

SECTION RBC313 - FLOODPLAIN CODE

RBC313.1 SHORT TITLE. This section will be known and cited as the Floodplain Code.

RBC313.2 STATUTORY AUTHORIZATION. The Legislature of the state of Colorado has delegated in Sections 31-23-301, 30-28-111 and 30-28-115(1), Colorado Revised Statutes, the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the adopting Jurisdiction does ordain as set out in this section.

RBC313.3 LEGISLATIVE DECLARATION.

RBC313.3.1 The flood hazard areas of the Pikes Peak Region are subject to periodic inundation which could result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which could adversely affect the public health, safety and general welfare.

RBC313.3.2 These flood losses could be caused by the cumulative effect of obstructions in areas of special flood hazards, which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

RBC313.3.3 It is in the interest of the public health, safety and welfare to designate a floodplain management program which provides for the protection of identified floodways as well as flood fringe areas, all of which have been established through the base flood elevation maps which have been submitted to the Jurisdiction by FEMA.

RBC313.4 STATEMENT OF PURPOSE. It is the purpose of this section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

1. To protect human life and health;
2. To minimize expenditure of public money for costly flood control projects;
3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. To minimize prolonged business interruptions;
5. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;

6. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard;
7. To insure that potential buyers are notified that the property is in an area of special flood hazard; and
8. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

RBC313.5 METHODS OF REDUCING FLOOD LOSSES. In order to accomplish these purposes, this section includes methods and provisions for:

Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights or velocities;

Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;

Controlling the alteration of natural floodplains, stream channels, and natural protective barriers that help accommodate or channel floodwaters;

Controlling filling, grading, dredging, and other development which may increase flood damage;

Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas;

Prohibiting any development in regulatory floodway if any increase in flood levels during the base flood discharge would result.

RBC313.6 DEFINITIONS. Unless specifically defined below, words or phrases used in this section shall be interpreted so as to give them the meaning they have in common usage and to give this section its most reasonable application.

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.

APPURTENANT STRUCTURE. A structure which is on the same parcel of property as the principle structure to be insured, and the use of it is incidental to the use of the principle structure.

AREA OF SHALLOW FLOODING. A designated AO, AH, AR/AO, AR/AH, or VO zone on a community's FIRM with a one (1) percent or greater chance of flooding to an average depth of one to three (1-3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where the velocity flow may be

evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD. Land in a floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. The area may be designated as Zone A on the FIRM. After detailed ratemaking has been completed in the preparation for publication of the FIRM, Zone A usually is redefined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH or AR/A. For purposes of Section RBC313, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

ATTENDANT FACILITIES. HVAC duct work, HVAC units, water heaters, boilers, AC compressors, electrical breaker panels and meters, and any other such devices and connections required for habitable and sanitary use of the structure. It does not include the main underground stub to the property for electrical, sewer, water, gas, etc.

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

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

BUILDABLE LOT. The area of land required in coordination with all applicable codes adopted by the Jurisdiction that enables the construction of a building, access and all utilities for habitability.

CHANGE OF USE. When a current structure changes use as defined in Section RBC110.1.2 of the Pikes Peak Regional Building Code and is required to meet all current building codes for the new use including being brought into compliance with current floodplain ordinances.

CLOMR. Conditional Letter of Map Revision processed through FEMA.

COMPENSATORY STORAGE. The providing of equal or greater amount of storage to compensate for that which was destroyed.

CRITICAL FACILITIES. Facilities required for the safety and/or continued occupation by the public as a whole. Examples of these facilities are as follows but not limited to hospitals, fire stations, police stations, jails, water treatment plants, wastewater treatment plants, gas / electric utility facilities, fall out and Red Cross shelters, schools, etc.

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 to improved or unimproved real estate, including but

not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment and/or materials located within the area of special flood hazard.

DEVELOPMENT PERMIT. The permit issued by the FPA before a development occurs within any area of special flood hazard.

DRAINAGE BOARD. The Review Board for appeals and variance requests in the City of Colorado Springs and/or unincorporated El Paso County.

ELEVATED BUILDING. For insurance purposes, a building without a basement that has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings or columns.

EXISTING CONSTRUCTION OR EXISTING STRUCTURE. For the purpose 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 MANUFACTURED HOME PARK OR SUBDIVISION. A manufactured home park 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) are completed before the effective date of the floodplain management regulations adopted by the Jurisdiction.

