

Ordinance 2021-07

AN ORDINANCE AMENDING TITLE 11, BUILDING AND BUILDING REGULATIONS, CHAPTER 16 FLOOD DAMAGE OF THE MUNICIPAL CODE OF PARK CITY IMPLEMENTING NEW MAPPING AND REGULATIONS FOR FLOOD DAMAGE PREVENTION IN THE AREAS OF SPECIAL FLOOD HAZARD

WHEREAS, the Municipal Code was adopted by the City Council of Park City, Utah to promote the health, safety and welfare of the residents, visitors, and property owners of Park City; and

WHEREAS, the Municipal Code implements the goals, objectives and policies of the Park City General Plan to maintain the quality of life and experiences for its residents and visitors; and to preserve the community’s unique character and values; and

WHEREAS, the Federal Emergency Management Agency updates it Flood Insurance Study and the Flood Insurance Rate Map; and

WHEREAS, to comply with federal regulations to receive flood insurance coverage those updates must be reflected;

NOW, THEREFORE, BE IT ORDAINED by the City Council of Park City, Utah as follows:

SECTION 1. MUNICIPAL CODE AMENDMENTS TO TITLE 11, CHAPTER 16 – Building and Building Regulations Code. The recitals above are incorporated herein as findings of fact. Municipal Code of Park City Chapter 11-16 Flood Damage Prevention is hereby amended as attached (see Attachment A).

SECTION 2. EFFECTIVE DATE. This Ordinance shall be effective upon publication.

PASSED AND ADOPTED this 11th day of March, 2021.

PARK CITY MUNICIPAL CORPORATION

DocuSigned by:
Andy B

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Andy Beerman, Mayor



Attest:

DocuSigned by:

Michelle Kellogg

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Michelle Kellogg, City Recorder

Approved as to form:

DocuSigned by:
Margaret Plane
41523EGF3101489...

Margaret Plane, Special Counsel

ATTACHMENT A

11-16 Flood Damage Prevention

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11-16-1 Statutory Authorization

~~The Legislature of the State of Utah~~ Consistent with Utah Code Ann. § 10-3-701, has delegated the responsibility to local governments ~~and units to~~ adopt ~~regulations-ordinances~~ designed to promote the public health, safety and general welfare of its citizenry.

11-16-2 Findings Of Fact

- A. The flood hazard areas of Park City are subject to periodic inundation, which ~~could~~ results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and 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.
- B. These flood losses are ~~caused~~ created by the cumulative effect of obstructions in floodplains areas of special flood hazards, which cause an increase flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because when inadequately anchored, damage uses in other areas. Uses that they are inadequately flood-proofed, elevated, or otherwise protected from flood damage, ~~also contribute to the flood loss.~~

11-16-3 Statement Of Purpose

It is the purpose of this Chapter 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 the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. Insure that potential buyers are notified that property is in an area of special flood hazard; and
- H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

11-16-4 Methods Of Reducing Flood Losses

In order to accomplish its purpose, this Chapter ~~uses~~ includes the following -methods ~~and provisions for~~:

- A. Restricting ~~ing~~ or prohibiting ~~ing~~ uses which are dangerous to health, safety or property in times of flood or cause excessive increases in flood heights or velocities; ~~and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;~~
- B. Requiring ~~ing~~ that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling ~~ing~~ the alteration of natural flood-plains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters; ~~help accommodate or channel flood waters;~~
- D. Controlling ~~ing~~ filling, grading, dredging, and other development which may increase flood damage; and
- E. Preventing ~~ing~~ or regulating ~~ing~~ the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

11-16-5 Lands To Which This Chapter Applies

This Chapter shall apply to all areas of special flood hazard within the jurisdiction of Park City, [Utah](#).

11-16-6 Basis For Establishing The Areas Of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency in [a scientific and engineering report entitled, "The Flood Insurance Study of Park City, Utah", dated March 23, 2021, with accompanying March 23, 2021 Flood Insurance Rate Maps and Flood Boundary Maps \(FIRM and FBFM\) and any revisions thereto are hereby adopted by reference and declared to be a part of this Chapter.](#) ~~its Flood Insurance Study, dated March 16, 2006, with accompanying Flood Insurance Rate Map (FIRM) dated March 16, 2006, is adopted by reference and declared to be a part of this Chapter. The study and FIRM are on file at the Park City Planning Office, 445 Marsac Avenue, Park City, Utah. The City may, from time to time, adopt additional or updated maps prepared by FEMA, which maps would then further define the areas of special flood hazard.~~

HISTORY

Amended by Ord. ~~06-03~~ on 2/16/2006

11-16-7 ESTABLISHMENT OF DEVELOPMENT PERMIT

[A floodplain development, preliminary plat approval, site plan approval, or a building permit, shall be required to ensure conformance with the provisions of this Chapter.](#)

11-16-78 Compliance

No structure or land [within City limits shall hereafter be](#) ~~shall hereafter be constructed,~~ located, ~~extended,~~ ~~or altered,~~ [or have its use changed without full compliance with the terms](#) ~~without full compliance with the terms~~ of this Chapter and other applicable regulations.

