## ATTACHMENT D

### Chapter 21

## HAZARD REGULATIONS © 🖃

12-21-1: PURPOSE:

12-21-2: **DEFINITIONS**:

12-21-3: MASTER HAZARD PLANS:

12-21-4: APPROVAL OF MASTER PLANS:

12-21-5: TOWN MANAGER TO ACCUMULATE INFORMATION:

12-21-6: SUPPLEMENTAL STUDIES BY APPLICANT:

12-21-7: REPORT TO TOWN COUNCIL:

12-21-8: INTERPRETATION:

12-21-9: DISCLAIMER OF LIABILITY:

12-21-10: DEVELOPMENT RESTRICTED:

12-21-11: FLOOD HAZARD ZONES:

12-21-12: RESTRICTIONS IN SPECIFIC ZONES ON EXCESSIVE SLOPES:

12-21-13: RESTRICTIONS IN GEOLOGICALLY SENSITIVE AREAS:

12-21-14: RIGHT OF APPEAL:

12-21-15: REQUIREMENT OF BOND:

12-21-1: PURPOSE: 👫 🔤

The purpose of this chapter is to help protect the inhabitants of the town from dangers relating to development of floodplains, avalanche paths, steep slopes, wildfire hazard areas and geologically sensitive areas; to regulate the use of land areas which may be subject to wildfire, flooding and avalanche or which may be geologically sensitive; and further to regulate development on steep slopes; to protect the economic and property values of the town, to protect the aesthetic and recreational values and natural resources of the town, which are sometimes associated with floodplains, wildfire hazard areas, avalanche areas and areas of geological sensitivity and slopes; to minimize damage to public facilities and utilities and minimize the need for relief in cleanup operations; to give notice to the public of certain areas within the town where floodplains, wildfire hazard areas, avalanche areas and areas of geologic sensitivity exist; and to promote the general public health, safety and welfare. (Ord. 5(1985) § 1: Ord. 12(1978) § 4)

12-21-2: DEFINITIONS: <sup>♠</sup> □

For the purposes of this chapter, the words contained in this section are defined as follows:

ALLUVIAL FAN FLOODING: 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: 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: A designated AO, AH, or VO zone on a community's flood insurance rate map (FIRM) with a one percent (1%) chance or greater annual chance of flooding to an average depth of one to three feet (3') 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.

BASE FLOOD: The flood having a one percent (1%) chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION: The elevation shown on a FEMA flood insurance rate map for zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent (1%) chance of equaling or exceeding that level in any given year.

BASEMENT: Any area of the building having its floor subgrade (below ground level) on all sides.

BLUE HAZARD AVALANCHE AREA: An area impacted by a snow producing a total static and dynamic pressure less than six hundred (600) pounds per square foot on a flat surface normal to the flow and/or a return interval in excess of twenty five (25) years.

CONDITIONAL LETTER OF MAP REVISION (CLOMR): FEMA's comment on a proposed project, which does not revise an effective floodplain map, that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodplain.

CRITICAL FACILITY: A structure or related infrastructure, but not the land on which it is situated, as specified in subsection 12-21-11 of this chapter, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood.

CRITICAL FEATURE: 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: Any manmade 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: A nonbasement building: a) 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 b) 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 floodwaters. 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: For the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM. "Existing construction" may also be referred to as "existing structures".

FLOOD HAZARD ZONE: The land in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year. The area is designated as zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V, on the flood insurance rate map (FIRM).

FLOOD INSURANCE RATE MAP (FIRM): An official map on which the federal emergency management agency has delineated both the special flood hazard areas (SFHA) and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY: The official report provided by the federal emergency management agency that includes flood profiles and water surface elevation of the base flood as well as the flood boundary-floodway map.

FLOOD OR FLOODING: A general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters.
- B. The unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD PROTECTION SYSTEM: 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.

FLOODPLAIN MANAGEMENT: 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 OR FLOOD PRONE AREA: Any land area susceptible to being inundated by water from any source (see definition of Flood Or Flooding).

FLOODPROOFING: Any combination of structural and nonstructural 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): 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: 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 shipbuilding and ship repair facilities, but does not include long term storage or related manufacturing facilities.

GEOLOGICALLY SENSITIVE AREA: An area within the town of Vail which may be subject to rockfalls, mudflows, debris flows, debris avalanches, and unstable soil, slopes or rocks.

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

HISTORIC STRUCTURE: Any structure that is:

A. 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;

B. Certified or preliminarily determined by the secretary of the interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;

C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the secretary of interior; or

D. Classified as historically significant per <u>title 10, chapter 2</u>, "Special Historic And Architectural Structures", of this code.

LETTER OF MAP REVISION (LOMR): FEMA's official revision of an effective flood insurance rate map (FIRM), or flood boundary and floodway map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations (BFEs), or special flood hazard area (SFHA).

LETTER OF MAP REVISION BASED ON FILL (LOMR-F): FEMA's modification of the special flood hazard area (SFHA) shown on the flood insurance rate map (FIRM) based on the placement of fill outside the existing regulatory floodway.

