

CHAPTER 5. ENVIRONMENTAL STANDARDS

Article 5.A. Land and Resource Conservation

Sec. 5-A-1 Site Fingerprinting

A. Generally.

1. All subdivisions and site plans shall show the boundaries of areas of the natural resources listed in *Subsection B.*, if such areas exist on the parcel proposed for development. Such delineation shall be by a qualified professional.
2. Development that does not require a site plan, but is located on a parcel or lot which was not subdivided in accordance with the requirements of this Article shall provide site fingerprinting.

B. Resource Mapping Criteria. The following resources on a parcel proposed for development shall be mapped according to the stated criteria or methodologies. These resources are subject to the resource protection requirements of this Article.

1. Riparian Buffers. Riparian buffers shall be mapped as an area that extends 30 feet landward of the ordinary high water mark or top of bank, as applicable, from rivers, streams, and creeks.
2. Floodplains, Floodways, and Floodway Fringes. Floodplains, floodways, and floodway fringes shall be mapped according to their boundaries as shown on the most recent maps available from the Federal Emergency Management Agency (FEMA).
3. Wetlands. Wetlands shall be delineated according to the most recent version of the U.S. Army Corps. of Engineers Wetland Delineation Manual.
4. Forests and Woodlands. Forests and woodlands are areas that are at least 10 contiguous acres in area in which trees have overlapping crowns that provide at least 50 percent cover. Forests and woodlands are delineated by the edges of the crowns.
5. Critical Wildlife Habitat, Winter Range for Elk and Mule Deer, and Big Game Migration Corridors. Critical wildlife habitat, winter range for elk and mule deer, and big game migration corridors shall be mapped in consultation with the Colorado Division of Wildlife. (See Sec. 5-A-6, Protection of Wildlife Corridors, Ranges, and Habitat.).
6. Steep Slopes. Steep slopes shall be mapped as those areas on a parcel proposed for development with an average grade of 30 percent or more.
7. Geologic Hazard Areas.
 - a. Geologic hazard areas shall be mapped after geotechnical analysis for those sites which are shown on Map 3 of the 2007 Comprehensive Plan as "geologic constraints," or for sites that are known to the Administrator to contain geologic hazards.
 - b. Each type of geologic hazard on a parcel proposed for development shall be mapped.

C. Waiver of Requirement.

1. The Administrator may waive the fingerprinting requirement for one or more of the listed resources if the Administrator determines that there is no evidence of the presence of the resource or resources on the parcel or lot proposed for development.

Sec. 5-A-2 View Protection

A. Purpose. Procedures for evaluating the impacts of development on scenic views and vistas available to the general public are warranted given the surrounding National Forest Protected Lands, mountain peaks, slopes, and valleys.

The intent of this Section is to preserve the scenic quality of these resources and thereby promote a high quality of life, preserve property values, and promote sustainable economic development by limiting reductions of visual integrity, and to ensure that development does not materially obstruct scenic ~~view or~~ vistas as seen from critically important public view corridors.

- B. Applicability.** The requirements of this Section apply to all development, redevelopment or substantial improvement of buildings or sites that are within the view corridor between the Continental Divide and following key destination points within the Town's municipal limits:
1. Wolf Park;
 2. Confluence Park; and
 3. Hideaway Park;
- C. Requirements.**
1. *Generally.* There shall be no significant structure in the view corridor from the key destination points listed above in subsection (B) and the Continental Divide. To show that there is no significant structure in the view corridor a view analysis shall be submitted when legitimate concerns are raised by Town staff, Town Council, and/or the general public that a proposed development is likely to impact views of the surrounding mountain peaks, slopes, and valleys as seen from key public ~~designation~~ destination points that serve the community interest by ensuring that signature views available to the public are not blocked by the installation of new structures.
 2. *Extent of View Analysis.* See Sec. 7-D-8.B, *View Analysis Requirements*.
 3. *Mitigation Measures.* The applicant is permitted to propose mitigation measures to reduce the impact of the proposed structure(s). See Sec. 7-D-8.D, *Mitigation Measures*.

Sec. 5-A-3 Hillside, Ridgelines and Topographic Features

Subsec. 5-A-3-1 Purpose and Intent

- A. Purpose.**
1. The standards of this Section are appropriate for areas that have physical characteristics limiting development, so that development occurs in a manner that minimizes the adverse environmental and visual problems associated with drainage, erosion, earth movement, and vegetation removal. These standards consider the natural constraints of a site to accommodate development that:
 - a. Is sensitive to the natural, wild environment;
 - b. Incorporates safeguards to maximize public health, safety, and general welfare; and
 - c. Minimizes changes to the visual quality of the hillside.
 2. The hillside conservation standards are designed to protect and enhance the Town's unique natural assets, environment, wildlife habitat, and significant scenic views and vistas. Hillside areas are places of special character that affect and are affected by their surroundings.
- B. Applicability.**
1. *Generally.* Any rezoning, subdivision, site plan, master site plan, or building permit shall be subject to regulations and standards of this Section.
 2. *Exceptions.* Except as provided below, the regulations of this Section apply to those portions of parcels or lots proposed for development where slopes of 30 percent or greater are impacted. The following types of development are exempt from the provisions of this Section:
 - a. Exterior building maintenance and repairs;
 - b. Interior alterations;
 - c. Construction of public utilities in the right-of-way;

- d. Development necessary to comply with Title 6, Chapter 1, *Building Codes*, of the Town's Code of Ordinances; and
- e. Development necessary to ensure the immediate public health or safety as required by the Town Council.

Subsec. 5-A-3-2 Protection of Hillside and Ridgelines

A. Generally.

1. The development standards set out in this Section apply to those portions of parcels or lots proposed for development where slopes of 20 percent or greater are impacted. These standards also apply to flat areas on top of ridgelines or hillcrests that have significant visibility or that may be identified as significant natural features or distinctive landforms. Section 5-A-3-3, *Streets, Driveways, Parking, and Emergency Vehicle Access on Hillside*s, provides special provisions for hillside that meet this slope threshold that are located within 100-feet from the top of bank of a natural waterway.
2. Any rezoning, subdivision, annexation, development, planned development, site plan, or building approval or permit shall be subject to compliance with the hillside regulations, regardless of whether specific reference to the hillside regulations is made in the UDC section governing such approval or permit process.

Table 5-A-3-2-1 Hillside Regulations for Land Use Type			
Land Use Type	<20%	20%-29.9%	30% or more
Single Family Residential - Existing Lot	No Hillside Review	Admin.	Admin
Single Family Residential - New Lot Subdivision	No Hillside Review	Admin. & Subd.	Prohibited
Multifamily - Existing Lot	No Hillside Review	Admin.	Admin.
Multifamily - New Lot Subdivision	No Hillside Review	Admin. & Subd.	Prohibited
Commercial or Mixed Use - Existing Lot	No Hillside Review	Admin.	Admin.
Commercial or Mixed Use - New Lot Subdivision	No Hillside Review	Admin. & Subd.	Prohibited
Access to an Existing Lot	No Hillside Review	Admin.	Admin.
Access to a New Lot Subdivision	No Hillside Review	Admin.	Admin.
Significant Vegetation Removal ¹	No Hillside Review	Admin.	Prohibited
Notes: Admin- Administrative Review Subd. - Subdivision Process 1 - Fire mitigation projectst in the Wildfire-Urban Interface are exempt			

B. Hillside Protection Review Process and Required Submittals.

1. The development review and permitting process is determined by the slope of the area on which the work is to be done. All proposals or development activity including grading, modifying, and / or disturbing of slopes of 20 percent or greater require application, review, and approval. An application is also required for all annexations, rezonings, or subdivisions of properties which have slopes of 20 percent or greater.
2. A completed application must be filed with the Department along with the appropriate fee and all required submittal materials. An application is required for all persons desiring to remove significant vegetation (coniferous trees six feet and taller, deciduous trees four inches in circumference or greater) on slopes of twenty percent or greater. The topography of a parcel is measured using actual ("natural") slope instead of average slope.
3. A rejection of the project may be appealed to the Planning Commission in accordance with the procedures set out in Section 7-G-2, *Administrative Appeals*.

