anchoring:

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
2. All manufactured housing units shall meet the anchoring standards of subsection [19.11.060A](#) of this chapter.

C. 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 use methods and practices that minimize flood damage.
3. All elements that function as a part of the structure, such as furnace, hot water heater, air conditioner, electrical, plumbing, ventilation, etc., shall be elevated to or above the base flood elevation or depth number specified on the flood insurance rate map (FIRM).
4. Ensure electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed or located so as to prevent water from entering or accumulating within the components during flooding.
5. Within flood zones AH or AO, with adequate drainage conveyance structures to convey floodwaters around and away from proposed structures.
6. The minimum net area of required ventilation openings shall not be less than one square inch for each square foot of enclosed crawl space area. One such ventilation opening shall be within three feet (3') of each corner of the building.

D. Elevation And Floodproofing:

1. New construction and substantial improvement of any structure shall have the bottom of the lowest floor beam or basement floor elevated to at least one foot (1') above the base flood elevation. Nonresidential structures will meet the standards in subsection D3 of this section. Upon completion of the structure, the elevation of the lowest floor, including the basement, shall be certified by a registered professional engineer or surveyor or verified by the local building inspector that the elevation requirements have been met. Notification of compliance shall be recorded as set forth in subsection [19.09.030F](#) of this title.
2. New construction and substantial improvement to any structure in a zone AO shall have the bottom of the lowest floor beam or basement floor elevated at least one foot (1') above the base flood elevation number specified on the flood insurance rate map (FIRM); be elevated at least one foot (1') above the base flood elevation as determined by a state licensed engineer or surveyor; shall be elevated at least one foot (1') above the base flood elevation as specified on the FIRM; shall be elevated at least one foot (1') above the base flood elevation as determined by a state licensed engineer or surveyor. In all other zones, including the X-shaded and flood prone areas, shall be elevated at least one foot (1') above the base flood elevation or predeveloped highest adjacent grade, whichever is greater, or as determined by the administrator. If there is no base flood elevation number on the flood insurance rate map (FIRM), the bottom of the lowest floor beam or basement floor shall be elevated to a depth of two feet (2') above the highest adjacent grade. Nonresidential structures will meet standards in subsection D3 of this section. Upon completion of the structure, compliance to the elevation requirement shall be certified by a registered professional engineer or surveyor

or verified by the local building inspector. Notification of compliance shall be recorded as set forth in subsection [19.09.030F](#) of this title.

- a. The interior grade of a crawl space below the BFE must not be more than two feet (2') below the lowest adjacent grade.
  - b. The height of the below grade crawl space, measured from the interior grade of the crawl space to the top of the floor joist must not exceed four feet (4') at any point.
  - c. There must be an adequate drainage system that removes floodwaters from the interior area of the crawl space. The enclosed area should be drained within a reasonable time after the flood event (within 72 hours).
  - d. The velocity of floodwaters at the site should not exceed five feet (5') per second for any crawl space. For velocities in excess of five feet (5') per second, other foundation types should be used.
  - e. Crawl space construction is not recommended in A zones with high velocity floodwaters (greater than 5 fps).
3. Nonresidential construction shall either be elevated in conformance with subsection D1 or D2 of this section or, together with attendant utility and sanitary facilities, be floodproofed to the base flood elevation. Examples of floodproofing include, but are not limited to:
- a. Installation of watertight doors, bulkheads, and shutters;
  - b. Reinforcement of walls to resist water pressure;
  - c. Use of paints, membranes or mortars to reduce seepage through walls;
  - d. Addition of mass or weight to structure to resist flotation;
  - e. Armor protection of all fill materials from scour and/or erosion;
  - f. Certification by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certification shall be provided to the administrator set forth in section [19.09.020](#) of this title.
4. Manufactured homes shall meet the above standards and also the standards in this chapter.
5. All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect or meet or exceed the following minimum criteria:
- a. Must have a minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
  - b. The bottom of all such openings will be no higher than one foot (1') above the lowest adjacent finished grade.

Openings may be equipped with louvers, valves, screens, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

Before a certificate of occupancy is issued, property owners must be notified, in writing, by the building official, that this type of construction increases the risk of structural damage to the foundation, and may result in higher than normal flood insurance costs. A copy of this notice must attach to title. (Bill 2006-O, 2006: Bill 99-B, 1999: Bill 85-D § 2, 1985)

#### **19.11.020: STANDARDS FOR ALLUVIAL FANS:**

Areas subject to alluvial fan flooding have irregular flow paths that result in erosion of existing channels and the undermining of fill material. Those areas are identified on the flood insurance rate map (FIRM) as AO zones with velocities.

