ARTICLE 4

SITE DEVELOPMENT STANDARDS - EAGLE COUNTY

ARTICLE 4
SITE DEVELOPMENT STANDARDS

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ARTICLE 4

SITE DEVELOPMENT STANDARDS

DIVISION 4-1. OFF-STREET PARKING AND LOADING STANDARDS

SECTION 4-100. PURPOSE

This Division establishes parking standards for land uses within unincorporated portions of Eagle County. The standards are intended to lesson congestion on streets, to ensure an adequate supply of parking spaces within a reasonable distance of land uses and to provide standards for the design and use of required parking areas.

SECTION 4-110. APPLICABILITY

The standards of this Division shall apply to all development, including new uses, expansion of existing uses and the change of use of land or structures.

SECTION 4-120. NUMBER OF REQUIRED PARKING AND LOADING SPACES

A. Off-Street Parking Required. All uses shall be required to provide that number of off-street parking spaces which complies with the standards set forth in Table 4-120, "Minimum Off-Street Parking Standards For Each Use".

1. Multiple Uses. If two (2) or more principal uses occupy a single parcel or structure, the number of required off-street parking spaces for the parcel or structure shall be the additive total for each principal use of the parcel or structure.

2. Shared Parking or Loading Areas. No parking or loading area that is required by these Land Use Regulations shall be a required parking or loading area for another use, unless it can be shown that the peak use periods for required parking or loading areas for two (2) or more uses located on the same or adjoining sites will not overlap with one another. Upon the presentation of satisfactory evidence by the applicant that such shared use will not result in a shortage of parking at any time, the Planning Director may approve a shared use arrangement for said parking or loading area and may reduce the number of off-street parking spaces by up to twenty (20) percent of the total required for all uses.

3. Required Fractional Spaces. When any calculation of the number of required off-street parking spaces results in a fractional space being required, such fraction shall be rounded up to the next higher number of spaces.

TABLE 4-120
MINIMUM OFF-STREET PARKING STANDARDS FOR EACH USE

Use	Parking Standard
Single-Family or Duplex Dwelling Unit	3 spaces per dwelling unit[1]
Mobile Home Unit	2 spaces per mobile home space
Multi-Family Dwelling Unit: 1 bedroom or studio 2 to 3 bedrooms 4 or more bedrooms	 2 spaces per dwelling unit[1] 2.5 spaces per dwelling unit 3 spaces per dwelling unit
Multi-Housekeeping Dwelling Unit	1 space per bedroom
Lodging Unit (including hotel, motel, lodge, boarding house and similar uses)	1 space per room
Retail, Service Commercial and Office	1 space per 250 s.f. of net leasable floor area[2]
Restaurant and Tavern	1 space per every 4 seats
Auditorium and Public Assembly Areas	1 space per 100 s.f of floor area used for seating or assembly
Public Facilities and Health Facilities (excluding auditorium and public assembly areas)	1 space per 300 s.f. of floor area[2]
Ski Facility: Visitors Mountain Employees	 1 space per 4 persons of maximum allowed skiers at one time (SAOT) employees per day/1.3 persons per day
Manufacturing Establishment	1 space per 1,000 s.f. of floor area
Wholesale Establishment, Warehouse, Rail or Truck Freight Terminals	1 space per 2,000 s.f. of floor area

Notes:

1. The parking requirement for a studio or one (1) bedroom dwelling unit shall be 2 spaces per unit.

2. Net leasable areas include only those areas that are designed to be leased to a tenant and occupied for commercial or office purposes, exclusive of any area dedicated to foyers, bathrooms, stairways, circulation corridors and mechanical areas and storage areas used solely by tenants on the site.

4. **Uses Not Listed.** The number of required off-street parking spaces for any use not specifically listed in Table 4-120, "Minimum Off-Street Parking Standards For Each Use", shall be determined by the Planning Commission, considering a report and recommendation by the Planning Director. The report shall identify the standards for any similar uses listed in Table 4-120, "Minimum Off-Street Parking Standards For Each Use", and shall also identify other potentially applicable standards contained in recognized publications or used in communities similar to Eagle County.

B. Off-Street Loading Required. Buildings or structures that are designed to receive and distribute materials and merchandise by truck, or that are substantially altered so as to receive and distribute materials and merchandise by truck, shall provide and maintain off-street loading berths or loading spaces in sufficient number to meet their own needs.

Where the property or use is served or designed to be served by tractor-trailer delivery vehicles, the following standards shall be used in establishing the minimum number of off-street loading berths required:

Gross Floor Area of the Building	**Number of Required Loading Berths or Spaces**
Up to 10,000 sq. ft.	1
Greater than 10,000 sq. ft.	2

SECTION 4-130 GENERAL STANDARDS FOR PARKING AND LOADING AREAS

A. Continuing Obligation. The provision and maintenance of off-street parking and loading spaces that comply with the standards of this Division shall be a continuing obligation of the property owner.

1. **Spaces Shall Be Shown With Building Permit Application.** No building permit shall be issued until plans are presented showing the area that will be made available for exclusive use to meet the applicable off-street parking and loading standards. A plan drawn to scale, indicating how the applicable off-street parking and loading standards will be fulfilled, shall accompany an application for a building permit.

2. **Spaces Shall Remain Available.** Any subsequent use of property for which the building permit is issued shall be conditional upon the unqualified continuance and availability of parking and loading spaces that comply with the standards of this Division.

3. **Change of Use.** Should the owner or occupant of any lot or building change the use to which the lot or building is put, thereby increasing off-street parking and loading requirements, it shall be unlawful and in violation of these Regulations to begin or maintain such altered use until such time as the increased off-street parking and loading requirements are complied with.

B. Prohibited Uses of Required Spaces. Required parking spaces shall be available only for the parking of operable passenger automobiles of residents, guests, customers, patrons, and employees of the use for which they are required. Prohibited uses of required parking spaces shall be as follows:

1. **Inoperable Vehicles or Materials.** Inoperable vehicles or materials shall not be stored in required parking spaces.

2. **Delivery Vehicles.** Delivery vehicles or trucks used in conducting the business or use shall

not be parked in required parking spaces during business hours, but may be parked in such spaces for overnight storage or parked in designated additional spaces during business hours or for overnight storage.

3. **Vehicles for Sale.** Vehicles shall not be displayed for sale in any parking area required for a non-residential use, except for the casual display of a vehicle by its owner, when the owner is an employee or customer using the premises.

4. **Repair Work.** Repair work shall not be conducted in any parking area required for a non-residential use if the repairs render a vehicle inoperable for periods of more than twenty-four (24) hours.

5. **Commercial Vehicles on Residential Property.** Commercial vehicles or heavy equipment used in a business operation shall not be parked in required parking spaces for a residential use, unless the commercial vehicle is used for a permitted home occupation or is a company vehicle used for commuting that is parked overnight.

C. Location of Required Parking Spaces. Required off-street parking spaces shall be located as follows:

1. **On The Same Lot.** On the same lot as the structure the spaces are intended to serve; or

2. **Within a Common Assigned Parking Area.** Within a common assigned parking area under the ownership of the individual owners of, and within the same development as, the use the spaces are intended to serve, unless specific arrangements have been approved by the Planning Commission, considering a report and recommendation by the Planning Director.

D. Loading and Unloading. Loading and unloading of vehicles serving commercial and industrial uses shall be conducted on private property and not on any street or alley.

SECTION 4-140. DESIGN STANDARDS FOR PARKING AND LOADING AREAS

A. Parking Surface and Drainage. Off-street parking areas, aisles, and access drives shall have a durable, all weather surface, made of materials that (1) are suitable to the uses to which the parking area will be put, and (2) are compatible with the character of the proposed development and the surrounding land uses and parking areas. Appropriate parking surface materials may include, but are not limited to, asphalt, concrete, paving blocks, and gravel surface. Grass ring surface may be used for temporary or emergency situations. Parking surfaces shall be compacted and graded, with a minimum grade of two (2) percent for asphalt, one (1) percent for concrete, and two (2) percent for paving blocks, gravel, or grass ring surface, to permit drainage of surface water without damage to public or private land or improvements. Paved surfaces shall be striped to demarcate the parking spaces for all commercial lots and for residential lots over four (4) contiguous spaces.

B. Minimum Dimensions of Parking Areas. The minimum dimensions of parking spaces, aisles and back-up areas shall be as specified in the illustration on the following page. For 90 degree angle parking, the length of a parking space may be reduced to eighteen (18) feet, including wheel stop, if

an additional space of two (2) feet in length is provided for the front overhang of the car, provided that the overhang shall not reduce the width of the adjacent walkway to less than four (4) feet. *(am.12/13/05)*

C. Minimum Dimensions of Loading Berths. The minimum dimension of any loading berth shall be ten (10) feet wide by thirty-five (35) feet long, with a vertical clearance of fourteen (14) feet. Where the vehicles generally used for loading and unloading exceed these standards, the dimensions of these berths shall be increased.

D. Compact Car Spaces. In parking areas containing more than ten (10) spaces, up to twenty (20) percent of the spaces over and above the first ten (10) spaces may be designed for compact cars.

1. Minimum Dimensions. A compact car space shall have minimum dimensions of eight (8) feet in width by sixteen (16) feet in length.

2. Sign. Compact car spaces shall be designated for exclusive use by compact cars with a raised identification sign or stencil. The identification sign shall be twelve (12) inches by eighteen (18) inches, with a height not to exceed seven (7) feet. The standard colors of the sign shall be white on green. The stencil may be either white or yellow in color.

E. Handicapped ("Accessible") Parking. Any use requiring special access, as defined in the International Building Code (IBC) or the American National Standard Institute A-117.1-1998 published by the Council of International Code CommitteeA117.1, shall provide, according to Table 4-140 except as otherwise required under IBC or ICC/ANSI A117.1, as each may be amended from time to time, spaces for use only by persons with disabilities ("handicapped parking," "accessible parking"). One van accessible parking space shall be provided for every five (5) accessible parking spaces, or fraction thereof. *(am.11/08/05)*

1. Minimum Width. Parking spaces shall have a minimum stall width of eight and one-half (8.5) feet with an adjacent access aisle five (5) feet wide. Parking access aisles shall be part of the accessible route to the building or facility entrance and shall further comply with the IBC or ICC/ANSI A117.1. Two accessible parking spaces shall be permitted to share a common access aisle. *(am.11/08/05)*

a. Van Parking Adjacent Access Aisle. Van parking shall have a minimum adjacent access aisle width of eight (8) feet.

b. Passenger Loading Zones. Passenger loading zones shall provide an access aisle five (5) feet in width and a minimum of twenty (20) feet long, adjacent and parallel to the vehicle pull-up space and at the same level as the roadway. Passenger loading zone access aisles shall be part of the accessible route of travel to the building or facility entrance.

2. Sign. Accessible parking spaces shall be identified by a sign showing the international symbol of accessibility complying with ICC/ANSI A.117.1 section 4.28.8. Signs shall not be obscured by a vehicle parked in the space. *(am.11/08/05)*

3. Location. Except as otherwise excepted or modified by the IBC, accessible parking spaces

shall be located on the shortest possible accessible route from adjacent parking to an accessible building entrance. In facilities with multiple accessible building entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. *(am.11/08/05)*

4. **Design and Construction**. Design and construction of handicapped parking shall be in accordance with CABO/ANSI A117.1.

5. **Most Restrictive Provisions Apply.** Where there may be a conflict in the particulars between these Land Use Regulations, the IBC, and/or ICC/ANSI A117.1, as each may be amended from time to time, the most restrictive provision shall apply. *(am.11/08/05)*

TABLE 4-140 *(am 9/27/99)*
NUMBER OF ACCESSIBLE PARKING SPACES

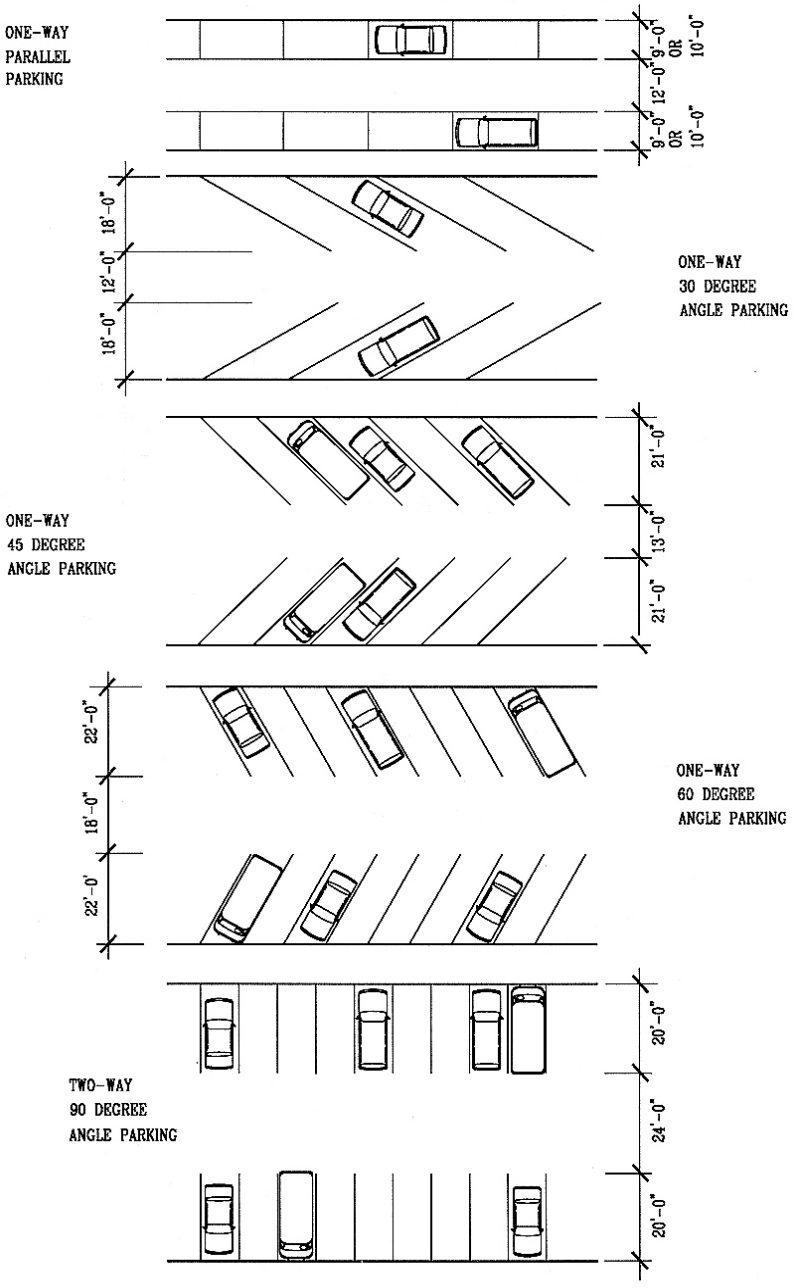
Total Parking Spaces in Lot or Garage	Minimum Required Number of Accessible Spaces
1 - 25	1
26 - 50	2
51 -75	3
76 - 100	4
101 - 150	5
151 - 200	6
201 - 300	7
301 - 400	8
401 - 500	9
501 - 1,000	2% of total spaces
Over 1,000	20 spaces plus 1 space for every 100 spaces, or fraction thereof, over 1,000

DOUBLE ROW PARKING

BOTH ROWS OF PARKING STALLS MUST BE AT THE SAME ANGLE OR IF ANGLE OF STALLS VARY, THEN THE GREATER DISTANCE FOR THE AISLE WILL APPLY.

FOR TWO WAY PARKING THE AISLE MUST BE 24 FEET WIDE

FOR INDOOR PARKING STALLS DIMENSIONS WILL BE 18' x 9' OR AS OTHERWISE SHOWN FOR OUTDOOR PARKING STALLS DIMENSIONS WILL BE 20' x 10' OR CURB, GUTTER AND WHEEL STOPS ARE INSTALLED

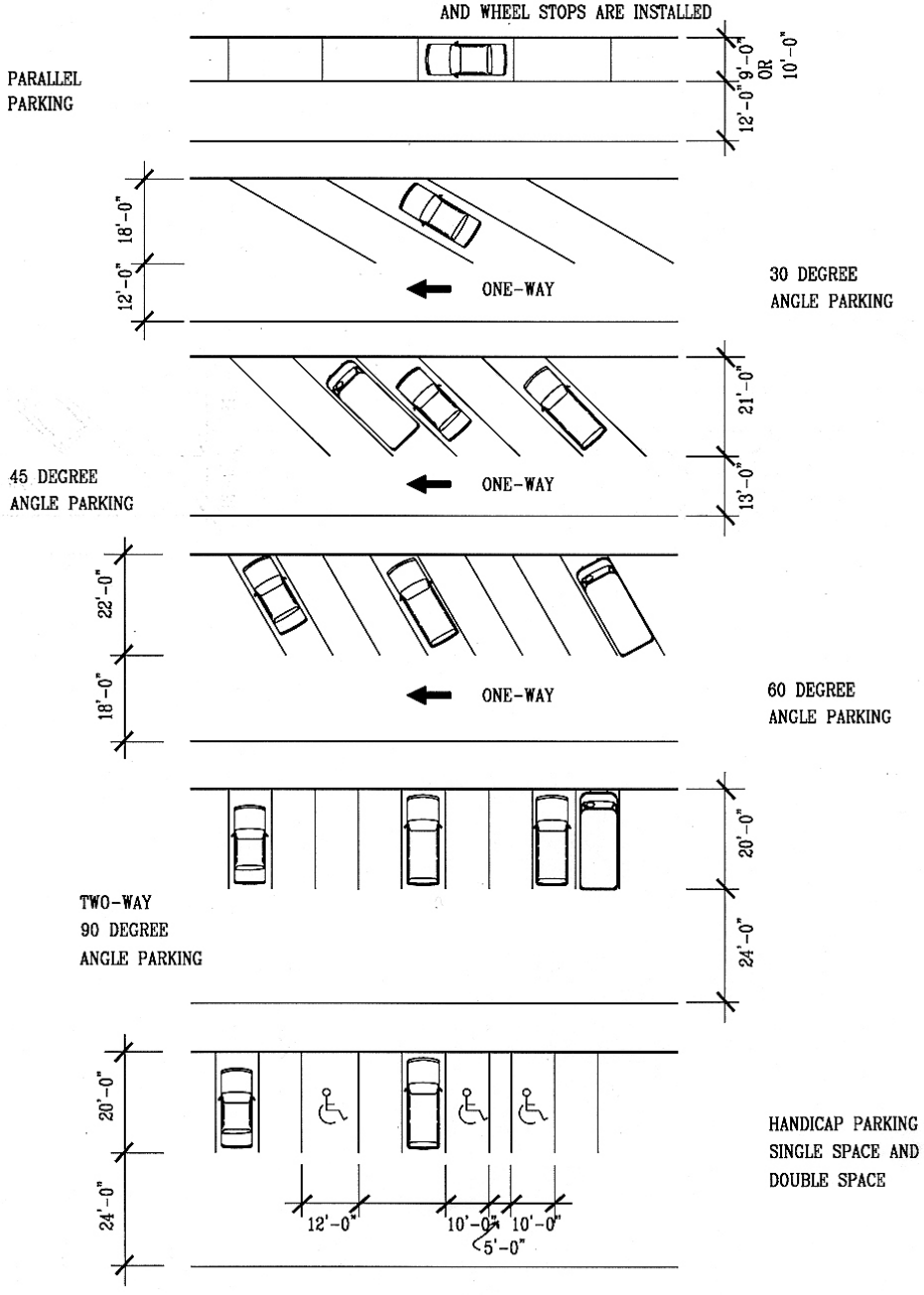


SINGLE ROW AND HANDICAP PARKING

IF ANGLE OF STALLS VARY, THEN THE GREATER DISTANCE FOR THE AISLE WILL APPLY.

FOR TWO WAY PARKING THE AISLE MUST BE 24 FEET WIDE

FOR INDOOR PARKING STALLS DIMENSIONS WILL BE 18' x 9' OR AS OTHERWISE SHOWN
FOR OUTDOOR PARKING STALLS DIMENSIONS WILL BE 20' x 10' OR CURB, GUTTER AND WHEEL STOPS ARE INSTALLED



F. Unobstructed Access. Each required parking space shall have unobstructed access from a road or alley, or from an aisle or drive connecting with a road or alley, except for approved residential tandem parking.

G. Tandem Parking. Tandem parking (a vehicle parking directly behind another) shall be permitted to count towards meeting the off-street parking standards of this Division when the tandem spaces are assigned to the same dwelling unit. In such instances, a parking space for a dwelling unit located behind a garage or behind another space may be counted towards the total parking requirement for the dwelling unit, provided use of the space does not impede the movement of other vehicles on the site. Tandem parking may also be permitted for lodge or commercial uses, when the applicant agrees, as a condition of the approval, to provide valet parking for the tandem spaces at all times when the use is in operation.

1. **Credit Limited to One (1) Space.** Tandem parking provisions may only be used to obtain credit for one (1) required parking space.

2. **Tandem Parking Prohibited in Parking Structure.** Tandem parking shall not be allowed when required parking is located within a parking structure or within a garage that serves multiple dwelling units.

H. Backing Onto Roads Prohibited. All parking areas shall be located and designed in conjunction with a driveway, such that vehicles exiting from a parking space shall not be required to back onto the right-of-way of a public street. Provided, however, that vehicles exiting from a parking space for a single-family or duplex dwelling unit may back onto a residential street. Vehicles exiting from a parking space for any use may also back onto the right-of-way of an alley adjacent to the property.

I. Access Driveways. Access driveways into required off-street parking areas shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress and the maximum safety of pedestrian and vehicular traffic on the site.

1. **Minimum Width.** The minimum width of the access driveway shall be twelve (12) feet for a one (1) way drive and twenty-four (24) feet for a two (2) way drive for commercial and industrial access and ten (10) and twenty (20) feet, respectively, for residential access.

2. **Clear Vision Area.** Access driveways shall have a minimum clear vision area formed by the intersection of the driveway centerline, the street right-of-way line, and a straight line joining said lines through points twenty (20) feet from their intersection.

J. Parking Area Landscaping. Parking and loading areas for non-residential uses located adjacent to residential uses or residential zone districts shall be designed to minimize disturbance to residents, including, but not limited to, installation of perimeter landscaping, control of illumination and proper screening of loading areas with opaque materials. Landscaping, screening and illumination of all parking areas shall comply with the standards of Article 4, Division 2, Landscaping and Illumination Standards.

K. Snow Storage. Adequate space shall be provided for storage of snow removed from pedestrian and vehicular ways, and parking and loading spaces on any property that contains commercial or industrial uses, multi-family units, or a common outdoor parking area.

1. **Minimum Area.** A designated area, sufficient to store snow from the entire parking area, shall be provided. As a general guideline, and considering the varying elevations and snowfall amounts throughout the County, it is anticipated that a minimum area equivalent to two and one-half (2.5) percent of the total area of the required off-street parking and loading area, inclusive of access drives, shall be designated to serve as a snow storage area. Provided, however, the applicant may submit information to the County to demonstrate that the elevation of the property and its typical snowfall amounts can be adequately accommodated in a smaller area and the County may reduce the size of the required snow storage area accordingly.

2. **Storage in Parking Spaces Prohibited.** Snow shall not be stored within required parking spaces, except on an emergency basis for a period not to exceed forty-eight (48) hours.

3. **Storage in Yards and Open Space Permitted.** Snow may be stored in required yards and open space, including landscaped areas properly designed for snow storage. Snow stored in a required yard or open space shall not be located to restrict access or circulation, or to obstruct views of motorists.

4. **Drainage.** Adequate drainage shall be provided for the snow storage area to accommodate snow melt and to ensure it does not drain onto adjacent property.

L. Pedestrian Circulation. Safe and efficient pedestrian circulation paths shall be provided between required parking areas and the entry to the building(s) on the site. As applicable, pedestrian circulation paths on the site shall also be connected to transit facilities and trails or paths on adjacent sites.

M. Parking within a Planned Unit Development (PUD).

1. **PUD Parking Plan.** Parking within a Planned Unit Development (PUD) shall comply with all provisions of this Division, unless specifically varied by the approval of a PUD Comprehensive Parking Plan. If a PUD comprehensive parking plan has been approved by the Board of County Commissioners, the provision of that parking plan shall supersede any conflicting parts of this Division.

DIVISION 4-2. LANDSCAPING AND ILLUMINATION STANDARDS

SECTION 4-200. PURPOSE *(am.5/16/06) (am.12/11/07)*

A. Purpose. The purpose of this Division is to provide standards for landscaping, water conservation relative to landscaping, and illumination of development within unincorporated portions of Eagle County, so as to maintain and enhance the character of residential neighborhoods, commercial centers and industrial areas. This is accomplished by:

1. Setting minimum standards for planting within residential and non-residential development and associated parking areas;

2. Promoting and facilitating water conservation through the efficient utilization of water for irrigation purposes;

3. Preventing degradation of water resources and related aquatic environments due to soil erosion and low stream flow events.

4. Preventing property damage due to improper drainage.

5. Minimizing unsightliness through the use of landscape buffers and screening around and between the County's more intensively developed areas.

6. Eliminating the spread of noxious weeds or invasive plant species.

7. Establishing standards to prevent illumination from becoming a nuisance to neighboring properties or to motorists, while allowing illumination necessary for safety purposes.

SECTION 4-210. APPLICABILITY

These regulations are applicable to all new construction in the unincorporated territories of Eagle County, and shall supersede the provisions of any previously approved Planned Unit Development which may contain language contradictory in nature to the intent of these regulations. In the event that a previously approved Planned Unit Development documents, including the Preliminary Plan, the PUD Guide and all supporting materials contain language which is more restrictive than the language found in these regulations, then the more restrictive language shall apply. The standards of this Division shall apply except as follows: *(am.12/11/07)*

A. **Existing Structure.** The standards of this Division shall not apply to remodeling, repair, restoration or alteration of an existing structure. However, additions or expansions that increase the footprint of a commercial, industrial or multi-family structure by more than twenty-five (25) percent and any landscape berms not previously approved through the Subdivision, PUD or building permit process shall comply with the standards of this Division to the maximum extent possible. Additions or expansions that increase the footprint of a single family or duplex structure by more than twenty-five (25) percent shall submit landscaping plans that indicate adherence to the landscape water conservation principles contained herein to the maximum extent practicable.

In applying this standard to additions or expansion of pre-existing development the property owner may not be required to remove any existing established landscaping including turf grass that was installed on the property in accordance with the provisions of these Land Use Regulations, PUD Guides, Covenants or Design Guidelines that applied at the time of the installation. The Planning Director may require sprinkler system upgrades pursuant to these regulations, if a significant improvement to water conservation over existing conditions is achievable. *(am. 5/16/06) (am.12/11/07)*

B. **Governmental Entities.** Governmental entities responsible for providing recreational amenities including public recreation fields, sports fields, public golf courses and play areas shall be exempt. *(orig.12/11/07)*

C. **Golf Courses.** Public and private golf courses shall be exempt; although water conservation practices should be implemented on golf courses to the greatest extent practicable. *(orig.12/11/07)*

D. 35 Acre Parcels. The standards of this Division shall not apply to Use by Right residential use on parcels thirty five (35) acres or greater in size within the Resource Zone District. *(am.12/11/07)*

SECTION 4-220. LANDSCAPE PLAN

A. Landscape Plan Required. A landscape plan for all multi-family, commercial and industrial development, prepared by a person who by reason of special knowledge of the principles and methodology of landscape architecture and landscape design acquired by professional education, practical experience, or both, is qualified to engage in the practice of landscape architecture and whose competence has been attested through certification as a landscape architect within the State of Colorado, shall be submitted for review as part of an application for building permits and other development applications within Eagle County, except that development specifically exempted in Section 4-210, Applicability. *(am.12/11/07)*

A landscape plan for all single-family and duplex residential structures shall be submitted for review as part of an application for building permit within Eagle County, except that development specifically exempted in Section 4-210, Applicability. The landscape plan is not required to be prepared by a certified landscape architect unless the habitable space of the single-family residence contains more than 5,000 square feet or, 10,000 square feet for both halves of a residential duplex structure combined. In these instances, the landscape plan shall be prepared by a certified landscape architect. The landscape plan shall address the following types of issues: *(am.12/11/07)*

1. **Proposed Residential Subdivisions and PUD's.** The landscape plan that accompanies a proposed residential subdivision or PUD is intended to address issues such as where and what type of trees and other landscaping will be placed, how common areas will be treated, how areas graded or otherwise disturbed during development will be re-vegetated, during development will be re-vegetated, how landscaped areas will be irrigated and similar concerns. It is not anticipated that landscaping for individual residential lots will be addressed in the landscape plan for Subdivisions or PUD's. Regulations governing Public Rights of Way and specified clear zones, pursuant to Chapter 5-30.01 and Article 4-230.A39.a of these Land Use Regulations, must be applied. *(am 3/12/02) (am.12/11/07)*

2. **Single-Family and Duplex Lots.** The Landscape plan that accompanies building permit applications for single-family and duplex residential structures is intended to address the protection of existing plants, grading, revegetation of disturbed areas and water conservation. *(am.12/11/07)*

3. **Commercial, Industrial, Multi-Family and Other Development.** The landscape plan that accompanies a proposed commercial, industrial, multi-family or other type of development is intended to address how areas that are not covered by impervious surfaces will be treated and how such developments will be buffered from surrounding land uses and major streets or roads. *(am.12/11/07)*

B. Conceptual Landscape Plan. The landscape plan submitted with a Preliminary Plan for Subdivision or Sketch Plan for PUD shall be a conceptual plan illustrating the overall intent of the applicant with regard to landscaping of commercial and industrial development, multi-family development and common areas / open space located within single-family and duplex residential development. Site specific landscape plans for single-family and duplex residential lots shall be required with application for building permit. Areas where trees, shrubs and ground cover will be preserved,

removed or replaced shall be identified. Proposed landscape areas shall be labeled, to identify the type of landscaping planned and the general size and number of plants that are intended to be installed. *(am.12/11/07)*

C. Detailed Landscape Plan. The landscape plan submitted with a Final Plat for Subdivision or Preliminary Plan for PUD or building permit for a single-family or duplex residence or for any other development requiring a landscape plan shall be a detailed plan showing how the applicant intends to landscape the development. It shall contain the following materials: *(am.12/11/07)*

1. Drawing. A dated, scale drawing, including topographic information at two (2) foot contour intervals, locating all lot lines and improvements to the property and any easements of record. The drawing shall identify all existing deciduous trees and coniferous trees of six inches (6") in caliper or greater that illustrates which trees will be preserved and which will be removed or relocated, areas where other existing vegetation will either be preserved or removed, and the type, location, size and number of plants that will be installed. Where it would be impractical to identify each tree, the drawing shall outline the dimensions of groves of existing and proposed trees. The drawing shall also show proposed earthen landscape berms, and where, how and what type of irrigation is to be provided. The size, quantity, common name and botanical name of plants used, including ground cover shall be labeled. When seed mixtures are used, the percentages of grass and/or wildflower mixtures and seed application rates shall be specified. *(am. 5/16/06) (am.12/11/07)*

2. Calculations. A summary of all calculations used to determine the landscaping required for the site shall be provided, whenever applicable. The area of the property that is proposed to be landscaped shall be identified in square feet and as a percentage of the entire property. For single-family and duplex structures, the area proposed to be treated with irrigated turf shall also be measured in square feet and clearly indicated. For required landscaping of parking lots, the amount of the site proposed to be covered by parking areas and the number of parking stalls to be provided shall also be identified. *(am.12/11/07)*

3. Cost Estimate. With the exception of single-family and duplex structures, an estimate of the cost of supplying and installing the materials depicted in the landscape plan shall be provided. *(am.12/11/07)*

4. Erosion Control. A description of how erosion will be controlled on-site during and after construction shall be provided either on the landscape plan or in an associated Construction Management Plan. *(am.12/11/07)*

5. Maintenance Program. With the exception of single-family and duplex structures, a description of the proposed program to maintain the landscaping after it has been installed shall be provided. *(am.12/11/07)*