11-16-98 Abrogation And Greater Restrictions

This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and other Titles or Chapters of this Code, [another ordinance,](#) easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

11-16-109 Interpretation

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

[A. C](#)onsidered as minimum requirement;

[B. L](#)iberally construed in favor of the governing body; and

~~[C. d](#)~~ [D](#)eemed neither to limit nor repeal any other powers granted under [s](#)State statutes.

11-16-110 Warning And Disclaimer Of Liability

The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. [On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes.](#) ~~Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes.~~ This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of Park City, or any officer or employee thereof [for any flood damages that result from the reliance on this Chapter or any administrative decision lawfully made thereunder,](#) ~~or the Federal Emergency Management Agency for~~

~~any flood damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.~~

11-16-12 SEVERABILITY

If any section, provision, or portion of this Chapter is adjudged unconstitutional or invalid by a court, the remainder of the Chapter shall not be affected.

11-16-11 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 11-16-6. Application for a Development Permit shall be made on forms furnished by the Building Official 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, of the lowest floor, including basement, of all structures;~~
- ~~2. Elevation, in relation to mean sea level, to which any structure has been flood proofed;~~
- ~~3. Certification by a registered professional engineer or architect that the flood proofing methods for any non-residential structure meet the flood proofing criteria in Section 11-16-14; and~~
- ~~4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.~~

11-16-123 Designation Of The FLOODPLAIN ADMINISTRATOR Building Official As Local Administrator

The Park City, City Engineer is hereby appointed the Floodplain Administrator to administer and implement the provisions of this Chapter and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management. The Building Official is hereby appointed to administer and implement this Chapter by granting or denying development permit applications in accordance with its provisions.

11-16-143 Duties And Responsibilities Of The Floodplain Administrator Building Official

Duties and responsibilities of the Floodplain Administrator shall include, Building Official shall include, but not be limited to, the following:

- A. Maintain and hold open for public inspection records pertaining to the provisions of this Chapter.
- B. Review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- C. Review, approve or deny all applications for development permits required by adoption of this Chapter. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State and local government agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
- D. Where interpretation is 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 Floodplain Administrator shall make the necessary interpretation.

E. Notify, in riverine situations, adjacent communities and the State Coordinating Agency which is the State of Utah Department of Public Safety Emergency Management Division, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

F. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

G. When base flood elevation data has not been provided in accordance with Section 11-16-5, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Section 11-16-17 General Standards.

H. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

I. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision).

1. ~~PERMIT~~ ~~REVIEW.~~

- ~~1. Review all development permits to determine that the permit requirements of this Chapter have been satisfied.~~
- ~~2. Review all development permits to determine that all necessary 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 is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 11-16-11 are met.~~

~~If it is determined that there is no adverse effect and the development is not a building, then the permit shall be granted without further consideration.~~

~~If it is determined that there is an adverse effect, then technical justification, i.e., registered professional engineer, for the proposed development shall be required.~~

~~If the proposed development is a building, then the provisions of this Chapter shall apply.~~

- ~~2. **USE OF OTHER BASE FLOOD DATA.** When base flood elevation data has not been provided in accordance with Section 11-16-6, the Building Official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer Section 11-16-15 Specific Standards.~~
- ~~3. **INFORMATION TO BE OBTAINED AND MAINTAINED.**~~
 - ~~1. Obtain and record the actual elevation, in relation to mean seal 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 flood proofed structures, verify and record the actual elevation, in relation to mean sea level, to which the structure has been flood proofed, maintain the flood proofing certifications required in Section 11-16-11(C) and maintain for public inspection all records pertaining to the provisions of this Chapter.~~
- ~~4. **ALTERATION OF WATERCOURSES.** Notify adjacent communities and the State Division of Comprehensive Emergency Management prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Management Agency. The Building Official shall also require that maintenance is provided within the altered or relocated portion of said watercourse so that flood carrying capacity is not diminished.~~
- ~~5. **INTERPRETATION OF FIRM BOUNDARIES.** Make 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.~~
- ~~6. **VARIANCES.** Appeals and requests for variances from the requirements of this Chapter shall be heard in accordance with the established procedures of Park City. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.~~