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 accordance 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 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 requirement of section 60.3 of the national flood insurance program regulations.

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 the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM, 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 December 4, 2007, and includes any subsequent improvements to such structures.

100-YEAR FLOODPLAIN: See the definition of Flood Hazard Zone.

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 projections;

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.

RED HAZARD AVALANCHE AREA: Any area impacted by a snow avalanche producing a total static and dynamic pressure in excess of six hundred (600) pounds per square foot on a flat surface normal to the flow and/or a return interval of less than twenty five (25) years.

SLOPE: As defined in section 12-2-2 of this title.

SPECIAL FLOOD HAZARD AREA: The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year, i.e., the 100-year floodplain.

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 one hundred eighty (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.

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: Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure. Market value shall be determined by a qualified assessor designated by the administrator. The market value of a structure is determined 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. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include 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.

VIOLATION: 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)(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: 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.

WILDFIRE HAZARD AREA: For the purposes of this code a wildfire hazard area is defined as an area at elevated risk to public safety from wildland fire. Wildfire hazard areas contain or are surrounded by vegetation, live or dead, which has the potential to burn and cause public safety hazards. All of the Town of Vail is within a wildfire hazard area.

ZONE OF INFLUENCE: Any area in a potential avalanche hazard zone where detailed information is not currently available but which may be impacted by said hazard. These zones of influence shall be designated on the appropriate maps of the administrator of the town. (Ord. 19(2013) § 1)

### 12-21-3: MASTER HAZARD PLANS: © 🖃

The town manager shall formulate and develop master hazard plans for the town. Said hazard plans shall be based on engineering studies and shall indicate the location of known floodplains, avalanche, wildfire hazard areas and geological hazard zones of influence, known red and blue avalanche and geological hazard areas, and forty percent (40%) slope areas. In addition, the plans may show any other information or data deemed to be desirable by the town manager. Maximum citizen participation during the formulation of the master hazard plans as well as other phases of the information implementation of the hazard studies and regulations shall be encouraged. The purpose of the master hazard plans is to identify and alleviate present and future problems created by the construction of improvements in the hazard areas within the town by means of presenting in an orderly fashion the general data and information which are essential to the understanding of the relationship between the hazards and improvements located within said areas. The master hazard plans may be altered from time to time to conform to new information or existing conditions. (Ord. 29(2005) § 43: Ord. 12(1978) § 4)

## 12-21-4: APPROVAL OF MASTER PLANS: © 🖃

The master hazard plans shall not be considered to be official hazard master plans of the town until and unless the town council adopts the same, by motion. No substantial modification of the master hazard plan shall be made unless it is first approved by the town council in a similar manner. As soon as the master hazard plans are adopted, or portions thereof are adopted, a copy of it shall be placed on file in the office of the town clerk, where it may be inspected by any interested party during normal business hours. (Ord. 12(1978) § 4)

# 12-21-5: TOWN MANAGER TO ACCUMULATE INFORMATION: © 🖃

The town manager, with the advice and approval of the planning and environmental commission, shall continue to study and accumulate information as to hazard areas. When additional information is available, it shall be reviewed by the planning and environmental commission and added to the master hazard plans. (Ord. 12(1978) § 4)

## 12-21-6: SUPPLEMENTAL STUDIES BY APPLICANT: \*\* ==

If an application is made to build in an identified avalanche hazard zone of influence or

modification to the floodplain, the administrator may require the applicant to conduct supplemental studies as specified in this chapter. The information submitted by the applicant following completion of said studies shall be viewed by the town staff and the planning and environmental commission and may be added to the master hazard plans. (Ord. 12(1978) § 4)

12-21-7: REPORT TO TOWN COUNCIL: 🕯 🖃

The town manager shall report to the town council not less than once each year on any additions that have been made to the master hazard plan. (Ord. 12(1978) § 4)

12-21-8: INTERPRETATION: <sup>♠</sup> □

The provisions of this chapter shall be deemed to be minimum requirements. Nothing herein shall impair the obligations of or interfere with private agreements in excess of the minimum requirements. Where this chapter imposes a restriction different from that imposed by other applicable provisions of law, contract, or deed, the more restrictive provision shall control. (Ord. 5(1985) § 3)

12-21-9: DISCLAIMER OF LIABILITY: 🗣 🖃

This chapter is based on scientific and engineering considerations which are continually being developed. Compliance with the provisions herein cannot ensure freedom from risk to life, safety or property. This section shall not create liability on the part of the town or any officer or employee thereof for any damage that may result from reliance on this chapter, or any administrative decision lawfully made hereunder. The designation of certain areas as hazard areas or geologically sensitive areas pursuant to maps incorporated into this chapter does not imply in any way that areas not so designated are free from all risk to life, safety or property. (Ord. 5(1985) § 4)

12-21-10: DEVELOPMENT RESTRICTED: 🗣 🖃

A. No structure shall be built in any flood hazard zone or red avalanche hazard area. No structure shall be built on a slope of forty percent (40%) or greater except in single-family residential, two-family residential, or two-family primary/secondary residential zone districts. The term "structure" as used in this section does not include recreational structures that are intended for seasonal use, not including residential use.