- A. All structures must be securely anchored to minimize the impact of the flood and sediment damage.
- B. All new construction and substantial improvements must be elevated on pilings, columns or armored fill, so that the bottom lowest floor beam is elevated at or above the depth number.
- C. Use of all fill materials must be armored to protect the material from the velocity of the flood flow.
- D. All proposals for subdivision development must provide a mitigation plan that identifies the engineering methods used to:
  - 1. Protect structures from erosion and scour caused by the velocity of the flood flow;
  - 2. Capture or transport flood and sediment flow through the subdivision to a safe point of disposition.
- E. All mobile homes shall be prohibited within the identified hazard area except within existing manufactured home parks or subdivisions. (Bill 2006-O, 2006: Bill 85-D § 2, 1985)

**19.11.030: STANDARDS FOR STORAGE OF MATERIALS AND EQUIPMENT:**

- A. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive, or could be injurious to human, animal or plant life, is prohibited.
- B. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning. (Ord. 85-D § 2, 1985)

**19.11.040: STANDARDS FOR UTILITIES:**

- A. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
- B. All new and replacement sanitary sewage systems shall be designed to prevent infiltration and intermingling of floodwaters. Sanitary sewers and storm drainage systems for buildings that have openings below the base flood elevation shall be provided with automatic backflow valves or other automatic backflow devices that are installed in each discharge line passing through a building's exterior wall.
- C. On site individual sewage disposal systems shall be designed, constructed and located to avoid impairment to their functioning and to reduce potential contamination during flood events. (Bill 2006-O, 2006: Bill 85-D § 2, 1985)

**19.11.050: STANDARDS FOR SUBDIVISIONS:**

- A. All tentative parcel maps, parcel maps, and tentative subdivision maps shall identify the flood hazard area and the elevation of the base flood.
- B. All subdivision plans will provide the elevation of proposed structure(s) and pad(s). If the site is filled above the base flood elevation, the final first floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the floodplain administrator.
- C. All subdivision proposals shall be consistent with the need to minimize flood damage.
- D. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- E. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

F. All tentative maps and grading plans are to provide the elevation of proposed structures or building pads. (Bill 2006-O, 2006: Bill 93-B, 1993: Bill 85-D § 2, 1985)

**19.11.060: STANDARDS FOR MANUFACTURED HOMES:**

- A. All manufactured homes that are placed or substantially improved, within the A zones on the community's flood insurance rate map, on sites located:
1. Outside of a manufactured home park or subdivision;
  2. In a new manufactured home park or subdivision;
  3. In an expansion to an existing manufactured home park or subdivision; or
  4. In an existing manufactured home park or subdivision on a site upon which a manufactured home has incurred substantial damage as the result of a flood;

shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation (the state of Nevada recommends at least 1 foot above the base flood elevation) and be securely anchored to an adequately anchored foundation system to resist flotation collapse and lateral movement.

- B. Manufactured homes in an existing manufactured home park or subdivision will be elevated so that either:
1. The lowest floor of the manufactured home is at or above the base flood elevation (the state of Nevada recommends at least 1 foot above the base flood elevation); or the chassis of the manufactured home is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty six inches (36") in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement;
  2. All manufactured homes located in special flood hazard areas shall be elevated on a permanent foundation such that the bottom of the structural frame or the lowest point of any attached appliances, whichever is lower, is at or above the base flood elevation. (Bill 2011-E, 2011: Bill 99-B, 1999: Bill 93-B, 1993: Bill 85-D § 2, 1985)

**19.11.065: STANDARDS FOR CRITICAL STRUCTURES:**

"Critical structures", as defined in section [19.05.010](#) of this title, are not permitted to be constructed within a special flood hazard area, unless:

- A. All alternative locations in flood zone X have been considered and rejected.
- B. All alternative locations in flood zone X-shaded have been considered and rejected.

If the administrator determines the only practical alternative location for the development of a new or substantially improved critical structure is in a special flood hazard area, he/she shall give public notice of the decision and reasons for the elimination of all alternative locations. (Bill 2006-O, 2006)

**19.11.070: FLOODWAYS:**

Located within areas of special flood hazard established in section [19.07.020](#) of this title are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

- A. Encroachments, including fill, new construction, substantial improvements, storage of equipment or supplies, and other development, are prohibited unless certification by a registered

professional engineer or architect is provided demonstrating the encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- B. If no floodway is identified, the applicant for a permit shall provide an engineering study for the project area that establishes a setback where no encroachment of any new development will be allowed that would increase the water surface elevation of the base flood plus one foot (1'), or establish a setback from the stream bank equal to five (5) times the width of the stream at the top of the bank or twenty feet (20') on each side from the top of the bank, whichever is greater. (Bill 99-B, 1999; Bill 85-D § 2, 1985)

#### **19.11.080: STANDARDS FOR RECREATIONAL VEHICLES:**

All recreational vehicles placed on sites within and on the community's flood insurance rate map will either:

- A. Be on the site for fewer than one hundred eighty (180) consecutive dates;
- B. Be fully licensed and ready for highway use. A 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 type utilities and security devices, and has no permanently attached additions; or
- C. Meet the permit requirements of this title and the elevation and anchoring requirements for manufactured homes in section [19.11.060](#) of this chapter. (Bill 93-B, 1993)

### **Chapter 19.13**

#### **VARIANCE PROCEDURES**

##### **19.13.010: NATURE OF VARIANCES:**

The variance criteria set forth in this chapter are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this title would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the board of county commissioners to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this chapter are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate. (Bill 2006-O, 2006)

##### **19.13.020: APPEAL BOARD:**

- A. The planning commission shall hear and decide appeals and requests for variances from the requirements of this title, upon a notice of appeal or request for variance in writing specifying with particularity the error complained of or relief sought.
- B. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the planning director or building official regarding this title.