SECTION 4-230. LANDSCAPING DESIGN PRINCIPLES, STANDARDS AND MATERIALS

A. Landscaping Principles Applicable to All Development. *(am 12/11/07)*

1. Landscape developments shall be designed and installed to maximize the conservation of water by incorporating the following seven (7) basic principles to the greatest extent practicable:

a. Landscape improvements should be carefully planned and designed according to water and maintenance needs. *(am 12/11/07)*

b. The extent of turf should be limited to areas where it can be efficiently watered. *(am 12/11/07)*

c. The most efficient irrigation water delivery systems should be used. *(orig. 12/11/07)*

d. Where necessary, the water holding capacity of the soil should be improved through the addition of soil amendments. *(orig. 12/11/07)*

e. Final soil surfaces should be covered with organic or inorganic mulches to control soil temperatures and retain moisture. *(orig. 12/11/07)*

f. New plants should be hardy and drought tolerant, and should be grouped according to sun and moisture needs. *(orig. 12/11/07)*

g. All landscaping and irrigation systems should be routinely maintained to insure proper function and adjusted to accommodate changes over time. *(orig. 12/11/07)*

h. All landscapes should be regularly maintained with approved methods by the State of Colorado to eliminate noxious weeds or invasive plants as found on the current County noxious plant material list. *(orig. 12/11/07)*

B. Location and Irrigation Standards for Required Landscaping. *(orig. 12/11/07)*

1. Single Family and Duplex Lots. All portions of lots disturbed by construction and not covered by impervious materials shall be landscaped in a manner consistent with the unique ecosystem and specific environment in which the lot is located. Turf grass shall specifically not be allowed on slopes steeper than 3:1. *(orig. 12/11/07)*

2. Multi-Family, Commercial and Industrial Development. All portions of lots in residential zones containing multifamily dwellings and all portions of lots in the Commercial Limited (CL), Commercial General (CG), Industrial (I) zone districts and Planned Unit Developments (PUD), as applicable, disturbed by construction and not covered by impervious materials shall be landscaped. Landscaping shall also be installed to effectively buffer proposed commercial or industrial uses from surrounding residential uses and to provide a landscaped buffer along collector and arterial streets or roads. Regulations governing Public Rights of Way and specified clear zones, pursuant to Chapter 5-30.01 and Article 4-230.A.9.a of these Land Use Regulations, must be applied. *(am 3/12/02) (orig. 12/11/07)*

3. Subdivision, Planned Unit Development (PUD) and Cluster Development. Landscaping shall be provided in a residential subdivision, planned unit development or cluster development, in a manner which is most consistent with the character planned for the development, the unique ecosystem and specific environment in which the development is located. Water intensive landscape treatments and turf areas should be minimized to the greatest extent practicable and in conformance with the principles and standards of this Division 4-2. Irrigated turf should not be used as a treatment in traffic medians. Where units are developed in clusters, landscaping should also be provided around clusters of units, to create a buffer between denser clusters and lower density and open areas. Landscaping should preserve or replace existing trees, shrubs and ground cover in areas disturbed by development to the greatest extent practicable while remaining in conformance with Section 4-430, Development in Areas Subject to Wildfire Hazards and Chapter III, Section 3.12.1, Wildland Fire Regulation of these Land Use Regulations. *(orig. 12/11/07)*

4. Irrigation. Irrigation Plans submitted shall depict a water efficient design responsive to different site water needs based on aspect, exposure, soil conditions and surface treatments. Sketch and Preliminary Plan Applications for Subdivision or PUD shall indicate in text or on a plan the method of irrigation for specific areas (natural un-irrigated, flood irrigation, sprinkler system, drip system, etc.) Applications for Final Subdivision Plat and PUD Final Plat shall include detailed irrigation plans and specifications. Detailed site specific irrigation plans for single-family and duplex residential lots will be required with application for building permit. (See also Section 4-240.A.5 Installation and Maintenance Requirements, Irrigation System) *(orig. 12/11/07)*

a. **Use of Raw Water.** Developments on land that has access to agricultural irrigation water rights are required to design and utilize a separate raw water system to accommodate all long term landscape irrigation needs. *(orig. 12/11/07)*

b. Limitation on Pop-up Spray Heads. The use of above-ground, pop-up spray heads shall be limited to manicured turf areas only. Drip, micro-jet or other low water consumptive water delivery systems shall be used for all other planted areas. *(orig. 12/11/07)*

(1) Exception for Temporary Irrigation. Non-permanent spray systems may be used on a temporary basis to promote seed germination in revegetated areas. Irrigation shall be discontinued once a healthy stand of vegetation has been established. *(orig. 12/11/07)*

(2) Exception for Homes in Areas of Moderate, High or Extreme Wildfire Danger Above ground spray heads may be used to irrigate landscape improvements within the 15 foot "Zone 1" defensible space area for homes located in areas of moderate, high or extreme wildfire danger. *(orig. 12/11/07)*

(3) Exception for "dirty" water. In those instances where un-filtered irrigation water precludes the use of drip, micro-jet or other low water consumptive delivery systems, alternative water delivery systems may be used to irrigate landscape improvements. *(orig. 12/11/07)*

5. Living Cover. All required landscape areas shall be landscaped. Non-living ground cover is encouraged, to the greatest extent practicable in the drier climates of the County, and may include decorative gravel, bark mulch, river rock or similar materials. Decorative elements, such as walks, decks, terraces, water features and similar treatments may be provided. *(am 12/11/07)*

6. Plants Compatible with Local Conditions. All plants used for landscaping shall be compatible with the local climate and the soils, drainage and water conditions of the site. When planting occurs on hillsides, slopes, drainage ways or similar natural areas, plant material should duplicate adjacent plant communities both in species composition and spatial distribution patterns. Whenever possible, landscaping should consist of drought-resistant varieties and employ low water consumptive design principles. Plant varieties adapted to local soil conditions and exposures should be used for all areas scheduled for drip irrigation. *(am 12/11/07)*

7. Save Existing Vegetation. The landscape plan shall be designed so that healthy trees, native vegetation and natural or significant rock outcroppings and other valued features are preserved and integrated with planted areas. Existing trees and shrubs that are preserved shall count toward the landscaping standards of this Division. Any existing tree in healthy condition of six (6) inches in caliper or greater that is retained may be substituted for two (2) required trees. Conformance with Section 4-430, Development in Areas Subject to Wildfire Hazards and Chapter III, Section 3.12.1, Wildland Fire Regulation of these Land Use Regulations must be adhered to when determining which existing trees and shrubs to preserve. Additionally, vegetation to be preserved must comply with any Wildlife Enhancement Plans included as part of a subdivision and / or Planned Unit Development approval. *(am 12/11/07)*

8. Type and Extent of Sod Turf grasses can be high water consumptive plants. Where turf is allowed, drought tolerant turf grasses should be used, unless anticipated uses (sports fields, high traffic areas) specifically require more resilient species. In addition to the avoidance of slopes steeper than 3:1, the following turf area restrictions shall apply to single-family and duplex lots: *(orig. 12/11/07)*

a. Residential structures with habitable space of 2000 square feet or less shall be limited to 3000 square feet of irrigated turf, as depicted on the landscape plan. *(orig. 12/11/07)*

b. Residential structures with habitable space that exceeds 2000 square feet shall be limited to 3000 square feet of irrigated turf, plus 30% of the increment of habitable space exceeding 2000 square feet, as depicted on the landscape plan. *(orig. 12/11/07)*

c. The maximum amount of irrigated turf for any single family or duplex residential structure or lot shall be 5000 square feet. *(orig. 12/11/07)*

d. Allowance for Lots Bordering Golf Course. Single Family and Duplex lots immediately adjacent to manicured turf areas of golf courses shall be allowed an additional 1500 square feet of turf within the side yard or rear yard setback in order to facilitate an appropriate blending of manicured landscape elements. *(orig. 12/11/07)*

e. Exemptions to Irrigated Turf Limitations. The Director of Community Development may exempt homes from the above turf area restrictions if it can be clearly demonstrated that the addition of irrigated turf over and above that allowed will not result in the use of more water than would otherwise have been consumed by a landscape plan conforming to these standards. A written request for exemption is required, and should include details regarding the raw water delivery system, water rights information, a letter from the water provider, ditch operator plan details, specifications, Design Review Board or Home Owners Association approval and any other information deemed relevant by the Director. *(orig. 12/11/07)*

9. Minimum Size. Landscaping within a clear vision area shall comply with the height limitations of Section 4-230 A.12.a., Clear Vision Area. Otherwise, trees and shrubs depicted on the landscape plan shall be of at least the following minimum size at the time of their planting, unless a larger tree size is specified in any applicable development permit for buffering, screening or planting on the subject property. *(am 12/11/07)*

a. Deciduous Trees. Deciduous trees shall be a minimum of one and-half (1-1/2) inches in caliper, measured four (4) feet above the ground. *(am 12/11/07)*

b. Coniferous Trees. Coniferous trees shall be a minimum of four (4) feet in height, measured from the top of the root ball to the top of the tree. *(am 12/11/07)*

c. Ornamental Trees. Ornamental and flowering trees shall be a minimum of one and one-half (1.5) inches in caliper, measured four (4) feet above the ground. *(am 12/11/07)*

d. Shrubs and Vines. Shrubs shall be in a minimum three (3) gallon container, and shall be a minimum of one (1) to two (2) feet in height. Vines shall be in a minimum one (1) gallon container. *(am 12/11/07)*

10. Minimum Number of Trees and Shrubs within Required Landscape Area. Landscape areas that are provided in order to comply with the maximum lot coverage standards of the Residential Multi-Family (RMF), Residential Suburban Medium Density (RSM), Residential Suburban Low Density (RSL), Commercial Limited (CL), Commercial General (CG), Industrial (I) and Rural Center (RC) zone districts shall comply with the applicable standards from Table 4-230, Number of Trees and Shrubs Within Required Landscape Area.

TABLE 4-230
NUMBER OF TREES AND SHRUBS WITHIN REQUIRED LANDSCAPE AREA*

Dimensions of Required Landscape Area	Minimum Number of Required Trees and Shrubs
Ten (10) to fifteen (15) feet in width	One (1) tree and six (6) shrubs per two hundred-fifty (250) sq. ft. of landscaped area
Fifteen (15) to twenty-five (25) feet in width	One (1) tree and six (6) shrubs per two hundred-seventy-five (275) sq. ft. of landscaped area
More than twenty-five (25) feet in width	One (1) tree and six (6) shrubs per three hundred (300) sq. ft. of landscaped area

Note * See text of Section 4-230 B.7 to determine applicability of these standards. *(am 12/11/07)*

11. Trees within a Paved Area. Any tree planted within a paved area shall be placed in a tree vault and shall have a tree grate installed around its trunk. A structural soil mix composed of the following three components mixed in the following proportions by weight is required: crushed stone (100 parts); clay loam (20 parts), and; hydrogel (0.03 parts) which provides support for the paved system while allowing for the expansion of the root system. *(am 12/11/07)*

12. Parking and Storage Prohibited. Areas required as landscaping shall not be used for parking, outdoor storage and similar uses, but may be used for snow storage if properly designed for this function. Hardy tree and shrub species appropriate for planting in snow storage areas should be utilized in designated snow storage areas. *(am 12/11/07)*

13. Obstructions Prohibited.

a. Clear Vision Area. A clear vision area shall run along property lines and along the entrance to the site. Plant materials shall be limited to thirty (30) inches in height at maturity within the clear vision area, so as to avoid visibility obstructions or blind corners at intersections. *(am 12/11/07)*

b. Fire Hydrants and Utilities. Landscaping shall be installed so it does not obstruct fire hydrants or utility boxes and so it will not grow into any overhead utility lines.

c. Street Trees. Any tree planted along the street shall be located a minimum of five (5) feet from the curb or the edge of the street, to provide room for snow plowing, street maintenance and opening of car doors. The installation of street trees and associated irrigation systems shall be subject to review and inspection by the County Engineering Department and, for planting along public streets or roads only, the County Road and Bridge Department, to ensure the trees do not create use conflicts or safety hazards and to determine maintenance responsibilities for the trees. *(am 12/11/07)*

14. Standards for Landscape Berms. Earthen landscape berms shall conform to the following processes and standards: *(orig. 05/16/06)*

a. Pursuant to Section 4-660.A.2, Excavation and Grading Standards, proposals for landscape berms not previously approved through the Subdivision, PUD or building permit process must obtain a grading permit or an exemption from a grading permit from the Eagle County Engineer.

b. All berms shall conform to Section 4-230 B.13.a., Clear Vision Area.

c. All berms shall conform to dimensional limitations listed under Section 3-340.C.4, Fence, Hedge, Wall or Berm. Proposals for earthen berms not conforming to Section 3-340.C.4, Fence, Hedge, Wall or Berm, shall be required to obtain approval from Eagle County as detailed in Section 4-230.B.15, Approval Process for Large Landscape Berms.

d. Earthen berms shall be located outside of stream setbacks, and shall not impact wetlands or riparian areas.

e. Earthen berms shall not encroach into public rights of way, drainage easements, access easements or utility easements, unless evidence has been submitted indicating approval of the placement of the berm by the holder of the right-of-way or easement.

f. Berm slopes shall be no steeper that 2:1. Berm contours shall be smoothly undulated along both the linear face and the crest to mimic natural topographic features.

g. Berms shall be designed to have a natural appearance, and shall specifically avoid the appearance of a levy or a dam. Where physical space allows, the pattern of berms on the landscape should be discontinuous in nature. Breaks between separate berm segments should be purposefully located to facilitate drainage, pedestrian movement, wildlife movement, utilities, and/or the preservation of public view corridors. Separate berm segments may overlap one another by no more than 10% of their combined length.

h. Landscape plant materials used should vary in size and species, and should be placed in natural appearing groups along the toe, slopes and crest of the berm. The type of trees and shrubs selected and their position on the berm should be considerate of the local climate, soil conditions and exposure.

i. Berm design and placement shall reflect consideration for the well-being of wildlife. Southern exposures near roads can attract animals in the early spring and densely planted areas near roads provide hiding places from which animals can suddenly appear.

j. All earthen berms shall be fully revegetated to prevent erosion and to provide a sustainable and attractive vegetative cover.

15. Approval Process for Large Landscape Berms. Berms taller than eight (8) feet as measured from natural grade at any point on the side of the berm that faces an adjacent property or longer than 150 feet in length shall be required to obtain a Finding of No

Significant Impact (FONSI) from the Director of Community Development or approval of a Site Specific Development Plan by the Board of County Commissioners. *(orig. 05/16/06)*

a. Submittal requirements for large landscape berms shall include the following:

(1) Minimum Contents of application as detailed in Section 5-210.D.2,

(2) A detailed landscape plan as described in Section 4-220.C, and

(3) Any other information, analysis or study as deemed relevant and appropriate by the Director of Community Development

b. **Determination.** Based upon review of the application material and the information obtained at the pre-application meeting, the Director may determine that a Finding of No Significant Impact (FONSI) is warranted.

(1) **Finding of No Significant Impact (FONSI).** The Director of Community Development may determine that a Finding of No Significant Impact (FONSI) should be issued if the construction of the berm in its proposed location is consistent with the spirit and intent of related standards and is unlikely to have any significant adverse impact to adjacent properties or public resources or amenities. In the instance that a FONSI is made, and upon expiration of the reconsideration period described below, the applicant may pursue obtaining a Grading Permit for the construction of the berm.

(2) **Notice of Director's Determination of a FONSI.**

(a) Upon the Director's Determination of a FONSI, the Director shall notify the applicant by mail, and shall notify the Board, the County Administrator and the County Attorney of the Determination by e-mail or memorandum.

(b) The Notice of Director's Determination of the FONSI shall be published once in the County legal newspaper not more than fourteen (14) days following the Determination. The notice shall describe the Project and the procedure for requesting reconsideration as set forth below.

(3) **Reconsideration of Director's Determination of a FONSI.**

(a) **Call-up by the Board.** Within fourteen (14) days after publication of the Director's Determination of a FONSI, the Board may decide to reconsider the Determination. Such reconsideration shall be made at the next regularly scheduled meeting of the Board for which proper notice can be accomplished.

(b) **Request for Reconsideration by Affected Party**. Any affected party seeking a reconsideration of the Director's Determination of a FONSI shall file a written request with the Board within fourteen (14) days of the date of publication in the newspaper of the Notice

of the Director's Determination of the FONSI. The Board shall reconsider the Director's Determination of the FONSI at the next regularly scheduled meeting for which proper notice can be accomplished. The affected party may request a reasonable extension if necessary.

c. Approval Required. If the Director determines that a Finding of No Significant Impact (FONSI) is not appropriate, the application will be forwarded to the Board of County Commissioners for consideration. At a public hearing, the Board of County Commissioners shall consider the application, the relevant support materials, and any public testimony. After the close of the public hearing, the Board may uphold the Director's determination, overturn the Director's determination or overturn the Director's determination with conditions.

C. Landscaping Standards Within Off-Street Parking Areas. All off-street parking areas containing fifteen (15) or more spaces, except for enclosed or sub-grade parking structures, shall provide the following forms of landscaping: *(am 12/11/07)*

1. Planting Strips. There shall be a planting strip provided along all property lines where a street right-of-way is located adjacent to the parking area.

a. Width. The planting strip shall have a minimum width of ten (10) feet.

b. Screen. A minimum of eighty (80) percent of the length of the planting strip shall be used to screen the parking area from the street. The screen shall be a minimum of thirty (30) inches in height and may consist of a berm, wall, plant material or combination thereof, however, the clear vision area shall be maintained. See related standards under 4-230.A.10, Standards for Landscape Berms, and Section 3-340.C.4, Dimensional Limitations for Fence, Hedge, Wall or Berm. *(am. 5/16/06)*

c. Trees. A minimum of one (1) tree shall be planted for every twenty-five (25) linear feet of the planting strip. The trees may be grouped together, provided the grouping does not leave a gap between individual trees or tree groups that exceeds forty (40) feet. *(am 12/11/07)*

2. Interior Planting Areas. Planting areas shall be established to break up the interior of all parking areas.

a. Minimum Area. A minimum of five (5) percent of the interior area of the parking area shall be required landscaping.

b. Islands. One (1) planting island that is a minimum of six (6) feet wide shall be provided for every fifteen (15) parking spaces. The planting islands shall be dispersed throughout the parking area, to provide visual relief and shade.

c. Parking Rows. Where double rows of parking are planned, there shall be a center planting strip installed that is a minimum of seven (7) feet wide. Where any parking row is adjacent to a circulation way, there shall be a planting strip installed that is a minimum of seven (7) feet wide.

d. Trees. There shall be a minimum of one (1) tree planted in each planting island. Within each planting strip, there shall be a minimum of one (1) tree planted for every twenty-five (25) linear feet of planting area.

SECTION 4-240. INSTALLATION AND MAINTENANCE REQUIREMENTS

A. For All developments Except Single Family and Duplex Lots.

1. Collateral. Prior to the issuance of any development permit, the Planning Director may require the applicant to submit to the County a surety or cash bond, letter of credit or other collateral found to be suitable by the County Attorney to guarantee the installation of the required landscaping and irrigation system. The collateral shall be in an amount equal to one hundred-twenty-five (125) percent of the total cost of supplying and installing the materials depicted in the approved landscape plan, based on the cost estimate provided by the applicant and accepted by the County. When collateral has not been required to be submitted prior to the issuance of a development permit, then no certificate of occupancy shall be issued for any portion of the development until the required landscaping has been installed or until a suitable collateral has been provided to guarantee that required landscaping will be installed within the first planting season following occupancy of the property. Collateral shall not be required for the landscaping and irrigation systems on individual single-family or duplex residential lots. *(am 12/11/07)*

2. Certification and Release. Following installation of the required landscaping, the applicant shall certify that the landscaping has been installed in conformance with the approved plan. The performance guarantee shall be released within ten (10) working days following receipt of the certification and inspection by the County.

3. County Use of Security. In the event the landscaping for items contained within the cost estimate is not installed, or is installed in a manner that does not conform with the approved plan, the County may draw upon the security to bring the landscaping into conformance with the approved plan.

4. Required Time For Completion. All required landscaping shall be installed within the first planting season following occupancy of the property. When phasing of a project's construction is approved, then installation of required landscaping may be phased consistent with the project's approved development phasing. For the purposes of this regulation, planting season begins April 1st and extends through October 31st. *(am 12/11/07)*

5. Irrigation System. Irrigation shall only be applied to that portion of the landscaped area that is live cover that cannot be naturally sustained with adequate moisture for the types of plants existing or installed. With the exception of exemptions listed in Section 4-230.A.3.b, the use of above-ground spray heads shall be limited to manicured turf areas only. Drip, micro-jet or other low water consumptive water delivery systems shall be used for all other planted areas. A non-potable raw water system should be utilized whenever practical, so long as it can be demonstrated to be an efficient and environmentally conscientious approach to the satisfaction of the Planning Director. The use of other water-conserving techniques such as Smart Controllers (Smart Controllers measure the site-specific soil moisture content, temperature, wind speed, soil type and can be programmed for different plant types) grey

water systems, the avoidance of day-time irrigation, the installation of rain sensors, and the design of irrigation zones that accommodate the physical characteristics of the site and/or the groupings of vegetation installed must be employed to the greatest extent practicable. *(am 12/11/07)*

6. **Maintenance.** All landscaping shall be healthy at the time of its installation and shall meet the standards of the American Association of Nurserymen. Landscaping shall be maintained so that it remains alive, or replacement is required and shall be enforced pursuant to Chapter I, Section 1.14 Enforcement of these land use regulations. *(am 12/11/07)*

   a. **Landowner Responsible.** Maintenance of landscaped areas shall be the responsibility of the landowner.

   b. **Replacement.** Landscaping that does not survive within the first three (3) years after it is planted shall be replaced within three (3) months after it perishes, unless that date is not during a planting season, in which case it shall be replaced during the first month of the next planting season. The replacement vegetation shall be similar in size, type and amount to the vegetation that perished, so the integrity of the landscape plan is preserved and shall be in compliance with any approved Wildlife Enhancement Plans included as part of a subdivision and/or Planned Unit development approval. *(am 12/11/07)*

   c. **Noxious Plant Materials.** Weed control shall be required. Plant materials as listed on the most current noxious plant material list adopted by the Board of County Commissioners shall not be allowed as landscaping, and must otherwise be managed in compliance with applicable State and County regulations. *(am 12/11/07)*.

B. For Single Family and Duplex Lots *(orig. 12/11/07)*

1. **Required Time For Completion.** Notwithstanding requirements related to any other applicable permits, unless provided by the terms of deed restrictions, a subdivision improvements agreement or the terms of the Planned Unit Development documents, the owner of a single-family or duplex residence shall be required to complete installation of the landscaping, per the approved plan, within one growing season after receiving a Certificate of Occupancy. For the purposes of this regulation, growing season begins April 1st and extends through October 31st.

2. **Irrigation System.** Irrigation shall only be applied to that portion of the landscaped area that is live cover that cannot naturally be provided with adequate moisture for the types of plants existing or installed. The use of above-ground spray heads shall be limited to manicured turf areas only. Drip, micro-jet or other low water consumptive water delivery systems shall be used for all other planted areas. The use of non-potable or raw water irrigation systems, wherever practical, efficient and environmentally conscientious, is required. To the greatest extent practicable, the landowner is ~~also~~ encouraged to employ other water-conserving techniques such as the avoidance of day-time irrigation, the installation of rain sensors, Smart Controllers (Smart Controllers measure the site-specific soil moisture content, temperature, wind speed, soil type and can be programmed for different plant types) and the efficient design of irrigation zones that accommodate the physical characteristics of the site and/or the groupings of vegetation installed.

3. **Maintenance Responsibility.** The landowner shall be responsible for the maintenance of all landscaped areas. Periodic weed control shall be required, and plant materials listed on the most current noxious plant material list adopted by the Board shall not be allowed as landscaping, and must otherwise be managed in compliance with applicable State and County regulations.

SECTION 4-250 ILLUMINATION STANDARDS

A. **Purpose.** This section establishes standards for controlling illumination to prevent intense glare or direct illumination that would create a nuisance detract from the use or enjoyment of adjoining property or cause traffic hazards to motorists.

B. **Standards.** Exterior illumination shall not cast glare directly onto adjacent properties. Low Pressure Sodium (LPS) lamps are the preferred illumination source but other sources can be considered depending upon the filtering, shielding, height and number of sources. Mercury vapor lamps are discouraged. Streetlights used for illumination of public ways are encouraged to be 20 feet or less in height. Outdoor lighting used for decorative effects (architectural illumination, flag and monument lighting, illumination of trees, bushes, etc.) should be located, aimed, or shielded so as to minimize stray light trespassing across property boundaries.

DIVISION 4-3.SIGN REGULATIONS

SECTION 4-300. PURPOSE

The purpose of this Division is to provide a comprehensive system of reasonable, effective, consistent, content-neutral and non-discriminatory standards for signs. These standards control the construction, size, type, location and maintenance of signs and sign structures within the unincorporated portions of Eagle County so as to:

A. **Protect Appearance.** Protect the appearance of the community and enhance the attractiveness of Eagle County as a place to live, do business and visit.

B. **Identification.** Enable places of residence and commerce to be easily identified and allow the communication of information necessary for the conduct of business.

C. **Compatible**. Permit signs that are compatible with their surroundings and aid in orientation, but preclude placement in a manner that conflicts with the principal uses of the site, adjacent land uses, or adjacent signs, or interferes with, obstructs the vision of, or distracts motorists, bicyclists or pedestrians.

D. **Limit Size and Number.** Limit the size and number of signs and sign messages to the minimum reasonably necessary to identify a residential or business location and the nature of any such business.

E. **Lessen Hazards.** Lessen hazardous situations, confusion and visual clutter caused by proliferation, improper placement or installation, illumination, animation and excessive height, area and bulk of signs that compete for the attention of motorists, bicyclists and pedestrians.

F. **Safety.** Protect the public from the dangers of unsafe signs, and require signs to be constructed, installed and maintained in a safe manner.

SECTION 4-310. APPLICABILITY

A. **General.** The provisions of this Division shall apply to the display, construction, erection, alteration, use, maintenance and location of all signs within the unincorporated areas of Eagle County, except as specifically exempted in Section 4-310 B., Exempt Signs. All signs displayed, constructed, erected or altered after the date of the adoption of this Division shall be in conformance with its applicable provisions. All signs that are existing at the time of the adoption of this Division shall not be altered or enlarged without being in conformance with this Division.

B. **Exempt Signs.** The following types of signs shall be allowed in all zone districts and are not subject to the requirement to obtain a sign permit, pursuant to Section 4-350, Procedure to Obtain Sign Permit. This exemption shall not be construed to relieve the owner from complying with any other applicable provisions of this Division.

1. **Signs Less than Six (6) Square Feet in Area.** All signs, whether permanent or temporary, that do not exceed six (6) square feet in sign area, provided that there is not more than one (1) such sign per individual business, parcel, lot, or group of contiguous lots under single ownership.

2 **Signs Required By Law.** Signs required or specifically authorized for a public purpose by any law.

3. **Public Notices.** Public notices or signs relating to an emergency.

4. **Traffic Signs.** Signs erected in public rights-of-way by a local, state or federal governmental agency controlling or directing traffic.

5. **Information Signs on Public Property.** All information signs on or directing people to public property, provided such signs are related to the use of the property and are erected and maintained by the agency responsible for the public property.

6. **Official Notices Posted By Government.** Official government notices and notices posted by governmental officers in the performance of their duties to provide warning, necessary information, direction or other regulated purposes.

7. **Hazard Warning Signs.** Temporary or permanent signs erected by a public utility company or construction company to warn of dangerous or hazardous conditions.

8. **Temporary Signs.** Temporary signs for a special civic event, such as pennants or banners. Such displays may be erected three (3) weeks prior to the opening of the event and shall be removed one (1) week after completion of the event.

9. **Historic Plaques.** Memorial tablets or commemorative plaques installed by an historical agency, including cornerstones for buildings.

10. **Scoreboards.** Scoreboards used for athletic events, provided they do not exceed twenty (20) feet in height and sixty-four (64) square feet in size.

11. **Holiday Decorations.** Decorations, clearly incidental and customary and commonly associated with any national, local or religious holiday.

12. **Signs Affixed to Vehicle.** Any signs permanently affixed to a truck, train, automobile, airplane or other operable vehicle that is not placed in a location for the purpose of advertising a product, service or activity or to direct people to a business or activity located on the premises or nearby.

13. **Flags.** Flags of any state, nation, government and any other flag not specifically used for advertising purposes. Flags shall not exceed sixty-four (64) square feet in size.

14. **Works of Fine Art.** Works of fine art that in no way identify or advertise a product or business.

15. **Religious Emblem.** Any religious emblem or insignia.

16. **Addresses.** Mail boxes, address numbers or residential nameplates.

17. **Gravestones.** Any gravestone.

SECTION 4-320. PROHIBITED SIGNS

The following types of signs or advertising devices are expressly prohibited in all zone districts:

A. **Structurally Unsafe.** Signs that are structurally unsafe or constitute a hazard to safety or health by reason of inadequate maintenance or dilapidation.

B. **Signs Blocking Ingress or Egress.** Signs that have been installed or maintained so as to prevent free ingress or egress from any door, window or fire escape. No sign of any kind shall be attached to a stand pipe or fire escape, except those signs that may be required by other codes, regulations, or ordinances.

C. **Signs Obstructing Visibility**. Signs that obstruct or interfere with traffic signs or signals or with the visibility of operators of vehicles, bicycles or other conveyances using the public right of way or that are located within a clear vision area.

D. **Signs Resembling Traffic Control Devices.** Signs that are of a size, location, movement, content, coloring or manner of illumination that may be confused with or construed as a traffic control device, but have not been erected or authorized to be erected by a governmental agency.

E. **Metal Signs.** Signs with metallic surfaces, unless such surfaces are treated to reduce reflection from sunlight or artificial illumination.

F. **Signs Creating Optical Illusion.** Signs that create an optical illusion of movement by means of a design which presents a pattern capable of reversible perspective, giving the illusion of motion or changing of copy.

G. **Signs With Moving Parts**. Signs with visible moving, revolving or rotating parts, flashing or fluttering lights or other illuminating devices that have a changing brightness or intensity or color or any mechanical movement or apparent movement achieved by electrical, electronic or mechanical means, except for time, temperature and date signs or holiday decorations.

H. **Displays With Open Light Bulbs**. External displays, other than temporary decorative holiday lighting, that consist of unshielded or open light bulbs.

I. **Signs Making Sounds.** Any sign that contains a radio, phonograph, whistle, bell or other sound-making device.

J. **Signs Without Adequate Clearance From Power Lines**. Signs that have been constructed or maintained with less horizontal or vertical clearance from authorized communication or energized electrical power lines than that prescribed by State law.

K. **Off-Premises Signs.** Signs not located upon the property or business identified or advertised by the sign.

L. **Vehicle Signs.** Signs placed on vehicles or trailers that are parked or located for the apparent purpose of advertising a product, service or activity or to direct people to a business or activity located on the premises or nearby.

M. **Portable Signs.** Portable or wheeled signs or advertising devices, except for operable and licensed motorized vehicles and licensed trailers used in the pursuit of regular day-to-day business having the name of the permitted use(s) or service(s) offered.

N. **Obsolete Signs.** Signs that are located on property that becomes vacant and unoccupied for a period of six (6) months or more, or a sign that pertains to a time, event or purpose that no longer applies shall be considered obsolete. The sign face of an obsolete sign shall be removed by the owner of the sign or the owner of the property. A sign that is not so removed by the owner may be removed by the Planning Director, as authorized by Section 4-370, Violations and Penalties. Provided, however, that the following types of signs shall be excepted from these provisions:

1. **Exception for Change of Ownership.** Permanent signs displayed on a business temporarily suspended because of a change of ownership or management of the business shall not be construed to be obsolete unless the property remains vacant or the business is closed for a period of six (6) months or more.

2. **Exception for Seasonal Business.** Permanent signs displayed on a business that is open

only on a seasonal basis shall not be construed to be obsolete unless the property remains vacant or the business is closed for a period of twelve (12) months or more.

O. **Obscene Signs.** Signs or pictures of an obscene, indecent or immoral character, such as will offend public morals or decency in accordance with constitutional standards.

P. **Three Dimensional Signs.** Three (3) dimensional signs, such as statues, real or simulated, utilized for advertising purposes.

Q. **Balloons.** Balloons or similar types of lighter-than-air objects tethered to the ground by lines or other methods, except for those used in conjunction with special events that do not exceed three (3) days in duration.

R. **Signs on Natural Features.** Signs painted on rocks or other natural features.

SECTION 4-330. SIGN STANDARDS APPLICABLE IN ALL ZONE DISTRICTS

A. **Relationship to Other Regulations.** The County's sign standards recognize other regulations pertaining to signage (such as the State of Colorado, Department of Highways, "Rules and Regulations Pertaining to Outdoor Advertising," effective January 1, 1984). Where any provision of this Section covers the same subject matter as other applicable regulations, the more restrictive regulation shall apply.