- B. Structures may be built in blue avalanche hazard areas provided that proper mitigating measures have been taken.
- C. The administrator may require any applicant or person desiring to build in an avalanche hazard zone of influence to submit a definitive study of the hazard area in which the applicant proposes to build if the town's master hazard plan does not contain sufficient information to determine if the proposed location is in a red hazard or blue hazard area. The requirement for additional information and study shall be done in accord with <a href="https://chapter12">chapter 12</a> of this title.
- D. The administrator may require any applicant or person desiring to build in an identified blue avalanche hazard zone to submit additional information or reports as to whether or not

improvements are required to mitigate the possible hazard. If mitigation is required, said information and report should specify the improvements proposed in the blue avalanche hazard zone. The required information and reports shall be done in accordance with <u>chapter 12</u> of this title. (Ord. 28(2007) § 4: Ord. 29(2005) § 44: Ord. 16(1983) § 1: Ord. 12(1978) § 4)

## 12-21-11: FLOOD HAZARD ZONES: ©

A. Lands To Which This Chapter Applies: This chapter shall apply to all special flood hazard areas and areas removed from the floodplain by the issuance of a FEMA letter of map revision based on fill (LOMR-F) within the jurisdiction of the town of Vail, Colorado.

- B. Purpose: To promote public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
- 1. Protect human life and health;
- 2. Minimize expenditure of public money for costly flood control projects;
- 3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 4. Minimize prolonged business interruptions;
- 5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- 6. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas;
- 7. Ensure that potential buyers are notified that property is in a flood area;
- 8. Ensure that those who occupy the floodplain assume the responsibility for their actions;
- 9. Protect the natural areas required to convey flood flows and retain flow characteristics; and
- 10. Obtain and maintain the benefits to the community of participating in the national flood insurance program.
- C. Basis For Establishing Special Flood Hazard Areas: Special flood hazard areas identified by the federal emergency management agency in a scientific and engineering report entitled, "The Flood Insurance Study For Eagle County, Colorado, And Incorporated Areas" dated December 4, 2007, with accompanying flood insurance rate maps and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter.
- D. Designation Of The Floodplain Administrator: The town engineer or designee 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.

- E. Duties And Responsibilities Of The Floodplain Administrator: Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:
- 1. Maintain and hold open for public inspection all records pertaining to the provisions of this chapter.
- 2. Review all permit applications to ensure that the requirements of this chapter have been satisfied and that the proposed improvement will be reasonably safe from flooding.
- 3. Review, approve or deny floodplain use and modification permits to determine whether proposed improvements meet the provisions of this chapter.
- 4. Review evidence prior to the issuance of a floodplain use permit that all necessary permits have been obtained from those federal, state, or local government agencies from which prior approval is required. Conditional floodplain use permits may be issued contingent upon receipt of the above mentioned agency permits.
- 5. Review and verify that no new habitable structure is constructed within the special flood hazard area.
- 6. Review and verify that a licensed professional engineer or professional land surveyor certified the location of the 100-year floodplain on all development applications that are adjacent to, or partially located within the 100-year floodplain, that are proposing improvements that may affect the floodplain.
- 7. Where interpretation is needed as to the exact location of the boundaries of the special flood hazard areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the floodplain administrator shall make the necessary interpretation.
- 8. Notify, in riverine situations, adjacent communities and the Colorado water conservation board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the federal emergency management agency.
- 9. Assure that the flood carrying capacity within any altered or relocated portion of any watercourse is maintained.
- 10. When base flood elevation data have not been provided in accordance with subsection C of this section, the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from federal, state or other source, in order to administer the provisions of subsection G of this section.
- 11. 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-half foot  $\binom{1}{2}$  at any point within the community.

12. 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-half foot  $\binom{1}{2}$ , provided that the community first applies for a conditional FIRM revision through FEMA (conditional letter of map revision).

### F. Floodplain Permits:

- 1. Floodplain Use Permit:
- a. Purpose: The floodplain use permit is a permit to allow temporary grading within the floodplain and allow for necessary public infrastructure improvements within the floodplain. A floodplain use permit may be issued under at least one of the following conditions:
- (1) Temporary grading in the floodplain approved by the floodplain administrator, in which the site is returned to its existing grade and conditions;
- (2) Utility construction/maintenance within the floodplain approved by the floodplain administrator which is deemed to have an insignificant impact to the 100-year floodplain;
- (3) Stream bank stabilization within the floodplain approved by the floodplain administrator and is deemed to have an insignificant impact to the floodplain;
- (4) Public infrastructure construction/maintenance approved by the floodplain administrator including, but not limited to, roads, bridges, recreation paths, walks, stream drop structures, and stream erosion control measures which are deemed to have an insignificant impact to the floodplain;
- b. Floodplain Use Permit Application Submittal Requirements: Applicants shall provide the following information prior to design review or any review by the planning and environmental commission:
- (1) Site plan at an engineering scale showing the location, dimensions, and elevations of the proposed landscape/grade alterations, existing and proposed structures, relevant landscape/topographic features, and the location of the foregoing in relation to the 100-year floodplain. The floodplain line shall be provided on a plan certified by a licensed professional engineer or land surveyor.
- (2) Detailed topographic cross sections provided by a licensed professional surveyor of the area proposed to be altered, showing existing and proposed conditions.