C. Landscape Anomalies and Cut Slopes. Under certain conditions, the grading standards can be administratively waived due to the existence of landscape anomalies or slopes which were created by a previous excavation. A

landscape anomaly, such as a mound or pit, or cut slope may create a steep slope within an otherwise relatively flat area of land. A small land form may be allowed to be graded, so that a small feature would not render unbuildable an otherwise buildable location.

- D. **Conflicting Requirements.** In the event of overlapping or conflicting requirements between the hillside regulations and other provisions or regulations under the UDC, the more restrictive provisions shall apply.

Subsec. 5-A-3-3 Streets, Driveways, Parking, and Emergency Vehicle Access on Hillsides

- A. **Generally.** The standards of this Section apply to the design of streets, driveways, parking, and emergency vehicle access ("vehicular improvements") on hillsides. The limitations of Subsection B., below, apply in riparian areas with qualifying slopes.
- B. **Riparian Areas.** When a hillside is within 100 feet of the top of bank of a natural waterway, streets, driveways, access, and parking shall not be constructed on that hillside except as necessary to provide essential access or a necessary crossing of a waterway.
- C. **Design and Grading.** The grading of slopes shall be minimized by aligning vehicular improvements to conform to existing grades as closely as is possible, and consistent with safe geometric design. Vehicular improvements shall be designed to:
1. Minimize the alteration of the physical and visual character of the hillside (e.g., large notches in ridgelines should be avoided); and
 2. Retain natural landforms by utilizing gentle horizontal and vertical curves in alignments (i.e., alignments on the hillside should be neither wider nor straighter than necessary).
- D. **Streets.** The Town Engineer may allow a proposed street to cross a 30 percent slope only if it is demonstrated that:
1. The street serves one or more of the following purposes:
 - a. The street is necessary in order to serve a dwelling unit on an existing lot of record;
 - b. The street is shown on recorded plat or part of a road network described in a Final Development Plan; or
 - c. The street provides a community benefit that cannot be provided in a cost-effective and technically feasible manner in an alternative location.
 2. The street shall be designed to meet the following objectives:
 - a. The street is aligned in a location that:
 1. Is least disruptive to the steep slope; and
 2. Minimizes cut and fill by following natural contours.
 - b. Streets and driveways that are necessary to serve dwellings on existing lots shall limit the amount of grading necessary by designing the dwelling placement and access points where they have the least impact on the hillside.
 - c. Streets may be split into two, parallel one-way streets (thereby effectively functioning as a two-way street with a land "median") in steeper areas to minimize grading and to blend with the terrain. Culs-de-sac or loop roads are encouraged where necessary to fit the terrain.
 - d. Streets must not be parallel to one another to avoid a "shelving" effect on hillsides.
 - e. Modified street standards may be approved by the Town Engineer to reduce required grading.
 - f. Retaining walls shall blend with the natural features of the setting. Use of native rock or use of other masonry shall convey a scale and texture similar to that of traditional rock or traditional materials found within the natural setting. Limit the height of a retaining wall to less than six feet. Where greater heights in a retaining wall must occur, use a series of terraced or stepped walls. The width of a retaining terrace shall not be less than five feet. The Administrator may vary the retaining wall height and width requirements depending on site conditions.
 - g. Screen road cuts and retaining walls with plant materials.

3. When no retaining wall is to be used, avoid making cuts too steep to accomplish revegetation of the affected hillside.
- E. **Curb Cut Width.** Refer to the Standards and Specifications for Design and Construction.
- F. **Garage Location.** Generally, garages shall not be located in the front of the lot or parcel proposed for development. However, an exception may be granted by the Administrator where necessary to avoid extensive cut and fill. In such circumstances, the appearance of the garage doors shall be minimized from street level vantage points.
- G. **Driveways.** In order to limit the impact of driveways on sloped lands, the following standards apply:
1. Grading of slopes of 30 percent or more in order to construct a driveway shall be allowed only if it is necessary to serve a dwelling unit on an existing lot of record and there are no feasible alternative locations for access with lesser slope.
 2. Driveways shall generally follow existing contours.
 3. Minimum grading shall occur to accommodate the driveway. Minimizing grading shall be a priority in terms of driveway design and building placement.
 4. Non-shared driveways should be narrowed to 12 feet, when feasible.
 5. Shared drives shall be a maximum of a 20 foot wide paved driving surface and should be narrowed to a 16 foot wide paved driving surface with two-foot gravel shoulders on each side, when feasible.
 6. Shared driveways shall be utilized to minimize hillside cuts whenever feasible.
 7. Driveways should take up the grade of the slope rather than cutting into or manipulating the topography.
 8. Driveway cuts shall be screened with a rock wall, plant materials, and / or other features.
 9. Driveways shall be designed to minimize erosion due to drainage.

Subsec. 5-A-3-4 Utilities

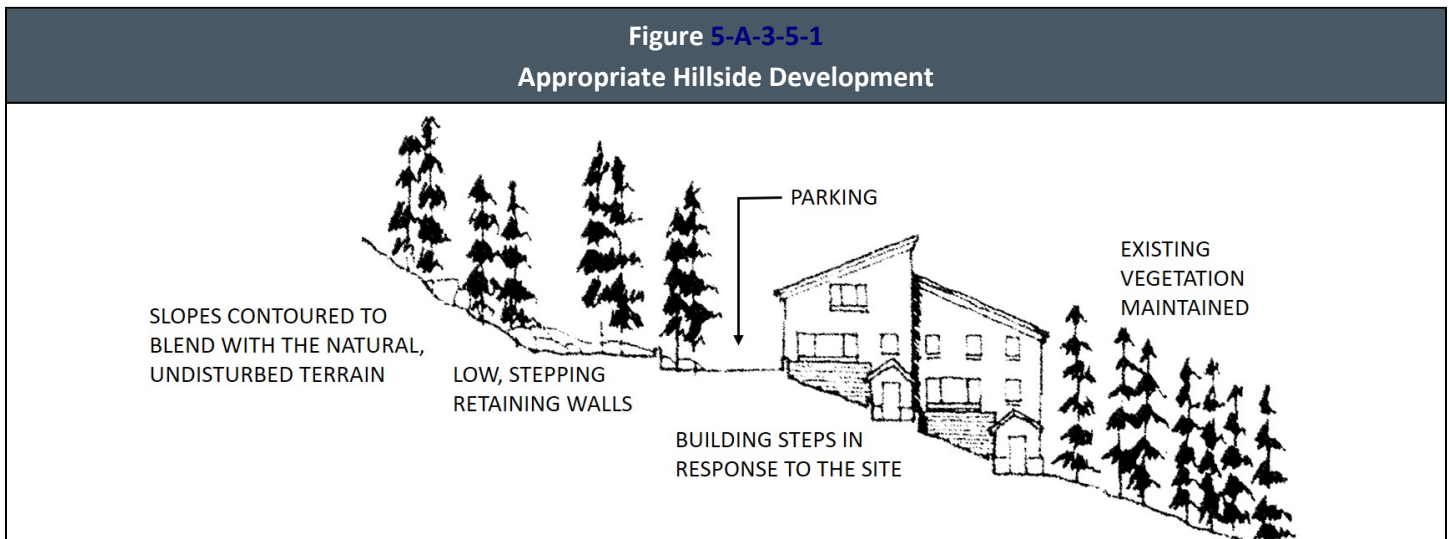
All utilities shall follow road and driveway corridors where possible. New utilities shall be underground, unless the situation where burying the lines would require significant blasts to clear masses of outcrops or rock formations. Alternatives to utility placement shall be approved by the Town Engineer.