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

FEMA. The Federal Emergency Management Agency.

FLOOD OR FLOODING. A general and temporary condition of partial or complete inundation of normally dry land areas from the unusual and rapid accumulation or runoff of surface waters from any source.

100-YEAR FLOOD. A flood event having a one (1) percent chance of occurring in any given year.

500-YEAR FLOOD. A flood event having a zero point two (0.2) percent chance of occurring in any given year.

FLOOD FRINGE. Areas denoted on the floodway map that are adjacent to the floodway and within the 100- year floodplain.

FIRM. Flood Insurance Rate Map. The official map on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the Jurisdiction.

FIS. Flood Insurance Study. The official report provided by FEMA that includes flood profiles, the flood boundary-floodway map and the water surface elevations of the base flood.

FLOOD PROOFING. 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.

FPA. Floodplain Administrator. The Regional Building Department designee who administers the Pikes Peak Regional Building Department floodplain program.

FREEBOARD. A factor of safety usually expressed in feet above the base flood level for purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effects of urbanization of the watershed.

GOVERNING BODY. A board of township trustees, city council, or board of county commissioners as determined and elected by the Jurisdiction.

JURISDICTION. Any of the signatory entities that established Pikes Peak Regional Building Department. Jurisdiction in context means the government entity with Jurisdiction.

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 to provide protection from 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.

LIVING SPACE. Space within a dwelling unit utilized for living, sleeping, eating, cooking, bathing, washing and/or sanitary purposes, and associated accessory use areas.

LOMR. Letter of Map Revision processed through FEMA.

LOMR-F. Letter of Map Revision Based on Fill processed through FEMA.

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 as a building's lowest floor, provided that the enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Section RBC313.18 of this Code.

MANUFACTURED HOME. A structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. For purposes of these regulations, manufactured home also includes recreational vehicles or travel trailers placed on a site for more than six (6) months.

MANUFACTURED HOME PARK OR SUBDIVISION. A parcel of land divided into two or more manufactured home lots for rent or sale.

MEAN SEA LEVEL. The National Geodetic Vertical Datum (NGVD) or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

NEW CONSTRUCTION. Structures for which the "start of construction" commences on or after the effective date of initial floodplain management regulations adopted by the Jurisdiction; and is applicable to subsequent improvements to such structures.

RECREATIONAL VEHICLE. A vehicle which is built on a single chassis; four hundred (400) square feet or less when measured at the largest horizontal projections; designed to be self-propelled or towed by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOODWAY. The channel of a river or other watercourse and 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. The Colorado statewide standard for the designated height to be used for all newly studied reaches shall be one-half foot (six inches). Letters of Map Revision to existing floodway delineations may continue to use the floodway criteria in place at the time of the existing floodway delineation.

REVIEW BOARD. The board designated or established by the Jurisdiction to decide appeals and variance requests within the specific Jurisdiction, including the Drainage Board for the City of Colorado Springs and/or unincorporated El Paso County. Each Jurisdiction should establish its own Review Board or enter into an agreement with another member Jurisdiction to use the same

Review Board. It is recommended that any Review Board be comprised of five (5) members as follows:

1. Professional Civil Engineer licensed by the State of Colorado
2. Realtor or Appraiser
3. Officer of a Financial Institution or Insurance Industry representative
4. Citizen Advocate – No ties to the construction community
5. Architect licensed by the State of Colorado

START OF CONSTRUCTION. The first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, installation of pilings, construction of columns or any work beyond the stage of excavation. For a structure without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of a structure or any part thereof on its pilings or foundation. For manufactured homes, "start of construction" means the date of placement of the manufactured home on its permanent site.

STRUCTURE. A walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home. This term also applies to anything built or constructed that may impede the flow of water.

SUBSTANTIAL DAMAGE. Damage from 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 rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure, before the improvement is started. The term does not, however, include either: Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to ensure safe living conditions; or any alteration of a structure listed on the National Register of Historic Places or the state Inventory of Historic Places provided that the alteration will not preclude the structure's continued designation as an "historic structure".

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

VIOLATION. A failure of a structure or other development to be fully compliant with the Jurisdiction's floodplain management regulations. A

structure or other development without an elevation certificate, other certifications, or other evidence of compliance required by this Code is presumed to be in violation until such 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 riparian areas.