- (3) Description of the extent to which any floodplain will be altered including why, when, how, and when it will be replaced back to its original configuration, and addressing each relevant criterion in subsection F3 of this section.
- (4) Copy of all other necessary approved permits (i.e., building permit, public way permit, ACOE permit, dewatering permit, DOW permit, CDHPE permit, etc.).
- (5) If required by the floodplain administrator, an engineered floodplain analysis of the impacts to the floodplain prepared by a qualified licensed professional engineer.
- (6) Submitted application for a conditional FIRM and floodway revision through FEMA, if applicable.
- (7) Any additional information deemed necessary by the floodplain administrator.
- 2. Floodplain Modification Permit:
- a. Purpose: A floodplain modification permit is a permit to allow construction of improvements and/or modifications to the adopted floodplain for all other uses, improvements, or modifications to or within the floodplain that do not fall within the guidelines of the floodplain use permit. However, no habitable structures or improvements shall be allowed to be constructed within the floodplain.
- b. Floodplain Modification Application Submittal Requirements: Applicants shall provide the following information prior to design review or any review by the planning and environmental commission:
- (1) Elevation of the lowest floor (including basement and crawl space) of all new and substantially improved structures within or adjacent to the floodplain.
- (2) Description of the extent to which any floodplain will be altered including why, when, how, and when it will be replaced back to its original configuration, and addressing each relevant factor in subsection F3 of this section.
- (3) Signature of the owners of all property subject to an impact by the proposed improvement.
- (4) A site plan drawn to an engineering scale showing the location, dimensions, and elevations of the proposed landscape/grade alterations, existing and proposed structures, relevant landscape/topographic features, and the location of the foregoing in relation to the 100-year floodplain. The floodplain line shall be provided on a plan certified by a licensed professional engineer or land surveyor.
- (5) Detailed topographic cross sections provided by a licensed professional surveyor of the area proposed to be altered, showing existing and proposed conditions.

- (6) Copy of all other necessary approved permits (i.e., building permit, public way permit, ACOE permit, dewatering permit, DOW permit, CDHPE permit).
- (7) An engineered floodplain analysis of the impacts to the floodplain prepared by a qualified licensed professional engineer.
- (8) Copy of submitted application for a conditional FIRM and floodway revision through FEMA, if applicable.
- (9) Environmental impact report, per chapter 12 of this title.
- (10) Any additional information deemed necessary by the floodplain administrator.
- 3. Review, Criteria And Findings: At the discretion of the floodplain administrator, floodplain use permits may be reviewed by the floodplain administrator or the PEC. All floodplain modification permits shall be reviewed and approved by the floodplain administrator and the PEC.
- a. Criteria: The following factors shall be used to make a determination in issuance of floodplain permits:
- (1) The effects upon the efficiency or capacity of the floodway;
- (2) The effects upon persons and personal property upstream, downstream and in the immediate vicinity;
- (3) The effects upon the 100-year flood profile and channel stability;
- (4) The effects upon any tributaries to the main stream, drainage ditches and any other drainage facilities or systems;
- (5) The danger to life and property due to flooding or erosion damage;
- (6) The susceptibility of the proposed improvement and its contents to flood damage and the effect of such damage on the individual owner;
- (7) The danger that materials may be swept onto other lands to the injury of others;
- (8) The compatibility of the proposed use with existing and anticipated development;
- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) 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;

- (11) 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;
- (12) The effect the proposed changes will have any adverse environmental effect on the watercourse including, without limitation, erosion of stream banks and stream side trees and vegetation and wildlife habitat;
- (13) The necessity to the facility of a waterfront location, where applicable;
- (14) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (15) The relationship of the proposed use to the comprehensive plan for that area.
- b. Findings: The following findings shall be made before granting of a floodplain permit:
- (1) That the proposed use or modification adequately addresses the findings in subsection F3a of this section, as determined by the floodplain administrator, unless the applicant can demonstrate that one or more of the standards is not applicable, or that a practical solution consistent with the public interest has been achieved;
- (2) That the proposed use or modification is consistent with the adopted goals, objectives and policies outlined in the Vail comprehensive plan and compatible with the development objectives of the town; and
- (3) That the proposed use or modification is compatible with and suitable to adjacent uses and appropriate for the surrounding areas; and
- (4) That the proposed use or modification promotes the health, safety, morals, and general welfare of the town and promotes the coordinated and harmonious development of the town in a manner that conserves and enhances its natural environment and its established character as a resort and residential community of the highest quality.
- 4. Permit Fees: The town council shall set a floodplain permit schedule sufficient to cover the cost of town staff time, consultant fees, and incidental expense.
- 5. Expiration Of Permit: A floodplain permit shall expire two (2) years after its date of issuance if the permittee has not started construction under the permit.
- G. Provisions For Flood Hazard Reduction:
- 1. General Standards: In all special flood hazard areas, the following provisions are required for all new construction and substantial improvements:

- a. Habitable structures or improvements shall not be permitted to be constructed within the 100-year floodplain. Improvements that may be approved for construction within the 100-year floodplain include:
- (1) Temporary grading in the floodplain approved by the floodplain administrator, in which the site is returned to its existing grade and conditions;
- (2) Utility construction/maintenance within the floodplain approved by the floodplain administrator which is deemed to have an insignificant impact to the floodplain;
- (3) Stream bank stabilization within the floodplain approved by the floodplain administrator and is deemed to have an insignificant impact to the floodplain;
- (4) Public infrastructure construction/maintenance approved by the floodplain administrator including, but not limited to, roads, bridges, recreation paths, walks, stream drop structures, and stream erosion control measures which are deemed to have an insignificant impact to the floodplain;
- b. An insignificant impact to the floodplain shall be defined as: An improvement in the floodplain that is a public benefit that meets the criteria set out in subsection G1a of this section and causes no negative impacts to adjacent properties and no permanent localized cumulative increase in the adopted base flood elevations (BFE) greater than 0.25 vertical feet. The applicant shall apply for a conditional FIRM and floodway revision through FEMA, if applicable;
- c. All new structures or improvements, unless otherwise specifically provided for within this chapter, shall not influence the 100-year floodplain and shall maintain a minimum clear distance from the 100-year floodplain of one foot (1') in both the horizontal and vertical directions;
- d. Floor plans and elevations illustrating that the lowest floor elevations including basement, together with attendant utility and sanitary facilities, of the new or substantially improved structure, shall be elevated to at least one foot (1') above the base flood elevation;
- e. All approved new or modified improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the improvement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- f. All new approved construction or modified improvements shall be constructed by methods and practices that minimize flood damage;
- g. All new approved construction or modified improvements shall be constructed with materials resistant to flood damage;
- h. All existing nonconforming structures located within the 100-year floodplain that may require maintenance shall not negatively impact the adopted BFEs or adjacent properties in any way, unless as provided by subsection G1a of this section; and shall increase conformity and flood

protection as required by the floodplain administrator (i.e., floodproofing, flotation prevention, flood resistant materials, etc.);

- i. All existing nonconforming structures that may require maintenance to operational systems that are within the floodplain 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;
- j. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- k. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters; and
- l. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- 2. Standards For Areas Of Shallow Flooding (AO/AH Zones): Located within the special flood hazard areas established in subsection C of this section, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet (3') 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, together with attendant utility and sanitary facilities) elevated one foot (1') above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 3 feet if no depth number is specified).
- b. All new construction and substantial improvements of nonresidential structures have the lowest floor (including basement, together with attendant utility and sanitary facilities) elevated one foot (1') above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least 3 feet if no depth number is specified), or; together with attendant utility and sanitary facilities be designed so that one foot (1') above 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 chapter are satisfied.
- d. Require within zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

- 3. Floodways: Floodways located within special flood hazard areas established in subsection C of this section, 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 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 this subsection G is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this subsection G.
- 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.

#### H. Properties Removed From Floodplain By Fill:

- 1. Permit: A floodplain permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a FEMA letter of map revision based on fill (LOMR-F), unless such new structure or addition complies with the following:
- a. Residential construction: The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot (1') above the base flood elevation that existed prior to the placement of fill.
- b. Nonresidential construction: The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot (1') above the base flood elevation that existed prior to the placement of fill, or together with attendant utility and sanitary facilities be designed so that the structure or addition is watertight to at least one foot (1') above the base flood level that existed prior to the placement of fill 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.

#### I. Critical Facilities:

1. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the regulatory floodplain.

- 2. Construction of new critical facilities in the regulatory floodplain shall be permissible if no feasible alternative site is available, provided:
- a. Critical facilities shall have the lowest floor elevated three feet (3') above the base flood elevation or to the height of the 500-year flood, whichever is higher. If there is no available data on the 500-year flood, the permit applicants shall develop the needed data in accordance with FEMA mapping guidelines.
- b. Access to and from the critical facility shall be protected to the elevation of the 500-year flood. (Ord. 19(2013) § 2)

# 12-21-12: RESTRICTIONS IN SPECIFIC ZONES ON EXCESSIVE SLOPES: <sup>©</sup> 🖃





"Slope" is the gradient or configuration of the undisturbed land surface prior to site improvement of a lot, site, or parcel which shall be established by measuring the maximum number of feet in elevation gained or lost over each ten feet (10') or fraction thereof measured horizontally in any direction between opposing lot lines; the relationship of elevation or vertical measure as divided by the horizontal measurement shall be expressed as a percentile as a means of quantifying the term "slope". In determination of "slope" as defined herein, for use in establishing buildable area requirements and maximum floor area ratio limitations on existing and proposed lots, a grid system based on ten foot (10') modules shall be superimposed on a topographic map of the subject property and the lot slope determination established by the defined method for each one hundred (100) square foot grid portion of the tract, lot or portion thereof.