Subsec. 5-A-3-5 Hillside and Ridgeline Design Standards

Subsec. Hillside and Ridgeline Design Standards

- A. **Generally.** Development activities that impact slopes of 20 percent or greater shall meet the design objectives set out in this Section.
- B. **Building and Respect for the Natural or Existing Topography.**
1. *Location and Site Design Standards.*
 - a. Buildings shall be designed to fit the lot or parcel, rather than substantially modifying the grade of the lot or parcel to fit the building. Buildings, access drives, and lawns shall be designed and configured to maintain as much of the natural landform as possible.
 - b. Where areas of the parcel or lot are already disturbed, the existing, disturbed areas shall be used for building envelopes rather than undisturbed areas, provided that such areas are of an adequate area and shape and do not pose a geological hazard or other safety issues.
 - c. Structures should be located to preserve or protect significant natural features of the site, such as landforms, rock outcroppings, mature trees and vegetation, drainage courses, hilltops, and ridgelines.
 - d. Locate buildings to balance the following objectives for the optimization of the site for outward views:
 1. To retain or enhance view from off-site view points; and
 2. To respect privacy, access to light, and safety of neighboring properties.

2. **Building Elevations.** No single-family, duplex, townhome, or multiplex building elevation shall appear as more than two and one-half stories in height.
3. **Building Heights.** No building shall exceed a height to roof ridge of 28 feet for a sloping roof, or parapet height of 16 feet for a flat roof.
4. **Building Mass and Scale.**
 - a. Building form shall be planned to enhance the site's natural features (if practicable), and to blend with the natural terrain.
 - b. The mass and scale of buildings shall respect the natural surroundings and unique visual resources by incorporating designs which minimize or mitigate bulk and mass, follow natural topography, and minimize visual intrusion on the natural landscape.
 - c. Structures shall be designed to blend into the natural character of the hillside by reducing the visual bulk through landscaping, terraced building forms, appropriate building materials and colors, and height variations. Split-pad and stepped foundations shall be used where necessary to minimize cut and fill, and to create forms that step down or step up with the natural slope to avoid padding and to mitigate the appearance of building mass.
 - d. A series of smaller, visually distinct roofs, specifically pitched, gabled and hipped roofs, shall be utilized on buildings with a floor plate that is larger than 2,500 square feet, in order to reflect the visual diversity of the natural hillsides, except that in the wildland-urban interface, fire-resistant design shall take priority over varied roof forms.
 - e. Reflective materials shall not be used for roofing.
 - f. The maximum overhang for any deck or cantilevered building design which extends over a downhill slope is 10 feet. In the wildland-urban interface, overhanging decks and cantilevered building elements are not allowed.



C. Design with Slope.

1. When feasible, locate the principal building on the flat part of the site and off the slope. Where such locations are not feasible, foundation systems, home designs, and driveways shall be used to take up grade.
2. Foundation corners shall match the natural grade as much as practicable.
3. Buildings that must be constructed on steep slopes shall be designed with stepped foundations and structures that follow the slope as outlined in Figure 5-A-3-5-1 *Appropriate Hillside Development*.

D. Grading.

1. Grading shall be limited to that which is necessary to construct the house, driveway, and a limited area for yard purposes.
2. No site alterations shall exceed a one-foot elevation change within one foot of any property line.
3. A grading permit shall be required prior to the commencement of grading activities on slopes of 20 percent or more.

E. Retaining Walls.

1. Generally, retaining walls should be used to minimize the impacts of cut and fill on steep slopes on a site (for example, to ensure the safe development of a lot or parcel, or for the control of stormwater runoff or erosion). Otherwise, retaining walls shall be avoided. Retaining walls are not acceptable when their purpose is to create flat yards.
2. Retaining walls shall blend with the natural features of the setting. Use of native rock or use of other masonry shall convey a scale and texture similar to that of traditional rock or traditional materials found within the natural setting. Limit the height of a retaining wall to less than six feet. Where greater heights in a retaining wall must occur, use a series of terraced or stepped walls. The width of a retaining terrace shall not be less than five feet. The Administrator may vary the retaining wall height and width requirements depending on site conditions.

F. Ridgeline Setback and Landscape Buffer.

1. Generally, buildings shall be set back 45 feet from top of slope or ridgeline.
2. A landscape Type C bufferyard between the building and the ridgeline shall be installed and maintained. Existing, healthy vegetation shall be counted towards this requirement. (See Sec. 6-B-5, Bufferyards.)
3. Property owners may elect to dedicate a ridgeline easement to protect highly visible and significant ridgelines and views. In the case of a ridgeline easement, the height of any structure shall be not less than 50 vertical feet below the low point of the easement, and the structure must be at least 200 horizontal feet from the nearest edge of the easement.
 - a. Easements may also be dedicated on hillsides that are not ridgelines.
 - b. In the area of the ridgeline easement native vegetation shall remain undisturbed.

G. Subdivisions and Developments with Multiple Buildings.

1. Development clusters are encouraged to preserve natural features, reduce grading and impervious surface area, increase usable open space areas, and preserve views of the hillsides.
2. For developments with multiple buildings, buildings should have height variations in order to minimize a "walled" effect or a repetitive appearance. Wherever possible, the buildings should be positioned so that they appear to be "tucked" into the hillside and not easily visible from below.

H. Slopes of 30 Percent or More. On slopes of 30 percent or more, the following standards apply in addition to the standards of Subsection B., above:

1. For new subdivisions, building envelopes shall be created outside of the 30 percent or greater slope areas. In areas in which this is not possible, new lots shall not be created.
2. No construction activities shall occur outside of the building envelope except approved driveways that are designed according to the standards of Section 5-A-3-3, *Streets, Driveways, Parking, and Emergency Vehicle Access on Hillsides*.
3. The standards set out in Subsections D.1. and D.2., above, shall not be interpreted to preclude development of an existing lot or parcel with a single-family detached dwelling unit. On existing lots or parcels that are developed or redeveloped with single-family detached buildings, detached garages or garages below grade are encouraged. Garages that are constructed below grade shall be screened from views from vantage points that are parallel to the contour lines of the hillside where such designs are feasible.

- I. **Modification of Setbacks.** Flexibility in required setbacks may be considered in order to avoid altering steep slope areas. The Administrator may allow the application of alternative setbacks in order to avoid or minimize alterations to steep slope areas, as follows:
 1. Front and side setback requirements may be varied to protect an existing slope. Minimum setbacks shall be established during the preliminary design review. Setback adjustments shall ensure at least 20 feet of spacing between the proposed development and buildings on abutting lots.
 2. Setbacks along the portion of a lot furthest from a ridgeline may be reduced to minimize encroachment on the skyline.
 3. Varied and staggered front building setbacks are encouraged in hillside residential subdivision layout. This is consistent with the natural hillside character and will reduce the visual monotony and "walled" effect of repetitive setbacks.
 4. Setback adjustments shall not create or exacerbate encroachments into Special Flood Hazard Areas.