11-16-15 ~~11-16-15~~ PERMIT PROCEDURES

- A. Applications for a development permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:
 1. Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures;
 2. Elevation (in relation to mean sea level) to which any nonresidential structure shall be floodproofed;
 3. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Section 11-16-18(2);
 4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development;
 5. Maintain a record of all such information in accordance with Section 11-16-14(A).
- B. Approval or denial of a development permit by the Floodplain Administrator shall be based on all of the provisions of this Chapter and the following relevant factors:
 1. The danger to life and property due to flooding or erosion damage;

- 2 The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- 3 The danger that materials may be swept onto other lands to the injury of others;
- 4 The compatibility of the proposed use with existing and anticipated development;
- 5 The safety of access to the property in times of flood for ordinary and emergency vehicles;
- 6 The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
- 7 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;
- 8 The necessity to the facility of a waterfront location, where applicable;
- 9 The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- 10 The relationship of the proposed use to the comprehensive plan for that area.

11-16-16 ~~11-16-16~~ V VARIANCE PROCEDURES

- A. The Board of Appeals ~~City Council~~ as established by the Land Management Code shall hear and render judgement on requests for variances from the requirements of this Chapter.
- B. The Board of Appeals ~~City Council~~ shall hear and render judgement on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this Chapter.
- C. Any person or persons aggrieved by the decision of the Board of Appeals ~~City Council~~ may appeal such decision in the courts of competent jurisdiction within thirty (30) days.
- D. The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- E. 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 Chapter.
- F. 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 the relevant factors in Section 11-16-15 (2A - J) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

G. Upon consideration of the factors noted above and the intent of this Chapter, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Chapter (Section 11-16-3 Statement of Purpose).

H. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

I. Variances may be issued for the repair or rehabilitation of historic structures 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.

J. Prerequisites for granting variances:

1 Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

2 Variances shall only be issued upon:

a. showing a 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 a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

3 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 below 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.

K. Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

1 the criteria outlined in Section 11-16-16 (1)-(9) are met; and

2 the structure or other development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.

11-16-174 General Standards

In all areas of special flood hazards, the following provisions are required for all new construction and substantial improvements: standards are required:

1. ~~ANCHORING. All new construction and substantial improvements including manufactured homes, which are controlled by the Land Management Code, shall be anchored to prevent floatation, collapse, or lateral movement of the structure. All manufactured homes must be elevated and anchored to resist floatation, 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:~~

- ~~1. Over the top ties at each of the four corners of the manufactured home, with two (2) additional ties per side at intermediate locations, with manufactured homes less than fifty feet (50') long requiring one (1) additional tie per side;~~
- ~~2. Frame ties be provided at each corner of the home with five (5) additional ties per side at intermediate points, with manufactured homes less than fifty feet (50') long requiring four additional ties per side;~~
- ~~3. All components of the anchoring system be capable of carrying a force of 4,800 pounds; and~~
- ~~4. Any additions to the manufactured home must be similarly anchored.~~

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.~~

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.~~

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 fifty (50) lots or five (5) acres, whichever is less.~~

A. Shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

B Shall be constructed by methods and practices that minimize flood damage;

C Shall be constructed with materials resistant to flood damage;

D 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.

E All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

F New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,

G On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

11-16-185 Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Section 11-16-6, (ii) Section 11-16-14(7G), or (iii) Section 11-16-18(3C), the following provisions are required:
~~In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 11-16-13 (B) the following standards are required:~~

- ~~1. **RESIDENTIAL CONSTRUCTION.** New construction and substantial improvement of any residential structure shall have the lowest floor, including the basement, elevated to or above base flood elevation. Within any AO or AH zone on the FIRM, all new construction and substantial improvement of residential construction shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM, at least two feet if no depth number is specified. Within any AO or AH zone, adequate drainage paths around structures shall be required to guide floodwater around and away from proposed structures.~~
- ~~2. **NON-RESIDENTIAL CONSTRUCTION.** New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or together with attendant utility and sanitary facilities, shall:
 - ~~1. Be flood proofed so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water;~~
 - ~~2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and~~
 - ~~3. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Official as set forth in Section 11-16-13(C)(2).~~
 - ~~4. Within any AO or AH Zone on the FIRM, all new construction and substantial improvement of non-residential structures: (a) shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM, at least two feet (2') if no depth number is specified; or (b) together with attendant utility and sanitary facilities be completely flood proofed to that~~~~

level to meet the flood-proofing standard specified in Section 11-16-15(B), above. Within any AO or AH Zone, adequate drainage paths around structures shall be required to guide floodwater around and away from proposed structures.