RBC313.7 APPLICATION. This section shall apply to all areas of special flood hazard and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) within the Jurisdiction.

RBC313.8 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD. The areas of special flood hazard identified by FEMA in a scientific and engineering report entitled "The Flood Insurance Study El Paso County, Colorado and Incorporated Areas" August 23, 1999 with accompanying FIRM's and any amendments, is adopted by reference and declared to be a part of this section. The FIS is part of this section.

RBC313.9 COMPLIANCE. No land shall hereafter be converted or altered nor structure shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this Section and other applicable regulations.

RBC313.10 PENALTIES FOR NONCOMPLIANCE. Refer to local Jurisdiction's penalties for noncompliance as stated within the Jurisdiction's ordinances or regulations.

RBC313.11 ABROGATION AND GREATER RESTRICTIONS. This section is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where Section RBC313 of this Code and any other ordinance, regulation, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

RBC313.12 INTERPRETATION. In the interpretation and application of this section, all provisions shall be:

Considered as minimum requirements;

Liberal construed in favor of the governing body; and

Deemed neither to limit nor repeal any other powers granted under state statutes.

RBC313.13 WARNING OF DISCLAIMER OF LIABILITY. The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and

will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This section shall not create liability on the part of any local Jurisdiction, any officer or employee thereof, or FEMA, for any flood damages that result from reliance on this section or any administrative decision lawfully made hereunder.

RBC313.14 ESTABLISHMENT OF DEVELOPMENT PERMIT. A floodplain development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section RBC313.8 of this Code.

A Floodplain Development 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), with a lowest floor elevation placed below the Base Flood Elevation with one foot of freeboard that existed prior to the placement of fill.

RBC313.14.1 The permit shall expire at the end of twelve (12) months from the date of issuance. Application for a floodplain development permit shall be made on forms furnished by the FPA 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 and control of the foregoing.

RBC313.14.2 Specifically, the following information is required and is to be certified by a professional engineer or architect licensed by the State of Colorado. (Elevations may be certified by a professional surveyor licensed by the State of Colorado.):

Elevation in relation to mean sea level or the lowest floor (including basement) of all structures;

Elevation in relation to mean sea level to which any structure has been floodproofed;

Evidence that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section RBC313.20.2 of this Code; and

Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

RBC313.14.3 If the proposed development activity is located within an identified regulatory floodway, a certification by a Colorado registered professional engineer that the proposed development will result in no rise in the base flood elevation, or satisfies the requirements of Section RBC313.20 of this Code.

RBC313.15 DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR. The FPA is appointed to administer and implement Section RBC313 of this Code by granting or denying development permit applications in accordance with its provisions.

RBC313.16 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR. Duties of the FPA shall include, but not be limited to the following:

RBC313.16.1 Permit Review. Review all development permits to determine that the permit requirements of this section have been satisfied;

Review all development permits to determine if the proposed development is located in the flood fringe. If located in the flood fringe, ensure that the provisions of Section RBC313.20 of this Code are met; and

Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, ensure that the encroachment provisions of Section RBC313.20.1 of this Code are met.

RBC313.16.2 Use of Other Flood Data. When base flood elevation data has not been provided in accordance with Section RBC313.8 of this Code, the FPA 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 Sections RBC313.19.1 and RBC313.19.2 of this Code.

RBC313.16.3 Obtain and Maintain Information. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures;

For all new or substantially improved flood proofed structures:

Verify and record the actual elevation (in relation to mean sea level); and

Maintain the flood proofing certifications required by Section RBC313.14.1.3 of this Code.

Maintain for public inspection all records pertaining to the provisions of this section.

RBC313.16.4 Alteration of Watercourses. Notify adjacent communities and the Colorado Water Conservation Board prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA; and

Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.

RBC313.16.5 Interpretation of Flood Boundaries. Make interpretations where needed as to the exact location of the boundaries of the

areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section RBC313.17 of this Code.

RBC313.16.6 Rules and Regulations. The FPA is empowered to make such rules and regulations and to establish such criteria and methodologies as are necessary and consistent with the requirements for sound floodplain management pursuant to the guidelines and regulations promulgated by FEMA.

RBC313.17 Appeals and Review Procedures.

RBC313.17.1 Appeals. The Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, shall hear and decide appeals of decisions by the FPA when it is alleged there is an error in any requirement, decision, determination or interpretation made by the FPA in the enforcement or administration of this section.