Sec. 5-A-4 Water Quality Setbacks and Vegetated Buffers

Subsec. 5-A-4-1 Purpose and Intent

- A. **Purpose.** This Section establishes minimum acceptable standards for development within Water Quality Setbacks, wetland development, and requirements for the design of vegetated buffers. The standards of this Section are appropriate for areas that contain watercourses, wetlands, and floodplains in order to protect:
 1. Watercourses, wetlands, and floodplains.
 2. The water quality of Fraser River, Vasquez Creek, and other significant water resources; and
 3. Riparian and aquatic ecosystems;
 4. The environmentally sound use of land resources;
 5. This section achieves these purposes by: restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; and controlling the alteration of natural flood plains, stream channels, and natural protective barriers that help accommodate or channel flood waters and provide other benefits as described in the following sentence.
- B. **Benefits.**
 1. Water Quality Setbacks, wetlands, and vegetated buffers provide numerous environmental protection and resource management benefits that can include: restoring and maintaining the chemical, physical, and biological integrity of water resources; reducing pollutants delivered from stormwater runoff; reducing erosion and sediment entering rivers, creeks, and streams; stabilization of stream banks; Infiltration of stormwater runoff; maintaining the base flow of watercourses; contributing organic matter as a source of food and energy for the aquatic ecosystem; providing tree canopy to shade streams and promote desirable aquatic organisms; providing riparian wildlife habitat; furnishing scenic value and recreational opportunity; protecting the public from flooding, property damage and loss; and providing sustainable, natural vegetation.

Subsec. 5-A-4-2 Water Quality Setback

- A. **Purpose.** This Section establishes minimum acceptable standards for development within Water Quality Setbacks.
- B. **Applicability.** This Section applies to proposed improvements associated with all land development activity requiring rezoning, subdivision, site plan, final development plan amendment, or a building permit on property containing a watercourse. These requirements are in addition to, and do not replace or supersede, any other applicable stormwater management requirements such as the Town of Winter Park Standards and Specifications for Design and Construction.

- C. **Watercourse Setback.** The Water Quality Setback shall be thirty (30) feet from the high water mark of the watercourse and shall be kept as a vegetated buffer unless otherwise exempted in the Section.
- D. **Requirements.** Vegetated buffers are required to be maintained in the Water Quality Setback as outlined in Sec. 5-A-4-3, *Vegetated Buffers*.
- E. **Exemption.** Any existing use is exempt from the requirements of this Section but must meet the requirements for compliance for any new development requiring a site plan, subdivision, or building permit. Additionally, the following uses are allowed within the Water Quality Setback:
1. Any new structure located on a lot within Blocks 1-2, Winter Park Village shall have a minimum water quality setback of fifteen feet (15') from the Fraser River, measured from the approximate high water mark of the river embankment upon approval of a site plan detailing a vegetated buffer as outlined in Subsec. 5-A-4-3 *Vegetated Buffers*.
 2. A public walking or bicycle path installed at least five (5) lateral feet landward from the watercourse, measured horizontally on a line perpendicular to the location of the normal high water mark of both sides of a watercourse.
 3. Access to public piers provided that any impervious surface utilized to facilitate such access shall be as minimal as is required to accommodate the access
 4. Encroachments of permitted underground utility systems, provided that such systems must cross the Water Quality Setback as close to perpendicular as practicably possible
 5. Public streets authorized by the Town Council, as applicable.
 6. Dikes, embankments, walls, reservoirs, pumping stations or other drainage works approved by the federal, state, or local regulations. Installation should be encouraged as far back as possible from the Fraser River and Vasquez Creek, to allow for more natural buffer and floodplain processes.
 7. No allowable use may be permitted within the Water Quality Setback unless adequate and proper measures are specifically undertaken in connection with the location and/or construction of such use or uses to ensure that the water holding capacity of the floodplain is substantially maintained without upstream flooding, without endangering properties of adjacent owners, and without interfering or diminishing the basic flow of the waterway.
- F. **Prohibited Uses.** The following uses are prohibited in the Water Quality Setback (except with approval of the Administrator):
1. Use, storage, or application of pesticides, except for the spot spraying of noxious weeds or nonnative species;
 2. Filling or dumping including but not limited to yard waste;
 3. Grading, stripping, or other soil disturbing practices;
 4. Clearing of existing vegetation;
 5. Draining the buffer area by ditching, underdrains, or other systems; and
 6. Storage or operation of motorized vehicles except for maintenance or emergency use.

Subsec. 5-A-4-3 Vegetated Buffers

See Sec. 6-B-5(l), Bufferyards.

Subsec. 5-A-4-4 Wetlands

- A. **Purpose and Intent.** This Section establishes minimum acceptable standards for wetland development. The wetland regulations set forth in this section are intended to complement and operate in conjunction with the distinct jurisdictional wetland disturbance process set forth in Section 404 of the Federal Clean Water Act and administered

by the U.S. Army Corps of Engineers. Accordingly, the wetland disturbance provisions of this UDC may apply notwithstanding the determination of the jurisdictional nature of the wetlands by the U.S. Army Corps.

- B. **Applicability.** This Section applies to all areas within the Town containing a wetland.
- C. **Independent Survey Requirements.** In light of the purpose and intent of this section, if there is any evidence that a site subject to disturbance may contain wetlands as such term is defined in Article 8.C of this UDC, the Town may require the developer to obtain and submit a wetlands survey by an independent third party consultant specializing in wetlands delineations as recognized by the U.S. Army Corps of Engineers on its periodically updated “Wetlands Delineation Consultants List”.
- D. **Disturbance of Wetlands or Wetland Setbacks.**
 - 1. Soil disturbance and structures are prohibited within 15 feet of a wetland as such term is defined in Article 8.C of this UDC, and recognized as such by the Town, notwithstanding any contrary determination by the U.S. Army Corps of Engineers.
 - 2. The Administrator may reduce the 15-foot setback if the disturbance of the wetland area or the wetland setback is minimized using the criteria listed in Subsection 5-A-4-4 (F, G, H). Unless an activity is exempt from the wetland setback regulations as provided for in this Section, the wetland setback impacts and/or other relevant concerns shall be evaluated concurrently with each type of development review as provided for in this UDC, including but not limited to rezoning, subdivision, site plan, final development plan amendment, or a building permit on property containing a watercourse.
 - 3. Work in a wetland area or a wetland setback is exempt from this requirement if:
 - a. The work is to re-vegetate the setback to a natural, weed-free state without extensive grading;
 - b. The work is water dependent such as piers;
 - c. Necessary to achieve either vehicular or utility access to property, and no other access route avoiding the wetland areas or the associated setbacks is technically feasible, provided the impacts of such access shall be mitigated in conformance with the standards contained in Subsection H of this Section, *Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas*;
 - d. Activities directly related to farming, ranching, and silviculture; or
 - e. The purpose of the work is to restore the wildlife habitat, and the work will be done under the supervision of Colorado Parks and Wildlife (CPW) and CPW has granted approval for the work to be done under the auspices of the Division’s nationwide 404 permit. Evidence of approval from CPW must be submitted to the Planning Division prior to commencement of any work conducted under this exemption.
- E. **Compliance with Disturbance and Mitigation Plans and Applicable 404 Permit Requirements.** Prior to final approval of a subdivision, site plan or grading plan, the project proponent shall submit a plan to meet the standards set forth in Subsections G and H of this Section. If the site contains areas deemed a jurisdictional wetland by the U.S. Army Corps of Engineers, the applicant must either present evidence of compliance with Section 404 of the Federal Clean Water Act (“CWA”), or present evidence that work will be done under the auspices of the CPW nationwide 404 permit as provided in Subsection D of this Section, *Disturbance of Wetlands or Wetland Setbacks*. Documentation and compliance with all potential Section 404 matters shall remain the sole and ongoing responsibility of the project proponent, and any failure to maintain such compliance may lead to suspension or revocation of any approvals provided under this UDC.
- F. **Criteria for Disturbing Wetland Areas and the Associated Setbacks.** The Administrator may allow disturbance of wetland areas or the wetland setback if the disturbance activity to the wetland area and the associated setback meet all of the following criteria:
 - 1. A wetland or the associated setback cannot have soil disturbance unless there is no practicable alternative to avoiding a wetland or the wetland setback, and such activity is to either:
 - a. Meet a comprehensive plan strategy;