The following additional special restrictions or requirements shall apply to development on any lot in a hillside residential, single-family residential, two-family residential or two-family primary/secondary residential district where the average slope of the site beneath the existing or proposed structure and parking area is in excess of thirty percent (30%):

- A. A soil and foundation investigation, prepared by and bearing the seal of a registered professional engineer shall be required.
- B. Foundations must be designated and bear the seal of a registered professional engineer.
- C. A topographic survey prepared by a registered surveyor, with contour intervals of not more than two feet (2'), shall be required.
- D. Structures must be designed by a licensed architect.
- E. Site coverage as it pertains to this chapter, as permitted by sections 12-6A-9, 12-6B-9, 12-6C-9 and 12-6D-9 of this title, is amended as follows:
- 1. Not more than ten percent (10%) of the total site area may be covered by driveways and surface parking.

- 2. In order to protect the natural landform and vegetation on steep slopes, not more than sixty percent (60%) of the total site area may be disturbed from present conditions by construction activities. The design review board (DRB) may approve site disturbance in excess of the sixty percent (60%) maximum if specific design criteria warrant the extent of the requested deviation.
- F. A site grading and drainage plan shall be required.
- G. A detailed plan of retaining walls or cuts and fills in excess of five feet (5') shall be required.
- H. A detailed revegetation plan must be submitted.
- I. The administrator may require an environmental impact report as provided in section  $\underline{12-12-2}$  of this title.
- J. A minimum of one covered parking space shall be provided for each dwelling unit.
- K. Setbacks, as they apply to this chapter, as required by sections <u>12-6A-6</u>, 12-6B-6, 12-6C-6 and <u>12-6D-6</u> of this title, are amended as follows: There shall be no required front setback for garages, except as may be required by the design review board. Garages located in the front setback, as provided for in this section, shall be limited to one story in height (not to exceed 10 feet) with the addition of a pitched or flat roof and subject to review and approval by the design review board.
- L. Retaining walls up to six feet (6') in height may be permitted in the setback by the design review board when associated with a permitted garage as referenced in subsection K of this section. (Ord. 28(2007) § 8: Ord. 17(2006) § 1: Ord. 29(2005) § 45: Ord. 5(2001) § 3: Ord. 2(1995) § 1: Ord. 13(1994) § 1)

# 12-21-13: RESTRICTIONS IN GEOLOGICALLY SENSITIVE AREAS: © 🖃

- A. Maps Adopted: The following maps are hereby adopted as the official maps of the town, identifying areas of geologic sensitivity:
- 1. The debris flow and debris avalanche hazard analysis map prepared by Arthur I. Mears, P.E., Inc., and dated November 1984.
- 2. The rockfall map prepared by Schmueser and Associates, Inc., and dated November 29, 1984.
- 3. All areas within the boundaries of the geologic hazards map, figure 3, prepared by Lincoln DeVore Engineers, Geologists and dated August 16, 1982.
- B. Investigation:
- 1. In any area located within the boundaries of the Lincoln DeVore map, or in any area identified as a debris flow or debris avalanche area by the Mears map, or in any area identified as a rockfall area by the Schmueser map, no initial application for a building permit, grading permit or major

or minor subdivision shall be approved until a site specific geologic investigation is complete. For the purpose of this section, a site specific geologic investigation shall be deemed a detailed geologic investigation which is applicable to each respective site. All reports and studies required by this section shall be prepared by a "professional geologist", as defined by Colorado Revised Statutes section 34-1-01, as amended, or a "registered professional engineer", as defined by Colorado Revised Statutes section 12-25-102, as amended, under the direction of and at the expense of the owner/applicant and submitted to the department of community development.

- 2. The extent of the site specific ecologic investigation required shall be determined by the geologist or engineer who is responsible for the investigation; however, the investigation shall be of sufficient thoroughness and accuracy to allow such expert to certify to the following:
- a. For all structures other than single-family and two-family dwellings, and "accessory uses" thereto as defined in section 12-6C-4 of this code:
- (1) Whether the geologic conditions are such that the site can or cannot be developed for the specific structure or use proposed without corrective engineering or engineered construction, or other mitigation or alterations.
- (2) Whether corrective engineering or engineered construction, or other mitigation or alterations can or cannot be accomplished to reduce the danger to the public health, safety or to property due to problems related to geologic sensitivity to a reasonable level, and not increase the hazard to other properties or structures, or to public buildings, rights of way, roads, streets, easements, utilities or facilities or other properties of construction.
- b. For single-family and two-family dwellings, and "accessory uses" thereto as defined in section 12-6C-4 of this title, the site specific geologic investigation shall certify to the following:
- (1) Whether the site can be developed for the specific structure or use proposed without corrective engineering or engineered construction or other mitigation or alterations; or
- (2) That the site is a geologically sensitive area but development will not increase the hazard to other property or structures, or to public buildings, rights of way, roads, streets, easements, utilities or facilities or other properties of any kind.
- C. Development Plan Or Building Permit: Following the completion of the site specific geological investigation and its review by the department of community development, a development plan may be approved or a building permit may be issued as follows:
- 1. For all structures other than single-family and two-family dwellings, and "accessory uses" thereto as defined in section 12-6C-4 of this title:
- a. If the conclusion of the engineer or geologist performing the investigation is that the site can be developed for the specific structure or activity proposed without corrective engineering or

engineered construction or other mitigation or alterations, the subdivision plan or building permit or grading permit may be approved without conditions relating to the mitigation of the areas of geologic sensitivity.