Any person aggrieved by a decision of the FPA may appeal to the Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, provided a written notice of appeal, stating the grounds for appeal, is filed with the FPA within thirty (30) days of the date of the FPA's decision. The Review Board shall hear the appeal at the next available meeting, but not less than fourteen (14) days after receipt of the notice of appeal.

The Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, shall conduct a public hearing on the appeal and shall consider the factors set forth in Section RBC313.17.1.5, below. At the conclusion of the hearing, The Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, shall make appropriate findings and determine whether the FPA's decision shall stand, be overturned or modified.

Those aggrieved by the decision of the Review Board may appeal the decision to the Governing Body of the Jurisdiction, provided that a notice of appeal, stating the grounds for appeal, is filed with the FPA within ten (10) days of the date of Review Board's decision. Upon receiving a perfected appeal, the matter shall be set for a public hearing according to the established procedures of the Governing Body of the Jurisdiction. At the conclusion of the public hearing, the Governing Body of the Jurisdiction shall determine whether there is some competent evidence in the record to support the

Review Board's decision, and if so, then the decision must be affirmed. If there is no competent evidence in the record to support the Board's decision, the Governing Body of the Jurisdiction may overturn the decision or modify it.

In passing upon appeals of the FPA's decision, the Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, shall consider all technical evaluations, all relevant factors, standards specified in other sections of this code, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the Governing Body of the Jurisdiction;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternate locations for the proposed use, which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the Comprehensive Plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of use, and sediment transport of the flood waters and the effects of wave action, if applicable, and expected at the site; and
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

Upon consideration of the factors listed in Section RBC313.17.1, Item 5, the Review Board, or the Governing Body of the Jurisdiction, if no Review Board is established, may impose conditions on the FPA's decision as the Review Board or the Governing Body of the Jurisdiction, if no Review Board is established, deems necessary to further the purposes of this section.

Appeals to the District Court. Any person who has exhausted all administrative remedies established herein and is aggrieved by a decision of the Governing Body of the Jurisdiction, may appeal that decision to the El Paso County District Court pursuant to Rule 106 of Colorado Rules of Civil Procedure.

RBC313.17.2 Conditions for Pre-Construction Variances. Variances may be issued by the FPA for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places, the State Inventory of Historic Places, or part of the local Historic Preservation District or a locally designated historic landmark, 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.

All other variances shall be reviewed and approved by the Review Board or the Governing Body of the Jurisdiction, if no Review Board has been established; no application for variances shall be accepted or considered for an existing structure;

The Review Board or Governing Body of the Jurisdiction, if no Review Board has been established, shall conduct a public hearing on all applications for variance. The FPA shall be given an opportunity to comment on the application and make a recommendation to the Review Board or Governing Body of the Jurisdiction. The applicant shall be given an opportunity to support the request for variance and respond to any comments by the FPA. The public shall be given an opportunity to comment on the variance application;

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

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

Variances shall only be issued upon the Review Board's or the Governing Body of the Jurisdiction's, if no Review Board has been established, finding that the application substantially complies with the following:

A showing of good and sufficient cause;

A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

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 or victimization of the public as identified in Section RBC313.17.1.5, or conflict with existing local laws or ordinances.

Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor 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.

RBC313.18 GENERAL STANDARDS. In all areas of special flood hazards, the following standards are required:

RBC313.18.1 Base Flood Elevations. If base flood elevation data has not been provided per Section RBC313.8 of this Code, this data is required to be established and provided by a professional engineer licensed by the State of Colorado.

RBC313.18.2 Anchoring. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure, as required by Section 1612 and Appendix G of the International Building Code.

RBC313.18.3 Construction Materials and Methods. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, as required by Section 1612 and Appendix G of the International Building Code;

All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage, as required by Section 1612 and Appendix G of the International Building Code;

All new mechanical and utility equipment shall be designed and/or elevated to prevent water from entering or accumulating in components, as required by Section 1612 and Appendix G of the International Building Code; and

All new construction and substantial improvements with fully enclosed areas below the lowest floor that 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 professional engineer or architect licensed by the state of Colorado, or must meet or exceed the minimum criteria as required by Section RBC 313.19.4 and Appendix G of the International Building Code.

RBC313.18.4 Utilities. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

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

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

them during flooding.