- b. Meet a policy of this UDC; or
 - c. Allow reasonable use of the property.
 2. The project will limit the degree of impact on the wetland area and the associated setback to the greatest extent practical using the mitigation procedures outlined in Subsection 5-A-4-4 H, *Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas*.
 3. The impact on the wetland area or the associated setbacks will be mitigated by preservation and maintenance operations.
 4. The loss of a wetland area will be compensated for by replacing or substituting the wetland resource lost in terms of quantity and quality.
 5. The project's discharges will not violate other applicable regulations and laws (e.g., state water quality standards, the Endangered Species Act, the National Environmental Policy Act), or significantly degrade the waters of the United States or any other wetland as such term is defined in Article 8.C of this UDC and recognized as such by the Town.
- G. **Submittal Requirements for a Wetlands Disturbance Plan.** Where all or part of a wetland area or the associated setback is proposed to be disturbed or substantially altered by development, an applicant for development review shall submit a wetlands disturbance plan which shows:
1. The amount, location and acreage of wetland fill, removal or other alteration proposed;
 2. The proposed mitigation improvements, including those wetland areas to be restored or created in accordance with Subsection H of this Section, *Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas*;
 3. A grading and erosion control plan, including plant material to be used for revegetation and soil stabilization measures; and
 4. A narrative explaining how a proposed activity in the wetland setback or a wetland area will meet the criteria contained in Subsection F of this Section, *Criteria for Disturbing Wetland Areas and the Associated Setbacks*.
- H. **Mitigation Procedures for Developing Within or Adjacent to Wetlands Areas.** A mitigation plan shall be required, in accordance with Subsection E of this Section, for any unavoidable earth disturbing activities within wetland areas or the associated setbacks. Any earth disturbance within any wetland areas or the associated setbacks shall use the following mitigation:
1. Time grading and construction to minimize soil exposure during periods of snowmelt and rainy periods;
 2. Retain and protect natural vegetation; strip only the area required for construction in stages;
 3. Infiltrate runoff from impervious surfaces by locating infiltration trenches below driplines, walkways, parking areas and driveways;
 4. Minimize length and steepness of exposed slopes by designing with the natural topography; prevent erosion on exposed slopes by placing barriers, such as straw bale dikes;
 5. Keep runoff velocities low to prevent high erosive powers by using flow barriers (vegetation, rip-rap, etc.);
 6. Protect drainage ways and outlets from increased flows by using rip-rap;
 7. Trap sediment on-site by using straw bales, filter fences and sand bags;
 8. Any disturbed areas must be replanted with native vegetation;
 9. Natural hydrologic flows will be maintained through the site;
 10. Minimize earth movement by avoiding cut and fill slopes;
 11. Foundations shall be stepped down the slope to minimize cut and fill;
 12. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety;

13. Appropriate erosion and sedimentation prevention measures must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date;
 14. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the activities primary purpose is to impound water;
 15. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance; and
 16. Any other appropriate measure as deemed necessary by the Town Engineer, the Planning Division, the Planning Commission, or the Town Council.
- I. **Financial Guarantee.** A development improvements agreement and associated financial guarantee to ensure the requirements of this Section are met shall be posted in accordance with Section 4-B-4, *Development Improvements Agreement* or as otherwise provided for in this UDC. Notwithstanding the forgoing, the term of the financial guarantee for the period following installation shall be a minimum of two growing seasons in order to ensure that successful, stable plant establishment is achieved for all wetland plantings.
- J. **Penalties:** Documentation and compliance with all potential Section 404 matters of the Federal Clean Water Act shall remain the sole and ongoing responsibility of the project proponent, and any failure to maintain such compliance may lead to suspension or revocation of any approvals provided under this UDC.

Sec. 5-A-5 Geological and Wildfire Hazard Area

Subsec. 5-A-5-1 Disclaimer

The degree of hazard protection intended to be provided by this Section is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. This regulation does not imply that the areas outside of established hazard boundaries or uses permitted within these boundaries will be totally free from damage caused by these hazards. This regulation shall not create any liability on the part of, or cause an action against, the Town, the Town Council, or any officer or employee or official (elected or appointed) thereof for damages that may result from reliance on the regulations set out in this Section.

Subsec. 5-A-5-2 Designation of Hazard Areas

- A. **Official Hazard Area Maps.** Maps and documentation regarding the general location of geologic and wildfire hazard areas ("Official Hazard Area Maps") are on file at the Division.
1. Geologic Hazard Areas. Geologic hazard areas are identified on maps prepared by the Colorado Geological Survey and other qualified geological professionals.
 2. Wildfire Hazard Areas. Wildfire hazard areas are identified on maps prepared by the Colorado Forest Service.
- B. **Site-Specific Delineation.** The maps described in Subsection A., above, define only approximate boundaries of hazard areas. The maps serve primarily as notice that geologic and/or wildfire hazards are known to exist on or near a parcel proposed for development, such that further analysis may be necessary. Precise boundary delineations require site-specific evaluation by qualified professionals.

Subsec. 5-A-5-3 Geologic Hazard Mitigation

- A. **Generally.** This Section is not intended to categorically preempt all future development. The mitigation that may be required by this Section shall be proportionate to the nature, severity, and frequency of the hazard and the nature and intensity of the proposed land use.
- B. **Engineering Study.**

1. If a parcel proposed for development is known or reasonably suspected to be in a geologic hazard area or wildfire hazard area, then the Town may require the applicant to provide a site-specific engineering study to:
 - a. Delineate the hazard;
 - b. Define its degree of severity;
 - c. Determine its frequency / probability of recurrence;
 - d. Evaluate the compatibility of the proposed land use;
 - e. Propose appropriate mitigation measures to reduce risks to people, property, and natural resources; and
 - f. Propose ongoing operations and maintenance programs to ensure that the mitigation measures function properly.
2. All reports and studies required by this Section shall be prepared by a "professional geologist", as defined by C.R.S. § 34-1-01, as amended, or a "registered professional engineer," as defined by C.R.S. § 12-25-102, as amended, under the direction of and at the expense of the owner or applicant.
3. The extent of the site-specific 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 one of the following:
 - a. The site can be developed for the specific development that is proposed, without corrective engineering, engineered construction, or other mitigation or alterations;
 - b. The site is a geologically sensitive area, but the specific development that is proposed:
 1. Can be constructed with corrective engineering, engineered construction, or other mitigation or alterations which mitigate the risks to the occupants of the development such that they are reasonable; and
 2. Will not increase the hazard to other property or structures or to public buildings, rights-of-way, streets, easements, utilities or facilities, or other properties of any kind; or
 - c. The site is a geologically sensitive area on which the specific proposed development is not appropriate because there are no mitigation techniques that could reduce the risks created by the geologic hazard to a reasonable level with respect to:
 1. Occupants and property on the parcel proposed for development; and
 2. Other property or structures, public buildings, rights-of-way, streets, easements, utilities, or facilities of any kind that are currently affected by the hazard or that would likely be affected by the hazard if the proposed development occurred.