- b. If the finding of the engineer or geologist performing the geologic investigation is that the site is a geologically sensitive area, but that corrective engineering or engineered construction or other mitigation or alterations can be accomplished to reduce the danger to the public health and safety or to property to a reasonable level, and such mitigation does not increase the hazard to other property or structures, or to public buildings, roads, streets, rights of way, easements, utilities or facilities, approval of the development plan and/or the issuance of the building or grading permit shall be conditional and contingent upon approval of plans for corrective engineering and engineered construction or other litigation or alterations as set forth in this title.
- c. If the conclusion of the geologist or engineer performing the site specific geologic investigation is that the site cannot be developed for the structure or use proposed because the danger posed by the geologically sensitive area cannot be reduced or mitigated to a reasonable level, the subdivision plan or building permit or grading permit shall be denied.
- 2. For single-family and two-family dwellings, and "accessory uses" thereto as defined in section 12-6C-4 of this title:
- a. If the conclusion of the engineer or the geologist performing the investigation is that the site can be developed for the specific structure or use proposed without corrective engineering or engineered construction or other mitigation or alterations, or that the site is a geologically sensitive area, but will not increase the hazard to other property or structures or to public buildings, roads, streets, rights of way, easements, utilities or facilities, a grading permit or building permit may be issued.
- b. If the finding of the engineer or geologist performing the site specific geologic investigation is that the site is a geologically sensitive area, but that corrective engineering or engineered construction or other mitigation or alterations can be accomplished so that there is no increased hazard to other property or structures, or to public buildings, roads, streets, rights of way, easements, utilities or facilities, the issuance of a building or grading permit shall be conditional and contingent upon approval of plans for corrective engineering or engineered construction or other mitigation or alterations as set forth in this section.
- c. If the conclusion of the geologist or engineer performing the site specific geologic investigation is that the site cannot be developed for the structure proposed because the danger posed by the geologically sensitive area cannot be reduced or mitigated so that the hazard to other properties or structures will not increase from the present level or the hazard to public buildings, roads, streets, rights of way, easements, utilities and facilities will not increase from the present level, then the building permit or grading permit shall be denied.
- D. Construction Requirements: The following requirements shall pertain to the construction of any building or structure to be built in an identified or designated area of geologic sensitivity and which requires corrective engineering or engineered construction or other mitigation or

alterations to reduce the danger to public health and safety or to property due to such problems as set forth in subsections C1b or C2b of this section:

- 1. The certified site specific reports and plans required by this subsection shall be prepared by each engineer and geologist as applicable to their area of expertise and specialty and shall certify that:
- a. Adequate base data as may be pertinent has been provided.
- b. Said base data is utilized in the design and planning of the proposed project or structure.
- c. Design and construction procedures derived from said base data are executed.
- d. Design and construction will reduce danger to the public health, safety or property due to geologic sensitivity to a reasonable level.
- 2. No certificate of occupancy, temporary or permanent, shall be issued until the following have been approved by the department of community development or its authorized representatives:
- a. Inspection and certification by the town building official and the engineer or geologist who prepared the plans and specifications that the work was properly performed in accordance with the plans and specifications.
- b. If the engineer, geologist, or building official of the town finds that the work is not being done in accordance with the approved plans and specifications, the discrepancy shall be reported immediately in writing to the contractor and to the department of community development. Recommendations for corrective measures, if necessary, shall also be submitted.
- c. All geologic reports prepared under this section shall be signed by and prepared by or under the responsible direction of "professional geologists" as defined by Colorado Revised Statutes section 34-1-201, as amended. Such professional geologist shall be experienced and competent in the geologic specialty required to meet the objectives of this chapter. Such professional geologist shall be responsible for certification of all geologic maps and reports prepared by him/her under his/her responsible direction as specified in this section. All engineering reports required by this section shall be done by a "registered professional engineer" as defined by Colorado Revised Statutes section 12-25-102, as amended.
- E. Existing Uses Continued; Exceptions: Existing use of land, structures or premises which are not in conformity with the provisions of this regulation may be continued, except for the following:
- 1. No building permit will be issued for the exterior expansion, alteration or addition to existing structures in geologically sensitive areas except for windows, skylights and other similar minor alterations unless the requirements of subsections B through D of this section are complied with.