B. **Signs Limited to On-Premises Advertising.** Signs shall identify or advertise interests conducted only on the lot of the sign location.

C. **Comprehensive Sign Plan.** All buildings or lots containing more than one (1) business shall be required to submit a comprehensive sign plan showing all proposed signage in the building or lot. The comprehensive sign plan shall allocate to individual businesses their portion of the total sign area permitted for the building or lot. It shall also contain provisions that ensure that all signs in the building or on the lot will have a consistent appearance in terms of color, size, shape, lettering, graphics and illumination.

D. **Conform to Other Codes.** Signs and sign structures shall be designed and constructed to conform to the Eagle County Building Resolution and the National Electric Code, including but not limited to consideration for wind loads, seismic loads, allowable stresses, materials and anchorage requirements. The following shall also be required:

1. **Safety Standards.**

a. **Wind Load.** Signs over ten (10) feet in height and/or forty (40) square feet in surface area shall be engineered to withstand a wind loading of a minimum of thirty (30) pounds per square foot of sign area without failure of face retention system or sign structure. Engineering data sufficient to prove the reliability of the structure and the foundation shall be submitted with the drawings at the time of permit application.

b. **Electric Wiring.** Electrical wiring for energizing an electrical sign shall be

underground, in the case of freestanding signs, and behind the sign cabinet, in the case of wall or projecting signs. All electrical work shall be in conformance with the Eagle County Building Resolution and the National Electric Code, which may require an electrical permit that will be subject to review by the Eagle County Building Department.

c. Support. Roof signs, signs mounted on marquees, or projecting signs, shall be engineered in such a manner that no guy wires are needed for support, other than for the sign structure itself.

d. Damage By Moving Vehicles. Anchors and supports shall be guarded and protected when near driveways, parking lots or similar locations where they could be damaged by moving vehicles. Signs attached to masonry, concrete or steel shall be safely and securely fastened thereto by means of metal anchors, bolts or approved expansion screws of sufficient size and anchorage to safely support the loads applied. No anchor or support of any sign, except flat wall signs, shall be connected to or supported by a parapet wall that is not braced.

e. Unsafe Signs Are a Violation. Signs in danger of falling down or that become insecure or otherwise represent an unsafe condition shall constitute a violation under the provisions of this Division and shall be removed or corrected by the sign owner.

2. Maintenance Standards. Signs and sign structures shall be maintained at all times in a state of good repair, with all braces, bolts, clips, supporting frame and fastenings free from deterioration, insect infestation, rot, rust or loosening. All signs shall be kept neatly finished, including all metal parts and supports thereof that are not galvanized or of rust resistant metals.

E. Sign Area Measurement.

1. Area To Be Measured. The area of a sign shall be measured in conformance with this Section, provided that the structure or bracing of a sign shall be omitted from measurement unless such structure or bracing is made part of the message or face of the sign. Where a sign has two (2) display faces, the area of one (1) side shall be considered the total area for that sign.

2. Sign With Backing. The area of all signs with backing or a background, material or otherwise, that is part of the overall sign display shall be measured by determining the sum of the areas in each square, rectangle, triangle, portion of a circle or any combination thereof that creates the smallest single continuous perimeter enclosing the extreme limits of the display surface or face of the sign including all frames, backing, face plates, nonstructural trim or other component parts not otherwise used for support.

3. Signs Without Backing. The area of all signs without backing or a background, material or otherwise, that is part of the overall sign display shall be measured by determining the sum of the areas of each square, rectangle, triangle, portion of a circle or any combination thereof that creates the smallest single continuous perimeter enclosing the extreme limits of each word, written representation (including any series of letters), emblems or figures of similar character.

4. **Combined Signs.** The area of any sign having parts both with and without backing shall be measured by determining the total area of all squares, rectangles, triangles, portions of a circle or any combination thereof constituting the smallest single continuous perimeter enclosing the extreme limits of either of the following combinations:

   a. **Display Surface.** The display surface or face of the sign including all frames, backing, face plates, nonstructural trim; or

   b. **Other Parts.** Other component parts not otherwise used for support.

F. Illumination. Illumination of any sign permitted by this Division shall meet the following standards:

1. **Shade, Shield or Direct.** Illuminated signs shall be shaded, shielded or directed to not cause glare or otherwise adversely impact residential areas.

2. **Not Cause Hazard.** Neither the direct or reflected light from any light source shall create a traffic hazard to operators of motor vehicles on public thoroughfares or approaches to public thoroughfares.

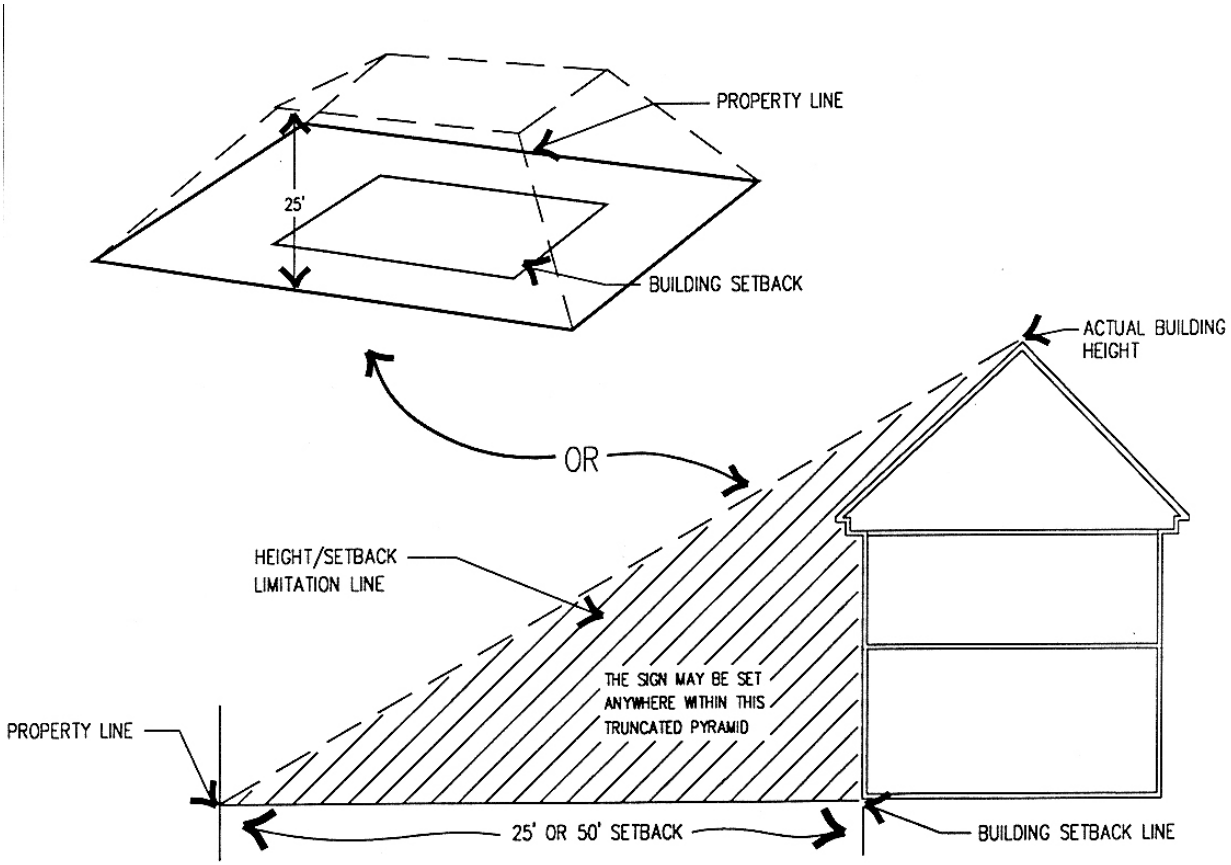
3. **Not Blink, Flash or Move.** No sign shall have blinking, flashing, moving or fluttering lights or other illuminating devices that have a changing light intensity, brightness or color.

4. **Not Resemble Traffic Device.** Colored lights shall not be used at any location or manner so as to be confused with or construed as a traffic control device.

G. Height and Setback Calculation. Height and setback calculations for signs in all zone districts shall be determined by the following method:

No sign shall extend above the planes formed by intersecting imaginary lines from the lot lines to the setback lines, at a height of twenty-five (25) feet, (when existing building(s) conform to the required setbacks) or to the top of the tallest building on the lot, whichever is greater. The truncated pyramid formed by these planes is the height/setback limit. All signs in all zone districts shall conform to the above calculation, unless specifically exempted. Refer to the illustration on the following page.

HEIGHT/SIGN SETBACK CALCULATION



The formula for calculating sign height and/or setback is:

$$\frac{\text{sign setback}}{\text{bldg. setback}} = \frac{\text{sign height}}{\text{bldg. height}}$$

Example: Setback requiremnet for an 8" high sign on a vacant lot with a 50' setback is:

$$\frac{?}{50} = \frac{8}{25} = 16' \text{ from the property line.}$$

SECTION 4-340. SIGN STANDARDS APPLICABLE TO SPECIFIC ZONE DISTRICTS

A. Signs Allowed in All Residential, Agricultural and Resource Zone Districts. The following signs shall be allowed by sign permit in all Residential, Agricultural and Resource Zone Districts, as identified in Section 3-210, Residential, Agricultural and Resource Zone Districts.

1. Residential Identification Sign. One (1) residential building, lot or occupant identification sign per dwelling unit (identifying the name and/or address), provided the total sign area does not exceed twelve (12) square feet.

2. Special Use Identification Sign. One (1) identification sign per approved special use, provided the total sign area does not exceed thirty-two (32) square feet, or as further restricted under the conditions of the special use permit.

3. Subdivision Identification Sign. One (1) identification sign per subdivision entrance in residential developments, provided that the sign area of each sign shall not exceed thirty-two (32) square feet and the maximum height of such signs shall not exceed eight (8) feet. Such signage shall not be required to meet the height/setback calculation, provided that the sign shall not be located within an intersection clear zone and shall not impede drainage.

4. Identification Sign for Model Home. One (1) identification sign per model home within an approved subdivision, provided that the sign area does not exceed sixteen (16) square feet and the maximum height shall not exceed six (6) feet. Such signage shall not be required to meet the height/setback calculation, provided that the sign shall not be located within an intersection clear zone and shall not impede drainage.

5. Sign For Vacant Land. One (1) sign for the sale, rent or lease of vacant land, provided that the total sign area shall not exceed sixteen (16) square feet, the sign is not illuminated, and the sign is limited to one (1) sign per parcel, lot, or group of contiguous lots under single ownership. Said sign shall be removed within seven (7) days following completion of the land sale, rental or lease.

6. Sign For Dwelling Units. Signs for the sale, rental or lease of dwelling units under construction or to be constructed, provided that no more than one (1) sign is located adjacent to each street abutting the subdivision, and providing that the total sign area of each sign does not exceed sixteen (16) square feet. No such sign shall remain erected for more than two (2) years or until the last dwelling unit is sold, whichever comes first.

7. Construction Sign. One (1) construction sign for each construction project not to exceed thirty-two (32) square feet in sign area. Two (2) individual tradesmen may display separate signs, not to exceed sixteen (16) square feet each, in addition to the thirty-two (32) square foot construction sign. Such signs may be erected ten (10) days prior to beginning construction and shall be removed after six (6) months or upon completion of construction whichever is later. Construction signs shall not count toward the total sign area allowed per lot

B. Signs Allowed Only in Certain Residential, Agricultural and Resource Zone Districts. The following signs shall only be allowed by sign permit in the residential, agricultural or resource zone districts specified herein.

1. Signs Advertising Products Raised on Premises. Signs advertising the sale of products produced or raised on the premises shall be allowed in the Resource (R), Resource Limited (RL), Agricultural Residential (AR), Agricultural Limited (AL), Rural Residential (RR) and Fulford Historical (FH) zone districts, provided that the total sign area shall not exceed twenty-four (24) square feet and shall not be illuminated.

2. Directory Sign. One (1) directory sign shall be allowed for each lot, parcel, or group of contiguous lots under single ownership located in the Residential Suburban Low Density (RSL), Residential Suburban Medium Density (RSM), Residential Multi-Family (RMF) zone districts. The sign shall not exceed sixteen (16) square feet in sign area or eight (8) feet in height. Directory signs may be illuminated, in compliance with the provisions of this Division. One (1) individual directory sign, not exceeding eight (8) square feet in sign area, shall also be permitted for each multifamily structure.

C. Signs Allowed In Commercial And Industrial Zone Districts. The following signs shall be allowed by sign permit in the Commercial and Industrial zone districts identified in Section 3-220, Commercial and Industrial Zone Districts.

1. Individual Business Signs. Individual businesses shall not exceed one (1) square foot of sign area per linear foot of building frontage for the first thirty-two (32) feet and one-third (1/3) of a square foot of sign area per linear foot of building frontage in excess of thirty-two (32) feet. In no case shall the total sign area for an individual business exceed a maximum of sixty-four (64) square feet, per street frontage.

2. Multiple Business Signs. Multiple businesses (business or shopping centers) shall be required to submit a comprehensive sign plan showing all proposed signage within the business center. The comprehensive sign plan shall comply with the provisions of Section 4-340.D.2., Comprehensive Sign Plan and the following standards:

a. Business Center. The business center itself shall be allowed one (1) square foot of sign area per linear foot of building frontage for the first thirty-two (32) feet and one-third (1/3) of a square foot of sign area per linear foot of building frontage in excess of thirty-two (32) feet. In no case shall the total sign area for a business center exceed a maximum of sixty-four (64) square feet, per street frontage.

b. Individual Business. Each individual business within the business center shall be allowed twenty (20) square feet of sign area in addition to that permitted for the business center.

c. Allocation to Businesses. Allocation of total aggregate sign area to individual businesses or tenants is not specified by these Regulations, but instead shall be the responsibility of the property owner or authorized agent.

3. **Directory Sign.** One (1) directory sign per street frontage shall be allowed, identifying the individual businesses within the business center, provided that the total sign shall not exceed forty (40) square feet in area nor ten (10) feet in height. The directory sign shall not be included in the total sign area allowed for the business center, and shall not be required to meet the height and setback calculation, provided that the sign shall not be located within an intersection clear zone nor shall it impede drainage.

4. **Directional Signs.** Directional signs shall be allowed, provided that the total sign area of each sign shall not exceed six (6) square feet or eight (8) feet in height. Directional signs shall not be included in the total sign area allowed per individual business or multiple business and shall not be required to meet the height/setback calculation, provided that the signs shall not impair visibility for traffic movement and shall not impede drainage.

5. **Sign for New Business.** One (1) sign shall be permitted for each new or relocated business, for a period not to exceed thirty (30) days, to allow the business sufficient time to install a permanent sign. The area of the sign shall not exceed thirty-two (32) square feet, which shall not be included in the total sign area allowed for each business.

6. **Sale, Rent or Lease Sign.** One (1) for sale, for rent or for lease sign per business shall be allowed, provided that the total sign area of each sign shall not exceed sixteen (16) square feet in sign area. Said sign shall be removed within thirty (30) days of completion of the sale, rent or lease of the business. This temporary sign shall not be included in the total sign area allowed for each business.

7. **Sign for Vacant Land.** For sale, for rent or lease signs advertising vacant land shall be allowed, provided that the total sign area of all such signs shall not exceed sixteen (16) square feet and shall be limited to one (1) sign per parcel, lot or group of contiguous lots under single ownership. Said signs shall be removed within seven (7) days following completion of the land sale, rental or lease. These signs shall not be included in the total sign area allowed for each business.

8. **Construction Sign.** One (1) construction sign for each construction project shall be allowed, not to exceed thirty-two (32) square feet in sign area. Two (2) individual tradesmen may display separate signs not to exceed sixteen (16) square feet each in addition to the thirty-two (32) square foot construction sign. Such signs may be erected ten (10) days prior to beginning construction and shall be removed after six (6) months, or completion of construction, whichever is later. Construction signs shall not be included in the total sign area allowed for each business.

9. **Window Signs.** Window signs shall be allowed, provided that no more than twenty-five (25) percent of the exterior window area, per street frontage, is covered by signs. Window signs shall not be included in the total sign area allowed for each business.

D. Signs Allowed in a Planned Unit Development (PUD).

1. **PUD Sign Plan.** Signs within a Planned Unit Development (PUD) shall comply with all provisions of this Division, unless specifically varied by the approval of a comprehensive sign plan for the development. If a comprehensive PUD sign plan has been approved by the Board of County Commissioners, the provisions of that sign plan shall supersede any conflicting parts of this Division.

2. **Comprehensive Sign Plan.** Any Planned Unit Development may, by or through its managing body, submit to the County a comprehensive sign plan for the control and regulation of signs within the PUD. The application and review procedures to amend an approved PUD, as specified in Section 5-240 F.3.m., Amendment, shall be followed for the review and approval of the PUD sign plan and any amendments thereto.

3. **Application and Review Procedures.** No application for a sign permit in a PUD shall be approved by Eagle County unless the application has been authorized for submission by the managing body of the PUD. Applications shall be submitted to the Eagle County Planning Department, together with two (2) copies of a sketch of the proposed sign(s) and any other pertinent information. The staff shall review the application to determine whether the proposed signage is consistent with the comprehensive PUD sign plan, as approved by the Board of County Commissioners.

SECTION 4-350. PROCEDURE TO OBTAIN A SIGN PERMIT

The following procedure shall be followed in order to erect and maintain a sign after the effective date of these regulations (which was February 21, 1989). A sign permit shall also be required at any time the area of an existing sign is increased.

A. **Permit Required**. A sign permit for all signs shall be obtained from the Planning Department, unless the sign is specifically listed as exempt, pursuant to Section 4-310 B., Exempt Signs. No permit shall be required for the maintenance of a sign or for a change of copy, provided that the sign conforms to the standards of this Division.

B. **Pre-Existing Signs.** A sign permit shall not be required for signs erected prior to May 8, 1978, provided that said signs conform to the standards of this Division.

C. **Application Form.** Application for a permit to erect or display a sign in Eagle County shall be made to the Eagle County Planning Department on standard forms provided by the Department. Application forms shall be completed and signed by the property owner or authorized agent, and submitted with the appropriate fee, as established from time-to-time by Eagle County. Only complete applications shall receive consideration for approval.

D. **Drawing.** All requests for a sign permit shall be accompanied by a drawing that is fully drawn to dimensions, showing the sign structure and proposed lighting. A site plan shall also be submitted, showing the location, setbacks, height and sign area of all proposed and existing signage on the lot.

E. **Electrical Permit.** All requests for a new illuminated sign or that require replacement or extension of electrical wiring shall be accompanied by an application for an electrical permit.

F. Inspection. The applicant shall request an inspection by Eagle County within three (3) months of the date of issuance of a sign permit. The sign permit shall expire three (3) months after its date of issuance if the sign has not been inspected and received final approval. A single three (3) month time extension may be granted by the County, if the extension is requested by the applicant in writing prior to expiration of a valid permit.

G. Permit is For Life of Sign. A sign permit shall be issued for the life of the sign.

H. Amendments. If, after a sign permit has been issued by Eagle County, it becomes necessary to change, modify, or alter the structural characteristics of the sign, or otherwise deviate from the terms or conditions of said permit, such amendment may be allowed, upon approval by the County, without additional permit fees being assessed. Such approval may only be granted by the County upon a finding that said amendment conforms to the provisions of this Division. A written record of such approval shall be entered upon the original permit application and maintained in the files of the Eagle County Planning Department.

SECTION 4-360 NONCONFORMING SIGNS

A. General Provisions. Section 4-300, Purpose, describes the County's intentions for the administration of signs in Eagle County. In order to reach those intentions, the eventual termination of signs that do not conform to these regulations is both reasonable and desirable.

B. Policy for Legally Nonconforming Signs. The provisions of this Section allow nonconforming signs to continue, while at the same time assuring that the neighborhood in which the nonconforming sign exists will eventually benefit from the substantial compliance of permanent and temporary signs with these regulations.

C. Determination That Sign is Legally Nonconforming. A legally nonconforming sign is any sign that:

1. Does Not Conform to Original Sign Regulations. Was lawfully erected as of the effective date of this Division, which was February 21, 1989, and has been lawfully maintained in accordance with the provisions of any prior regulations, but does not conform to this Division; or

2. Does Not Conform to Amended Sign Regulations. Was lawfully erected as of or after the effective date of this Division, which was February 21, 1989, and has been lawfully maintained in accordance with the provisions of this Division, but which sign, by reason of amendment to the provisions of this Division after the effective date hereof, does not conform to this Division.

D. Continuation of Legally Nonconforming Signs.

1. Sign May Not Be Changed. Any legally nonconforming sign may be continued in operation and maintained after the effective date of this Division, which was February 21, 1989, provided no such sign shall be changed in any manner that increases the nonconformity of such sign.

2. **Burden Rests Upon Owner.** The burden of establishing a sign to be legally nonconforming under this Division rests entirely upon the person claiming such status for a sign.

E. Termination of Legally Nonconforming Signs. The right to use, operate or maintain a legally nonconforming sign shall terminate upon any of the following:

1. **Abandonment.** Signs pertaining to activities or occupants that are no longer using a property shall be removed from the premises within six (6) months after the associated activity or occupant has vacated the premises. Any such sign not removed within the required period shall constitute a nuisance and shall be subject to removal by action of Eagle County.

2. **Violation.** Any violation of this Division and/or any pre-existing Eagle County sign provisions shall immediately terminate the right to maintain such sign.

3. **Destruction, Damage or Obsolescence.** The right to maintain any legally nonconforming sign shall terminate whenever the sign sustains damage in excess of fifty (50) percent of its replacement cost, or becomes obsolete or substandard to the extent that the sign becomes a hazard.

4. **Condemnation.** The Board of County Commissioners may choose to condemn a nonconforming sign. Recommendations for condemnation may be made by the Planning Director, when the sign is found to be in violation of this Division.

5. **Failure to Maintain.** The right to continue use of a legally nonconforming sign shall terminate if the sign is not maintained in good structural and visual condition, as determined by the Board of County Commissioners, based upon the recommendations of the Planning Director.

SECTION 4-370. VIOLATIONS AND PENALTIES

A. Inspection and Order to Repair. The Planning Director shall inspect and shall have the authority to order the repair, alteration, painting or removal, at the owner's expense, of any sign that constitutes a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation or obsolescence.

B. Written Order. When the Planning Director finds that a violation of this Division exists, he shall issue a written order to the alleged violator. The order shall specify those provisions of this Division that the individual may be in violation of and shall state that the individual has ten (10) days from the date of the order in which to correct the alleged violation, or to file a variance application with the Planning Department.

C. Removal of Obsolete Sign. If, upon inspection, the Planning Director finds that a sign has been abandoned, he shall issue a written order to the owner of the sign and/or owner or occupant of the premises stating the nature of the violation and requiring that person to remove or repair the sign within ten (10) days from the date of the order. In cases of emergency, the Planning Director may

cause the immediate removal of any sign that endangers the public or is structurally, materially, electrically or otherwise defective, without notice, at the expense of the owner of the sign or premises.

D. **Removal of Prohibited Sign.** In the case of a prohibited sign, the sign owner or owner of the premises shall be required to remove the offending sign(s) within two (2) days of receipt of written notification served on the sign owner or owner of the premises personally, or by certified mail, return receipt requested. If return receipt is not received within ten (10) days, then the Planning Director shall serve the notice upon the alleged violator. If the sign is not removed two (2) days thereafter, then the County may remove the offending sign(s) and recover the costs from the owner of the sign(s) or the premises.

E. **Sign Does Not Comply With Permit.** If the Planning Director finds that the sign under any permit issued does not comply with the information supplied in the permit application and/or is in violation of this Division, or finds that there has been any misrepresentation in connection with the application for the permit, he shall notify the sign owner of such findings and notify the sign owner that the violation must be corrected within five (5) working days. The sign owner shall have five (5) working days in which to reply to such notification. If such correction is not made within the five (5) day period, the Planning Director shall revoke the permit and shall serve written notice thereof upon the sign owner.

F. **Violation**. It is a violation of this Division for any person to perform or order the performance of any act that is contrary to the provisions of this Division, or to fail to perform any act that is required by any of the provisions hereof. In the case of a continuing violation, each twenty-four (24) hour period in which the violation exists constitutes a separate violation.

G. **Penalties**. Penalties for violations of this Division shall be as provided in Article 7, Enforcement.

DIVISION 4-4. NATURAL RESOURCE PROTECTION STANDARDS

SECTION 4-400. PURPOSE

The purposes of this Division are: (1) to provide for the protection of wildlife, riparian areas and other natural resources; (2) to ensure that development on steep and unstable slopes and other areas subject to geologic hazards is accomplished in a manner that protects the safety of inhabitants and minimizes environmental and aesthetic impacts; and (3) to preserve ambient air quality and water quality and quantity, to maintain the County's healthy, attractive mountain environment for residents and visitors.

SECTION 4-410. WILDLIFE PROTECTION

A. **Purpose.** As natural land and native wildlife habitat is developed for human use, the need to minimize the negative impact of humans on wildlife and their habitat increases. The purpose of the Wildlife Protection Section is to protect and maintain wildlife in Eagle County and minimize the risk of dangerous interaction between humans and wildlife. This is done through the development review process whereby potential wildlife habitat is identified and appropriate avoidance, minimization and/or impact mitigation techniques are suggested that will sufficiently protect the wildlife species and their habitats. *(am 3/12/02)*

B. Wildlife Analysis.

1. Applicability. At the discretion of the Planning Director, the provisions of this Section may apply to any application for a Special Use Permit, Subdivision or Planned Unit Development (PUD). *(am 3/12/02)*

2. Procedure for Wildlife Analysis. An applicant for development that is subject to the provisions of this Section 4-410.B Wildlife Analysis, shall submit a Wildlife Analysis as part of the application. The purpose of the Wildlife Analysis is to identify the location of wildlife habitat or migration routes, determine potential impacts of development, and identify appropriate avoidance, minimization, and/or impact mitigation techniques. The County encourages the assistance of competent professional technicians at this stage of the planning process. *(am 3/12/02)*

3. Referral to Colorado Parks and Wildlife. As part of the review of the application, the Planning Director, shall refer to the Colorado Parks and Wildlife (CPW) all applications as identified in Section 4-410.B.1, Applicability. Referral of Final Plat applications will be at the discretion of the Planning Director. *(am 3/12/02)*

4. Review by CPW. CPW will be requested to review the application and determine whether there is potential impact to wildlife habitat or migration routes. During their review, CPW should take into consideration potential impacts to the following:

a. Elk Migration Corridors and Patterns

b. Elk Production Areas

c. Elk Severe Winter Ranges and Winter Concentration Areas

d. Mule Deer Staging Areas and Migration Corridors

e. Mule Deer Severe Winter Ranges, Winter Ranges, and Winter Concentration Areas

f. Bighorn Sheep Migration Patterns

g. Bighorn Sheep Winter Concentration Areas

h. Bighorn Sheep Production Areas

i. Bald Eagle Roost Sites

j. Golden Eagle Nest Sites

k. Peregrine Falcon Nest Sites

l. Sage Grouse Production Area

m. Lynx Occupied Habitat.

n. Other pertinent wildlife habitat or activity areas. *(am 3/12/02)*

5. Recommendation By CPW. Considering the potential impact to wildlife, the CPW shall review the application, including the Wildlife Analysis, and make recommendations pertaining to important habitat or migration routes of wildlife species which may be affected by the proposed development. The recommendation shall identify appropriate avoidance, minimization, and/or impact mitigation techniques. *(am 3/12/02)*

6. Consideration. The County shall consider the content of the Wildlife Analysis and the recommendations of the CPW during the development review process. *(am 3/12/02)*

C. Wildlife Proof Refuse Container/Dumpster Enclosure Standards *(orig. 3/12/02)*

1. Applicability. The provisions of this Section shall apply to any application for a Special Use Permit, Subdivision or Planned Unit Development (PUD). The provisions of this Section may apply entirely or in part to the application for a Limited Review at the discretion of the Planning Director.

2. Definitions.

a. Wildlife - any undomesticated animal, including but not limited to elk, deer, sheep, lynx, skunks, squirrels, bears, raccoons, coyotes, mountain lions, bobcats and foxes.

b. Wildlife Proof Refuse Container - a fully enclosed container constructed of non-pliable material to prevent access by wildlife and meets the standards of theses Land Use Regulations. A dumpster, or similar trash receptacle of heavy construction may be a Wildlife Proof Refuse Container.

c. Wildlife Proof Dumpster Enclosure - a fully enclosed structure consisting of four sides and a roof or cover of sufficient design and construction to prevent access by wildlife. The door or cover must have a latching mechanism, the sides of the structure must extend to within two inches of the ground, and ventilation openings must be covered with a heavy gauge steel mesh or other material of sufficient strength to prevent access by Wildlife. Wildlife Proof Dumpster Enclosures are subject to all building codes and planning and zoning requirements.

d. Wildlife Resistant Refuse Container - a fully enclosed container that can be constructed of pliable materials but, must be reinforced to deter access by wildlife.

3. General Requirements.

a. Refuse Container Design. All refuse containers, regardless of size, that receive wastes shall be either a Wildlife Proof Refuse Container as recommended by the Division of Wildlife (All Refuse Haulers will be issued a list of recommended refuse

containers created by the county with direct input by the Colorado Parks and Wildlife. This list will be kept on record at the Eagle County Building), or a Wildlife Resistant refuse container which is stored within a building, house, garage, or approved Wildlife Proof Dumpster Enclosure. The lid must fit tightly and have a latching mechanism resistant to animal access. Any refuse container and/or dumpster which has been compromised by wildlife shall be replaced within 14 days.

b. Dumpster Design. All dumpsters, regardless of size, that receive food waste shall be of a design that is Wildlife Proof, with drain holes no greater than one (1) inch in diameter. Dumpster lids must have a closure mechanism and/or a latching device and be approved by the Colorado Parks and Wildlife, or their designee. All lids must:

(1) Fully enclose (cover) the dumpster opening;
(2) Have edges that fit flush (not turned up or bent);
(3) Have closure mechanisms which will withstand opening by an animal and will remain closed when on their side or upside down;
(4) Have acceptable latching devices, such as cables, bars and/or handles and must lock into place with a pin or other mechanism; and
(5) Be constructed to withstand the weight of a full grown bear (approximately450 pounds).

c. Outdoor Compactor Design. Compactors must be Wildlife Proof. No trash may be exposed and doors must be kept closed except when loading or removing refuse.

d. Time Limit. Refuse for curb-side pick up shall only be allowed to remain by the curb during daylight hours. Refuse containers which do not meet the standards of Section 4-410.C.3. "General Requirements," must be wildlife resistant and may only remain outdoors from dawn to dusk on the day of trash pick-up.

SECTION 4-420. DEVELOPMENT IN AREAS SUBJECT TO GEOLOGIC HAZARDS

A. Purpose. There are certain types of lands in Eagle County that have the potential to pose hazards to human life and safety and to property due to their geologic characteristics. These lands include, but are not limited to, avalanche hazard areas, rockfall hazard areas, landslides, debris fans, talus slopes, areas containing expansive soils and rocks, and areas susceptible to ground subsidence. Development in certain of these hazard areas also has the potential to cause significant impacts on the environment, including loss of soil and vegetation cover, which can cause increased runoff and consequent erosion and sedimentation. *(am. 02/06/07)*

These regulations are intended to ensure that development avoids geologic hazard areas whenever possible. Where it is not possible for development to avoid these areas, mitigation techniques shall be provided to reduce or minimize the potential impacts of these hazards on the occupants of the property and, as applicable, the occupants of adjacent properties.

B. Maps Incorporated. There are two (2) sets of maps that depict the potential geologic hazard areas in unincorporated Eagle County. The first such map set is known as "Bedrock Geological, Surficial

Deposits and Potential Geologic Hazards Map, Eagle County, Colorado", prepared by Charles S. Robinson and Associates, Inc., Golden, Colorado, 1975. The second such map set is known as "Bedrock Geological, Surficial Deposits and Potential Geologic Hazards Map, Eagle County, Colorado", prepared by Allan E. Miller, Consulting Geologist, Steamboat Springs, Colorado, 1977-78. These two (2) maps sets are hereinafter referred to collectively as "The Eagle County Geologic Hazard Maps" and are hereby incorporated herein by reference. A copy of the map sets are available for review by the public in the Office of the Planning Director during normal business hours.