C. Effect of Study.

1. 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, building permit, or grading permit may be approved without conditions relating to the mitigation of the areas of geologic sensitivity.
2. 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, 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 out in this Section.
3. 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.

- D. **Techniques.** Mitigation techniques shall be consistent with the purposes of this UDC. Examples of mitigation techniques which may be acceptable are:
1. Retaining walls, fill, rock bolting, or pilings.
 2. Diversion, channeling, damming, or barriers.
 3. Excavation of unstable areas, bridging of weak zones, or proper distribution of loading.
 4. Improvement of surface and subsurface drainage.
- E. **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 posed by the development of a geologically hazardous area:
1. The certified site specific reports and plans required by this Section 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:
 - a. Inspection and certification by the 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 find 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. 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 Section. 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.
- F. **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 that 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 all of the requirements of this Section are met.
- G. **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 of this UDC 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 of this UDC 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.

Subsec. 5-A-5-4 Wildfire Hazard Mitigation

- A. **Generally.** The Wildland-Urban Interface ("WUI") is a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels. The WUI creates a potentially dangerous situation for flames or embers from a wildland fire to come in contact with structures. The purpose of this Section is to provide a means to protect the public health, safety, and welfare by establishing standards for development within a WUI area in order to:
 1. Reduce threats to life safety, property, and resources by improving development and construction standards, access to and defensibility of developments, homes, and other property in WUI areas;
 2. Minimize the potential of spreading fire from wildland areas to structures and from structure fires to wildland areas;
 3. Identify the appropriate use of cul-de-sacs, hammer head turnarounds, and turnouts on streets and roads providing legal and physical access to subdivisions with the intent to provide better emergency access to remote areas; and
 4. Require homeowners and neighborhoods to plan, create, and maintain defensible space that utilizes fire resistant construction and landscaping.
- B. **Wildfire Mitigation Plan Required.** Proposed development that is located in the WUI shall provide and implement a wildfire hazard mitigation plan according the standards of Appendix C, Wildfire Mitigation Plan Guidance.
- C. **Site Design.** The following design standards apply to parcels proposed for development within the WUI. The Town may approve alternative standards if it is demonstrated that they are consistent with current State and / or Federal guidance on wildfire hazard mitigation for development within the WUI.
 1. **Defensible Space.** Development sites shall be designed to provide three zones of defensible space, as described in Appendix C, Wildfire Mitigation Plan Guidance.
 2. **Chimneys.** Buildings and building sites shall be located outside of ravines or other topographical features which constitute "fire chimneys," and within 150 feet of the apex of "fire chimneys." Any proposed lot within a new subdivision with a "fire chimney" located on the lot should have a no-build area / zone designated on the face of the final plat for the subdivision that prohibits future development within "fire chimneys" and within 150 feet of the apex of "fire chimneys." This standard may be modified to allow development at ME zone density if it is demonstrated that the fire risk is appropriately mitigated and there is no other feasible option for development of the parcel proposed for development.
 3. **Improvements Prior to Construction.** Water sources, wells, draft sites, hydrants, fire breaks, access routes, and other fire protection equipment or features required by the preliminary plat approval shall be installed prior to construction of any buildings in a new subdivision.
 4. **Fuelbreaks and Greenbelts.** WUI fire protection may rely on fuelbreaks and greenbelts to separate communities, groups of structures, or individual homes. These breaks can slow or stop the spread of an oncoming fire.
 - a. Fuelbreaks and greenbelts shall be located to protect both existing and planned developments and adjacent wildlands. Fuelbreaks shall not be a bare soil trail which is bulldozed around a subdivision. However, they may be as simple as the removal of dead and fallen trees, tree limbs, shrubs, and other flammable vegetation, together with breaking the continuity of vegetation around the perimeter of the development.
 - b. Natural features such as rocky formations with little or no vegetation, or rivers or streambeds in which vegetation has been thinned and dead and dying materials removed can also be utilized.

- 5. Access. Access to the parcel proposed for development shall be designed to provide for the safe movement of firefighters and their equipment.
- D. **Building Design and Materials.** Buildings in the Wildland-Urban Interface (WUI) shall incorporate fire-resistant design techniques and utilize fire-resistant building materials.

Sec. 5-A-6 Protection of Wildlife Corridors, Ranges, and Habitat

- A. **Generally.** Critical habitat, big game winter ranges, and big game migration corridors shall be identified in a wildlife report. This report shall consist of narrative and maps necessary to identify wildlife habitat areas, winter ranges, and migration corridors and describe proposed mitigation measures for the protection of wildlife, their habitats, and migration corridors. This report shall be prepared in consultation with the Colorado Parks and Wildlife ("CPW") personnel and resources, including documentation of any CPW recommendations.
- B. **Exceptions.** The Administrator may waive the requirement of a wildlife report for properties that are located in areas where the existence of habitat, winter range, or migration corridor is highly unlikely, or where, due to existing development patterns and / or the size, location, and condition of the parcel proposed for development, the proposed development would have a de minimus impact on wildlife.
- C. **Avoidance and Mitigation of Wildlife Impacts.**
 - 1. *Generally.* Wildlife reports shall include proposed design parameters and management techniques to avoid, minimize, and mitigate impacts on critical habitat, big game migration corridors, and big game winter range.
 - 2. *Connectivity.* Critical habitat, big game migration corridors, and big game winter range shall be selected for its continuing value to wildlife, as follows:
 - a. Elements of habitat or range that are interdependent shall not be separated in ways that materially compromise the overall habitat.
 - b. Protected areas of big game migration corridors and big game winter ranges shall provide a continuous connection to off-site big game migration corridors and big game winter ranges, such that large-scale regional wildlife movements are not impeded by the proposed development.
 - c. Fencing and grading shall not materially interfere with wildlife movement across critical habitats, big game migration corridors, and big game winter ranges.

Sec. 5-A-7 Sustainability

The Town of Winter Park encourages the use of environmental sustainable measures such as Low Impact Development (LID) and the creation of alternative forms of small-scale energy production such as wind turbines, solar panels, and solar powered lighting. For information concerning specifically encouraged sustainable design features see Appendix A, Section K, *Sustainable Site Design*, of the Town's Design Guidelines.

Article 5.B. Flood Hazard Reduction

Sec. 5-B-1 Purpose

The purpose of this Article is to:

- A. Promote the public health, safety, and general welfare of the community;
- B. Minimize public and private losses due to flooding in specific areas by creating provisions that are 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;
 - 4. Minimize prolonged business interruptions;

5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets, and bridges located in special flood hazard areas;
6. Help maintain a stable tax base by providing for the sound use and development of special flood hazard areas so as to minimize future blight areas;
7. Ensure that potential buyers are notified that their property is in a special flood hazard area; and
8. Ensure that those who occupy special flood hazard areas assume responsibility for building in these locations.