- C. Those aggrieved by the decision of the planning commission may appeal such decision to the board of county commissioners as provided by [title 16](#) of this code. Those aggrieved by the decision of the board of county commissioners, or any taxpayer, may appeal such decision to the third judicial district court only as provided by Nevada Revised Statutes.
- D. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards, etc., specified in other sections of this title, and:
1. The danger that materials may be swept onto other lands to the injury of others;
  2. The danger to life and property due to flooding or erosion damage;
  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 uses that are not subject to flooding or erosion damage;
  7. The compatibility of the proposed use with 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;
  11. 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, and streets and bridges.
- E. Variances may not be issued if a public nuisance is caused or if the variance granted will cause fraud or victimization to the public. A public nuisance as related to variances of this chapter must not result in anything which is injurious to safety or health of the entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal or basin. Fraud/victimization, related to variances of this chapter, must not cause fraud on or victimization to the public. In examining this requirement, the planning commission will consider the fact and that every newly constructed building adds to government responsibilities, and remains a part of the community for fifty (50) to one hundred (100) years. Buildings permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger and suffering that those increased flood damages bring. Additionally, future owners may be unaware of the risk potential to the property due to flood damage and the extremely high rates for flood insurance.
- F. Variances shall only be issued upon a:
1. Showing of good and sufficient cause.
  2. Determination that failure to grant the variance would result in exceptional "hardship" to the applicant. The exceptional hardship as used herein is that which would result from a failure to grant the requested variance. The planning commission requires the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the

property owner to build elsewhere, or put the parcel to a different use than originally intended.

3. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a public nuisance (as defined herein), cause fraud or victimization (as defined herein) of the public, or conflict with existing local laws or ordinances.

Variations may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of subsection D of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance. Upon consideration of all the factors of section 6.1C and FEMA technical bulletin 11-01 and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances.

- G. Generally, variances may be issued for new construction and substantial improvements, and other proposed new development to be erected on a lot of one-half ( $1/2$ ) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing subsections D1 through D11 of this section have been fully considered. As the lot size increases beyond the one-half ( $1/2$ ) acre, the technical justification required for issuing the variance increases.
- H. Upon consideration of the factors of subsection D of this section and the purpose of this title, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purpose of this title.
- I. The planning director shall maintain the records of all appeal actions and report any variances to the federal emergency management agency upon request.
- J. Variations may be issued for the repair or rehabilitation of "historic structures" (as defined in section [19.05.010](#) of this title) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- K. Variations shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.
- L. Variations shall only be issued upon a determination that the variance is the "minimum necessary", considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this title. For example, in the case of variations to an elevation requirement, this means the planning commission need not grant permission for the applicant to build at grade level, or even to whatever elevation the applicant proposed, but only to that elevation which the planning commission believes will both provide relief and preserve the integrity of the local ordinance.
- M. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
  1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as twenty five dollars (\$25.00) for one hundred dollars (\$100.00) of insurance coverage;

2. Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the floodplain administrator in the office of the Churchill County recorder and shall be recorded in a manner so that it appears as an exception on the title of the affected parcel of land. (Bill 2006-O, 2006)

## **Chapter 19.15**

### **LETTER OF MAP AMENDMENT**

#### **19.15.010: LETTER OF MAP AMENDMENT:**

There are two (2) methods of appeal that exempt a structure from the purchase of flood insurance; both must be supported by the items listed below:

##### **A. Appeal To Elevation Requirements:**

1. An actual stamped copy of the recorded plat map of the property showing official recordation and proper citation, or a photocopy of the property's legal description (e.g., lot, block and plot number, etc.);
2. A copy of the flood hazard boundary map (FHBM) and/or flood insurance rate map (FIRM). Both must identify the location of the property;
3. A certification by a registered professional engineer or land surveyor or verification by the community building official stating:
  - a. The type of structure,
  - b. The elevation of the lowest finished grade adjacent to the structure,
  - c. The elevation of the bottom of the lowest floor beam.

##### **B. Appeal Of Location:**

1. An actual stamped copy of the recorded plat map of the property showing official recordation and proper citation, or a photocopy of the property's legal description (e.g., lot, block, and plot number, etc.);
2. A copy of the flood hazard boundary map (FHBM) and/or flood insurance rate map (FIRM) must both identify the location of the property as not within zone A or V;
3. Verification by local building official as to the property's location. (Bill 85-D § 2, 1985)