C. Applicability. The provisions of this Section 4-420, Development in Areas Subject to Geologic Hazards, shall apply to the following: *(am. 02/06/07)*

1. Lands Designated on Geologic Hazard Maps. Applications for Subdivision, Special Use, or PUD proposed on lands that are designated on the Eagle County Geologic Hazards Maps as avalanche hazard areas, rockfall hazard areas, landslides, debris fans, talus slopes, areas containing expansive soils and rocks, and areas susceptible to ground subsidence.

2. Exemptions. The following types of development shall be exempt from the provisions of this Section 4-420, Development in Areas Subject to Geologic Hazards.

a. Previously Subdivided Lot. The development of a single-family residence duplex**,** multi-family structure, commercial, industrial or institutional structure on a lot that received prior subdivision approval by Eagle County and, which bears the Board of County Commissioners Certificate. Also, any development conducted pursuant to a valid, approved special use permit shall be exempt. The development of said uses shall comply with any geologic hazard mitigation requirements applied by Eagle County to the approval of the subdivision, Planned Unit Development or Special Use Permit. *(am. 02/06/07)*

b. Existing Structure. The remodeling, repair, restoration, alteration or expansion of any existing structure.

D. Procedure.

1. General. Review of development that is subject to the provisions of this Section 4-420, and shall require referral of the application to the Colorado Geologic Survey.

2. Geologic Hazards Analysis. An applicant for development that is subject to the provisions of this Section 4-420, Development in Areas Subject to Geologic Hazards, shall submit a Geologic Hazards Analysis. The purpose of the Geologic Hazards Analysis is to determine, on a site specific basis, the location and degree of severity of the geologic hazards encumbering the property. The Geologic Hazards Analysis shall be prepared by a professional qualified geologist or registered engineer who has the expertise to map and evaluate geologic hazards and to assess their potential impacts on the development. The map depicting slopes may be prepared by a surveyor registered in Colorado. *(am. 02/06/07)*

a. Special Use Applications. For development requiring a Special Use Permit, the application shall include only those materials described under Subsection 4-

420.D.2.b.(2), Preliminary Plan / Special Use Permits in addition to the materials required for the Special Use Permit application pursuant to Article 5, Section 5-250 Special Uses. *(am. 02/06/07)*

b. Minor Subdivision. For development requiring a Minor Subdivision of land, excluding condominium maps, subdivision of townhomes, duplexes or patio homes, and lot line adjustments, the application shall include those materials described under Subsection 4-420.D.2.b.(2), Preliminary Plan / Special Use Permits in addition to the materials required for a Minor Subdivision application pursuant to Article 5, Section 5-290 Minor Subdivision. *(orig. 02/06/07)*

c. Development Involving Subdivision or Planned Unit Development Review. For any development subject to the procedures and standards of this Section that involves Subdivision or Planned Unit Development review, the Geologic Hazards Analysis shall be submitted in two (2) steps, as follows:

(1) Sketch Plan. The Geologic Hazards Analysis submitted with the sketch plan shall provide an initial investigation of the feasibility that the development can comply with this Section. It shall contain the following materials:

(a) Map. A map of the property that depicts the general locations of geologic hazards regulated by this Section in relationship to planned development areas. The map shall depict contours at a minimum of ten (10) foot intervals. *(am. 02/06/07)*

(b) Report. A brief report describing, in a general manner, whether the development is able to avoid the geologic hazards or proposes to mitigate the impacts of those hazards on the development. If mitigation is proposed, a general description of the form that mitigation is proposed to take shall also be provided.

(2) Preliminary Plan. The Geologic Hazards Analysis submitted with the Preliminary Plan or Special Use Permit shall provide a site specific analysis of how the development will comply with this Section. It shall contain the following materials: *(am. 02/06/07)*

(a) Site Specific Analysis. A site specific analysis of the property that depicts the locations of geologic hazards regulated by this Section in relation to planned development areas. The map shall also provide an accurate survey depiction, at two (2) foot contour intervals, of those portions of the property that contain slopes in excess of thirty (30) percent.

(b) Impact Evaluation. An evaluation of the potential impacts of the geologic hazards on the proposed development and potential impacts on any property surrounding the subject property. This shall include

an evaluation of any recent natural or human-made activity associated with the geologic hazards and shall provide an expert opinion as to the degree of severity of the potential geologic hazards. *(am. 02/06/07)*

(c) Building Envelopes. For newly proposed development or redevelopment, building envelopes shall be utilized, where applicable, to ensure that structures will be located in areas free of geologic hazards or that have been properly mitigated as to all identified hazards. Subdivision Plat Notes shall be utilized to identify geological hazards present outside of platted building envelopes, as applicable. *(am. 02/06/07)*

(d) Report. A complete report identifying how the proposed development will comply with the standards of this Section, including proposed hazard mitigation and avoidance measures.

3. Referral to Colorado Geologic Survey. During the staff review of the application, the Planning Director shall refer the application and Geologic Hazards Analysis to the Colorado Geologic Survey (CGS). Referral of Final Plat applications will be at the discretion of the Planning Director. The Report must be prepared by a registered professional engineer or geologist.

b. Review By CGS. CGS shall review the application and Geologic Hazards Analysis and provide comments to the County on potential geologic hazards posed to persons and property. The purpose of this review is to make use of the expertise and judgment of CGS to evaluate the potential impacts of these hazards on development and to determine the appropriate avoidance or mitigation techniques that may best apply to the proposed development. *(am. 02/06/07)*

c. Revision of Analysis May Be Required. If CGS determines there are geologic hazards on the property that are not shown on the Eagle County Geologic Hazard Maps and have not been addressed by the applicant, or that the Geologic Hazards Analysis is otherwise incomplete or inadequate, the County may require the applicant to revise the Geologic Hazards Analysis to properly address said hazards.

4. Recommendation By CGS. Considering the geologic characteristics of the property and potential geologic hazards associated with those characteristics, the CGS shall make recommendations regarding the potential impacts of the hazards and determine appropriate avoidance or mitigation techniques.

5. Consideration. The County shall consider the content of the Geologic Hazards Analysis and the recommendations of the CGS during the development review process.

SECTION 4-425 HILLSIDE DEVELOPMENT *(orig. 02/06/07)*

A. Purpose. To protect the property and quality of life of present and future residents by regulating development on steep valley-side slopes. By requiring development that occurs upon steep slopes to adhere to specified review procedures, performance standards and design guidelines intended to implement the following design objectives:

1. To enhance the quality of life of existing and future residents by the preservation and protection of the County's steep valley-side slopes;
2. To contribute to the natural hillside character of the existing neighborhoods and developments in the County by limiting the alteration to topography and natural drainage ways;
3. To preserve and protect the unique landforms and special natural features and aesthetic qualities of the hillside areas;
4. To ensure that new development is sensitive to the existing natural setting and that the protection design minimizes the removal of significant vegetation and natural features to the greatest extent practicable;
5. To integrate natural features into project design;
6. To respect the existing views toward and from steep valley-side slopes and privacy of the adjacent homes;
7. To encourage the use of innovative design techniques and solutions which minimize disturbance and protect sensitive areas;
8. To recognize community concerns related to development and its impact upon visually significant hillsides.

B. Methodology. Adoption of regulations requiring that development on such slopes respect existing natural drainage ways, land forms, vegetation, visually sensitive areas, viewsheds and privacy considerations.

C. Applicability. Except as provided in Section 4-425.G. hereof, the provisions of this Section 4-425 shall apply to applications for subdivisions, planned unit developments, special use permits and building permits, whether for single-family residential, duplex residential, multi-family residential, commercial, industrial or institutional structures, and including ancillary stormwater drainage appurtenances, access roads, driveways and parking areas, on land that contains slopes of thirty (30) percent or more.

D. Application Requirements

1. Subdivisions, Planned Unit Developments and Special Use Permits.

a. Minor Subdivisions. An application for minor subdivisions, excluding condominium maps, subdivision of townhomes, duplexes or patio homes, and lot line adjustments, shall include the materials described under this Section 4-425, in addition to the materials required under Article 5, Section 5-290 Minor Subdivision.

b. Subdivision and Planned Unit Development. An application for subdivision and planned unit development sketch plans and preliminary plans shall include the materials described under this Section 4-425, in addition to the materials

required for subdivision application under Article 5, Section 5-280 Subdivision and/or Article 5, Section 5-240 Planned Unit Development District.

c. **Special Use Permits**. An application for a special use permit shall include the materials required under this Section 4-425, in addition to the materials required under Article 5, Section 5-250 Special Uses.

d. **Required Materials.** All subdivision, planned unit development and special use permit applications must include:

(1) A slope analysis map shall be prepared by a professional engineer or professional land surveyor registered in the State of Colorado depicting the site contours as follows:

(a) Sketch plans shall provide a topographic map that depicts contours at a minimum of ten (10) foot intervals.

(b) Preliminary plans and special use permits shall provide a scaled site grading plan that depicts existing and proposed final grades with a maximum of two (2) foot contours. Site plans must illustrate the existing grades and improvements for the entire property in question unless the County Engineer approves a different area of interest. Areas on the map that contain slopes that are greater than 30%, and which will remain undisturbed, may be shown at ten (10) foot contours.

(2) A scaled site plan including all existing and proposed improvements and pertinent natural features such as rock outcroppings and significant groupings of existing vegetation, prepared at a scale of 1" = 50 feet or less; and

(3) An impact evaluation report, i.e., a narrative evaluation of the potential impacts of development on slopes greater than 30% within the proposed development, as well as potential impacts on adjacent surrounding properties; the report shall include an evaluation of any natural or pre-existing human-made alterations to the natural site grade; conclusions and recommendations for grading procedures; soil design criteria for any structures or embankments required to accomplish the proposed grading; and, where necessary, slope stability studies, and recommendations and conclusions regarding site geology.

e. The topographic contour map, grading plan, site plan, elevation drawing and impact evaluation report evaluated for consistency with the governing zone district standards and in accordance with the following review criteria:

(1) All standards of the governing zone district must be met (minimum setbacks, maximum height, lot coverage, driveway and road grades, access points, etc.);

(2) Disturbance of the natural terrain should be minimized to the extent practicable:

(a) Cuts and Fills should be minimized to the extent practicable and visually compatible stabilization measures should be used for Cut and Fill slopes;

(b) Natural land forms should be preserved to the extent practicable and natural features such as slopes and rock formations should be incorporated into the site design to the extent practicable;

(c) Existing, natural vegetation should be preserved and incorporated into the project design to the greatest extent practicable;

(3) Visual impacts upon off-site areas should be avoided or reasonably mitigated:

(a) Structures should be finished in earthtone architectural treatments and colors to make the structure less conspicuous as viewed from off-site. White and other light colors should be avoided.

(b) Structures should be sited so that there is a mountain or hillside backdrop.

(c) Existing vegetation should be preserved to the extent practicable and supplementary wildfire resistive landscaping introduced, to offset the visual impact of the structural mass on highly visible building sites. (Reference Colorado State Forest Service Publication 6.305, Firewise Plant Materials or, the version of this publication currently in effect.)

Minimal water usage is recommended to avoid erosion and similar degradation of the site; where erosion control methods include hillside revegetation, temporary irrigation may be utilized until the vegetation is established.

E. Outside Referral. During the staff review of the application, the Planning Director may refer the application to any applicable referral agency.

F. Consideration of Application. The County shall consider the content of the application and the recommendations of the referral agencies, as applicable, during the development review process to determine whether the proposed development in its proposed location is consistent with the spirit and intent of related standards and is unlikely to have any significant adverse impact to adjacent properties or the public health, safety and welfare. As a result of such consideration, the County may make the following determinations, among others.

1. Based upon site-specific slope characteristics, all newly proposed building sites must be sized appropriately to accommodate primary structures, ancillary structures, ancillary stormwater drainage appurtenances, parking structures, roads, driveways, parking areas and septic systems, well heads and all other necessary utilities for development within all zone districts. Each proposed building site shall be evaluated lot-by-lot based on the materials provided in accordance with the application requirements detailed in this Section 4-425.

2. Building Envelopes. For newly proposed development or redevelopment, building envelope placement must give due consideration to the review criteria of this Section 4-425.

G. Building Permits. An application for a building permit for new single-family, duplex, multi-family, commercial, industrial or institutional structures and grading permits on any portion of a lot or parcel of land containing slopes greater than 30%, shall include the following material, provided that applications for permits for development within building envelopes on plats previously approved by the Board of County Commissioners that bear the Board of County Commissioners' Certificate shall be exempt from the requirements of this Section 4-425.G.

1. A scaled site grading plan that depicts existing and proposed final grades with a maximum of two (2) foot contours. Site plans must illustrate the existing grades and improvements for the entire property in question unless the County Engineer approves a different area of interest. Areas on the map that contain slopes that are greater than 30%, and which will remain undisturbed, may be shown at ten (10) foot contours. The slope analysis map shall be prepared by a surveyor registered in Colorado;

2. A scaled site plan including all existing and proposed improvements and pertinent natural features such as rock outcroppings and significant existing vegetation, prepared at a scale of 1" = 20 feet or less;

3. A scaled Hillside building elevation drawing, including proposed grades, existing grades and scaled cross section(s) depicting the most prominent view(s) of the proposed building. The elevation and cross section drawings must be prepared at a scale of 1 inch = 20 feet or less.

H. Review Criteria for Building Permit Applications. The materials submitted in support of a building permit application shall be reviewed for consistency with the following criteria:

1. All standards of the governing zone district must be met (minimum setbacks, maximum height, lot coverage, driveway and road grades, access points, etc.);

2. Disturbance of the natural terrain should be minimized to the extent practicable:

a. Cuts and Fills should be minimized to the extent practicable and visually compatible stabilization measures should be used for Cut and Fill slopes;

b. Natural land forms should be preserved to the extent practicable and natural features such as slopes and rock formations should be incorporated into the site design to the extent practicable;

c. Existing, natural vegetation should be preserved and incorporated into the project design to the greatest extent practicable.

3. Visual impacts upon off-site areas should be avoided or reasonably mitigated;

a. Structures should be sited so that there is a mountain or hillside backdrop;

b. Structures should be finished in earthtone architectural treatments and colors to make the structure less conspicuous as viewed from off-site. White and other light colors should be avoided;

c. Existing vegetation should be preserved where practicable to soften the impact of structural mass of buildings located in highly visible areas, and in such areas supplementary wildfire resistive landscaping should also be introduced, as necessary.

d. Driveways should not be the predominant feature of the front yard; shared driveways are encouraged, when appropriate. Paved and other structural areas outside the main building mass should be softened by preserving the pre-existing vegetation where practicable;

e. Minimal water usage is recommended to avoid further aggravating geologic hazard impacts. Where erosion control methods and visual impact mitigation include hillside revegetation, temporary irrigation may be utilized until the vegetation is established.

SECTION 4-430. DEVELOPMENT IN AREAS SUBJECT TO WILDFIRE HAZARDS

A. Purpose. There are certain regions of Eagle County that have the potential to pose hazards to human life and safety and to property because they can be threatened by wildfire. These regulations are intended to provide standards to reduce or minimize the potential impacts of wildfire hazards on properties, the occupants of properties and the occupants of adjacent properties, as well as to facilitate access to manmade structures by firefighters in the event of a wildfire. Development should attempt to avoid high and extreme wildfire hazard areas whenever possible. *(am 12/17/02)*

B. Applicability. The provisions of this Section shall apply to any application for a Special Use Permit, Subdivision or Planned Unit Development (PUD). *(am 12/17/02)*

C. Vegetation Management Plan. All applications identified in Section 4-430.B, Applicability, shall include a Vegetation Management Plan. The Vegetation Management Plan shall be prepared by a natural resource professional with expertise in the field of vegetation management and wildfire mitigation. *(orig. 12/17/02)*

1. Special Use Applications. For development requiring a Special Use Permit, the application shall include those materials described under Subsection 4-430.C.2.b, Preliminary Plan. *(orig. 12/17/02)*

2. Development Involving Subdivision or PUD Review. *(orig. 12/17/02)*

a. Sketch Plan. The Vegetation Management Plan submitted with the sketch plan shall provide an initial site-specific evaluation. Following is the minimum information to be included in the plan:

(1) A statement of objectives for the Vegetation Management Plan;

(2) A site-specific wildfire analysis addressing topographic and vegetation features;

(3) A vegetation inventory, analysis and map which identifies and assesses the major timber stands and vegetation according to National Fire Protection Association (NFPA) Bulletin Number 299, Standard for Protection of Life and Property from Wildfire,1997 Edition or, the version of the referenced publication currently in effect.

b. Preliminary Plan. The Vegetation Management Plan submitted with the preliminary plan shall provide a detailed site specific analysis which includes the following minimum information;

(1) A schedule delineating how the wildfire mitigation actions identified in

the plan will be implemented including, but not limited to, overlot vegetation thinning, creation of fuelbreaks and the installation of working fire hydrants, fire cisterns and or/dry hydrants prior to the introduction of combustible construction materials on the site;

(2) Communication capabilities during construction with the Local Fire Authority Having Jurisdiction and the type of communication system. A physical address is required for E-911 purposes;

(3) Detailed specification of fire protection equipment and emergency preparedness actions to be installed or implemented and maintained within the subdivision during construction;

(4) Detailed mitigation actions including, but not limited to, thinning and removal of trees and vegetation designed to mitigate wildfire hazard areas. The use of building envelopes may be required to locate structures outside of severe hazard areas, off of steep slopes and outside of draws and canyons;

(5) Identification of the entities responsible for implementing the plan, constructing required improvements, and maintenance in perpetuity of the improvements and appropriate easements, if any;

(6) A map identifying major timber stands and vegetation, locations of fire hydrants, water tanks, cisterns and/or dry hydrants, as well as locations and flows or capacity of fire hydrants, water tanks, cisterns and/or dry hydrants.

D. Procedure.

1. Referral to Colorado State Forest Service. As part of the review of the application, the Planning Director shall refer to the Colorado State Forest Service (CSFS) all applications as identified in Section 4-430.B., Applicability. Referral of Final Plat applications will be at the discretion of the Planning Director.

2. Review and Classification of Degree of Hazard By CSFS. CSFS reviews the application and determines whether there is a low, moderate, high, or extreme degree of severity of wildfire hazard posed to persons and property pursuant to the National Fire Protection Association (NFPA) Bulletin Number 299, *Standard for Protection of Life and Property from Wildfire, 1997 Edition* or, the version of the referenced publication currently in effect. CSFS considers the Vegetation Management Plan, Defensible Space and proposed design of the subdivision or PUD (including the planned roads and water supply facilities and the configuration and location of lots), the topography of the site, the types and density of vegetation present, the fire protection measures proposed by the applicant and other related factors in making its determination. *(am 12/17/02)*

3. CSFS Response. Considering the degree of severity of wildfire hazard that is posed to persons and property, the CSFS shall also comment on the potential effectiveness of the Vegetation Management Plan and the mitigation techniques proposed. These recommendations shall be based on guidelines promulgated by CSFS (see, for example, "Creating Wildfire-Defensible Zones, No. 6.302 or currently accepted standards.) and may include, but are not limited to the following wildfire hazard mitigation techniques: *(am 12/17/02)*

a. **Locations.** Recommendations to locate structures outside of severe hazard areas, off of steep slopes and outside of draws and canyons.

b. **Manipulate Vegetation.** Recommendations to manipulate the density and form of vegetation, so as to create defensible space buffers around locations where structures are proposed including: Removal of tree limbs hanging near chimneys, establishing fuelbreaks, reduction of on-site vegetative fuel hazards through strategic thinning and clearing to promote overall health of on-site vegetation by reducing the severity of the hazard. The form and the extent of the recommendations to manipulate vegetation shall relate directly to the severity of the hazard that is present. *(am 12/17/02)*

c. **Building Design.** Recommendations to use fire rated or non-combustible roof materials, to require pitched roofs, and to sheath, enclose or screen projections and openings above and below the roofline, as applicable. Compliance with these recommendations shall occur prior to building permit issuance pursuant to Chapter 3.10, Building Resolution of the Eagle County Land Use Regulation. *(am 12/17/02)*

d. **Water Supply.** Where access to a pressurized water system with fire hydrants is not provided, recommendations may be made to ensure the availability of a water supply for individual structures, in the form of access to a pond, installation of an underground water storage tank, provision for dry hydrants, or similar methods.

e. **Access.** Recommendations to provide separate routes of entrance and exit into the subdivision or PUD, to lay out roads so as to create fuel breaks and to ensure the adequacy of access by emergency vehicles, including the provision of regularly spaced turnouts along roadways, the establishment of adequate grades and sight distances and the prohibition of dead end streets in the development. Depending upon the length of the road, fire hazard rating, number of units proposed, topography and the recommendation of the Local Fire Authority Having Jurisdiction, the Board of County Commissioners may, at their discretion, grant a variance from the required improvement standard. *(am 12/17/02) (am 03/21/06)*

f. **Maintenance.** Recommendations to keep roofs cleared of debris and to store flammable materials and firewood away from structures. Firebreaks, turnaround areas and emergency access routes shall be maintained. *(am 12/17/02)*

4. **Compliance.** The County shall consider the recommendations of the CSFS and apply the appropriate recommendations as conditions of approval of the sketch and preliminary plan. The applicant shall demonstrate how the development complies with all of the CSFS recommendations made conditions of approval by the County. *(am 12/17/02)*

E. Standards. *(orig. 12/17/02)*

1. Water Supply and Access. The following standards for water supply and access shall apply to all applications as identified in Section 4-430.B., Applicability.

a. Water Supply.

(1) Fire Hydrants.

(a) Fire hydrants shall be provided when a water distribution system will serve the proposed development and shall meet the required fire flow as defined in the fire code in effect at the time of application or as otherwise determined by the Local Fire Authority Having Jurisdiction.

(b) The water distribution system shall be capable of delivering the required fire flow for each hydrant connected to the distribution system within the proposed subdivision as delineated in the fire code in effect at the time of application, or as otherwise required by the Local Fire Authority Having Jurisdiction.

(c) Fire hydrants shall be located at the intervals defined in the fire code in effect at the time of application, and shall be located so that all structures are within a maximum five hundred (500) feet as defined in the fire code in effect at the time of application or as otherwise determined by the Local Fire Authority Having Jurisdiction.

(c) Fire hydrants shall be located in the public right-of-way or at other locations as required and approved by the Local Fire Authority Having Jurisdiction.

(d) Fire hydrants shall be accessible to fire fighting apparatus from County maintained roads, privately maintained roads or unobstructed emergency vehicle lanes as determined by the Local Fire Authority Having Jurisdiction.

(2) Water tanks, cisterns and/or dry hydrants. Water tanks, cisterns and/or dry hydrants shall be provided in developments that are not served by hydrants unless the Local Fire Authority Having Jurisdiction has approved an alternative fire protection water supply system.

(a) Water tanks and cisterns shall meet the requirements of the *1997 Uniform Fire Code* as adopted by Eagle County, or as defined in the fire code in effect at the time of application. Depending upon the recommendation of the Local Fire Authority Having Jurisdiction, the Board of County Commissioners may, at their discretion, grant a variance from the required improvement standard.

(b) A dedicated turn-around shall be placed no more than fifty (50) feet from a water tank or dry hydrant cistern and the discharge from the water tank or dry hydrant cistern shall be within eight (8) feet of the nearest usable portion of the dedicated right-of-way, unless otherwise approved by the Local Fire Authority Having Jurisdiction.

(c) Dry hydrants may be provided in combination with or in lieu of cisterns, water tanks or other approved fire protection water supply systems. Dry hydrants shall be installed in accordance with the standards of *NFPA Bulletin Number 1142, Suburban and Rural Fire Fighting 2001 Edition* or, the version of the referenced publication currently in effect. The Local Fire Authority Having Jurisdiction may approve an alternative standard. An average home size of 5000 square feet shall be assumed unless further modified within the development.

b. Access. With the exception of properties proposed to be served by driveways or by urban cul-de-sacs, separate routes of entrance and exit into the development shall be provided. Roads shall be laid out with consideration for creating fuel breaks and to ensure the adequacy of access by emergency vehicles, including the provision of regularly spaced turnouts along roadways, the establishment of adequate grades and sight distances and the prohibition of dead end streets longer than 1000 feet or serving more than 25 contiguous lots within the development. Reference ROADWAY STANDARDS Section 4-620.D.9.a and Section 4-620.J.1.h. Depending upon the length of the road, fire hazard rating, number of units proposed, topography and the recommendation of the Local Fire Authority Having Jurisdiction, the Board of County Commissioners may, at their discretion, grant a variance from the required improvement standard. *(am. 03/21/06)*

SECTION 4-440. WOOD BURNING CONTROLS

A. Findings and Intent. The Eagle County Board of County Commissioners hereby find and declare air quality to be an important part of the health, safety and welfare of the community. The Board of County Commissioners have a duty to protect and improve air quality in and around Eagle County, not only for the health, safety and general welfare of its residents and visitors, but also because air pollution resulting from the use of wood burning devices reduces the desirability of Eagle County as a recreation and tourism destination, thus affecting the aesthetic and economic welfare of the County. The Board of Commissioners find and declare the present level of degradation of air quality to be unacceptable and recognize the need to achieve the maximum practical degree of air purity possible by requiring the use of all available practical methods and techniques to control, prevent and reduce air pollution caused by wood smoke. It is the intent of the Board of County Commissioners to enact reasonable regulations to control pollution caused by wood smoke for the purpose of improving the air quality, aesthetic features and economy of Eagle County.

B. General Requirements.

1. Only New Technology Devices Permitted. Building or mechanical permits shall only be

issued for the installation of wood burning devices that comply with the standards of a new technology device, as defined herein, or unless the installation is otherwise exempt from these Regulations.

2. **Existing Wood Burning Devices.** Buildings with wood burning devices in existence on the effective date of this regulation shall be permitted to replace existing wood burning devices with new technology devices.

3. **Exemptions.** Section 4-440.C., Maximum Number of Wood Burning Devices in New Structures, does not apply to parcels thirty five (35) acres or greater in size, zoned Resource, and the sole source of heat is a new technology device.

C. Maximum Number of Wood Burning Devices in New Structures. The maximum number of wood burning devices permitted within new structures in unincorporated Eagle County shall be as follows:

1. **R, RL, AR, AL, and RR Zone Districts.** One (1) new technology device shall be permitted per building within the Resource (R), Resource Limited (RL), Agricultural Residential (AR), Agricultural Limited (AL), and Rural Residential (RR) zones, unless exempt under Section 4-440.B.3. Exemptions.

2. **RC, RSL, RSM, RMF and FH Zone Districts.** Within the Rural Center (RC), Residential Suburban Low Density (RSL), Residential Suburban Medium Density (RSM), Residential Multi-Family (RMF), and Fulford Historical (FH) zone districts, the following limitations shall apply:

   a. **Single-Family and Duplex Units.** One (1) new technology device shall be permitted per dwelling unit in single-family and duplex dwellings.

   b. **Multi-Family Units.** Wood burning devices shall not be permitted within multi-family dwelling units; however, one (1) new technology device shall be permitted in the common area of a building containing multi-family units.

3. **RC, CL, CG, and I Zone Districts.** Within the RC (Rural Center), Commercial Limited (CL), Commercial General (CG) and Industrial (I) zone districts, the following limitations shall apply:

   a. **Commercial and Industrial Uses.** One (1) new technology device shall be permitted per each building that contains commercial and industrial use(s); or

   b. **Hotel or Motel Use.** One (1) conventional open-hearth fireplace shall be permitted in the common area of a building that contains a motel or hotel use. Said fireplace shall be constructed with glass doors and shall have the ability to regulate the amount of outside return air entering the fire chamber.

4. **Approved PUD.** Within any approved planned unit development (PUD), including the Eagle-Vail PUD, the following limitations shall apply, unless alternative limitations are approved as part of the PUD Guide:

a. **Single-Family and Duplex Units.** One (1) new technology device shall be permitted per dwelling unit in single-family and duplex dwellings.

b. **Multi-Family Units.** Wood burning devices shall not be permitted within multi-family dwelling units; however, one (1) new technology device shall be permitted in the common area of a building containing multi-family units.

c. **Commercial and Industrial Uses.** One (1) new technology device shall be permitted per each building that contains commercial and industrial use(s); or

d. **Hotel or Motel Use.** One (1) conventional open-hearth fireplace shall be permitted in the common area of a building that contains a motel or hotel use. Said fireplace shall be constructed with glass doors and shall have the ability to regulate the amount of outside return air entering the fire chamber.

SECTION 4-450. RIDGELINE PROTECTION

A. **Purpose**. The purpose of the Ridgeline Protection Section is to preserve and maintain the County's scenic aesthetic resources as viewed from certain roadway corridors that are important to the character and economy of Eagle County. This is accomplished by the establishment of ridgeline areas within which the location and design of new development or redevelopment is reviewed to maintain and preserve the natural appearance of the mountain skyline by avoiding penetration or interruption of the natural skyline. (See definition of 'Ridgeline' in Article 2: Definitions). *(am.07/17/06)*

B. **Areas Subject to Analysis.** All undeveloped lands located near or on a ridgeline or intermediate ridge which are visible from the following transportation routes:

BRUSH CREEK ROAD	GYPSUM CREEK ROAD	US HIGHWAY 82 Corridor
COLORADO RIVER ROAD	LAKE CREEK ROAD	US HIGHWAY 24 Corridor
EL JEBEL ROAD	SQUAW CREEK ROAD	US HIGHWAY 131 Corridor
FRYING PAN ROAD	WEST LAKE CREEK ROAD	I-70 Corridor
		(am.07/17/06)

C. **Applicability.** The provisions of this Section 4-450, Ridgeline Protection, shall apply to applications for Building Permits, Subdivision, Special Use, or PUD. *(am.07/17/06)*

D. **Exemptions.** These standards shall not apply to: *(orig.07/17/06)*

1. Activity or development that has been previously approved through the Building Permit or Special Use Permit process prior to the date of adoption of these regulations;

2. All lots within platted subdivisions, approved by the Board of County Commissioners, which prior to the effective date of these Ridgeline regulations have designated building envelopes, assigned building areas or otherwise include previously approved ridgeline protection and/or mitigation standards.

3. Development which has received approval from the Board of County Commissioners through the PUD process specifically granted a variation from this section; or properties which have received a Variance from the Zoning Board of Adjustment granting a Variance from this section;

4. Telecommunication Facilities which have received Special Use Permits incorporating visual mitigation measures;

5. Public Utility Facilities which have demonstrated that no other feasible and prudent alternative sites exist;

6. Fences constructed primarily of wire;

E. Standards. All non-exempt development located in identified areas shall comply with the following standards: *(orig.07/17/06)*

1. The proposed development, where feasible, shall minimize potential visual impacts by utilizing existing topography and natural vegetation; however, after wildfire mitigation no part of any building shall silhouette the skyline at any time of year.

2. The proposed development height and bulk shall be designed to avoid the silhouetting of buildings from ridgelines. Mitigation techniques may include, but not be limited to either distributing the structural mass into a series of smaller forms; or utilizing stepped rooflines.

3. More restrictive minimum structural setbacks and/or height controls (heights less than normally permitted in underlying zone district) may be necessary to preserve public views from identified transportation routes, as determined by a site specific visual analysis.

F. Procedure. *(am.07/17/06)*

1. An applicant for development that is subject to the provision of this Section 4-450, Ridgeline Protection, shall submit a visual analysis. The purpose of the visual analysis is to illustrate the anticipated visual effects of the proposed development and to describe how the potential visual impacts will be mitigated.

a. Building Permit. For new development on ridgeline, or potential ridgeline areas which requires a building permit, the application shall include those materials described under Subsection 4-450.F.(2), Preliminary Plan in addition to the required materials necessary for the building permit application, and Pursuant to Section 4-450.G.1 FONSI Determination. *(am.07/17/06)*

b. Special Use Application. For development requiring a special use permit, the application shall include those materials described under Subsection 4-450.D.1~~b~~.d.(2), Preliminary Plan in addition to the required materials necessary for the special use permit application. *(am.07/17/06)*

c. Minor Subdivision. For development requiring a Minor Subdivision, pursuant to Section 5-290 Minor Subdivision with the exception of a minor subdivision for the purpose of subdividing condominiums, townhomes, patio homes or duplex structures, the application shall include those materials described under Subsection

4-450.D.1.d.(2), Preliminary Plan (unless otherwise exempted per Section 4-450.D) in addition to the required materials necessary for the minor subdivision application. *(am.07/17/06)*

d. Development Involving Subdivision or PUD Review. For any development subject to the procedures of this Section that involves Subdivision or PUD review, the Visual Analysis shall be submitted in the following stages: *(am.07/17/06)*

(1) Sketch Plan. Within the sketch plan application, the applicant shall submit an initial investigation of potential visual impacts and mitigation techniques. It shall contain the following materials:

(a) Map. A map of the property that depicts the general locations of ridgeline areas protected by this Section in relationship to planned development areas.