3. ~~**OPENINGS IN ENCLOSURES BELOW THE LOWEST FLOOR.**~~ For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize the hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 1. 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 shall be provided;
 2. The bottom of all openings shall be no higher than one foot (1') above grade; and
 3. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.
4. ~~**MANUFACTURED HOMES.**~~ Manufactured homes shall be anchored in accordance with Section 11-16-14 (A). All manufactured homes or those to be substantially improved shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and is securely anchored to an adequately anchored foundation system.

A. Residential Construction - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in Section 11-16-15(4A), is satisfied.

B. Nonresidential Construction - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.

C. Enclosures - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement 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 registered professional engineer or architect or meet or exceed the following minimum criteria:

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

D. Manufactured Homes –

1. Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, 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. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:

a. the lowest floor of the manufactured home is at or above the base flood elevation, or

ii.b. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

E. Recreational Vehicles - Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either:

1. be on the site for fewer than 180 consecutive days,

2. be fully licensed and ready for highway use, or
3. meet the permit requirements of Section 11-16-15(A), and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. 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.

11-16-19 ~~11-16-19~~ STANDARDS FOR SUBDIVISION PROPOSALS

- A. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Sections 11-16-~~2d~~, -3, -4.
- B. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of Sections 11-16-7, -15, -17, -18, -19, and -20 of this Chapter.
- C. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Section 11-16-6, or Section 11-16-14 (~~7G~~) of this Chapter.
- D. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- E. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

11-16-20 STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the areas of special flood hazard established in Section 11-16-6, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- A. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).
- B. All new construction and substantial improvements of non-residential structures;
 1. have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified), or;

2. together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

C. A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in Section 11-16-15(A), are satisfied.

D. Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

11-16-2116 Floodways

~~Located within areas of special flood hazard established in Section 11-16-6 are areas designated as floodway. 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 or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.~~
- ~~2. If Section 11-16-16(A) is satisfied, all new construction and substantial improvement shall comply with all applicable flood hazard reduction provisions of Section 11-16-14 and Section 11-16-15.~~

Floodways - located within areas of special flood hazard established in Section 11-16-6, are areas designated as floodways. 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 shall apply:

A. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway *unless* it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

B. If Section 11-16-20(1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 11-16-17, -18, -19.

C. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community **first** applies for a conditional FIRM and floodway revision through FEMA.

11-16-22 DEFINITIONS

The following definitions apply in this Chapter:

ALLUVIAL FAN FLOODING - means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

APEX - means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

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

AREA OF SPECIAL FLOOD HAZARD - is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

BASE FLOOD - means the flood having a one percent chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE) is the water surface elevation of the 1-percent-annual-chance flood event. It is the height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas. It is also the elevation shown on the FIRM and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a 1-percent chance of equaling or exceeding that level in any given year.

BASEMENT - means any area of the building having its floor sub-grade (below ground level) on all sides.

CRITICAL FEATURE - means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

DEVELOPMENT - means any man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

ELEVATED BUILDING - means a non-basement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately

anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In the case of Zones V1-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls met the standards of Section 60.3(e)(5) of the National Flood Insurance Program regulations.

EXISTING CONSTRUCTION - means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - means 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 before the effective date of the floodplain management regulations adopted by a community.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION- Means 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 OR FLOODING - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters.
2. the unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD INSURANCE RATE MAP (FIRM) - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY - is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

FLOODPLAIN OR FLOOD-PRONE AREA - means any land area susceptible to being inundated by water from any source (see definition of flooding).

FLOODPLAIN MANAGEMENT - means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency

preparedness plans, flood control works and floodplain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS - means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOOD PROTECTION SYSTEM - means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

FLOOD PROOFING - means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY (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 a designated height.

FUNCTIONALLY DEPENDENT USE - means 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, but does not include long-term storage or related manufacturing facilities.

HIGHEST ADJACENT GRADE - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. 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;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory or historic places (the Park City Historic Sites

Inventory) in communities with historic preservation programs that have been certified either:

a) by an approved state program as determined by the Secretary of the Interior; or

b) directly by the Secretary of the Interior in states without approved programs.

LEVEE - means a man-made 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 - means 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 accordance with sound engineering practices.

LOWEST FLOOR - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; **provided** that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood insurance Program regulations.

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".

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.

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

NEW MANUFACTURED HOME PARK OR SUBDIVISION - means 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 a community.

RECREATIONAL VEHICLE - means a vehicle which is:

1. built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projections;
3. designed to be self-propelled or permanently towable by a light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

START OF CONSTRUCTION - (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement 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 180 days of the permit date. 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 basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For 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 - means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE - means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

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 "start of construction" of the improvement. This 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, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary 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."

VARIANCE - is a grant of relief to a person from the requirement of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance. (For full

requirements see Section 60.6 of the National Flood Insurance Program regulations.).

VIOLATION - means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

WATER SURFACE ELEVATION - means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.