- 2. Structures existing on the effective date hereof which are damaged or destroyed may be reconstructed without compliance to this section as long as said structure complies with other applicable ordinances and is constructed to substantially the same dimensions as existed prior to damage or destruction, unless given approval by the town to alter the design.
- F. Notice Requirements: In order to provide reasonable notice to the public of the problems related to geologically sensitive areas, the following notice regulations and requirements are hereby adopted for all real property and structures located in geologically sensitive areas:
- 1. All subdivision plats recorded after the effective date hereof shall identify and designate each lot and block, or portions thereof, located within any geologically sensitive area, together with applicable subzone designations, by a stamp or writing in a manner providing reasonable notice to interested parties.
- 2. All plans submitted after the effective date hereof with the building permit application for property within said areas shall be stamped by the applicant "Geologically Sensitive Area" together with the applicable zone designation.
- 3. Prior to the issuance of any building permit for construction within the geologically sensitive areas, the owner shall submit a written, signed and notarized affidavit certifying acknowledgment of receiving personal notice of the fact that said building or structure is in an area of geologic sensitivity and notice of the studies conducted to date with regard thereto.
- 4. All owners, lessors or agents who rent, lease or sublet any structure or premises within an area of geologic sensitivity shall provide the tenant, lessee or subtenant with written notice that said property is located within said area prior to any lease being entered into or occupancy, whichever occurs first, if said rental lease or sublease will extend into the period of April 1 through July 1 of any year.
- 5. Each and every real estate agent, salesperson and broker, and each and every private party who offers for sale or shows a parcel of real estate and/or structure for sale within said area of geologic sensitivity, shall provide the prospective purchaser, with written notice that said real property and/or structure is located within said area of geologic sensitivity. Furthermore, written notice shall be made in all instances prior to the execution of any sales documents and shall state that this section and the studies and maps referred to in this section are available for public inspection at the office of the department of community development and that said maps, studies and this section should be reviewed prior to any party entering into any agreement or contract with regard thereto.
- G. Disputes; Procedure: In any case where a person wishes to dispute the designation of any property as a geologically sensitive area by one of the maps and studies adopted by this section, the following procedures shall be followed:
- 1. A written application shall be filed with the department of community development requesting such a hearing and providing a supporting site specific geologic investigation.

- 2. A hearing shall be set on a date a minimum of thirty (30) days after the application has been filed to allow for a staff review.
- 3. At the hearing before the town council, the applicant shall be given a reasonable opportunity to present his/her case and submit technical and geologic evidence to support his/her claim. If the site specific geologic investigation establishes by clear and convincing evidence that the property should not be designated as a geologically sensitive area, the town council shall direct the department of community development to amend the map appropriately.
- H. Additions To Maps: In any case where a person wishes to have one of the official maps adopted by this title amended to notate more detailed site specific information is available, the following procedure shall be followed:
- 1. A written application shall be filed with the department of community development requesting such a hearing and providing a supporting site specific geologic investigation.
- 2. A hearing shall be set on a date not less than thirty (30) days after the application has been filed nor more than sixty (60) days to allow for a staff review.
- 3. If the applicant establishes at the hearing by clear and convincing evidence that the information contained in the site specific geologic investigation is reliable, the town council shall direct the department of community development to keep a copy of said site specific investigation on file in the department of community development and available to the general public and shall further direct the department of community development to notate the appropriate official map adopted by this chapter so that it indicates that said site specific investigation is on file with the department of community development. (Ord. 28(2007) § 9: Ord. 29(2005) § 46: Ord. 20(1985) § 1: Ord. 5(1985) § 5)

### 12-21-14: RESTRICTIONS IN WILDFIRE HAZARD AREAS

All the Town of Vail is situated within a wildfire hazard zone. The natural vegetation surrounding and throughout the community is dependent on wildfire for regeneration and ecosystem health. The ecosystem is dependent upon infrequent, high severity stand replacing wildfire. Wildfires of this character can carry over many thousands of acres and burn for several weeks. Besides substantial flaming fronts, fires of this nature frequently send large quantities of embers miles outside of the main fire perimeter igniting additional spot fires. Due to the long and narrow layout of the town, no locations within the Town limits are outside the potential ember fall area from a wildfire.

Structures built within the Town shall be constructed and landscaped in a manner to resist ignition from wildfire flames and embers. Specific requirements for ignition resistant construction and landscaping are in Title 10, Chapter 7A; Title 12, Chapter 11; and Title 14, Chapter 10 of this code.

Nothing in this chapter shall be deemed to deny any interested person his/her rights to appeal the decision of the administrator in accordance with section 12-3-3 of this title. In addition, nothing in this chapter shall be deemed to deny any interested person his/her rights to seek a variance from the requirements of this chapter. Variances shall be governed by the provisions of chapter 17 of this title.

Variances specific to section <u>12-21-11</u>, "Flood Hazard Zones", of this chapter shall be governed by chapter 17 of this title and may be granted under the following conditions:

A. The appeal board may grant variances and place conditions upon them as it deems necessary to further the purpose and objectives of this chapter as stated in subsection 12-21-11B of this chapter.

B. 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, 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.

C. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result. (Ord. 19(2013) § 3)

## 12-21-**16**: REQUIREMENT OF BOND: ©

Any applicant under this chapter may be required to post bond, a letter of credit, or other guarantee to ensure that the improvements, reports, or other requirements of this chapter are completed and complied with. (Ord. 28(2007): Ord. 12(1983) § 1)