RBC313.18.5 Subdivision Proposals. All subdivision proposals shall be consistent with the need to minimize flood damage;

All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;

FEMA approved base flood elevation data and 100-year floodplain boundaries shall be provided and shown on plats for subdivision proposals and other proposed developments that contain at least fifty lots or five (5) acres, whichever is less;

All buildable lots less than two and one half (2½) acres in size are required to be located entirely outside of the 100-year floodplain. Lands within the 100-year floodplain shall be established in a tract, and require that the owner maintain the tract. Buildable lots two

and one half (2½) acres and larger, are required to have the 100-year floodplain contained in a drainage easement dedicated by plat in the name of the governing body with the restrictions of "No Build" and "No Storage of any Materials"; and

If subdivision proposals are located within three hundred (300) feet of a Zone A floodplain, FEMA approved base flood elevations and boundaries are required to be determined and shown on the plat, or provide a Floodplain Certification Letter by a professional engineer or architect licensed by the state of Colorado, stating that "Based on field verified characteristics of the property, the property is reasonably safe from flooding and to the best of the engineer's knowledge if the 100-year floodplain were studied it would not enter the property in question".

RBC313.18.6 Prohibit all activities in a Special Flood Hazard Area that may be hazardous to public health and water quality; activities include but are not limited to landfills, disabled vehicles, etc.

RBC313.18.7 All fill placed within the 100-year floodplain must be properly designed and compacted to ninety-five percent (95%) (ASTM D-698 equivalent or higher standard) with appropriate protection from erosion and scour. If other than ASTM D-698 is used, it must be certified by a professional engineer licensed by the State of Colorado.

RBC313.19 SPECIFIC STANDARDS. In all areas of special flood hazard where base flood elevation data has been provided as set forth in Section RBC313.18 of this Code (basis for

establishing the Areas of Special Flood Hazard) the following provisions are required:

RBC313.19.1 Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement together with attendant utility and sanitary facilities, elevated one (1) foot or more above base flood elevation.

For locations within an A zone for which no flood depth information has been documented on the FIRM, the base flood elevation may be deemed to be twenty-four (24) inches above the highest adjacent grade.

For locations within an AO zone for which no flood depth information has been documented on the FIRM, the base flood elevation may be deemed to be thirty six (36) inches above the highest adjacent grade.

Flood depth may also be determined using the methods outlined in FEMA 265 **"MANAGING FLOODPLAIN DEVELOPMENT IN APPROXIMATE ZONE A AREAS , A GUIDE FOR OBTAINING AND DEVELOPING BASE (100-YEAR) FLOOD ELEVATIONS"**

RBC313.19.2 Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement together with attendant utility and sanitary facilities, elevated to one (1) foot or more above the level of the base flood elevation; or together with attendant utility and sanitary facilities, or shall:

Be dry flood proofed as required by the Building Code to a point of one (1) foot above the base flood level so the structure is watertight with walls substantially impermeable to the passage of water;

Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

Be certified by a professional engineer or architect licensed by the State of Colorado, verifying the standards of this subsection are satisfied after construction is complete and prior to the Certificate of Occupancy being issued. Such certifications shall be provided to the FPA as set forth in Section RBC313.16.3 of this Code.

New critical facilities shall be located outside the SFHA or,

Shall have lowest finished floor elevated to 2 ft above the base flood level, and shall have continuous non-inundated access (ingress and egress for evacuation and emergency services) during a 100-year flood event

RBC313.19.3 Openings in Enclosures below the Lowest Floor. Crawlspace are prohibited in residential construction below the base flood elevation.

For all other new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect or must meet or exceed the following criteria:

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;

The bottom of all openings shall be no higher than one foot above grade;

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

RBC313.19.4 Manufactured Homes. Manufactured homes shall be anchored in accordance with Section RBC313.18.2 of this Code and installed in accordance with FEMA 85 (Manufactured Home Installation in Flood Hazard Areas).

All manufactured homes or those to be substantially improved shall conform to the following requirements:

Require that manufactured homes that are placed or substantially improved within Zones A1–30, A, AO, AH, and AE on the community’s FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated a minimum of one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation, collapse and lateral movement, when located within any of the following areas:

Outside of an existing manufactured home park or subdivision, or

In a new manufactured home park or subdivision, or

In an expansion to an existing manufactured home park or subdivision, or,

In an Existing Manufactured Home Park or Subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood.