(b) Preliminary Visual Analysis. The Visual Analysis should provide sufficient information to clearly identify visually sensitive areas where development may require mitigation to prevent impacts upon the skyline. *(am.07/17/06)*

(c) Written Statement. A brief written statement describing, in a general manner, where the development is proposed to be located in relation to the ridgeline areas and the design elements that will be used to mitigate visual impacts. *(am.07/17/06)*

(2) Preliminary Plan. Within the preliminary plan application, the applicant shall submit a detailed visual analysis. It shall illustrate the existing features of the site, as viewed from the applicable transportation route(s). The analysis shall depict the location and design of the proposed development, from identified vantage points. Vantage points shall be in half-mile increments along the identified transportation route(s) (see Section 4-450. B Areas Subject to Analysis). The visual analysis shall also include: *(am.07/17/06)*

(a) Illustrations. Illustrations of the mass and form of the proposed development. These may be provided as a photograph of the property, onto which the development has been rendered, a computer simulation, an architectural site section or other similar visual display technique. When the property is visible from two or more identified roadways, a visual analysis of the site must be provided from vantage points along all applicable transportation routes. *(am.07/17/06)*

(b) Proposed Mitigation Controls. Proposed Mitigation Controls including, but not limited to the following: *(am.07/17/06)*

(i) Structural Finish Materials and Colors. Statements or samples describing the materials and colors proposed to be

used in all structures; *(orig.07/17/06)*

(ii) Height limitations which may be more restrictive than the current definition for calculating building height (as found within Article 2: Definitions) or as the governing zone district allows; *(orig.07/17/06)*

(iii) Proposed Building envelopes; *(orig.07/17/06)*

(iv) Natural and introduced landscaping for the purpose of screening and preserving public view sheds. *(orig.07/17/06)*

(v) Other mitigation controls to prevent impacts to the skyline. *(orig.07/17/06)*

(c) **Map**. A map locating proposed roads and utilities and identifying the area proposed for development.

(d) **Plans.** Grading, landscaping and illumination plans.

(e) **Written Statement.** A written statement shall be submitted depicting how the development mitigates visual impacts on affected ridgelines.

(3) **Final Plat**. Within the final plat application, the applicant shall submit those materials necessary to provide the County with assurances that the development will meet all of its commitments for ridgeline development agreed to during preliminary plan review. Such assurances may include, but not be limited to covenants, deed restrictions and financial guarantees, or any other forms of mitigation as approved by the Board of County Commissioners. For developments that do not require a final plat, this information shall be provided with the preliminary plan. *(am.07/17/06)*

2. **Review by County**. The County shall review the application and visual analysis to determine whether there is potential visual impact to the ridgelines from transportation routes as identified in Section 4-450.B Areas Subject to Analysis. It is the intent that development subject to this Section 4-450, Ridgeline Protection, be located in such a manner that it does not appear to penetrate above the crest of a ridge whereby the proposed development has no backdrop and penetrates the skyline. *(am.07/17/06)*

G. **Approval Process for New Development Not Exempted In Section 4-450.D. Exemptions.** Any proposed development which is not exempted pursuant to Section 4-450.D.Exemptions for parcels of land on ridgeline, or potential ridgeline areas must receive a Finding of No Significant Impact (FONSI) from the Director of Community Development. The FONSI determination process shall occur concurrently with review of a Building Permit, unless the proposed new development is approved by the Board of County Commissioners through the Subdivision, PUD or Special Use Permit process, in such instances, a FONSI is not necessary. *(orig.07/17/06)*

1. **FONSI Determination.** Prior to administering a FONSI determination, the Planning Director must find that all of the following criterion has been satisfied:

a. The newly proposed development has been located to avoid ridgeline areas to the greatest extent practicable;

b. The newly proposed development cannot be readily seen from the roadways delineated in section 4-450.B of these regulations;

c. The proposed structural addition/expansion will not change the visual aspect of the existing structure or further breach the skyline;

d. That there are other circumstances including but not limited to: topography, access, geologic aspects, location and lot shape; and that no other alternative building site exists other than what is proposed;

e. The applicant has demonstrated, to the satisfaction of the Planning Director that Section 4-450.E. Standards has been incorporated into the proposed development.

Based upon review of the Building Permit application materials and additional evidence as supplied by the applicant, the Director of Community Development may find that a Finding of No Significant Impact (FONSI) is appropriate.

2. Finding of No Significant Impact (FONSI). The Director of Community Development may determine that a Finding of No Significant Impact (FONSI) should be issued if the proposed building permit in its proposed location is consistent with the spirit and intent of related standards and is unlikely to have any significant adverse impact to adjacent properties or the public health, safety and welfare. In the instance that a FONSI is made, and upon expiration of the reconsideration period described below, the building permit application will be issued pending compliance with all other applicable elements of these Land Use Regulations, as well as, the Eagle County Building Resolution.

a. Notice of Director's Determination of a FONSI.

(1) Upon the Director's Determination of a FONSI, the Director shall notify the applicant by mail, and shall notify the Board, the County Administrator and the County Attorney of the Determination by e-mail or memorandum.

(2) The Notice of Director's Determination of the FONSI shall be published once in the County legal newspaper not more than fourteen (14) days following the Determination. The notice shall describe the Project and the procedure for requesting reconsideration as set forth below.

b. Reconsideration of Director's Determination of a FONSI.

(1) Call-up by the Board. Within fourteen (14) days after publication of the Director's Determination of a FONSI, the Board may decide to reconsider the Determination. Such reconsideration shall be made at the next regularly scheduled meeting of the Board for which proper notice can be accomplished.

(2) Request for Reconsideration by Affected Party. Any affected party seeking a reconsideration of the Director's Determination of a FONSI shall file a written request with the Board within fourteen (14) days of the date of publication in the newspaper of the Notice of the Director's Determination of the FONSI. The Board shall reconsider the Director's Determination of the FONSI at the next regularly scheduled meeting for which proper notice can be accomplished. The affected party may request a reasonable extension if necessary.

3. Approval Required. If the Director determines that a Finding of No Significant Impact (FONSI) is not appropriate, the application will be forwarded to the Board of County Commissioners for consideration. At a public hearing, the Board of County Commissioners shall consider the application, the relevant support materials, and any public testimony. After the close of the public hearing, the Board may uphold the Director's determination, overturn the Director's determination or overturn the Director's determination with conditions.

SECTION 4-460. ENVIRONMENTAL IMPACT REPORT

A. Purpose. The purpose of an Environmental Impact Report is to provide complete information on the environmental effects of proposed development to the County Commissioners, the Planning Commission and the general public. In addition, the purpose is to ensure that long term protection of the environment is a criterion to be considered in planning, and that development decisions, both public and private, take into account the relative merits of possible alternative actions. This is accomplished by, providing procedures for review and evaluation of the environmental effects of proposed projects prior to granting of permits or other authorizations for commencement of development.

B. Applicability. Unless exempted by Subsection 4-460 D. Exemptions, an Environmental Impact Report is required for applications of subdivision, special use, or PUD that may significantly affect the environment, either during construction or an a continuing basis.

C. Application and Review. The Environmental Impact Report shall accompany the initial application submittal for the development proposal. Any subsequent submittal shall include the Environmental Impact report and reflect any revisions or additional information requested by the Planning Director, the Planning Commission or Board of County Commissioners.

D. Exemptions. An Environmental Impact Report shall not be required when a phase of a development for which an Environmental Impact Report was previously submitted and reviewed covering all phases of the entire development, provided that the development was approved originally and not subsequently altered in any material respect.

E. Report Contents.

1. Environmental Impact Report. The Environmental Impact Report shall contain information and analysis, in sufficient detail and adequately supported by technical studies, to enable the Planning Commission and the County Commissioners to judge the environmental impact of the proposal and to judge measures proposed to reduce or negate any harmful or undesirable environmental impacts. The Planning Director, Planning Commission and or County Commissioners may require submission of information in addition to that listed in this section. The Environmental Impact Report shall include all necessary information to adequately address the specific Environmental Conditions (Section 4-460 E.2.) affected.

2. Environmental Conditions. The following is a list of Environmental Conditions to be considered.

a. By significantly altering an ecological unit or land form, such as a ridgeline, saddle, draw, ravine, hillside, cliff, slope, creek, marsh, watercourse, or other natural land form feature.

b. By directly or indirectly affecting a wildlife habitat, feeding, or nesting ground.

c. By significantly altering or removing native grasses, trees, shrubs, or other vegetative cover.

d. By significantly affecting the appearance or character of a significant scenic area or

resource, or involving buildings or other structures that are of a size, bulk, or scale that would be in marked contrast to natural or existing cultural features.

e. By potentially resulting in avalanche, landslide, siltation, settlement, flood, or other significant land form change or hazard to health and safety.

f. By discharging toxic or thermally abnormal substances, or involving use of herbicides or pesticides, or emitting significant smoke, gas, steam, dust, or other particulate matter.

g. By involving any process which results in significant odor that may be objectionable or damaging.

h. By requiring any waste treatment, cooling, or settlement pond, or requiring transportation of solid or liquid wastes to a treatment or disposal site.

i. By discharging significant volumes of solid or liquid wastes.

j. By increasing the demand on existing or planned sewage disposal, storm drainage, or other utility systems to a level which is likely to cause an adverse impact on the environment.

k. By involving any process which generates significant noise that may be offensive or damaging.

l. By either displacing significant numbers of people or resulting in a significant increase in population.

m. By pre-empting a site which is desirable for recreational uses or planned open space.

n. By significantly altering local traffic patterns or causing an increase in traffic volume or transit service need.

a. By being a part of a larger project which, at any future stage, may involve any of the impacts listed above.

3. Preparation. The Environmental Impact Report shall be prepared by qualified professionals.

4. Inclusions. The Environmental Impact Report shall include:

a. Overview of Development Proposal. A general statement identifying and describing the proposed development in terms such as site area, numbers of residential units, proposed height and bulk of buildings, building floor area in square feet, and such other data as will contribute to a clear understanding of the scale of the development. Project boundaries, and boundaries of the area within which environmental impact is likely to be significant shall be shown on a site map.

b. Other Reviewers. A list of other regulatory review agencies and the specific

environmental protection regulations to which the proposed development will be subject (e.g. air, water, solid waste, etc.).

c. **Summary.** A summary of the Inventory and Analysis sections of the Environmental Impact Report and supporting technical studies shall be provided and prepared using terms that can be assessed and evaluated by county officials and the general public.

d. Inventory and Analysis. The Inventory and Analysis shall address and incorporate the applicable Environmental Conditions pursuant to Section 4-460 E.2., Environmental Conditions, as follows:

(1) Text, maps, photographs, and other appropriate illustrative material may be used as part of the Inventory and Analysis section of the Environmental Impact Report.

(2) The Environmental Impact Report shall include an inventory of existing environmental characteristics of the site that exist prior to the proposed development.

(3) The Environmental Impact Report shall include a comprehensive qualitative and quantitative analysis of any environmental impacts of the proposed development. The analysis portion of the Environmental Impact Report shall assess the following items in reasonable detail:

(a) Adverse effects, which cannot be avoided if the proposal is implemented.
(b) Mitigating measures proposed to minimize the impact.
(c) Possible alternatives to the proposed action.
(d) Temporary, secondary and cumulative long term effects of the proposal, which either significantly reduce or enhance the state of the environment.
(e) Irreversible environmental changes resulting from implementation of the proposal.
(f) How, if applicable, the proposal is part of a large project which at any future stage may increase impacts.

e. Environmental Topics to Address. Each Environmental Impact Report shall include inventory information and analysis of impacts on the following natural systems:

(1) **Hydrologic** - existing surface drainage and watershed characteristics, groundwater and soil permeability characteristics, natural or man-made water features and characteristics (such as streams, wetlands, ponds, etc.) and any potential changes or impacts caused by the development proposal.

(2) **Atmospheric** - airshed characteristics, potential emissions, and any potential changes or impacts caused by the development proposal.

(3) **Geologic** - all land forms (ridgelines, ravines, etc.), slopes, soil characteristics, potential hazards areas, and any potential changes or impacts caused by the development proposal such as landslide, flood, settlement, siltation, avalanche or other.

(4) **Biotic** - vegetation and wildlife habitats feeding, breeding, nesting or critical habitats including but not limited to upland, riparian and wetland, and any potential changes or impacts including but not limited to intrusion, obstruction, removal or alteration of vegetation.

(5) **Wastes, Noise and Odors** - levels and characteristics of any toxic, noxious or abnormal substances, smoke, odors, gas, wastes, steam, dust or other particulate matter.

(6) **Visual -** views and scenic values, and any potential changes, impacts, or marked contrasts that would affect the scenic area or resource.

(7) **Circulation and Transportation** - volumes and traffic flow patterns, transit service needs, alternative transit systems and potential changes or impacts.

f. **Related Studies and Requirements.** If the land development proposal is subject to other standards in these Land Use Regulations that are of a related environmental nature, reports used to meet those standards may be used to satisfy certain requirements for information and analysis in the Environ-mental Impact Report, so long as the preparer clearly identifies how and where a reviewer will find that information within the submittal package.

DIVISION 4-5. COMMERCIAL AND INDUSTRIAL PERFORMANCE STANDARDS

SECTION 4-500. PURPOSE

The purpose of this Division is to provide appropriate standards for the operation of commercial and industrial uses in Eagle County. These standards are intended to protect people and property from the health and safety hazards associated with excessive noise, vibration, smoke, heat, glare, radiation, fumes and water pollutants and from the improper storage of hazardous and non-hazardous materials.

SECTION 4-510. APPLICABILITY

This Division shall apply to all commercial and industrial uses located within unincorporated Eagle County.

SECTION 4-520. NOISE AND VIBRATION STANDARDS

A. **Maximum Permissible Noise Levels.** Every use shall be operated such that the noise level produced does not inherently and recurrently exceed sixty (60) decibels, during the hours of 7:00 A.M. to 7:00 P.M., or fifty-five (55) decibels from 7:00 P.M. to 7:00 A.M. During the hours of 7:00 A.M. to 7:00 P.M., the noise levels permitted may increase a maximum of five (5) decibels for a period not to exceed fifteen (15) minutes in any one (1) hour.

1. **Measured Along Property Boundary.** Noise levels shall be measured at any point along any boundary line of the property on which the use is located.

2. **Measurement When There Are Multiple Uses on a Single Parcel.** Where more than one (1) use is located on a property, then the noise levels shall also be measured along any wall of any other building on the property.

B. Vibration Generated. Every use shall be so operated that it does not inherently and recurrently generate a ground vibration that is perceptible, without instruments, at any point along any boundary line of the property on which the use is located. Where more than one (1) use is located on a property, then this standard shall also be measured along any wall of any other building on the property.

SECTION 4-530. SMOKE AND PARTICULATE STANDARDS

A. Smoke Emission. Every use shall be so operated that it does not emit smoke exceeding a density (opacity) of twenty (20) percent.

B. Emission of Particulate Matter. Every use shall be so operated that it does not emit particulate matter exceeding two-tenths (0.2) grains per cubic foot of the flue gas at a stack temperature of five hundred (500) degrees Fahrenheit.

C. Projection of Dust or Fumes. Every use shall be operated so that dust or fumes shall not project beyond the boundary line of the property on which the use is located. Where more than one (1) use is located on a property, then each use shall be operated so that dust or fumes do not project onto any wall of any other building on the property.

SECTION 4-540. HEAT, GLARE, RADIATION AND ELECTRICAL INTERFERENCE

Every use shall be operated so it does not emit a dangerous or discomforting degree of heat, glare, radiation or electrical interference and does not interfere with the normal operation of other equipment or instruments, including normal radio or television reception beyond any boundary line of the property on which the use is located. Sources of emissions shall be shielded, operated indoors or pointed away from neighboring properties. Where more than one (1) use is located on a property, then these standards shall also apply along any wall of any other building on the property.

SECTION 4-550. STORAGE OF HAZARDOUS AND NON-HAZARDOUS MATERIALS

A. Storage of Hazardous Materials.

1. **Flammable or Explosive Materials.** Flammable or explosive liquids, solids, or gases shall be stored so as to comply with all applicable local, state and federal regulations, with particular attention to any standards adopted by the applicable fire district. Hazardous materials stored on-site shall be reported to the County's Emergency Planning Committee, in compliance with the Superfund Amendments Reauthorization Act, Title III, as amended.

2. **Outdoor Storage in Closed Containers.** All materials or wastes which might cause fumes or dust or that constitute a fire hazard or that may be edible by or otherwise be attractive to vectors may be stored outdoors only when stored in closed containers.

3. **Safety.** More restrictive standards for the storage of hazardous materials may be applied when required for the safety of occupants of other land uses in proximity to the storage area or to address other pertinent neighborhood conditions.

B. Enclosure. All outdoor storage for commercial and industrial uses shall be enclosed by a sight-obscuring fence, wall or landscaped berm, concealing it from view from adjacent properties and, if possible, from any public right-of-way. The fence or wall shall not exceed eight (8) feet in height, and shall be built according to plans submitted to and approved by the Planning Director, to ensure its design and materials do not detract from adjacent uses.

C. Prevent Transfer By Natural Causes. No materials or wastes shall be stockpiled, deposited or otherwise placed upon a property in such form or manner that they may be transferred off the property by natural causes or forces.

SECTION 4-560. WATER QUALITY STANDARDS

No water pollutant shall be discharged by manufacturing or other processing, unless otherwise permitted by the Colorado Water Quality Control Division. In a case in which potential hazards exist, it shall be necessary to install safeguards and mitigation acceptable to the County Environmental Health Manager and in compliance with the laws of the State of Colorado and the Environmental Protection Agency before operation of the facility may begin. All required site tests, including but not limited to percolation tests, groundwater resource tests and drainage and discharge analysis, as may be required, shall be accomplished before operation of the facilities may begin.

DIVISION 4-6. IMPROVEMENTS STANDARDS

SECTION 4-600. PURPOSE

This Division sets forth the minimum design criteria and standards for infrastructure development in unincorporated Eagle County. The criteria and standards are intended to protect and promote the public health, safety and welfare of the residents and visitors of Eagle County.

SECTION 4-610 APPLICABILITY

A. General Improvements and their appurtenances within unincorporated Eagle County shall be planned and designed in compliance with this Division. These standards shall apply to all development that occurs within unincorporated Eagle County.

1. **Minimum Requirements.** The designer should be aware that whenever unusual or complex circumstances are anticipated in conjunction with a proposed development, additional information or analysis beyond the minimums set forth herein may be required by the County Engineer.

2. **Standards Are Not Inflexible.** These design criteria and standards provide a certain level of performance, however, they are not inflexible. If an alternate design, procedure, or material can be shown to provide performance and/or environmental sensitivity which reflects community values equal to or better than that established by these standards, said alternative may be recommended for approval by the County Engineer. In evaluating the proposed

alternate the County Engineer shall follow the procedures in Section 5-260.G., Variance From Improvement Standards. The County Engineer's evaluation shall consider whether the alternative will provide for an equivalent level of public safety and whether the alternative will be equally durable so that normally anticipated user and maintenance costs will not be increased.

3. **Plans Shall Be Prepared By Professional Engineer.** All plans, reports and specifications for development or redevelopment of improvements addressed within this Division shall be prepared by, or under the direct supervision of, a Professional Engineer, licensed in the State of Colorado. Final public improvement plans, reports and specifications shall bear the seal and signature of the Professional Engineer responsible for their preparation.

C. Public Improvements Guarantee. Applicable public improvements shall be guaranteed pursuant to Section 5-240, Planned Unit Development (PUD) District, Section 5-250, Special Uses, Section 5-280, Subdivision, or Section 5-290, Minor Subdivision.

SECTION 4-620 ROADWAY STANDARDS

A. Intent. The intent of these standards is to promote and provide a system of county roads that blend with and fit the mountainous terrain and environment of Eagle County and, outside of the primary arterial corridors in the County, to protect the country road ambience enjoyed and desired by residents and visitors alike, and to allow for maximum creativity of the designer in achieving these goals. These standards provide the designer the means of designing and constructing or reconstructing improvements and other infrastructure that offers maximum convenience to the user at minimum cost, both initially at the time of construction and in the future during maintenance, while also providing for basic safety and functional needs to ensure adequate access to all properties for fire, police and other vital services, on a system of roads that is experiencing increasing use.

B. Consistency With Other Standards. These Roadway Standards are generally consistent with the recommendations of the American Association of State Highway and Transportation Officials (AASHTO) and those of the Institute of Transportation Engineers (ITE). These standards also reflect the guidelines and recommendations of the Colorado Department of Transportation (CDOT), Transportation Research Board (TRB), United States Forest Service (USFS), National Park Service (NPS), Bureau of Land Management (BLM), Manual on Uniform Traffic Control Devices (MUTCD), and others. If there is a difference in the standards set forth in this Division and those referenced in any manual referenced in this Division, then the standards set forth in this Division shall govern.

1. **Conformance with Colorado Highway Commission Standards.** C.R.S. ' 43-2-114 states that the general standards for county primary roads shall be those adopted by the Transportation Commission for the state highway system for the corresponding class of county road in the state highway system. The Colorado Highway Commission adopted and approved said standards by Resolution No. 2297-D on June 20, 1991. The *1991 Standard Specifications for Road and Bridge Construction* identified in that Resolution incorporates the ***1990 Roadway Design Manual***, published by CDOT, and also incorporates the geometric design standards of AASHTO. The County road improvement standards that are contained herein are intended to be in conformance with AASHTO.

   a. All guardrail that is to be constructed within Eagle County rights of way must conform to the current Colorado Department of Transportation Standards and

Specifications for Road and Bridge Design and the Standard Plans M&S Standards. *(orig 3/12/02)*

b. U.S. Department of Transportation Federal Highway Administration Metric Standard Steel Backed Guardrail Type A and B, designated as M617-60 and M617-61, may be installed on roads which are maintained by private entities, such as metro districts. *(orig 3/12/02)*

2. Conformance With 1990 Road Design Manual. The County road improvement standards presented herein are intended to apply to roadways having or projected to have traffic volumes of three thousand (3,000) vehicles per day or less.

a. Roads Having Greater Volumes. The design of any roadway having, or projected to have, a volume of traffic greater than three thousand (3,000) vehicles per day shall be in compliance with the ***1990 Roadway Design Manual***, Sections 100 through 1000, inclusive. The design for such roadways shall also consider such other pertinent factors as are identified by the County Engineer, including, but not necessarily limited to, greater setbacks for noise buffering; climbing lanes; paved shoulders for ease of maintenance, safety and for non-motorized use for bicycles and pedestrians; acceleration/deceleration turn lanes; greater access control to protect the roadway's carrying capacity; and curve widening based on truck traffic.

b. Local Roads. Local roads are defined in the ***1990 Roadway Design Manual*** as roads primarily for access to a residence, business, or abutting property. Their design is addressed in Section 1100 of the Design Manual. The County improvement standards also accommodate lesser design criteria. The alternate standards for off system and low volume roads are in conformance with the minimum criteria presented in AASHTO's 1994 ***A Policy on Geometric Design of Highways and Streets***. The alternate standards are envisioned to cover both construction and reconstruction of roads and to recognize the importance of sight distance as a safety requirement in the construction or reconstruction of roads.

C. Functional Classifications Under ISTEA. The functional classifications contained herein are meant to compliment and supplement the Highway Functional Classifications used by the U.S. Department of Transportation. Under the Intermodal Surface and Transportation Efficiency Act (ISTEA), enacted in 1991, all higher category roads in the United States were classified. In Eagle County the classifications under ISTEA are as follows:

1. Principal Arterials, Interstate. I-70 is the only principal interstate arterial in unincorporated Eagle County.

2. Principal Arterials, Other Freeways or Expressways. There are no freeways or expressways in unincorporated Eagle County.

3. Other Principal Arterials. Highway 82 is the only other principal arterial in unincorporated Eagle County.

4. Minor Arterials. Highway 24 and Highway 131 are the only minor arterials in unincorporated Eagle County.

5. **Major Collectors.** The major collectors in unincorporated Eagle County are Highway 6, Brush Creek Road, Cottonwood Pass Road including Gypsum Creek Road connecting to Highway 6 in Gypsum, Fryingpan Road and Trough Road.

6. **Minor Collectors.** The minor collectors in unincorporated Eagle County are Colorado River Road, Cooley Mesa Road, Deep Creek Road, El Jebel Road/Upper Cattle Creek Road, Gypsum Creek Road, Homestake Road, and Sweetwater Road.

7. **Local Roads.** All other roads in unincorporated Eagle County are classified as local roads.

D. Functional Classifications By County. In addition to the road classifications under ISTEA, Eagle County classifies other roads in the county as Major and Minor Collector Roads, both Rural and Urban, due to their functional characteristics as defined by AASHTO. The user of these Improvement Standards may, therefore, find a dual classification for some Eagle County roads. For administrative and design purposes, roads shall be classified as shown in Classification of Roads in Eagle County. The current classification is attached hereto as Appendix C and will be replaced as the classification is amended from time-to-time by the County Engineer. Roads within the jurisdiction of unincorporated Eagle County are classified as follows: *(am 9/27/99)*

1. **Rural Major Collectors.** Rural major collectors serve as inter-county and intra-county routes in Resource zone districts that handle traffic volumes of up to three thousand (3,000) vehicles per day and more as they pass through urban and suburban areas. The lengths of such roads are generally significant in extent. Surfaces can be either gravel or pavement, as dictated by traffic volumes. Design and posted speeds range from thirty (30) to sixty (60) mph. On-street parking on such roads is prohibited and off-street parking must be specifically provided for. Access is regulated and intersection spacing is at least one-half (0.5) mile. Traffic noise from such roads on adjacent uses may be mitigated.

2. **Rural Minor Collectors.** Rural minor collectors serve as intra-county roads of moderate length connecting residential areas to commercial and industrial areas, and to major collectors in Resource zone districts that handle traffic volumes up to four hundred (400) vehicles per day. They may also traverse considerable distance. Design and posted speeds range from twenty (20) to forty (40) mph, depending upon terrain. Surfaces are treated gravel or pavement, depending on traffic volumes. Access to adjacent properties is limited and may require turn lanes, depending on traffic volumes. Intersection spacing ranges from six hundred (600) feet when design speeds are at or above thirty-five (35) mph, to three hundred (300) feet at design speeds below thirty-five (35) mph. On-street parking on such roads is prohibited and off-street parking must be specifically provided for.

3. **Rural Access Roads.** Rural access roads are country in nature, access ranch areas or public lands in Resource zone districts that handle a very low volume of traffic (less than fifty [50] vehicles per day) on gravel or dirt surface roads. Design and posted speeds range from fifteen (15) to twenty-five (25) mph, depending upon terrain. Though tangent sections are narrow, curves are widened generously to accommodate recreational vehicles, particularly if they are towing another vehicle, or to accommodate logging trucks. Turnouts are provided as terrain permits, however, the maximum spacing on turnouts should not exceed one-half (0.5) mile.

4. **Rural Residential Roads.** Rural residential roads generally serve development that has not

been clustered in the Resource Limited (RL), Agricultural Residential (AR), Agricultural Limited (AL), and Rural Residential (RR) zone districts. Rural residential roads include rural residential collector roads and internal rural residential roads.

a. **Rural Residential Collector Roads.** Rural residential collector roads are generally moderate in length (less than four [4] miles) and handle traffic volumes of less than 3,000 vehicles per day. These roads serve as a transition between higher classification roads and the associated residential area. Direct lot access is generally discouraged, and requires specific approval by the County Engineer. Design and posted speeds are generally terrain dependent and relatively low, in the range of twenty-five (25) to thirty-five (35) mph.

b. **Internal Rural Residential Roads.** Internal rural residential roads generally have lot frontages of greater than two hundred (200) feet and handle traffic volume of less than two hundred-fifty (250) vehicles per day. Paved roads with side ditches and culverts generally serve well for these roads. Paths or sidewalks are not generally provided and on street parking is prohibited. Design speeds range from twenty (20) to thirty (30) mph.

5. **Suburban Residential Roads.** Suburban residential roads serve development that has not been clustered in the Residential Suburban Low Density (RSL) and Residential Suburban Medium Density (RSM) zone districts. Suburban residential roads include suburban residential collector roads and internal suburban residential roads.

a. **Suburban Residential Collectors.** Suburban residential collectors are generally short in length (less than one (1) mile) and handle traffic volumes of less than three thousand (3,000) vehicles per day. Design speeds vary from twenty (20) to thirty (30) mph, dependent upon terrain, and direct residential lot access is prohibited. Extensive berming and planting are generally necessary along these roads to provide a buffer between traffic and residents. Suburban residential collectors shall have detached paths and transit facilities may be required as part of the street system. Attached paths are permitted where terrain mandates such designs. On street parking shall be prohibited. Internal Suburban Residential Roads. Internal suburban residential roads are shorts roads, with lengths of less than one-half (0.5) mile road whose segments are encouraged to be discontinuous so the internal roads do not function as collectors. They have design and posted speeds between twenty (20) and thirty (30) mph. Lot frontages are generally between seventy-five (75) feet and one hundred-twenty-five (125) feet. Paved roads with curb and gutter and sidewalks or an extensive paved path system are required. Intersection spacing may range down to three hundred (300) feet.

6. **Urban Residential Roads.** Urban residential roads are generally associated with residential developments and those portions of Planned Unit Development (PUD) zone districts having an urban density. *(am.3/21/06)*

a. **Urban Residential Collectors.** Urban residential collectors are generally very short in length (less than one half [0.5] mile) and handle traffic volumes of less than three thousand (3,000) vehicles per day. They serve to feed traffic into the heart of the associated residential area and serve as a section of road for turn lanes and vehicle

stacking when exiting the area. Direct access onto such roads is prohibited. Design and posted speeds vary from twenty (20) to thirty (30) mph. Berming and planting with detached sidewalks and curb and gutter shall be required.

b. **Internal Urban Residential Roads.** Internal urban residential roads are very short in length (less than one half [0.5] mile) and handle traffic volumes of less than seven hundred-fifty (750) vehicles per day. The segments of these roads are encouraged to be discontinuous so they do not function as collectors. These roads are paved with curb and gutter and detached sidewalks are required (paths are not an acceptable substitute). Off-street parking shall be provided and on-street parking shall be prohibited. Transit facilities are required as part of the street system.

7. **Commercial Roads.** Commercial roads serve Commercial Limited (CL) and Commercial General (CG) zoning. Curb and gutter and attached or detached sidewalks are required. Design speed would be twenty-five (25) mph. Off-street parking is typically required, however, on-street parking may instead be appropriate where there are lower traffic volumes. Transit facilities are required as part of the street system, as are street lighting and design features that accommodate pedestrians. The design of commercial roads shall consider intersection sight distance, separation of driveways from intersections, the need for intersection turn lanes, the special needs of single and multi-unit delivery trucks and general traffic movement efficiencies.

8. **Industrial Roads.** Industrial roads serve Industrial (I) zoning. Curb and gutter and attached or detached sidewalks are required, as is off-street parking. Design speed is twenty-five (25) mph. The design of industrial roads shall also consider the special needs of single and multi-unit truck operations and provide intersection and driveway sight distances that are large to allow for the greater time it takes these trucks to enter a roadway.

9. **Urban Cul-de-sacs.** *(am 03/21/06.)* Urban cul-de-sacs are short, dead end roads intended to serve residential or commercial developments in areas serviced by centralized domestic water delivery systems managed by a municipal or special operating district. For the purpose of these regulations, and pursuant to Section 4-620.J.1.h., Dual Access, properties located on an urban cul-de-sac do not require dual or secondary emergency access.

   a. **Maximum Length or Maximum Number of Residential Units.** In general, the maximum length of an urban cul-de-sac shall be 1,000 feet. In larger lot suburban settings the maximum length rule may be interchanged with a provision that allows no more 12 units on each side of the street for a total of twenty five (25) contiguous residential units per road. The Local Fire Authority Having Jurisdiction shall provide a recommendation regarding the design of urban cul-de-sacs for any new development or re-development proposal. Based on the number of units to be served, the wildfire hazard, the placement of fire hydrants and the capacity and pressure of the local water system, it may be determined by the Local Fire Authority Having Jurisdiction that the 1000 foot length or the maximum of 25 dwelling units is excessive.

   b. **Road Design Standards.** The physical characteristics of any urban cul-de-sac road shall be based on applicable provisions of Section 4-620.D., Roadway Standards, Functional Classification By County, unless otherwise determined appropriate by the County Engineer.

c. Turnarounds at Road End. All urban cul-de-sacs shall terminate in a circular, "T" or "L" type turnaround constructed in accordance with Section 4-620.D.11., Vehicle Turnarounds.

d. Non-motorized Pedestrian Links. When urban cul-de-sacs are incorporated in a residential or commercial development, applicants are encouraged to provide non-motorized links between cul-de-sacs, which may be credited towards any applicable requirements for open space or trails for the development.