Sec. 5-B-2 Applicability

- A. **Generally.** This Article shall apply to all special flood hazard area within the jurisdiction of the Town as reflected on the Flood Insurance Rate Map (FIRM), and areas removed from the floodplain by issuance of a Federal Emergency Management Association (FEMA) Letter of Map Revision Based on Fill (LOMR-F), which are on file at the Colorado Department of Community Development (CDCD).
- B. **Establishment of Areas of Special Flood Hazard.** The special flood hazard areas identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled "Flood Insurance Study for The Town of Winter Park, dated January 2, 2008", with accompanying FIRM maps and any revisions thereto, are hereby adopted by reference and declared to be a part of this UDC. The flood insurance study and FIRM are on file and may be reviewed at the offices of the CDCD.
- C. **Compliance.** No structure within a special flood hazard area shall hereafter be constructed, located, extended, or converted, nor shall any structure or land within a special flood hazard area be substantially altered, without full compliance with the terms of this Article.
- D. **Warning and Disclaimer of Liability.**
 1. *Level of Flood Protection.* The degree of flood protection required by this Article 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.
 2. *Lack of Guarantee.* This Article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages.
 3. *Disclaimer.* This Article shall not create liability on the part of the Town, any officer or employee thereof, FEMA, or any other governmental agency for any flood damages that result from reliance on this Article or any administrative decision lawfully made thereunder.
- E. **Methods of Reducing Flood Losses.** In order to accomplish its purposes, this Article includes methods and provisions for:
 1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities; and
 2. Requiring that uses that are vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel flood waters;
 4. Controlling filling, grading, dredging, and other development which may increase flood damage; and
 5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters, which may increase flood waters, or which may increase flood hazards in other areas.
- F. **Establishment of Floodplain Development Permit.** A floodplain development permit shall be required to ensure conformance with the provisions of this Article. See Sec. 7-F-7, *Floodplain Development Permit*.

Sec. 5-B-3 Findings of Fact

- A. **Periodic Inundation.** The flood hazard areas of the Town of Winter Park are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety, and general welfare.
- B. **Floodplain Obstructions.** These flood losses are caused by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed, or otherwise protected from flood damage.

Sec. 5-B-4 Standards for New Construction and Substantial Improvements

- A. **General Standards.** All new construction or substantial improvements in special flood hazard areas shall be:
 - 1. Designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
 - 2. Constructed by methods and practices that minimize flood damage;
 - 3. Constructed with materials resistant to flood damage;
 - 4. 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.
- B. **Required Approvals.** New construction or to buildings or other structures, except a flood control dam or irrigation structure, shall not be constructed in special flood hazard areas until the plans for such building or structure are first approved by the Town Engineer and the following special conditions within the special flood hazard area are adhered to substantial improvements.
 - 1. *Approved Buildings or Structures.* Any building or structure which is approved shall:
 - a. Be located so as to offer minimum obstruction to the flow of floodwater; and
 - b. Not cause lands outside of the natural flood channel to be flooded.
 - 2. *Wetland Construction.* No buildings shall be constructed within a wetland, unless approved and permitted by the U.S. Army Corps of Engineers and Town Council.
 - 3. *Water Quality Setbacks.* Water quality setbacks from streams, wetlands, or watercourses shall be a minimum of thirty feet, measured from the approximate high water mark of the stream or watercourse embankment, unless otherwise approved by the Town Engineer.
- C. **Water Supply Systems.** All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- D. **Sanitary Sewage Systems.**
 - 1. 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
 - 2. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- E. **Base Flood Elevation (BFE) Requirements.** In all special flood hazard areas where base flood elevation data is required the following provisions are required:
 - 1. *Residential Construction.*
 - a. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to or above the Base Flood Elevation (BFE).

- b. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that is in conformance with the application requirements of Sec. 7-F-7, *Floodplain Development Permit*.
2. *Nonresidential Construction.*
 - a. *Requirements.* New construction and substantial improvement of any nonresidential structure shall:
 1. Have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities;
 2. Be designed:
 - a. So that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and
 - b. With structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
 - b. *Review and Certification.* A registered professional engineer or architect shall:
 1. Certify that the design and methods of construction are in accordance with the UDC. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Administrator.
 2. Develop and/or review structural design, specifications, and plans for the construction.
 3. *Enclosures.* New construction and substantial improvements with fully enclosed areas below the lowest floor that are usable solely for the parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - a. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. 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.
 4. *Manufactured Homes.*
 - a. Manufactured homes to be placed within zone A on a community's Flood Hazard Boundary Map (FHBM) or FIRM and shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include without limitation use of over the top, or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
 - b. Manufactured homes that are placed or substantially improved within zones A1-30, AH, and AE on the community's FIRM on sites that are outside of a manufactured home park or a manufactured home subdivision; in a new manufactured home park or subdivision; in an expansion to an existing manufactured home park or subdivision; or in an existing manufactured home park or manufactured home subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood shall be:
 1. Elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation; and

2. Securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- c. Manufactured homes placed or substantially improved on sites in an existing manufactured home park or manufactured home subdivision within zones A1-30, AH, and AE on the community's FIRM that are not subject to the provisions of this Subsection shall be elevated so that either:
 1. The lowest floor of the manufactured home is at or above the base flood elevation, or
 2. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

Sec. 5-B-5 Subdivision Standards

- A. **General Standards.** All proposals for the development of subdivisions including without limitation the placement of manufactured home parks and subdivisions shall:
 1. Meet development permit requirements of Sec. 7-F-7, *Floodplain Development Permit*;
 2. Have adequate drainage provided to reduce exposure to flood hazards; and
 3. Public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.
- B. **BFE Data.** BFE data shall be generated for subdivision proposals and other proposed development including without limitation the placement of manufactured home parks and subdivisions which are greater than 50 lots or five acres, whichever is less.

Sec. 5-B-6 Standards for Areas of Shallow Flooding (AO/AH Zones)

- A. **Generally.** Located within the special flood hazard areas are locations designated as shallow flooding. These special flood hazard areas are associated with base flood depths of one to three feet where a clearly designed 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.
- B. **Nonresidential Structures.** All new construction and substantial improvements of nonresidential structures shall:
 1. Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the applicable FIRM (at least two feet if no depth number is specified); or
 2. Together with attendant utility and sanitary facilities, be designed so that below the base flood level of 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 or effects of buoyancy.
- C. **Drainage Paths.** Adequate drainage paths around structures on slopes are required to be installed within the AH and AO zones to guide floodwaters around and away from proposed structures.
- D. **Certification of Standards.** A registered professional engineer or architect shall submit certification to the floodplain administrator that the standards of this Article are satisfied. See Sec. 7-F-7, *Floodplain Development Permit*.

Sec. 5-B-7 Floodways

- A. **Designated Floodways.** Floodways located within special flood hazard areas established in Sec. 5-B-2.B, *Establishment of Areas of Special Flood Hazard* 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 standards shall apply:

1. *Prohibited Encroachments.* Encroachments are prohibited, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless an exemption is permitted.
 2. *Exemptions to Prohibited Encroachments.* An encroachment may be permitted if it is:
 - a. 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. Permitted under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations that permits a community to permit encroachments within the adopted regulatory floodways 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.
- B. **Undesignated Floodways.** When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Article 5.C. Erosion Control

Sec. 5-C-1 Purpose

This Section is intended to implement the erosion and sediment control regulations promulgated by:

- Clean Water Act of 1972 (Point and Non-point source pollution);
- Phase I implemented in 1990 for construction site stormwater discharge (5-acres or more of disturbance);
- Phase II implemented in 2003 for construction site stormwater discharge (1-acre or more of disturbance);
- EPA granted authority to the State of Colorado to enforce the Clean Water Act;
- The Colorado Water Quality Control Act that issues and enforces National Pollutant and Discharge Elimination System (NPDES) permits, renamed to CDPS (Colorado Discharge Permitting System).

These laws and standards are to be applied during construction to control and limit soil erosion.

Sec. 5-C-2 Applicability

- A. **Generally.** Notwithstanding any other provision of this UDC, compliance with the provisions of this Section shall be required of all land development activities.
- B. **Permit Required.** A permit is required through the Colorado Department of Public Health and Environment Water Quality Control Division – Stormwater Program CDPS General Permit. The permit is for construction activities disturbing one acre or more, or part of a larger common plan of development. These activities include clearing, grubbing, grading, excavating and stockpiling. The permit must be submitted prior to the start of earth disturbing activities.