Require that manufactured homes not subject to the provisions of paragraph 2.1 of this section be elevated so that either

The lowest floor of the manufactured home is elevated one (1) foot above the base flood elevation, or

The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above grade, and is securely anchored to an adequate foundation system to resist floatation, collapse, and lateral movement.

RBC313.19.5 Recreational Vehicles. A recreational vehicle shall meet the permit requirements and elevation and anchoring requirements of this Code unless:

It is on the site for fewer than six (6) months; and

It is fully licensed and ready for highway use; or

If the above two conditions are not meet, it will meet the requirements of Section RBC313.19.4 of this Code.

RBC313.20 FLOODWAYS. Located within areas of special flood hazard established in Section RBC313.8 of this Code are areas designated as floodways. Because the floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and erosion potential, the following provisions apply:

RBC313.20.1 Prohibited encroachments, including fill, and other development, unless certification by a professional engineer licensed by the state of Colorado is provided demonstrating that encroachments shall not result in any increase in 100-year flood height, 100-year flood discharge or 100-year floodplain width.

RBC313.20.2 All substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections RBC313.18 through RBC313.21 of this Code.

RBC313.20.3 Prohibit the placement of any mobile homes except in an Existing Mobile Home Park or Existing Mobile Home Subdivision.

RBC313.20.4 When a proposed floodway improvement will cause an increase in the base flood elevation (BFE), the following conditions must be met as a condition of approval:

No existing insurable structure(s) shall be located in the impacted area unless the applicant has an enforceable agreement with the owner of the structure(s) to purchase the structure(s) for the purpose of razing or removing same. Applicant shall produce proof of ownership prior to issuance of a floodplain permit;

No existing structure(s) located outside the currently designated 100-year floodplain area shall be placed inside the 100-year floodplain as a result of the proposed floodway development, unless the

applicant shows proof of razing or removing same; The applicant shall demonstrate that all reasonable and practicable engineering alternatives that would not result in a rise in the base flood elevation have been considered and determined to be impractical;

The project must demonstrate a net reduction in flood loss potential and/or result in a net public benefit to the community as a whole;

A written statement from each owner of property impacted by the proposed development shall be submitted, stating the potential impacts on the property, acceptance of those impacts by the property owner, and that the property owner agrees to hold the governing body and FEMA harmless for any future flood losses attributable in whole or in part to the increased flooding;

Applicant shall provide documentation of individual notice to all impacted property owners, explaining the impact of the proposed action on their property. Documentation shall include, as a minimum, evidence of service by certified mail, return receipt requested, or written evidence of service by sheriff or other process server. When deemed necessary by the governing body, the applicant may be required to execute indemnification agreements by which the governing body, FEMA, or individual property owners are held harmless for any future flood losses attributable in whole or in part to the increased flooding;

All impacted governmental agencies must be notified of the proposed increase and given an opportunity to comment;

The applicant shall apply for and receive a CLOMR from FEMA prior to issuance of a floodplain development permit. The applicant shall provide written acceptance of all conditions placed on the project by FEMA. A financial guarantee may be required to ensure completion of all proposed improvements;

No building shall be occupied for its intended use until all conditions have been met and the applicant has obtained a final LOMR from FEMA; and the applicant shall provide written assurance that any altered watercourse shall be maintained as appropriate.

RBC313.21 FLOOD FRINGE. Located within areas of flood hazard established in Section RBC313.8 of this Code are areas identified as flood fringe areas. Since flood fringe areas are important to floodplain management for the reasons that they

provide natural storage of floodwaters, control drainage patterns, and are an integral part of the floodplain system, the following provisions, in addition to any other applicable requirements of this section, shall apply:

RBC313.21.1 Provide that all new construction and substantial improvements are elevated on adequately anchored pilings or columns, and securely anchored to such pilings or columns so that the lowest floor, together with attendant utility and sanitary facilities, (excluding the pilings or columns) is elevated to one (1) foot or more above the base flood level;

RBC313.21.2 A professional engineer licensed by the State of Colorado shall certify that the structure is securely anchored to adequately anchored pilings or columns in order to withstand the velocity of floodwaters prior to issuance of a Certificate of Occupancy;

RBC313.21.3 Prohibit all new construction and substantial improvements of nonresidential structures, unless the lowest floor (including basement) together with attendant facilities, elevated or dry flood proofed one (1) foot or more above the base flood level.