10. Rural Cul-de-sacs. *(am 03/21/06)* Rural cul-de-sacs are dead end roads longer than 1000 feet in length that serve residential or commercial uses in areas where dual or secondary emergency access is not possible, and/or where centralized domestic water delivery is not available. As a matter of public safety, all reasonable effort shall be made to avoid the use of rural cul-de-sacs.

a. Driveways Exempt. Driveways that serve three (3) or fewer residential units shall not be considered rural cul-de-sacs, but shall be required to conform to Section 4-620.J.9, Access Approaches and Driveways.

b. Year-round Access Required. Rural cul-de-sacs will only be considered in those cases where year-round access can be assured by virtue of minimum grades and flatter curvature.

c. Road Design Standards. The physical characteristics of any rural cul-de-sac road shall be based on applicable provisions of Section 4-620.D., Roadway Standards, Functional Classification By County, unless otherwise determined appropriate by the County Engineer.

d. Emergency Vehicle Turnaround Areas. Emergency vehicle turnaround areas shall be required on rural cul-de-sacs at the initial 1000 foot mark and at 1000 foot intervals for the remaining length of the road. The Local Fire Authority Having Jurisdiction may recommend an alternative spacing plan for turnaround areas. The turnaround shall be constructed in accordance with Section 4-620.D.11, Vehicle Turnarounds.

e. Turnarounds at Road End. All rural cul-de-sac roads shall terminate in a circular, "T" or "L" type turnaround constructed in accordance with Section 4-620.D.11., Vehicle Turnarounds.

f. Water Service. Proposals for residential or commercial development accessed by rural cul-de-sacs shall provide at least one of the following:

(1) An on-site fire fighting water supply source acceptable to the Local Fire Authority Having Jurisdiction; or

(2) Monitored sprinkler systems in all residential and commercial buildings as determined appropriate by the Local Building Official and the Local Fire Authority Having Jurisdiction; or

(3) A combination of items (1) and (2) as determined appropriate by the Local Building Official and the Local Fire Authority Having Jurisdiction.

g. Variance Required Any proposal for development that requires access by a Rural Cul-de-sac shall be required to obtain a variance from Section 4-620.J.1.h., Dual Access as provided herein. The Board of County Commissioners may, at their discretion, grant a variance subject to the provisions of Section 4-620.J.1.h., Dual Access and Section 5-260.G., Variance from Improvement Standards or, in the event that a Planned Unit Development is proposed, subject to the provisions of Section 5-240.F.3.e(8) Improvements.

11. Vehicle Turnarounds

a. Preferred Design. Circular offset turnarounds are preferred, as illustrated in Exhibit 5-8 of ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS***, 2001, published by AASHTO. Cul-de-sacs may also terminate in a "T" or "L" shaped turnaround as illustrated in the above-referenced Exhibit 5-8. *(am 12/17/02) (am.3/21/06)*

b. Minimum Standards for Radii. Cul-de-sacs serving less than ten (10) residential units shall have a minimum thirty (30) foot radius bulb at the end. Cul-de-sacs serving ten (10) or more residential units shall have a minimum forty (40) foot radius bulb at the end. These minimum bulb radii presume the cul-de-sac is bordered by mountable curb or a four foot aggregate base course shoulder. In the event that the cul-de-sac is bordered by a barrier curb, then five (5) feet shall be added to the previously stated minimum radii.

c. Snow Storage. Easements or open space areas of appropriate size to provide adequate snow storage, as determined by the Eagle County Engineer, shall be located immediately adjacent to vehicle turnarounds.

d. Temporary Cul-De-Sacs and Turnarounds. Temporary cul-de-sacs or turnarounds may serve any classification of road, as determined by the County Engineer, to accommodate continuation of the road to adjoining properties when they are developed. These temporary cul-de-sacs or turnarounds must accommodate WB-12 design vehicles, and must be clearly identified as dead end streets through proper signage, in accordance with the MUTCD. The Local Fire Authority Having Jurisdiction shall provide a recommendation regarding the use of temporary cul-de-sacs or turnaround. *(am03/21/06)*

E. Traffic Impact Study. Proposed developments that are expected to generate more than four hundred (400) vehicle trips per day shall conduct a traffic impact analysis to determine the need for additional improvements on roadways affected by the proposed development.

1. Trip Generation Rates. The basis for projected volumes of traffic shall be the trip generation rates for various land use categories found in the latest edition of ***TRIP GENERATION***, published by ITE.

2. Background Traffic Data Not Available. If site specific information on background traffic for the study area is not available, considering existing zoning, then the Twenty (20) Year

Factor for the closest segment of State Highway published by CDOT, Division of Transportation Development, Information Management Branch, shall be used to predict background traffic to be factored into the traffic analysis. In certain instances it may be necessary to use a combination of existing zoning and CDOT's Twenty (20) Year Factor.

3. **Preparation of Analysis.** The traffic analysis shall be prepared using industry accepted standards and practices. It shall be prepared by a Professional Engineer competent in the field of transportation engineering, and shall include such information as current and projected background traffic volumes, projected development traffic volumes, calculated capacity and level of service of existing and proposed roadways and intersections affected by the development, including warrants for turn lanes, channelization and signalization.

F. Design Traffic Volume and Design Period. Key factors in the classification and design of any roadway are the amount (and type) of traffic that the roadway is expected to carry and the time period for forecasting traffic volumes on the roadway.

1. **Design Traffic Volume.** Design traffic volume shall be measured as annual average daily traffic (AADT), except for traffic volumes in excess of four hundred (400) AADT, which shall use the peak hour design hourly volume (DHV) as the basis for the design period.

2. **Design Period.** The design period for the design of new and upgraded roadways shall be twenty (20) years from the forecasted date of completion of the project.

G. Level Of Service. Roadways in unincorporated Eagle County shall function at Level of Service "C" or better. Intersections, both signalized and un-signalized, in unincorporated Eagle County shall function at Level of Service "D" or better. For purposes of this evaluation, these Levels of Service shall be as defined in the latest edition of the ***HIGHWAY CAPACITY MANUAL***, published by the Transportation Research Board. The methodology for computing the Level of Service shall be as specified in the latest edition of the ***HIGHWAY CAPACITY MANUAL***.

H. Right-Of-Way Width. Minimum right-of-way widths for all classifications of roadways in Eagle County are shown in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards. Sufficient right-of-way shall be provided to contain: travel lanes or driving surfaces; curb and gutter, when required; shoulders, drainage side ditches and other structures, when curb and gutter is not required; provisions for snow storage, particularly at higher elevations; utilities; facilities for bicycles and pedestrians, when required; cut and fill slopes and/or retaining walls; and, as applicable, future improvements of the roadway.

1. **Additional Right-of-Way for Rolling and Mountainous Terrain.** The right-of-way widths set forth in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, are the minimum necessary to accommodate roadway construction on level terrain. Additional right-of-way shall be provided to accommodate cuts and fills in rolling and mountainous terrain, considering that the roadway and associated slopes are a structure and should be structurally independent of development on adjacent property. The additional right-of-way for cuts and fills and their buffers may be in the form of a dedicated roadway maintenance easement.

I. Sight Distance.

1. **Setbacks.** Setbacks for structures, as established in these Land Use Regulations, shall be measured from the outside edge of the roadway maintenance easement.

2. **Compliance With AASHTO Manual.** In the design and construction or reconstruction of roadways in unincorporated Eagle County, sight distance shall be provided that complies with the latest edition of ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III***, published by AASHTO. Roadways that operate at functional classifications higher than residential or other low speed urban streets shall also provide sufficient sight distance to allow drivers to occupy the opposing traffic lane while passing slower vehicles without hazard to themselves or others.

3. **Design Considerations.** The greatest impact of providing sufficient sight distance will likely be on the vertical alignment of the roadway. However, horizontal alignment may also be affected by requiring flatter curves, in order to avoid sight obstructions due to terrain, vegetation, or man made features. Roadway design shall take into account the following design considerations:

   a. **Sight Distance Restrictions.** Where an object off the roadway and within the right-of-way such as a guardrail, cut slope, or natural growth restricts sight distance, the minimum radius of horizontal curvature shall be determined by the stopping sight distance.

   b. **No Sight Distance Restrictions.** Where there is no sight distance restriction within the right-of-way, the right-of-way line shall be considered to be the restriction. The necessary stopping sight distance on such horizontal curves may be determined with the aid of Figure 4-620 #1, Stopping Sight Distance On Horizontal Curves. When the design speed and clear distance (M) are known, this figure also provides the minimum centerline radius that satisfies these conditions.

   c. **Sight Distance Restrictions At End of Downgrades.** Where sight distance restrictions occur at the end of downgrades, an increase shall be made in the stopping sight distance in accordance with the values listed in the latest edition of ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III, Table III-2***, published by AASHTO.

   d. **Sight Distance For Passing.** Sight distance adequate for passing should be encountered frequently, at regular intervals. On roadways with high volumes, frequent and long passing sections are essential. On roadways with intermediate to low volumes, the need is not as great, but passing sections are still an important element for efficiency and safety. Passing sight distance for upgrades shall be greater than the derived minimum.

   e. **Meeting Sight Distance.** Meeting sight distance is the sum of the opposing stopping sight distances, or two (2) times the values listed for the various design speeds. Meeting sight distance is encouraged on narrow, low volume roads.

J. Geometric Standards. All roads within unincorporated Eagle County, whether publicly or privately maintained, shall conform to the design standards and requirements shown in Table 4-620.J., Summary of Environmental, Geometric and Design Standards.

SEE SEPARATE 11 X 17 TABLE INSERT:

Table 4-620.J. *SUMMARY OF ENVIRONMENTAL, GEOMETRIC AND DESIGN STANDARDS*.

1. **Horizontal Alignment.** The following special considerations for horizontal alignment shall apply to the design and construction or reconstruction of roadways in Eagle County:

   a. **Compound Curves.** The use of compound curves in proposed alignments is strongly discouraged, due to the potential deception they offer motorists, particularly when traveling from the larger to the smaller radii.

      (1) **Standards When Compound Curves Are Necessary.** If compound curves must be used to allow the roadway to better fit the existing terrain, then the ratio of the flatter radius to the sharper radius shall not exceed 1.5:1. Where feasible, a smaller difference in radii should be used; a desirable maximum ratio is 1.75:1. At intersections where motorists accept more rapid changes in design and speed, the radius of the sharper arc can be as high as a ratio of 2:1.

      (2) **Length.** Curves that are compounded should not be too short or their effect in enabling change from tangent or flat-curve to sharp-curve will be lost.

   b. **Reversal of Alignment.** Any abrupt reversal in alignment should be avoided. Such a change makes it difficult for a driver to keep within his own lane. It is difficult to superelevate both curves adequately, and hazardous and erratic operation of the vehicle may result.

      (1) **Suitable Design.** A reversal in alignment can be designed suitably by including a sufficient length of tangent between the two (2) curves for superelevation runoff, or preferably, an equivalent length with spiral curves. The distance between reverse curves should be the sum of the superelevation runoff lengths and the tangent runout lengths.

      (2) **Sufficient Distance Not Available.** If sufficient distance is not available to permit the tangent runout lengths to return to normal crown section, there is a long length where the edges of pavement and centerline are at the same elevation and poor transverse drainage can be expected. In this case, the tangent runouts may be eliminated and the superelevation runoffs joined, thus providing one (1) instantaneous level section.

      (3) **Tangent Separation Lengths.** Desirable and acceptable tangent separation lengths are shown in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards. A minimum tangent of fifty (50) feet shall be provided between all horizontal curves to facilitate steering and control.

c. **Curves.** The "broken-back" or "flat-back" arrangement of curves (having a short tangent between two curves in the same direction) should be avoided because most drivers do not expect succeeding curves to be in the same direction and because in some cases the "broken-back" alignment will not be pleasing in appearance. Curves will typically not be considered to be in a "broken-back" arrangement when the connecting tangent is of considerable length.

d. **Simple and Spiral Curves.** Figure 4-620 #2, Simple Curve, Figure 4-620 #3, Spiraled Curve, and Figure 4-620 #4, Relationship, Simple vs Spiral Curve, illustrate simple and spiral curves, their derivation and function.

e. **Travel Lane Widening.** To compensate for off-tracking as a vehicle follows a curve (rear wheels tracking inside the front wheels), travel lane widening shall be provided on certain classifications of roadway.

(1) **Standards.** Travel lane widening shall occur on the inside edge of the curve only, with the inside shoulder "kicked" out until a minimum of three (3) feet of shoulder is left. The amount of travel lane widening to be provided is shown in Table 4-620 J.1.e., Lane Widening On Curves.

(2) **Example.** For example, if the required width of shoulder is six (6) feet, up to three (3) of the six (6) feet may be used for inside edge widening. In this example, if four (4) feet of widening is required the total shoulder width would be seven (7) feet. The gravel shoulder available for "cutting the curve" becomes less and encourages traffic to stay on the pavement, and the transition extends over the same length as the superelevation runoff.

f. **Switchbacks.** Switchbacks are generally not considered a good roadway design solution, but may be the only alternative for gaining elevation in mountainous terrain.

(1) **Minimum Tangent Separation.** When switchbacks must be used, each switchback shall have a tangent separation of not less than two (2) times the minimum stopping sight distance from the last or next switchback, adjusted for grade in accordance with the latest edition of ASSHTO's ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III, Table III-2., Effect of grade on stopping sight distance - wet conditions.*** This is especially important on hillsides, on slopes steeper than twenty (20) percent, and where visually, switchbacks will create a major impact.

Table 4-620 J.1.e., Lane Widening on Curves (Reserved)

INSIDE LANE WIDENING, IN FEET, FOR TWO-LANE ROADWAYS WITH A TANGENT WIDTH OF:

Degree of Curve	24 Feet Design Speed, mph				22 Feet Design Speed, mph							20 Feet Design Speed, mph						Degree of Curve	18 Feet Des. Spd.		16 Feet Des. Spd.	
	35	40	50	60	20	25	30	35	40	50	60	20	25	30	35	40	50		20	25	20	25
1	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	3.5	3.5
2	0.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2	1.5	1.5	3.5	3.5
3	0.0	0.0	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	3	1.5	1.5	3.5	3.5
4	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	4	1.5	2.0	3.5	4.0
5	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.5	2.5	2.5	3.0	5	1.5	2.0	3.5	4.0
6	0.5	1.0	1.0		1.0	1.5	1.5	1.5	2.0	2.0		2.0	2.5	2.5	2.5	3.0	3.0	6	2.0	2.0	4.0	4.0
7	1.0	1.0			1.5	1.5	1.5	2.0	2.0	2.5		2.5	2.5	2.5	3.0	3.0	3.5	7	2.0	2.0	4.0	4.0
8	1.0	1.0			1.5	1.5	2.0	2.0	2.0			2.5	2.5	3.0	3.0	3.0		8	2.0	2.0	4.0	4.0
9	1.0	1.5			1.5	2.0	2.0	2.0	2.5			2.5	3.0	3.0	3.0	3.5		9	2.0	2.0	4.0	4.0
10	1.5	1.5			1.5	2.0	2.0	2.5	2.5			2.5	3.0	3.0	3.5	3.5		10	2.0	2.5	4.0	4.5
11	1.5	1.5			2.0	2.0	2.0	2.5	2.5			3.0	3.0	3.0	3.5	3.5		11	2.0	2.5	4.0	4.5
12	1.5				2.0	2.0	2.5	2.5	3.0			3.0	3.0	3.5	3.5	4.0		12	2.0	2.5	4.0	4.5
13	2.0				2.0	2.5	2.5	3.0	3.0			3.0	3.5	3.5	4.0	4.0		13	2.5	2.5	4.5	4.5
14	2.0				2.0	2.5	2.5	3.0	3.0			3.0	3.5	3.5	4.0	4.0		14	2.5	2.5	4.5	4.5
15–16					2.5	2.5	3.0					3.5	3.5	4.0				15.	2.5	2.5	4.5	4.5
17–18					2.5	3.0	3.0					3.5	4.0	4.0				16–20	2.5	3.0	4.5	5.0
19–20					3.0	3.0	3.5					4.0	4.0	4.5				21–23	3.0	3.0	5.0	5.0
21–23					3.0	3.5	4.0					4.0	4.5	4.5				24–29	3.0	3.5	5.0	5.5
24–27					3.5	4.0						4.5	5.0					30–39	3.5	3.5	5.5	5.5
28–32					4.0	4.5						5.0	5.5					40–50	4.0		6.0	
33–36					4.5							5.5										
37–41					5.0							6.0										
42–46					5.5							6.5										
47–50					6.0							7.0										
51–55					6.5							7.5										
56–60					7.0							8.0										

NOTES: For values less than 2.0 feet lane widening is not necessary.

Where semitrailers are significant, increase tabular values of widening by 0.5 for curves of 10° to 16°, and by 1.0 for curves 17° and sharper.

EAGLE COUNTY ENGINEERING DEPARTMENT	LANE WIDENING ON CURVES	TABLE 4-620 J.1.e
	DRAWN / REVISED	SHEET 1 OF 1

(2) Direct Lot Access. Direct lot access is not permitted on the tangent sections between switchbacks that are separated by the minimum distance outlined above. To gain lot access on the tangent section separating the switchbacks there must be the required minimum sight distance from intersecting streets and driveways from both switchbacks, as shown in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards.

(3) Lane Widening. Lane widening for switchback curves shall reflect AASHTO Design and Traffic Condition III-C. The minimum allowable centerline radius for switchback curves is shown in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards. The eighty (80) foot minimum radius is based on the recommendations of the ***Model Regulations For Protecting People and Homes From Wildfire in Subdivisions and Developments*** promulgated by the Colorado State Forest Service. A review of multiple-unit vehicle turning radii and pavement width occupation shows that an eighty (80) foot radius is the minimum radius a large vehicle can make and yet not occupy more than its own lane, even with travel lane widening on the inside of curves.

g. Street Pattern. The street pattern in the proposed development shall generally conform to any adopted County master plan for future development of the adjoining areas. Proposed streets or roadways within three (3) miles of any incorporated municipality shall conform to the street system and standards or official street plan of said incorporated municipality.

(1) Continuity of Alignment. Where appropriate to the design, the streets shall be continuous and in alignment with the existing platted streets with which they are to connect.

(2) Extend to Boundary Lines. Proposed streets shall be extended to the boundary lines of adjacent land, if the applicable adopted County Master Plan indicates the adjacent land will be suitable for development, unless the extension is prevented by topography or other physical conditions.

h. Dual Access. With the exception of properties proposed to be served from the public roadway system by driveways or by urban cul-de-sacs, two (2) points of ingress/egress to the public roadway system shall be provided, such that in the event a road within the subdivision becomes impassable, all properties will continue to have access to a public roadway system. Both points of access should be open and available for daily use. In the event that this is not possible, and at a minimum, there shall be provided a secondary emergency point of ingress/egress equipped with emergency breakaway barriers capable of accommodating emergency response vehicles commonly operated by the Local Fire Authority Having Jurisdiction for all new development or redevelopment. Secondary emergency access points must be kept free of obstruction, and must be maintained to assure year round use. Depending upon the length of the road, the wildfire hazard rating, the number of units proposed, the topography and the recommendation of the Local Fire Authority Having Jurisdiction, the Board of County Commissioners may, at their discretion, grant a variance from this required improvement standard. *(am. 03/21/06)*

2. Vertical Alignment. The following special considerations for vertical alignment shall apply to the design and construction or reconstruction of roadways in Eagle County:

a. Terrain Classification. Terrain in Eagle County can be characterized within one (1) of the following three (3) categories:

(1) Level Terrain. Level terrain is that condition where roadway sight distances, as governed by both horizontal and vertical restrictions, are generally long or could be made so without construction difficulty or major expense. The average natural cross slopes on level terrain are less than eight (8) percent.

(2) Rolling Terrain. Rolling terrain is that condition where the natural slopes consistently rise above and fall below the roadway grade and where occasional steep slopes offer some restriction to normal horizontal and vertical roadway alignment. The average natural cross slopes on rolling terrain are between eight (8) percent and fifteen (15) percent.

(3) Mountainous Terrain. Mountainous terrain is that condition where longitudinal and transverse changes in the elevation with respect to the roadway are abrupt and where benching and side hill excavation are frequently required to obtain acceptable horizontal and vertical alignment. The average natural cross slopes on mountainous terrain are greater than fifteen (15) percent.

(4) Combination of Terrain Types. A parcel may contain all or any combination of these terrain types. Terrain that has varying characteristics shall be classified within the above categories, and shall provide a transition in design speed between each category in five (5) mph increments, spaced seven hundred-fifty (750) feet apart. Ten (10) mph increments may be considered for approval by the County Engineer upon the applicant's demonstration that circumstances warrant. Part of this determination shall be based on the review of cross sections and cost estimates for both cases prepared by the applicant's engineer.

b. Maximum Grade. The maximum grade for each classification of roadway in Eagle County is illustrated in Table 4-620 J, Summary Of Environmental, Geometric And Design Standards.

(1) Ability to Negotiate Grade. A maximum grade of eight (8) percent is generally negotiable under year-round conditions by two (2) wheel drive vehicles with mud and snow tires where stopping and starting are not required. Steeper grades may require four (4) wheel drive and/or studded mud and snow tires under winter snow and ice conditions.

(2) Maximum Grade in Suburban and Urban Areas. A maximum grade of six (6) percent is more appropriate for suburban and urban areas, where the frequency of stopping and starting is increased.

(3) Special Design Considerations. Special design considerations regarding grades are required for intersections and driveway approaches and on switchback curves (see sub-sections 4-620 J.4., Intersections, 4-620 J.9., Access Approaches and Driveways, and 4-620 J.1.f, Switchbacks).

(4) Low Volume Roadways. On low volume roadways (AADT of four hundred [400] vehicles or less) grades may be increased to one hundred-fifty (150) percent of the stated desirable values in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, for a tangent distance not to exceed five hundred (500) feet on southern facing slopes only, subject to the approval of the County Engineer. There shall be no access approaches in the segment with the increased grade.

c. Vertical Curves. Vertical curves shall conform to the criteria set forth in the latest edition of ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III***, published by AASHTO.

(1) Grade Breaks. The use of grade breaks, in lieu of vertical curves, is not encouraged. However, if a grade break is necessary and the algebraic difference in grade does not exceed four-tenths (0.4) percent when curb and gutter is used, the grade break will be permitted, except at intersections, where algebraic differences in grade of eight-tenths (0.8) percent will be permitted to facilitate the warping of the side street to meet the through street.

(2) Rural Roads. On rural roads not bordered by curb and gutter, vertical curves are not required when the algebraic difference in grade is one (1) percent or less.

(3) Sag Vertical Curves. The minimum grade within a sag (sump) vertical curve is one-half (0.5) percent. This will require manual calculations and labeling at the low point of the sag vertical curve.

d. Cross Slope.

(1) Roadways Shall Be Level. Except at intersections, or where superelevation is required, roadways shall be level, as measured perpendicularly, from top of finished edge of pavement to top of finished edge of pavement, or from top of curb to top of curb when curb and gutter is required and shall have a two (2) percent crown as measured from centerline to finished edge of pavement, or lip of gutter when curb and gutter is required, or lip of median curb to lip of outside curb on roadways with raised center islands. Parabolic or curved crowns are not allowed.

(2) Warped Intersections. Maximum pavement cross slope allowed is four (4) percent at warped intersections, as measured above. In no case shall the pavement cross slope at warped intersections exceed the grade of the through street. The rate of change in pavement cross slope, when warping side streets at intersections, shall not exceed one (1) percent every twenty-five (25) feet horizontally on low volume residential roads and streets, one (1) percent every thirty-seven and one-half (37.5) feet horizontally on suburban and urban residential streets, or one (1) percent every fifty-six and one-half (56.5) feet horizontally on collector roads and streets.

3. Superelevation. Horizontal curve radius and superelevation shall be in accordance with the recommendations of the latest edition of AASHTO's ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III***. The following procedure is an outline for the correct application of superelevation. Further information on this method is available in AASHTO's ***A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, Chapter III***, 1994. Super Diagrams and Plot Exaggerated Profiles are not mandatory, but may be required by the County Engineer to evaluate proposed roadways.

a. Horizontal Centerline Radius, Degree of Curvature and Centerline Design Grade. Establish horizontal centerline radius, degree of curvature and centerline design grade. Centerline design grade shall be the actual centerline of roadways without raised medians, or median top of curb, or flowline or lip of median gutter (which shall be level across the median except at turn lanes) on roadways with raised medians. The method of attaining superelevations shall be rotation about the centerline on roadways without raised medians or rotation about the median top of curb on roadways with raised medians.

b. Rate and Length of Superelevation Runoff. Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, shall be used to determine the rate of superelevation and length of superelevation runoff required for the degree of curvature. Superelevation runoff is that length of roadway needed to accomplish the change in cross slope from a section with the adverse crown removed (flat) to the fully superelevated section, or vice versa.

c. Super Diagram. Use the information obtained from Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, to construct a "super diagram". The "super diagram" is a design aid used to establish the length of tangent runout required, and pavement cross-slopes generated through the transition from the normal cross section to full superelevation, or vice versa. Intervals at which pavement cross slopes are read shall not exceed twenty-five (25) feet and should be read at even twenty-five foot (25) stations along centerline (7+25, 7+50, not 7+28.79, 7+53.79). Tangent runout is that length of roadway needed to accomplish the change in cross slope from a normal (two [2] percent) crown section to a section with the adverse crown removed (flat), or vice versa.

Note: The superelevation runoff is located about the horizontal P.C. or P.T. of the curve at a two-thirds/one-third (2/3:1/3) ratio, with approximately two-thirds (2/3) of the total length required for the superelevated runoff being achieved prior to the P.C. or after the P.T. of the curve. The point at which the superelevation runoff begins or ends should be at the nearest five (5) foot station.

d. Plot Exaggerated Profile. Plot an exaggerated profile of the centerline or median top of curb using the grade originally established. Next plot both of the outer tops of curb or flowlines or lips of gutter, setting elevations radial to centerline by using the pavement cross slopes derived from the super diagram. Smooth the resultant grade of the outer tops of curb by the use of spline or french curves, if necessary. Read new elevations on these adjusted grades. Scale for this exaggerated profile shall be one (1) inch equals twenty-five (25) feet or larger horizontally and one (1) inch equals one (1) foot vertically.

e. Transfer to Normal Scale. Transfer all of the information on the exaggerated profile to the profile of the construction plan at normal scale.

f. Add Labels and Submit. Label, at each transition point in the plan view of the construction plan, the name, station, elevation, and rate of superelevation. Also, label each point by station and elevation where the pavement cross slope is one (1) percent, either direction, for the purpose of locating inlets to intercept cross pavement drainage flows if curb and gutter are required. Submit the super diagram(s) and exaggerated profiles for concurrent review with the public improvement plans.

4. Intersections. The following standards shall apply at intersections:

a. Through Street Takes Precedence. The grade of the "through" street shall take precedence at all intersections. At intersections of roadways with the same classification, the more important roadway, as determined by volume of traffic, shall have this precedence. Warp side streets to match through streets with as an effective and short transition as possible.

b. Design Factors. Factors that shall determine the elevation of the point of curb or edge of pavement return on the side street and the amount of warp needed on a side street transitioning to a through street are:

(1) Permissible Grade. Permissible grade in the stop/start lane, as described in sub-section 4-620 J.5., Intersection Grade.

(2) Pavement Cross Slope. Pavement cross slope at the Point of Curb Return or Beginning/End of Curve on the side street and permissible warp in pavement cross slope, as described in section 4-620 J.2.d., Cross Slope.

(3) Vertical Curve Criteria.

(4) Curb Returns. Vertical controls within the curb return itself, as described in sub-section 4-620 J.6., Curb Returns.

c. Elevation. The elevation at the P.C.R. of the curb return or B.C. on the through street shall be set by the grade of the through street in conjunction with normal pavement cross slope (two [2] percent) or the rate of superelevation.

d. Crown of the Side Street. Carrying the crown of the side street into the through street is not permitted.

e. Dipping the Flowline. Dipping the flowline to the extent that the lip of gutter is dipped is not permitted, except as required for a CDOT Type R Curb Inlet, Standard M-604-12. Tipping an inlet for the benefit of drainage is also not permitted.

f. Major Intersections. At a major collector-major collector intersection, a more detailed review of the entire intersection's driveability will be required. Few major intersections will have a uniform two (2) percent cross slope, the majority of them having one or more sides warped. See sub-section 4-620 J.2.d., Cross Slope, for information concerning warping of pavement at intersections.

g. Curb and Gutter. When curb and gutter is required, separate flowline profiles, and pavement cross slopes in the plan view may also be required by the County Engineer. Spot elevations in the intersection shall also be shown, on the plan view, on a fifteen (15) foot grid. This information shall be shown on separate plan and profile sheets at a scale of one (1) inch equals twenty (20) feet horizontally and one (1) inch equals two (2) feet vertically.

5. Intersection Grade. The first twenty (20) feet beyond the edge of the traveled way of the through street, including any necessary speed change lanes, shall slope down and away from the through street at a grade of two (2) percent. The transition back to the side street grade shall be accomplished in a minimum fifty (50) foot vertical curve. The maximum grade at intersections, including private driveway approaches to public roadways, shall be three (3) percent at flowline or edge of pavement and centerline (stop/start lane shall be as shaded in Figure 4-620 #5, Transition Distances for Permissible Intersection Grades, for the distances shown in the table that accompanies Figure 4-620 #5.) At intersecting major collectors the maximum permissible grade will be two (2) percent for two hundred (200) feet either side of the intersection on both sides of the roadway.

Figure 4-620 #5 - Transition Distances for Permissible Intersection Grades

	Rural Access	Residential	Collector	Commercial and Industrial
Driveway	20'	30'	40'	50'
Rural Access	30'	40'	40'	N/A
Residential	40'	50'	60'	80'
Collector	40'	60'	80'	100'
Commercial and Industrial	N/A	80'	80'	100'

6. Curb Returns. When curb and gutter is required, minimum fall around curb returns when turning water shall be six-tenths (0.6) of a foot for a thirty (30) foot return radius and one (1) foot for a fifty (50) return radius. For other curb return radii, a grade of one and twenty-seven hundredths (1.27) percent shall be used within the return to establish minimum fall when turning water.

7. Curb Return Profiles. When curb and gutter is called for in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, curb return profiles shall be required at every curb return in the public way within the proposed development, except on medians, in accordance with the following design procedure. These profiles are to be used for construction staking of the curb return. The following information is provided on curb return profiles:

a. Elevation. Determine the elevation at each P.C.R. of the curb return according to sub-section 4-620 J.4., Intersections.

b. Arc Length. Calculate the arc length of the return at its flowline.