Sec. 5-C-3 Erosion Control

- A. **Objectives.** In order to comply with the Town's Imagine Winter Park Plan, any application shall not cause erosion problems and, to that end, the design and operation of a project proposed for development shall ensure:
 1. That any development is designed and executed in a manner which will minimize disturbance of natural vegetation and soil cover;

2. That development proposals include adequate provision and guarantee for revegetation and for soil stabilization during and after development of the site;
3. That all cuts and fills are adequately designed and engineered and vegetated to control erosion as well as stability of the entire mass;
4. That development plans include adequate provision for protection of vegetation from fire;
5. That natural drainage patterns are preserved and protected from increased water flows which could alter such patterns or subject existing channels and adjacent areas to increased erosion;
6. That natural vegetation and soil cover are preserved within the 30-foot water quality setback from rivers, streams, lakes and reservoirs; and
7. That the specific erosion control criteria within the Standards and Specifications for Design and Construction are met.

B. General Requirements.

1. No person shall be granted a site development permit for land disturbing activity that would require the uncovering of 10,000 or more square feet without the approval of an Erosion and Sediment Control Plan.
2. No site development permit is required for the following activities:
 - a. Any emergency activity that is immediately necessary for the protection of life, property, or natural resources; or
 - b. An existing nursery.

C. Design Requirements.

1. Grading, erosion control practices, sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the Grand County Erosion and Sediment Control for Construction Activities Handbook, as applicable, and shall be adequate to prevent transportation of sediment from the site to the satisfaction of the Director of Public Works. Cut and fill slopes shall be no greater than 2:1, except as approved to meet other community or environmental objectives.
2. Clearing and grading of natural resources, such as forests and wetlands, shall not be permitted, except when in compliance with all other regulations, requirements, and standards of the Town. Clearing techniques that retain natural vegetation and drainage patterns shall be used to the satisfaction of the Director of Public Works.
3. Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed and have been stabilized.
4. Phasing shall be required on all sites disturbing greater than 10 acres, with the size of each phase to be established at plan review and as approved by the Director of Public Works.
5. Erosion control requirements shall include:
 - a. Soil stabilization that shall be completed within five days of clearing or inactivity in construction.
 - b. If seeding or another vegetative erosion control method is used, it shall become established within two weeks or when the Director of Public Works may require the site to be reseeded or a nonvegetative option employed.
 - c. Special techniques that meet acceptable engineering standards on steep slopes or in drainage ways shall be used to ensure stabilization.
 - d. Soil stockpiles must be stabilized or covered at the end of each workday.
 - e. The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.
 - f. Techniques shall be employed to prevent the blowing of dust or sediment from the site.
 - g. Techniques that divert upland runoff past disturbed slopes shall be employed.

6. Sediment controls requirements shall include:
 - a. Settling basins, sediment traps, or tanks and perimeter controls.
 - b. Settling basins that are designed in a manner that allows adaptation to provide long term stormwater management, if required by the Director of Public Works.
 - c. Protection for adjacent properties by the use of a vegetated buffer strip in combination with perimeter controls.
7. Waterway and watercourse protection requirements shall include:
 - a. A temporary stream crossing installed and approved by the Director of Public Works if a wet watercourse will be crossed regularly during construction.
 - b. Stabilization of the watercourse channel before, during, and after any in-channel work.
 - c. All on-site stormwater conveyance channels designed according to acceptable engineering standards.
 - d. Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.
8. Construction site access requirements shall include:
 - a. A temporary access road provided at all sites.
 - b. Other measures required by the Director of Public Works to ensure that sediment is not tracked onto public rights-of-way by construction vehicles or washed into storm drains.

D. **Submittal Requirements.** See Sec. 7-D-4.F, *Submittal Requirements*.

Article 5.D. Tree Removal and Protection

Sec. 5-D-1 Purpose

The purpose of this Article is to protect and encourage the protection and retention of existing trees to the maximum extent practicable in all new development, redevelopment, and substantial improvement projects. The Town Council finds that trees provide important environmental, aesthetic and health benefits to the residents and guests of the Town which extend beyond the boundaries of the property upon which trees may grow. The Council further finds that trees enhance the real estate values of property upon which trees grow and neighboring properties. Large trees are a resource which cannot be fully replaced if injured, damaged or removed. Property development and construction activities can result in injury or loss of valuable trees in the Town. It is the intent of this Section to preserve to the fullest extent possible existing trees considered desirable by the Administrator.

Sec. 5-D-2 Applicability

This Article applies to the removal and protection of all trees within nonresidential, mixed-use, and in the common open space areas of new residential development.

Sec. 5-D-3 Tree Removal and Protection

- A. **Generally.** There shall be no grading, excavation or clearing of trees prior to receiving written approval from the Administrator.
- B. **Development.** Trees may be removed from a parcel proposed for development if it is demonstrated that:
 1. There is no reasonable alternative site design at the same density and intensity that could be approved and relocation of the protected tree to another location on-site or within the Town is not practical or feasible for the survival of the tree; and
 2. The trees are replaced or mitigated according to the replacement standards in Table 5-D-3, *Tree Replacement Standards*.

**Table 5-D-3
Tree Replacement Standards**

Diameter of Tree to be Removed		Number of Required Three-Inch Caliper Replacements	Number of Required Two-Inch Caliper Replacements
Min. Diameter	Up to, But Not Including		
none	10 inches	1	2
10 inches	15 inches	2	3
15 inches	20 inches	3	4
20 inches	No limit	5	6

Notes:

- The Diameter of a tree to be removed shall be measured at four feet above grade.

C. Relationship to Other Landscaping Requirements.

- Replacement trees shall count toward the landscaping requirements of the areas in which they are planted. However, if this Section requires more trees than the other sections of this Article, then this Section controls.
- Replacement trees are not required for trees which are cleared to implement a fuels mitigation plan.

D. Timing of Replacement. Replacement trees that are required by this Section shall be installed within 30 days of removal, or if such date is not within a growing season, within the first 30 days of the next growing season.

E. Relocation. Protected trees that are relocated to another place on the parcel proposed for development, or another location within the Town, do not have to be replaced if they are relocated according to industry standards of transplanting methods, as approved by a certified Arborist.

F. Protected Individual Trees. The following trees are protected (unless otherwise being removed or relocated per the standards of Subsection B of this Section), and shall be preserved and maintained according to the following standards:

- For trees over four inches in caliper, the protected root zone shall extend to the drip line of the selected tree.
- Any tree that is shown on an approved landscape plan that is necessary to meet:
 - The planting requirements of this UDC; or
 - A condition of approval of the development to which the landscape plan applies.

G. Protected Root Zone (Dripline) Requirements.

- The dripline is the the cylinder extending from grade level down to a depth of ten (10) feet below grade, having a radius equal to the length of the longest branch of the tree, with the center of the cylinder located at the center of the tree trunk. This dripline shall be barricaded during construction to prevent damage to the trees and their roots by construction equipment or soil compaction. The barricades shall be posted "Off Limits."
- No cutting or filling, storage of building materials or debris, or disposal of wastes, shall take place within the dripline of any protected tree.
- No impervious paving shall be placed within the dripline of any protected tree.

H. Protection During Construction. All existing trees and vegetation outside of the site specific construction area should be protected and fenced properly during construction.

I. Protection of Stands of Trees. Development shall be designed so that existing stands of native trees are preserved in designated open spaces, whenever practicable. In general, alternative development options are available to facilitate such designs.

J. Clear Cutting. Clear cutting trees and vegetation to create view corridors is prohibited.

- K. **USDA Forest Service Lands.** USDA forest service lands within the Town's boundary are exempt from these tree removal regulations.