RBC313.22 A-ZONES WITH NO FLOODWAY DESIGNATED. For waterways with Base Flood Elevations for which a regulatory Floodway has not been designated, 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 ($1/2$) foot at any point within the community.

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 ($1/2$) foot, provided that the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision), fulfills the requirements for such revisions as established under the provisions of Section 65.12 and receives FEMA approval.

SECTION RBC314 - SWIMMING POOLS

RBC314.1 SCOPE. Swimming pools shall be regulated in accordance with the provisions of this section.

RBC314.2 DEFINITION.

Swimming Pool. Any structure intended for swimming, recreational bathing or wading that contains water over twenty-four (24) inches deep having a surface area of more than one hundred (100) square feet. This includes, but is not limited to in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

RBC314.3 APPLICABILITY OF REGULATIONS. The requirements of this section shall apply to all swimming pools within the jurisdiction, whether publicly or privately owned.

RBC314.4 ENFORCEMENT AND ADOPTION OF REGULATIONS. The Building Department shall have the duty to enforce Section RBC314 of this Code, and the Building Official or the Building Official's authorized representative, upon a proper showing of credentials, shall have the right to enter any building or premises in which or upon which a swimming pool is located in order to inspect any swimming pool with regard to these provisions.

In order to carry out the provisions of this section, the Building Official is authorized to issue to any party responsible for the operation of a swimming pool not in compliance with Section RBC314 of this Code, an order to abate the nuisance involved. The order shall be served in writing upon the party responsible for the operation of the swimming pool, and shall require the person to abate the nuisance within a reasonable time as specified in the notice. Should the Building Official determine that the operation of the swimming pool is an imminent threat to the welfare and safety of the citizens of the Jurisdiction, the Building Official may order the swimming pool to be drained immediately. Should the person responsible for the operation of the swimming pool not comply with such an order, the Building Official shall cause the nuisance to be abated, and the expense of such abatement shall be collected from the person who created, continued, or suffered such a nuisance to exist. Any party responsible for the operation of a swimming pool not in compliance with Section RBC314 of this Code, or who fails to obey an order of the Building Official to abate the nuisance involved, or who refuses to permit the Building Official to abate the nuisance involved, or who refuses to permit the Building Official or the Building Official's authorized representative to inspect the swimming pool, shall be guilty of a misdemeanor.

The Building Official may adopt any rules and regulations necessary for the proper administration and enforcement of Section RBC314 of this Code.

RBC314.5 SAFETY EQUIPMENT. Except as hereinafter stated, all swimming pools regulated by Section RBC314 of this Code shall be equipped with not less than one lightweight reaching pole of not less than twelve (12) feet in length, and not less than one life ring fifteen (15) inches in diameter with a line of three sixteenths (3/16) inch diameter rope attached of length equal to or exceeding the width of the pool. The reaching pole and the life ring shall be kept in a conspicuous place readily available to persons in the pool area.

Every swimming pool shall have the telephone numbers of the Fire, Police or any other appropriate emergency response service for that community posted in a prominent location in case of emergency.

RBC314.6 ENCLOSURES; FENCES REQUIRED. Except as hereinafter stated, every outdoor swimming pool regulated by Section RBC314 of this Code shall be completely enclosed by a fence or a wall not less than five (5) feet in height. Such fences or walls shall contain no openings, holes or gaps, except those equipped with gates or doors, larger than four (4) inches in a horizontal direction. Any openings, holes or gaps larger than four (4) inches, shall be equipped with doors or gates not less than five (5) feet in height. Such gates and doors shall be equipped with self-closing and self-latching devices designed to keep, and capable of keeping, such doors or gates securely closed at all times when not in actual use, such latching device to be attached to the upper part of the gate or door not less than four (4) feet from grade to the operable portion of the device.

The enclosure around one- and two-family residential pools may be around the perimeter of the pool or the whole perimeter of the property or any part thereof. Enclosure around any other pool shall be around the pool area that shall include the pool, the pool deck and any appurtenant sunbathing area. The enclosure around one or more of the sides of the pool may include a building or other permanent structure; provided, however, that any access to the pool through such building or structure shall be equipped as hereinabove required.

The enclosure height requirements of this section shall not apply to any outdoor swimming pool enclosed by a wall or fence not less than four (4) feet in height existing on the date of final approval