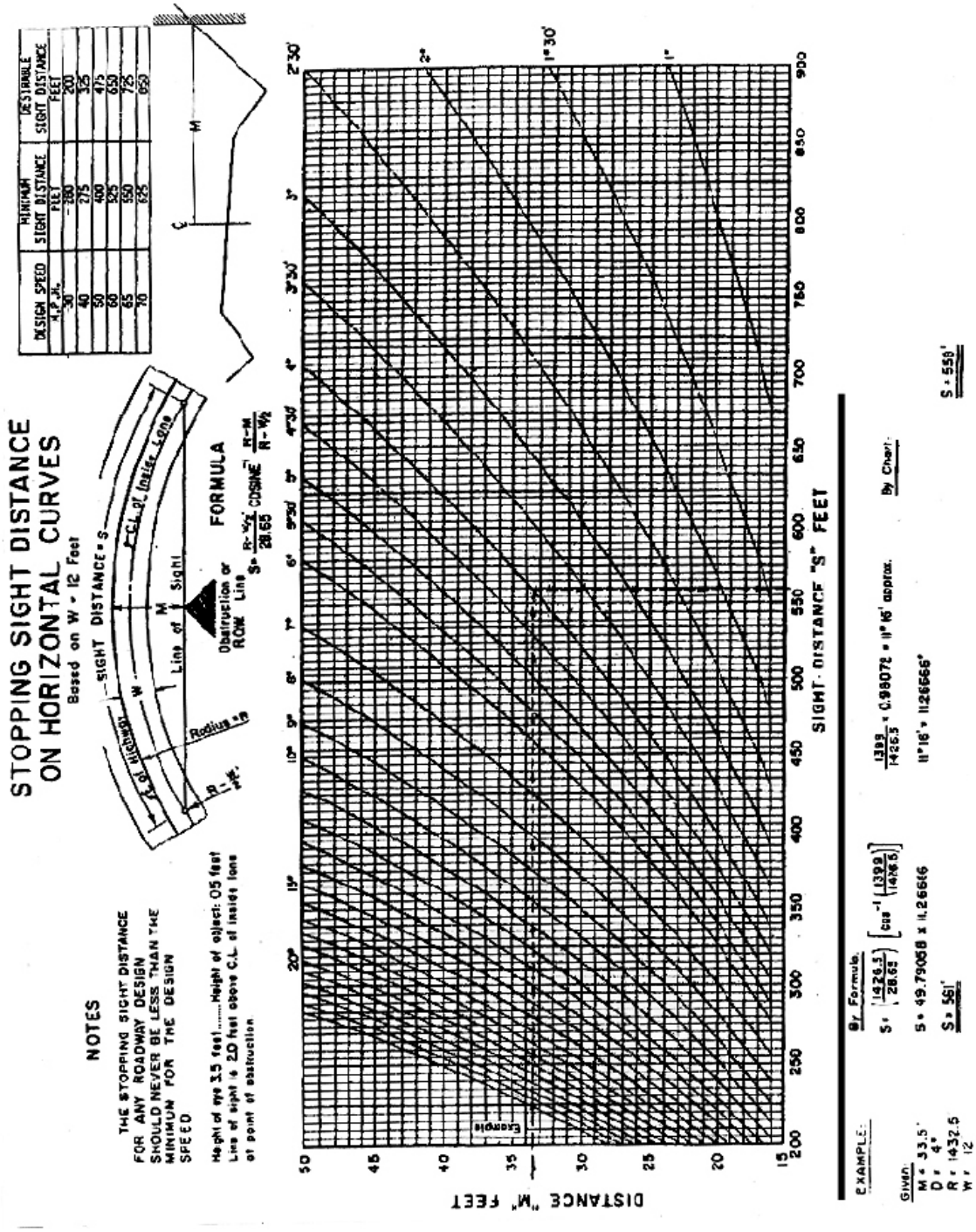
c. Flowline Grade. Show the corresponding flowline (or top of curb) grade for the roadway beyond the return at each P.C.R.

d. Extend Grades Until They Intersect Within the Return. The above corresponding grades shall be extended until they intersect, somewhere within the return (Figure 4-620 #6, Curb Return/Edge of Pavement Profile "A"). The grades may intersect near or outside either P.C.R., so long as the vertical difference in grades does not exceed two-tenths (0.2) of a foot at either P.C.R. (Figure 4-620 #7, Curb Return/Edge of Pavement Profile "B"). In this case, a line is drawn inside the return and two (2) percent vertical curves are used at the intersections. It may be necessary to revise the grade of the intersecting side street to obtain an acceptable curb return profile (Figure 4-620 #8, Curb Return/Edge of Pavement Profile "C"), however, the "through" street is never warped to facilitate this. See sub-section 4-620 J.4., Intersections.

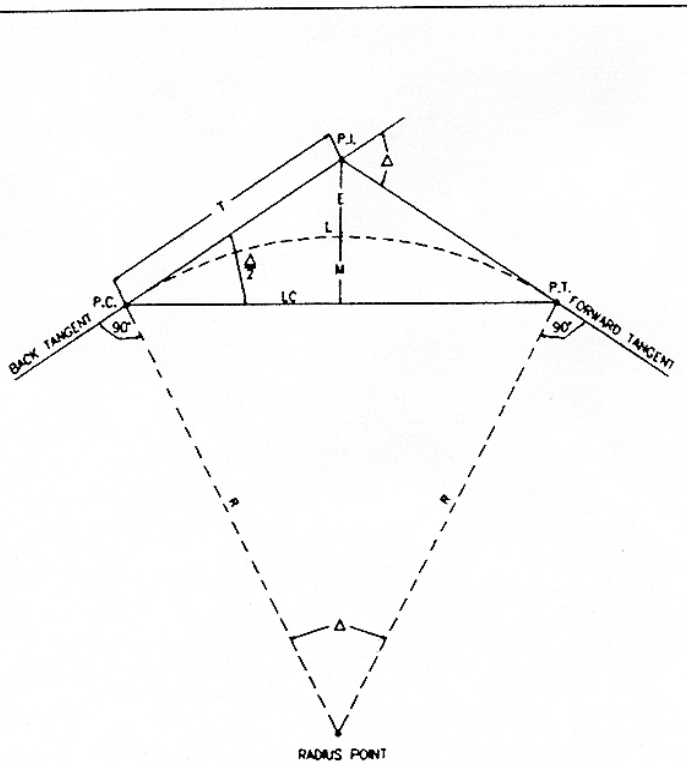
e. **Vertical Curves and Elevations.** Vertical curves within the return may be drawn in with french or railroad curves. Elevations of at least two points between each P.C.R., at spacing not to exceed fifteen (15) feet shall then be shown in the profile. These points shall be evenly spaced between the P.C.R.'s so as to divide the arc length of the curb return at flowline into equal segments. The elevation and location of the high or low point within the return, if applicable, is to be called out in the profile and on the plan view.

f. **Scale.** Scale for the curb return profile shall be one (1) inch equals ten (10) feet horizontally and one (1) inch equals one (1) foot vertically.

Reserved for CDOT Table: Stopping Sight Distance on Horizontal Curves



DESIGN SPEED M.P.H.	MINIMUM SIGHT DISTANCE FEET	DESIRABLE SIGHT DISTANCE FEET
30	200	200
40	275	325
50	400	475
60	525	650
65	550	725
70	625	850



SIMPLE CURVE :

P.I. – POINT OF INTERSECTION
P.C. – POINT OF CURVATURE
P.T. – POINT OF TANGENCY
R – RADIUS OF SIMPLE CURVE
E – EXTERNAL DISTANCE FROM P.I. TO SIMPLE CURVE
Δ – INTERSECTION ANGLE (TOTAL CENTRAL ANGLE)
D – DEGREE OF CURVATURE
L – LENGTH OF CURVE (P.C. TO P.T.)
LC – LONG CHORD (DISTANCE BETWEEN P.C. & P.T.)
M – MIDDLE ORDINATE
T – TANGENT DISTANCE (P.I. TO P.C. OR P.T.)

FORMULAS (SIMPLE CURVE)

$R = \frac{5729.578}{D}$

$T = R*\tan\frac{\Delta}{2}$

$L = 100*\frac{\Delta}{D}$

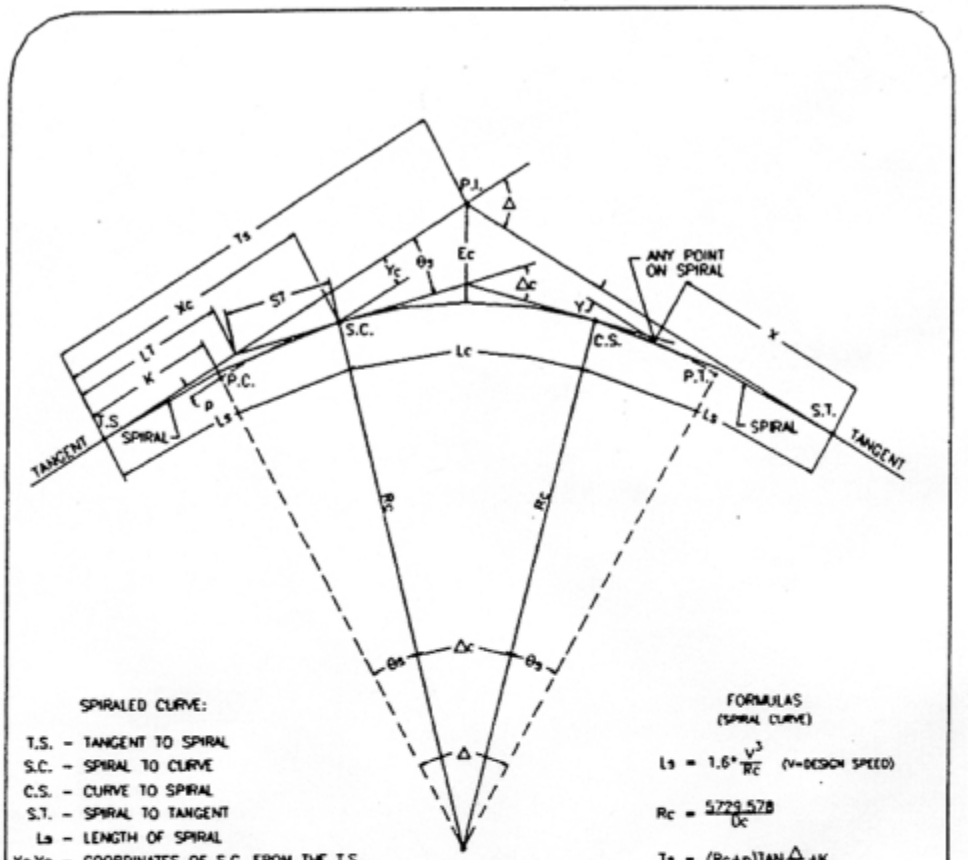
$LC = 2*R*\sin\frac{\Delta}{2}$

$M = R(1-\cos\frac{\Delta}{2})$

$E = R*\text{exsec} = \frac{R}{\cos\frac{\Delta}{2}} - R$

EAGLE COUNTY ENGINEERING DEPARTMENT	SIMPLE CURVE	FIGURE 4-620 #2
	DRAWN / REVISED	SHEET 1 OF 1

4-75



SPIRALED CURVE:

T.S. – TANGENT TO SPIRAL
S.C. – SPIRAL TO CURVE
C.S. – CURVE TO SPIRAL
S.T. – SPIRAL TO TANGENT
Ls – LENGTH OF SPIRAL
Xc,Yc – COORDINATES OF S.C. FROM THE T.S.
X,Y – COORDINATES OF ANY OTHER POINT ON SPIRAL FROM THE T.S. OR S.T.
Rc – RADIUS OF CIRCULAR CURVE (WITHIN THE SPIRALED CURVE)
Ec – EXTERNAL DISTANCE FROM P.I. TO CIRCULAR CURVE
p – OFFSET DISTANCE OF CIRCULAR CURVE PRODUCED
Δc – CENTRAL ANGLE OF CIRCULAR ARC
θs – CENTRAL ANGLE OF SPIRAL (SPIRAL ANGLE)
K – COORDINATE OF OFFSET P.C. OR P.T.
Dc – DEGREE OF CIRCULAR ARC
LT – LONG TANGENT (DISTANCE OF SPIRAL ONLY)
ST – SHORT TANGENT (DISTANCE OF SPIRAL ONLY)

FORMULAS (SPIRAL CURVE)

$Ls = 1.6 * \frac{V^3}{Rc}$ (V=DESIGN SPEED)

$Rc = \frac{5729.578}{Dc}$

$Ts = (Rc+p)\tan\frac{\Delta}{2} + K$

$Ec = (Rc+p)\tan\frac{\Delta}{2}\tan\frac{\Delta}{4} + p$

$\Delta c = \Delta - 2\theta s$

$Lc = \frac{100 * \Delta c}{Dc}$

$\theta s = \frac{Ls * Dc}{200}$

FOR θs BETWEEN 0° & 5°

$Yc = Y = Ls * SIN1/3\theta s$

$Xc = X = Ls - \frac{Y^2}{2 * Ls}$

$p = 1/4 * Y$

$K = 1/2 * X$

FOR θs BETWEEN 5° & 15°

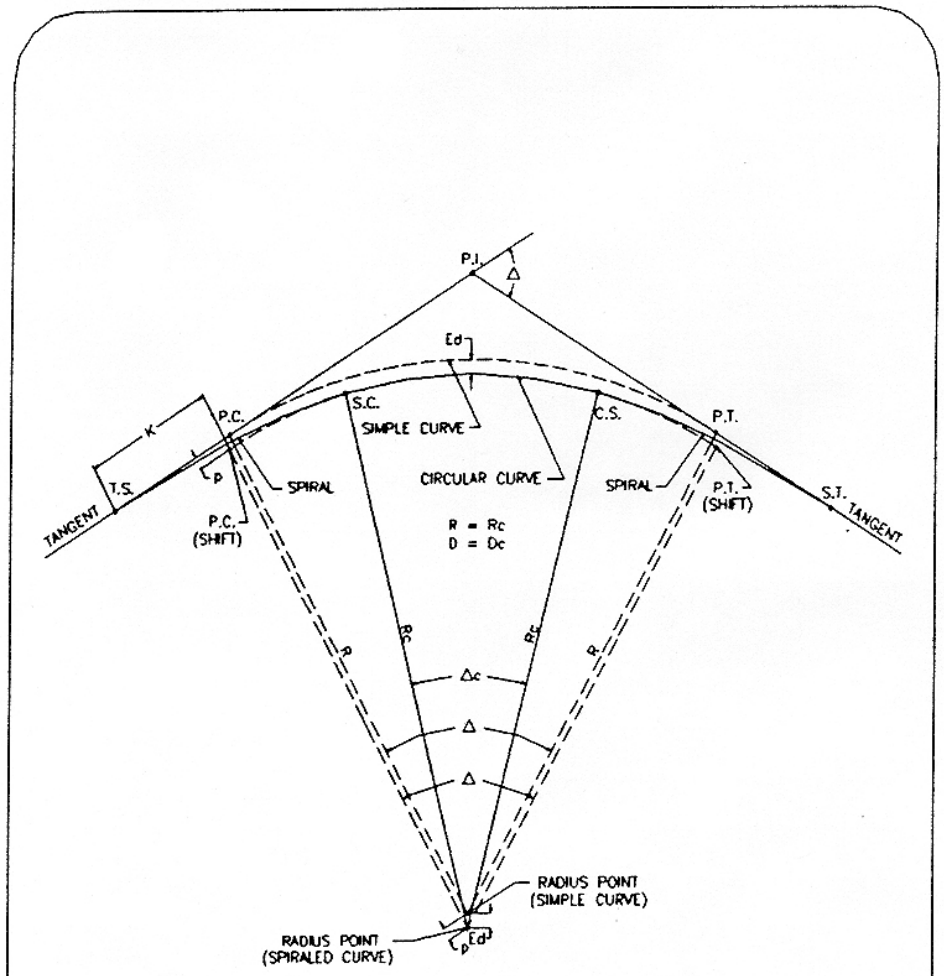
$Yc = Y = 4 * p$

$Xc = X = K + R * SIN\theta s$

$p = Ls * SIN1/12\theta s$

$K = 1/2 * Ls - \frac{4 * p^2}{Ls}$

EAGLE COUNTY ENGINEERING DEPARTMENT	SPIRALED CURVE	FIGURE 4-620 #3
	DRAWN / REVISED	SHEET 1 OF 1

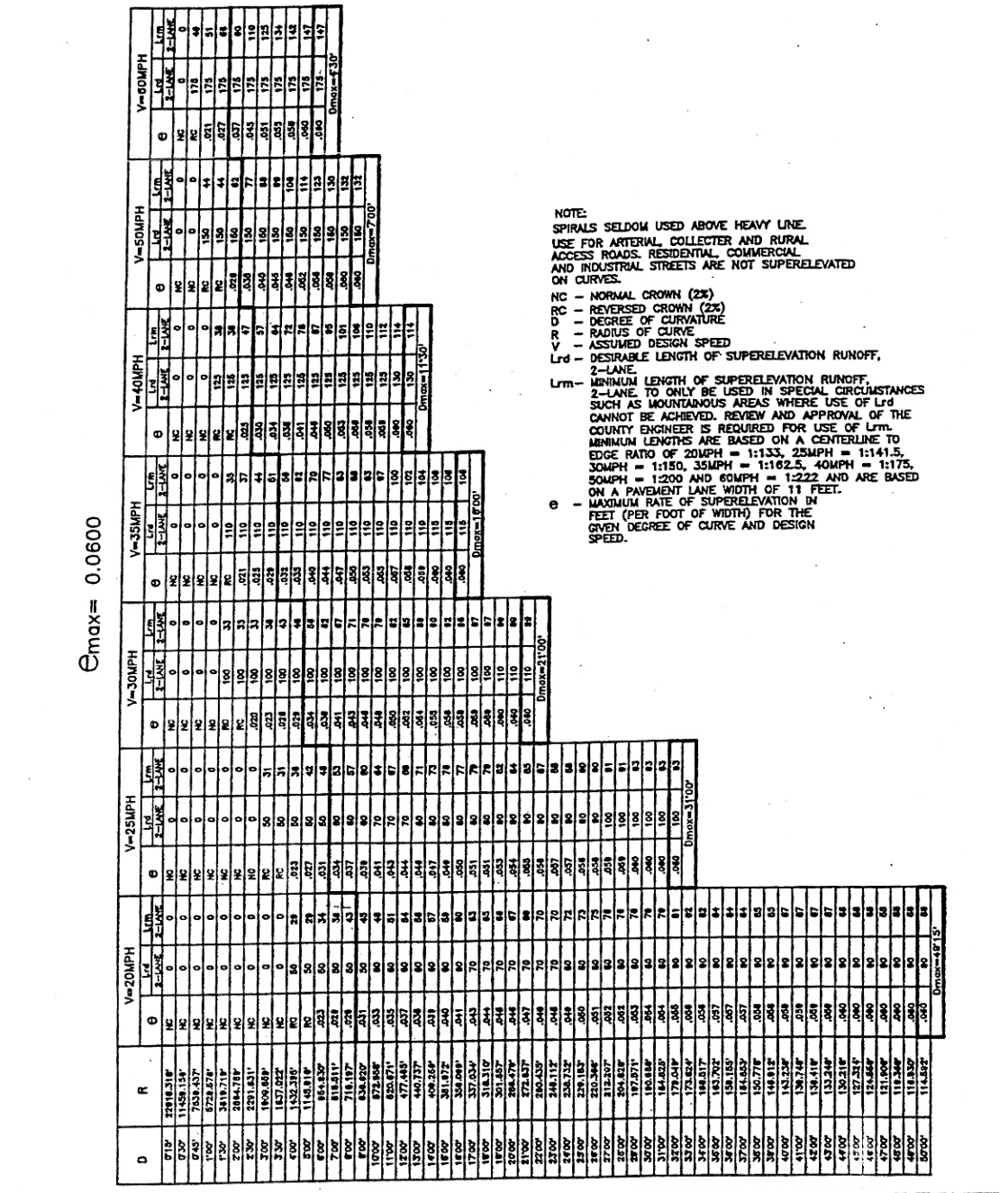


RELATIONSHIP – SIMPLE VS SPIRALED CURVE

R – RADIUS OF SIMPLE CURVE
Rc – RADIUS OF CIRCULAR CURVE (WITHIN THE SPIRALED CURVE)
D – DEGREE OF CURVATURE
Dc – DEGREE OF CIRCULAR ARC
Δ – INTERSECTION ANGLE (TOTAL CENTRAL ANGLE)
Δc – INTERSECTION ANGLE OF CIRCULAR ARC
Ed – CIRCULAR CURVE DIST. MINUS SIMPLE CURVE DIST. (E–Ec)
p – OFFSET DISTANCE OF CIRCULAR CURVE PRODUCED
K – COORDINATE OF OFFSET P.C. OR P.T.

T.S. – TANGENT TO SPIRAL
S.C. – SPIRAL TO CURVE
C.S. – CURVE TO SPIRAL
S.T. – SPIRAL TO TANGENT
P.I. – POINT OF INTERSECTION
P.C. – POINT OF CURVATURE
P.T. – POINT OF TANGENCY

EAGLE COUNTY ENGINEERING DEPARTMENT	RELATIONSHIP SIMPLE vs SPIRAL CURVE	FIGURE 4620 #4
	DRAWN / REVISED	SHEET 1 OF 1



EAGLE COUNTY
ENGINEERING DEPARTMENT

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SUPERELEVATION DETAIL

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Figure 4-620 #6 - Curb Return/Edge of Pavement Profile A

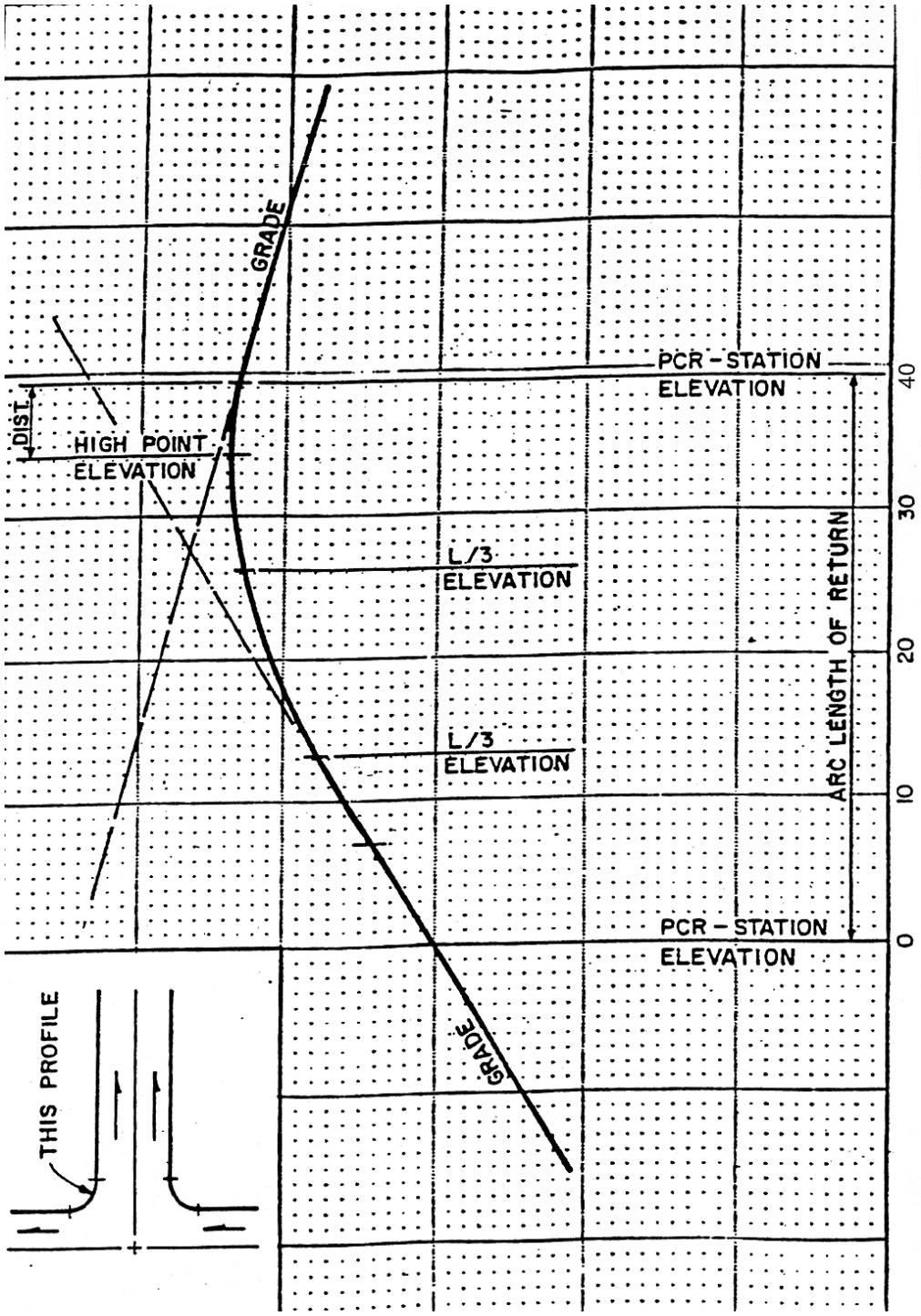


Figure 4-620 #7 - Curb Return/Edge of Pavement Profile B

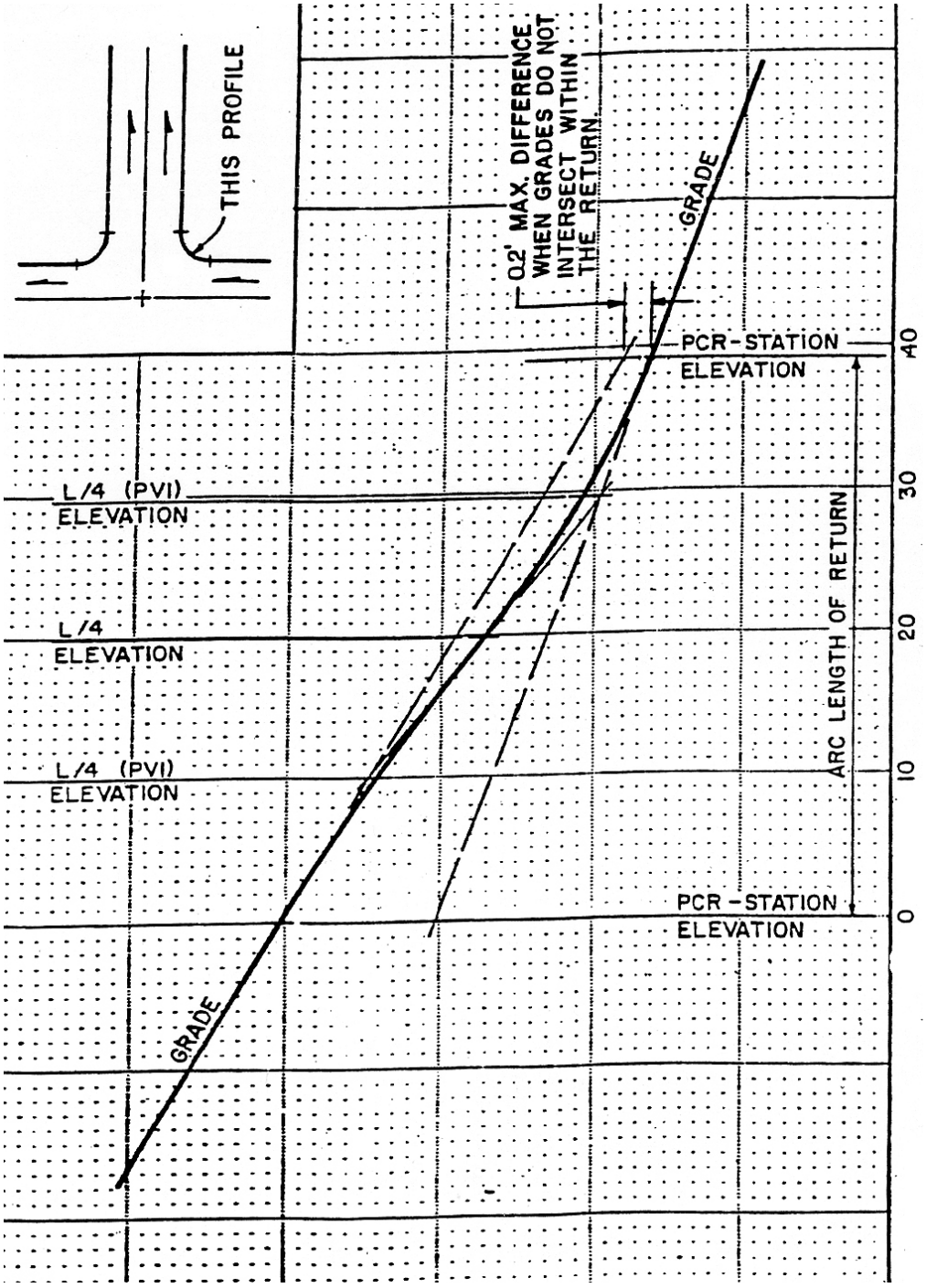
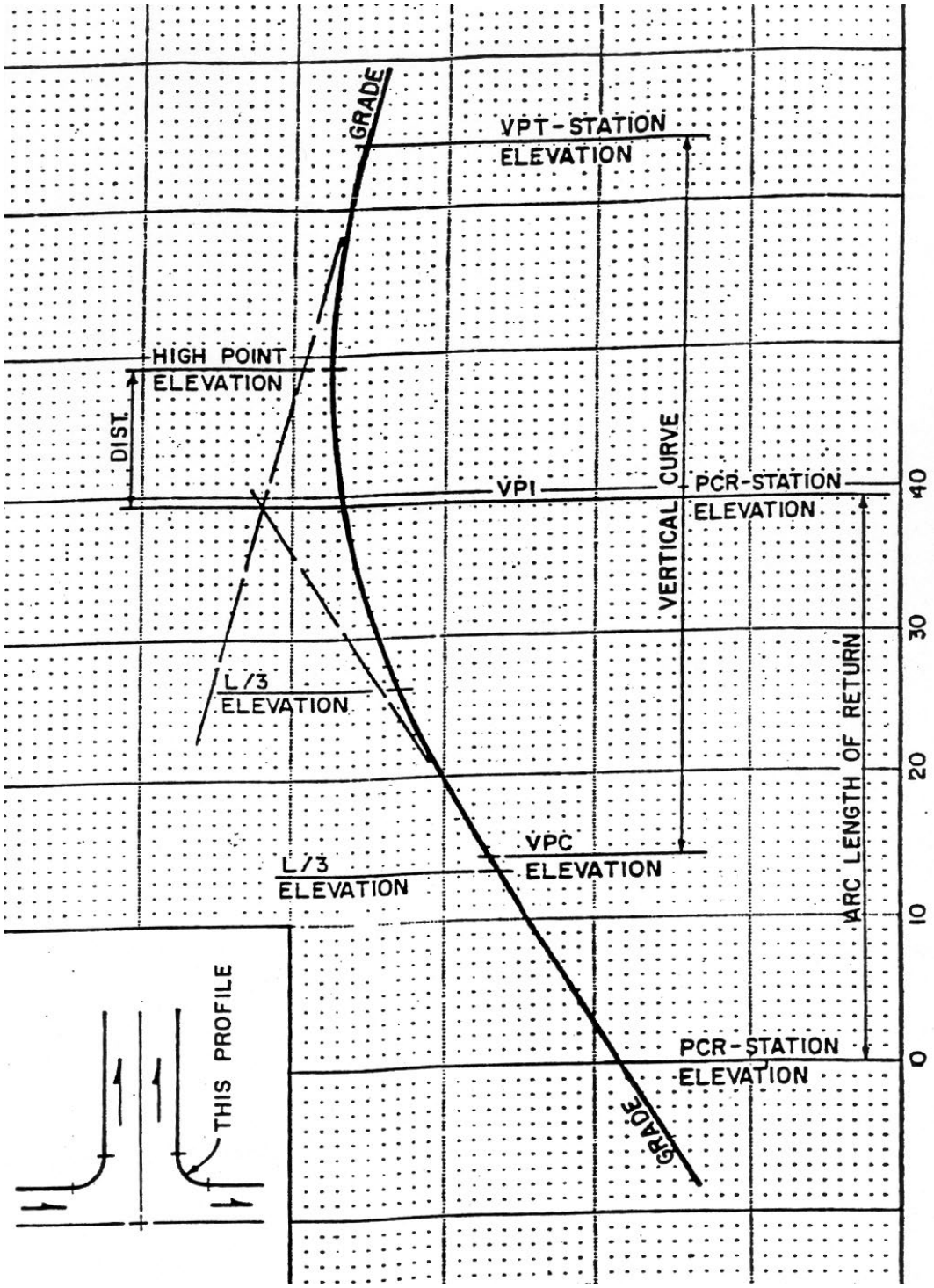


Figure 4-620 #8 - Curb Return/Edge of Pavement Profile C



Note: Separate flowline or edge of pavement profiles are required as the basis for design at bubbles, cul-de-sacs or horizontal curves when the vertical grade is less than one (1) percent and other departures from normal roadway cross sections, i.e., the pavement cross slope is not two (2) percent, and for at least two hundred (200) feet from all intersections.

8. Clear Vision Areas. A clear vision area shall be maintained on the corners of all properties at all roadway intersections, including railroad crossings, so that intersection sight distances as specified in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, are provided.

a. Prohibited Structures. A clear vision area shall contain no planting, fence, wall, sign, utility appurtenance, structure or other obstruction, temporary or permanent, exceeding thirty (30) inches in height, as measured from the top of the curb, or in the absence of curb and gutter, from the finished grade of the centerline of the street. Traffic control devices required by, and installed in accordance with, the MUTCD, or Colorado Supplement thereto, are exempt from this provision.

b. Applicant is Responsible. It shall be the applicant's responsibility, through his engineer, to ensure that the necessary clear vision area is provided in the layout and design of the development and is carried through during construction.

9. Access Approaches and Driveways.

a. Findings. Control of access to public streets and roads is an area of increasing concern, since roads are rarely being built or upgraded fast enough to accommodate increases in traffic. The proliferation of access points and driveways along major local roads and state highways impairs the ability of such roads to efficiently carry traffic. Effective control of access can enhance the carrying capacity and safety of most roadways by reducing the opportunity for turning movements both to and from a major roadway. In addition, elimination of turning movements can decrease the need for acceleration and deceleration lanes.

b. State Design Standards. Pursuant to C.R.S. 43-2-147 (1)(a), access approaches to roadways under the jurisdiction of Eagle County must meet the Design Standards found in Sections Three and Four of the Colorado State Highway Access Code, 2 CCR 601-1 (the Code). In addition, those parcels directly accessing highways under the jurisdiction of the Colorado Department of Transportation shall be required to obtain a State Highway Access Permit pursuant to the above-referenced Code. Eagle County is the Issuing Authority for such permits and should be contacted initially for the application and further information in obtaining State Highway Access Permits.

c. Additional County Standards. In addition to the foregoing, public and private access approaches and driveways shall be subject to the following standards:

(1) Access By Emergency and Service Vehicle. All dwellings and other structures shall be accessible by emergency and service vehicles. A

maximum grade of eight (8) percent and a minimum centerline radius of forty-five (45) feet is recommended for driveways on north-facing slopes. On south-facing slopes, a maximum grade of ten (10) percent and a minimum centerline radius of forty-five (45) feet is recommended. Curves should be widened generously in both circumstances. *(am12/17/02)*

Unless otherwise approved by the Local Fire Authority Having Jurisdiction, public and private access approaches and driveways in excess of 150 feet in length shall be provided with adequate area for emergency vehicle turnaround in close proximity to the residence or structure served. Access approaches and driveways in excess of 300 feet in length shall provide an area adequate for emergency vehicle turnarounds in close proximity to the residence or structure served, and shall also provide vehicle turnouts where the driveway is expanded to be at least 18 feet wide at 150 foot intervals. Alternatively, the private access or driveway may be designed to accommodate two-way traffic. Turnaround**s** shall be constructed in accordance with Section 4-620.D.11, Vehicle Turnarounds. *(am03/21/06)*

(2) Driveways in Mountainous Terrain. Proposed developments on lots with mountainous terrain may require the preliminary layout and design of the individual driveways at the preliminary plan stage, and the precise design of the driveway at the final plan stage, to assure that access can be provided to each dwelling unit served by the driveway in compliance with the standards of this Division.

(3) Driveways Requiring Significant Cuts and/or Fills Discouraged. Driveways that require significant cuts and/or fills are discouraged. Applicants are encouraged to relocate development to areas within the proposed development where such cuts and fills are not required. Where significant grading and/or retaining walls or other structures may be necessary, the applicant may be required to identify a precise building envelope and construct the driveway that will serve that envelope, at the discretion of the Board of County Commissioners, considering the advice of the County Engineer. In extraordinary cases, driveways may be considered public improvements and thus collateralized, constructed and subject to the terms and conditions of the other public improvements in the development.

(4) Driveways Shall Not Serve More than Three Units. Driveways shall not serve more than three (3) dwelling units, unless specified otherwise in these Regulations. Any residence having an accessory dwelling unit shall be counted as one (1) unit.

(5) Clearance From Intersections. Driveways shall be restricted for a sufficient distance from any intersection with road approaches to preserve normal and safe movement of traffic. Driveways shall provide the following intersection clearances, exclusive of driveway and intersection return radii or flares. In rural and suburban areas, a minimum intersection clearance of fifty (50) feet shall be provided for residential driveways and a minimum intersection clearance of one hundred (100) shall be provided for

commercial driveways. In urban areas, a minimum intersection clearance of twenty (20) feet shall be provided for residential and commercial driveways, due to the expectation that dedicated turn lanes for the driveways will be present. In the event there are no dedicated turn lanes, then the minimum twenty (20 foot intersection clearance may be extended, at the direction of the County Engineer.

(6) Maximum Number of Entryways. Generally, no more than one (1) entryway shall be allowed for any parcel of property where the frontage is less than one hundred (100) feet. Additional entrances or exits for parcels of property having a frontage in excess of one hundred (100) feet shall be permitted only when the applicant demonstrates they are required for actual convenience and necessity, and that safety to the traveling public will not be compromised.

(7) Not Encroach. All driveways shall be located so that the flared portion adjacent to the traveled way shall not encroach upon adjoining property.

(8) Intersection With Other Roadways. Road approaches shall intersect other roadways at ninety (90) degrees for a tangent distance of one hundred (100) feet from the centerline intersections. At intersections with major collectors this distance shall be increased to two hundred (200) feet. Driveways shall intersect the edge of the traveled way at ninety (90) degrees. This alignment shall be maintained within the public way. Beyond the right-of-way line onto the adjacent property, permissible axis angles of driveways in relationship to the right-of-way line shall be between ninety (90) and sixty (60) degrees.

(9) Maximum Width. Commercial driveways shall not exceed thirty-five (35) feet in width, as measured at right angles to the centerline of the driveway, except as increased by return radii at the edge of the traveled way. Residential driveways shall not exceed twenty-four (24) feet in width, measured in the same manner.

(10) Radii. Permissible radii on driveway returns shall be governed by such factors as the width of drive and angular placement. Where the flared edge of an approach controls the turning radius of a vehicle entering the property by a right turn from the adjacent outside traffic lane of the roadway, the radius of that edge shall not be less than twenty (20) feet for passenger vehicles and not less than fifty (50) feet where single unit or larger trucks may be expected to use the entrance and the traffic volume on the adjacent road exceeds four hundred (400) AADT.

10. Connections With Existing Roadways. Connections with existing roadways shall be smooth transitions, conforming to normal vertical curve or grade break criteria. When a vertical curve is used to make this transition, it shall be fully accomplished prior to the connection with the existing roadway.

a. Existing Grades. Existing grades shall be shown for at least three hundred (300)

feet, with field verified as-built showing stations and elevations at fifty (50) foot intervals in level terrain and twenty-five (25) foot intervals in rolling and mountainous terrain. For a connection with an existing intersection, these as-builts shall be shown within a three hundred (300) foot radius of the intersection. This information shall be included in the plan and profile of the proposed roadway.

b. Plan View. Limits and characteristics of the existing improvements shall be shown in the plan view. Such characteristics include horizontal alignment, off-site intersections, limits of the improvements, and similar factors.

c. Previously Approved Designs. Previously approved designs for the existing improvement are not an acceptable means of establishing existing grades, however, they shall be referenced, on the construction plans, where they occur.

d. Basis of As-Built Elevations. The basis of the as-built elevations shall be the same as the design elevations (both flowline and top of curb or edge of pavement).

11. Off-Site Design. The design grade, and existing ground at that design grade, of all roadways that dead end due to project phasing, subdivision boundaries or similar factors shall be continued, as necessary, in the same plan and profile as the proposed design, for at least three hundred (300) feet or to the intersection with a major collector roadway. This requirement shall be waived when there is no possibility of the roadway being extended in the future in accordance with sub-section 4-620 J.1.g., Street Pattern.

a. Applicant Is Responsible For Transition. If the off-site roadway, adjacent to the proposed development is not fully improved, the applicant shall be responsible for the design and construction of a transition for the safe conveyance of traffic from his improved section to the existing roadway.

b. Road Shall Be Extended. The improved section of road shall be extended to the boundary of the proposed development, as outlined in sub-section 4-620 J.1.g., Street Pattern, with the transition being constructed "beyond" the proposed development onto the existing road. The following formula shall be applied to the taper or lane change necessary for this transition:

$$L = WS^2/60$$

where:

L = Length of transition in feet
W= Width of offset in feet
S = Speed limit or 85th percentile speed.

K. Structures. The developer shall be responsible to have all bridges, culverts, retaining walls, borings, tunnels or other structures within the proposed development designed by a Professional Engineer, licensed in the State of Colorado, and shall be responsible to have said structures constructed, reconstructed or repaired through the two year warranty period in the Subdivision Improvements Agreement as defined in Section 5-280.B.5.e. The engineer shall provide certification, upon completion of any such structures, that it meets the minimum requirements for the intended use, traffic loading and soils conditions prior to acceptance of the public improvements by Eagle County. All such structures shall meet the following minimum standards: *(am 03/12/02)*

1. **Strength.** Structures shall be of sufficient strength to accommodate an AASHTO HS-20 loading.

2. **Pedestrian Facilities.** Facilities for pedestrians, bicyclists or equestrians shall be provided if the structure traverses a roadway. The facilities shall have a width equal to the traveled way, plus four (4) feet and shall include walkways and handrails.

3. **Hydraulic Capacity of Drainage Structures.** Drainage structures include, but are not limited to, bridges, pipe culverts, box culverts, channels, ditches, gutters, spillways, inlets, drains, orifices, gates, chutes, dams, levees, dikes, sills, ponds, basins, bays, drops, weirs, sluices, flumes, siphons, and energy dissipaters. Drainage structures that convey the flow of named streams, as shown on the United States Geological Survey, 7.5 minute topographic, 1:24,000 scale, Primary Map Series, and in the list in Appendix E, shall be designed with a hydraulic capacity to pass the one hundred (100) year flow. Drainage structures conveying the flow of lesser streams, or other sources of storm water at collector, commercial, or industrial roads, shall be designed to pass the fifty (50) year flow. Drainage structures conveying the flow of lesser streams, or other sources of storm water at all other roads, shall be designed to pass the twenty-five (25) year flow. *(am. 03/12/02)*

4. **Bridges and Culverts.** Bridges and culverts shall be designed with adequate guardrails (where required), roadway approach grades and curvature to assure safe sight distance.

5. **Roadway Fill.** An adequate channel and wingwalls shall be provided to protect approach roadway fill from scouring and erosion.

L. Street Name And Traffic Control Signs. The names of all streets shall be subject to the approval of the Board of County Commissioners, and wherever applicable, shall be consistent with street names, physical conditions and historic features in the surrounding areas. The developer shall be required to furnish and install street name signs and all traffic control signs and devices necessary in accordance with the "Manual of Uniform Traffic Control Devices" and the Colorado Supplement thereto. A street sign plan shall be submitted with the public improvement plans that demonstrates conformance to this standard.

M. Railroad Crossings. The developer shall be required to obtain all necessary forms and permits, and to perform any work required by the Public Utility Commission in the event any portion of the development involves a railway crossing.

SECTION 4-630 SIDEWALK AND TRAIL STANDARDS

A. Trails Standards. The following standards shall apply to any trails or paths required by the Board of County Commissioners through development approval. For standards not specifically listed here, the design, layout and construction details in the Eagle County Trails Plan, dated September 16, 1993 and as subsequently amended, shall apply.

Per Section 4-610 A.2., Standards Are Not Inflexible, these standards are not inflexible and may be modified if alternate design, procedure or material can be shown to provide better performance and or environmental sensitivity.

1. **Minimum Width.** The minimum recommended width of a trail or path is ten (10) feet with one to two (1 to 2) feet of clear area, graded for drainage on each side of the trail and surfaced with aggregate base course. See the Eagle County Trails Plan for additional standards on width.

2. **Minimum Surfacing.** Three (3) inches of asphalt over six (6) inches of compacted aggregate base course over a well-compacted subgrade. Concrete is acceptable as surfacing and may be required for trails that will be accepted for maintenance by a public agency, particularly for areas prone to flooding, erosion or unstable soils. Concrete trails shall have a minimum thickness of four (4) inches of 3,000 point psi concrete over six (6) inches of compacted aggregate base course. The extent of paved trails necessary to service a proposed development and link with adjacent trails systems will be determined through the development process.

3. **Grades.** 1% to 2% maximum grade recommended. Sections over 5% grade and under 500 feet long may be acceptable if wider trail width provided. 10% is the maximum allowed in very short distances of trail.

4. **Drainage.** Sloping in one direction at an optimum of 2%, or up to 5% on curves, is preferred over crowning to provide drainage. Hillside trails shall incorporate drainage swales on the uphill side to intercept downhill drainage. Catch basis and culverts may be necessary. Drainage structures such as grates and covers shall be located off of the trail.

5. **Trail Easement.** All trails which will become part of the County regional trail system as determined through the development process, or which maintain, replace or create trail connections to public land shall be platted as public easements, unless located and approved in the public road right-of-way. Easements shall be to the County for use by the public.

6. **Public Improvements.** Said trails or paths shall be considered public improvements and shall be collateralized, constructed and subject to terms and conditions of the other public improvements in the development.

7. **Public Lands Access.** As part of any development proposal that is adjacent to public lands, existing trail connections to public lands should be maintained or replaced. Creation of public lands access is recommended, where appropriate. Paved surfacing is not recommended for this type of trail, but subject to review through the development process.

8. **Private Trails.** Trails which are contained within a subdivision and are for the exclusive use of its residents shall be designed in accordance with these criteria, with the exception that width of path may be reduced if it is determined that with a combination of trails and attached sidewalks, adequate pedestrian facilities will be provided.

B. Sidewalk Standards.

1. **Minimum Width.** When sidewalks are called for in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, the minimum width shall be four (4) feet for an attached sidewalk and six (6) feet for a detached sidewalk (provided the detached sidewalk is not a component of the Trails Plan, in which case it would be subject to the

standards of that Plan).

2. **Minimum Thickness.** All sidewalks shall have a minimum thickness of four (4) inches of reinforced three thousand (3,000) psi concrete over a compacted six (6) inch CDOT Class 6 aggregate base course (ABC).

3. **Shoulder for Detached Sidewalks.** Detached sidewalks shall have a one (1) foot ABC shoulder on either side brought up flush with the edge of the sidewalk, and sloped down at a grade of four (4) percent away from the sidewalk for drainage purposes.

4. **Mountable Curb.** When mountable curb is called for in Table 4-620 J., Summary Of Environmental, Geometric And Design Standards, the sidewalk may be a monolithic pour.

5. **Curb Ramps.** Curb ramps shall be installed as required by the Americans with Disabilities Act in accordance with CDOT Standard M-608-1.

6. **Compliance With CDOT Standard.** Curbs, gutters and walks shall be constructed to comply with CDOT Standard M-609-1, as the situation requires per Table 4-620 J., Summary Of Environmental, Geometric And Design Standards.

SECTION 4-640 IRRIGATION SYSTEM STANDARDS

A. Surface Water Rights. If there are surface water rights appurtenant to lands proposed to be developed, utilizing an irrigation system, the applicant shall provide evidence of compliance with the requirements of applicable Colorado Law.

B. Irrigation Water. If irrigation water is to be made available in a development, it shall be the responsibility of the applicant to install an acceptable delivery system. The applicant and irrigation ditch owner shall collaborate on any necessary improvements to the ditch or attendant structures prior to final approval of the development. Such improvements shall be considered public improvements and shall be collateralized, constructed and subject to the terms and conditions of the other public improvements in the development.

1. **System Standards.** The irrigation delivery system shall meet minimum delivery requirements for the development and shall encompass the control of wastewater, drainage water, and surface water resulting from irrigation, and shall protect and deliver the water rights of others using the same water source.

2. **Review.** The irrigation delivery system shall be reviewed and approved by the County Environmental Health Manager, considering how it affects the operation of On-Site Wastewater Treatment Systems (OWTS) on lots within and adjacent to the development. The irrigation delivery system may also be subject to review and approval by the State Engineer. *(amd. 07-29-14)*

C. Restriction Of Irrigation Methods. Eagle County may restrict the methods of irrigation to be employed in a development in order to prevent an artificial and detrimental rise of the groundwater table under the subdivided land or adjacent lands.

D. Irrigation Ditch Easements. Irrigation ditch easements shall be provided for all irrigation ditches crossing the proposed development, unless the applicant can prove conclusively that they have been legally abandoned. Irrigation ditch easements shall be of a width equal to the average ditch width plus twenty (20) feet, or as otherwise recommended by the ditch owner and as approved by the Board of County Commissioners.

E. Irrigation Ditch Maintenance. Irrigation ditch owners shall be responsible for the maintenance of the ditch and any attendant structures unless other written agreements are entered into between the applicant and ditch owner. Such agreement(s) shall be filed as part of the final approval documents. Maintenance within the public way shall require the applicant to obtain a "Permit To Construct Within The Public Way Of Eagle County", which is administered by the Eagle County Engineer's Office.

SECTION 4-650 DRAINAGE STANDARDS

A. Purpose and Applicability.

1. **Purpose.** Land development, particularly increased impervious surface area, has been shown to degrade water quality and alter natural hydrology. The standards of this section are intended to minimize the likelihood and extent of flooding and environmental damage from uncontrolled urban runoff.

2. **Applicability.** These standards shall apply to any commercial or industrial development, any proposed subdivision or PUD, proposed development within one hundred (100) feet of a water body, and to any other development creating ten thousand (10,000) square feet or more of impervious surface area.

B. Standards. Stormwater runoff from all proposed development shall be managed so as to comply with the following standards: (1) No Direct Discharge; (2) Minimize Directly-Connected Impervious

Areas; (3) Detain and Treat Run-off; (4) Conveyance of 100-year Storm Flow; and, (5) Other Techniques. *(am 01/04/05)*

1. No Direct Discharge. Stormwater discharge shall comply with one (1) of the following management options:

a. Vegetated Surface. Sheetflow across at least one hundred (100) feet of stable, vegetated surface prior to discharge to any natural water body, or flow in one hundred (100) feet of non-erosive grass channels;

b. On Site Treatment. On-site treatment of stormwater by use of best management practices designed to detain and infiltrate the runoff and approved as part of the Stormwater Control Plan prior to discharge to any natural water body; or *(am0 3/12/02)*

c. Structure. Discharge to a stormwater conveyance structure, designed to accommodate the projected additional flows from the proposed project, with treatment by a best management practice prior to discharge into any natural water body. *(am 01/04/05)*

2. Minimize Directly-Connected Impervious Areas. The extent of directly-connected impervious areas shall be minimized by having runoff from fifty (50) percent of all developed impervious surfaces (rooftops, parking lots, sidewalks, etc.) drain over grass buffer strips before reaching stormwater conveyance systems. The fifty (50) percent requirement may be reduced if the outflow from the grass filter strip is directed to other stormwater treatment methods.

a. Examples. Examples of other potential techniques to be used in conjunction with grass buffer strips are: infiltration devices; constructed wetlands; sand filters; replacing curb and gutter systems with low velocity grass lined swales; and, over-sizing swales, ditches and culvert crossing (such as driveway intersections) to provide additional detention storage.

b. Slope. The maximum allowable slope for developed land surfaces that drain to grass buffer strips is ten (10) percent. The slope of the vegetative buffer strip itself should be no greater than five (5) percent and should be of a uniform gradient to insure evenly distributed sheet flows. Terracing and retaining wall construction may be required if necessary to maintain allowable slopes.

c. Formula. The design width, or distance along the sheet flow direction, shall be the greater of the following:

width = 8.0 feet
0.2 L

Where L equals the length of the flow path of the sheet flow over the upstream impervious surface.

3. **Detain and Treat Run-off.** Permanent stormwater detention facilities shall be designed to: (a) treat stormwater for pollutant removal; b) reduce peak flows to historic levels and minimize extreme flooding; and, (c) prevent erosion of downstream channels. Detention facilities shall be designed to comply with the following standards *(am 1/4/05)*:

   a. **Pollutant Removal.** Removal of pollutants shall be accomplished by providing ninety (90) percent trap efficiency for particles 0.005 mm in diameter or larger from the two (2) year, twenty-four (24) hour storm. For drainage from parking lots, vehicle maintenance facilities, or other areas with extensive vehicular use, this standard may require the use of a sand and oil grease trap or similar practice (e.g., constructed wetland, extended detention with no initial release, etc.).

   b. **Peak Flow Reduction.** Peak flow reduction shall be accomplished by limiting detention pond release rates to historic (undeveloped) peak flows for all storms up to and including the twenty-five (25) year, twenty-four (24) hour design storm. In determining runoff rates, the entire area contributing runoff must be considered, including any off-site contribution. Off-site contributions shall be based on the fully developed potential based upon proposed land uses. To minimize the threat of major property damage or loss of life, all permanent stormwater detention facilities must provide for the safe passage of the one hundred (100) year storm event.

   c. **Downstream Channels.** Channels downstream from the discharge of stormwater shall be protected from increased channel scour, bank instability, and erosion and sedimentation from the twenty-five (25) year design storm. The use of natural drainage ways as receiving streams is required unless it can be shown that no alternatives to changing natural drainage locations exist.

4. **Conveyance of 100-year Storm Flow.** All applications for any land development listed in Section 4-650.A.2. Applicability, shall include design provisions for the overland conveyance of the post development 100-year storm flows through the site without damage to any public or private property. *(orig 03/12/02)*

5. **Other Techniques.** Other techniques, not specifically identified, may be considered for implementation subject to the approval of the County Engineer. *(orig 01/04/05)*

C. **Stormwater Control Plan.** An applicant for any development listed in Section 4-650 A.2., Applicability, shall submit a stormwater control plan prepared by a qualified professional engineer registered in the State of Colorado. The plan shall contain the applicable information as listed in Section 4-665 C., Erosion and Sediment Control Plan, and the following additional information: *(am 01/04/05)*

1. **Calculations.** Hydrologic, hydraulic and all other calculations used to size and design drainage facilities and/or structural best management practices.

2. **Maintenance.** Maintenance measures for all proposed best management practices shall be identified including access, schedules, costs, and designation of a responsible party.

SECTION 4-660 EXCAVATION AND GRADING STANDARDS *(orig 03/12/02)*

A. Purpose and Applicability.

1. Purpose. The purpose of these requirements is to safeguard life, limb, property and the public welfare by regulating grading on private property.

2. Applicability. No person shall do any grading without first having obtained a grading permit or an exemption from a grading permit from the Eagle County Engineer.

3. Excavating and Grading Standards

a. Application. The excavation and grading standards shall be as contained in the current edition of the International Building Code Appendix J. Grading. The current edition will be as specified in Section 3.02 Application of Chapter III of the Eagle County Land Use Regulations also known as the Building Resolution. *(am 1/4/05)*

b. Amendments. The standards shall also include amendments to the current edition of the International Building Code as contained in Section 3.05 of the Building Resolution. Additional standards related to the design and placement of earthen landscape berms are also found in Section 4-230.A.10., Standards for Landscape Berms, and Section 3-340.C.4, Dimensional Limitations for a Fence, Hedge, Wall or Berm. *(am 01/04/05) (am. 05/16/06)*

c. **Retaining Walls**. Any retaining walls, or combination of tiered retaining walls, four (4) feet in height or greater as measured from the bottom of the footing to the top of the wall, are not permitted under the grading permit and require a separate building permit for construction. Engineered drawings stamped by a Professional Engineer licensed in the State of Colorado will be required with the building permit application. Retaining walls with less than four (4) feet of height can be approved under the grading permit. *(orig. 05/01/07)*

SECTION 4-665 EROSION CONTROL STANDARDS *(am 03/12/02)*

A. Purpose and Applicability

1. Purpose. Siltation of rivers and other water bodies is a leading cause of water quality impairment in rivers and lakes. The purpose of these requirements is to minimize the water quality impacts resulting from land development and other land disturbing activities.

2. Applicability. This section shall apply to any disturbance within one hundred (100) feet of a stream, all residential development disturbing more than one-half (2) acre, all commercial and industrial development, and all proposed subdivisions and PUD's.

B. Erosion Control Standards. The applicant shall minimize erosion of soils from a site that is being developed by complying with the following standards.

1. Phase Construction. Construction activities, such as clearing, grading, road construction, and utilities installation shall be phased to minimize soil exposure. Sediment trapping practices and stream and other water body protection shall be installed and stabilized before site grading or other construction is initiated.

2. Soil Stabilization. All disturbed areas and soil stockpiles shall be surface roughened, mulched, or seeded and mulched, or otherwise protected from erosive forces if they will remain exposed and inactive for periods longer than fourteen (14) days, or if soil will be exposed during winter, so erosion will not occur during spring snow melt. Disturbed areas shall be mulched, or seeded and mulched within seven (7) days after final grade is reached. Grass or straw mulch shall be crimped in place. On slopes steeper than twenty (20) percent, or within fifty (50) feet of any water body, exposed soils shall be hydromulched or covered with nets or mats. *(am. 05/01/07)*

3. Permanent Revegetation. Any disturbed area that is not built upon for one (1) year or longer shall be revegetated with a perennial, native grass mix. Within one growing season of project completion, vegetative site coverage shall be equal to or greater than seventy (70) percent of the disturbed areas.

4. Cut and Fill Slopes. Where cut and fill cannot be avoided, slopes shall be designed for long term stability. Permanent vegetation should be used as the preferred approach to stabilization of cut and fill areas where slopes are less than or equal to three to one (3:1). On steeper cut and fill slopes, stabilization may be attained by utilizing retaining walls, rock walls, up slope runoff diversions, slope drains or other measures appropriate for the specific situation. Step retaining walls shall be positioned such that the width of the step is half the height of the wall. Retaining walls over four (4) feet in height shall be designed by a professional engineer. Revegetation of the steps is required. In no case shall the soil surface of a cut and fill slope remain exposed without an approved method of soil stabilization.

5. Construction in or Adjacent to a Water Body. Construction in or directly adjacent to any water body, such as culvert or bridge installation, shall require bed and bank stabilization. This may include stream isolation through the use of coffer dams, complete containment of the stream in the area of the disturbance, stream crossing structures, or limits on the dates when in-stream work can be performed.

6. Channels and Ditches. New or re-routed irrigation ditches, receiving channels and streams shall be protected so that flows from the site do not cause erosion and flooding.

7. Stormwater Runoff. Stormwater runoff flows shall be managed to minimize erosion and sediment transport. Concentrated flows shall be diverted away from disturbed slopes. The length and steepness of disturbed slopes shall be minimized, or slope drains shall be used.

8. Sediment and Mud Control. Sediment and mud shall be prevented from leaving the construction site by immediate placement of street base or construction of mud pads in

access routes. Mud pads shall be at least fifty (50) feet in length and comprised of angular rock and/or a wheel washing facility. Adjacent properties shall be protected by using sediment fences, straw bales, and silt traps. Storm sewer inlets shall be protected from entry of sediment-laden water.

9. **Sediment Detention.** When the contributing drainage area, including off-site area, is greater than five (5) acres, sediment detention ponds, infiltration devices, and other management practices which store or detain runoff shall be used to treat sediment-containing runoff prior to discharge from the construction site. These practices shall be designed to treat the runoff from the two (2) year, twenty-four (24) hour storm. Sediment detention ponds, when included, shall be designed to achieve ninety (90) percent trap efficiency for all sediments of .005 mm or larger diameter. If the discharge from the pond is passed through a filtration (i.e. a constructed wetland) or infiltration device, the trap efficiency requirements may be reduced. Where the contributing drainage area is less than five (5) acres, a specific engineered design for these sediment trapping facilities shall not be required. Silt traps may be used to detain and treat runoff if the contributing drainage area is less than five (5) acres.

10. **Temporary Sediment Ponds.** Temporary sediment ponds that will be removed after successful revegetation of the site shall be designed to safely detain and release all storms up to and including the twenty-five (25) year, twenty-four (24) hour storm at its historic, pre-development rate of release. Ponds that will be left as permanent facilities shall have a capacity to safely pass the one hundred (100) year flood and meet any dam and diversion requirements of the State Engineer.

11. **Construction De-Watering.** All construction de-watering activities shall conform with the State's construction de-watering permit requirements, which include daily monitoring of total suspended solids with a thirty (30) day average concentration of no more than thirty (30) mg/l and a seven (7) day average of no more than forty-five (45) mg/l. Discharges from construction de-watering operations shall be accomplished in a manner that does not cause erosion.

12. **Inspection and Maintenance.** The applicant shall inspect all erosion and sediment control devices after any precipitation event during construction, and make any necessary repairs immediately thereafter. At a minimum, erosion and sediment control devices shall be inspected monthly. An inspection log shall be kept on-site for review by County officials until the project is complete. A copy of the inspection log sheets shall be delivered to the County at the end of each month during construction.

C. **Erosion and Sediment Control Plan.** An applicant for any development listed in Section 4-665.A.2., Applicability, shall submit an erosion and sediment control plan prepared by a qualified professional. The plan shall contain the following information:

1. **Existing Features.** Location of all existing and proposed structures and hydrologic features on the site, including intermittent water features, wetlands and the one hundred (100) year flood plain and all drainage structures or natural features on the land adjacent to the site and within a minimum of one hundred (100) feet of the site boundary line. The map must show the locations of street gutters, storm sewers, drainage channels, other water conveyance structures, wetlands or other waters receiving storm runoff from the site.

2. **Topography.** Existing and proposed topography at reasonable contour intervals, to provide necessary detail of the site. Existing and proposed areas of fifteen (15) to thirty (30) percent and greater than thirty (30) percent slope shall be identified. The map should extend a minimum of one hundred (100) feet beyond the property line and show the location of the property line. The map should show elevations, dimensions, location, extent and slope of all proposed grading including building site and driveway grades and the boundary limits of clearing and grading.

3. **Plans.** Plans of all drainage features, paved areas, retaining walls, cribbing, planting, temporary or permanent soil erosion control measures, or other features to be constructed in connection with or as part of the proposed development. As applicable, design drawings of sediment controls, temporary diversions, and practices used shall be provided. A brief description, including specifications, shall also be provided of how the site will be stabilized after construction is completed.

4. **Storage Areas.** The location of storage areas designated for equipment, fuel, lubricants, chemical and waste storage. Details on spill containment structures shall be provided where storage of these materials is planned. The location of soil stockpiles and snow storage areas shall also be shown, along with the location of any temporary roads designed for use during construction period.

5. **Construction Schedule.** The plan shall describe the expected starting and completion dates of the site grading and/or construction, including the installation and removal time periods of erosion and sediment control measures, and the duration of exposure of each area prior to the completion of temporary erosion and sediment control measures.

6. **Calculations.** Any calculations made for determining rainfall, runoff, sizing any sediment basins, diversions, conveyance or detention/retention facilities.

7. **CDPS and/or NPDES Permit**. Evidence of compliance with state and federal requirements to obtain a Colorado Discharge Permitting System (CDPS) and/or National Pollutant Discharge Elimination System (NPDES) permit for construction sites disturbing one (1) acre or more. The CDPS is administered by the State of Colorado under the authority granted by the US Environmental Protection Agency in accordance with the Clean Water Act and the National Pollutant Discharge Elimination System. *(am. 05/01/07)*

SECTION 4-670 UTILITY AND LIGHTING STANDARDS

A. **Utility Easements.** Easements acceptable to the utility provider shall be shown on the plat and construction plans, in compliance with the utility provider's design standards. Where utilities are not provided within a dedicated road right-of-way, easements of not less than twenty-five (25) feet shall be provided in the proposed development for accommodating water lines, sanitary sewers and stormwater drainage, unless, in the case of stormwater drainage easements, the drainage study indicates that additional easement width is necessary. The minimum width of easements for power lines, telephone lines and other utilities shall be fifteen (15) feet. The suggested form and contents of said easement dedication is found in Appendix of these Regulations.

B. Utility Laterals. All utility service laterals shall be stubbed to the property line of each lot.

C. Utility Conduits. Conduits may be required to be placed in public rights-of-way or public and private access easements at intersections or other locations for the installation of future utilities in order to avoid excavation or disturbance in newly constructed roadways. The potential need for such conduits shall be identified during the development's preliminary review stage. During preparation of the final public improvement plans, the applicant's engineer shall coordinate the design for the location and placement of the conduits with the necessary utility service provider(s). Such conduits shall be considered public improvements and shall be collateralized, constructed and subject to the terms and conditions of the other public improvements in the development.

D. Witnessing of Horizontal Locations. The horizontal location of the ends of laterals and conduits shall be witnessed by the developer's engineer to a minimum of three (3) separate and distinct points, with a permanent record made of same so that the lateral or conduit may be located in the future. Copies of these records shall be furnished to the Eagle County Engineer's office prior to acceptance of the public improvements by the County. Horizontal witnessing shall be to property corners, fire hydrants, manholes, water valve boxes and other "permanent" features. **Vertical Location**. In addition to witnessing the horizontal location of laterals and conduits, a vertical witness shall also be accomplished. Vertical witnessing shall be based on depth below ground and elevations based on datum used for the development. Bench marks shall be shown on witness records.

E. Street Lighting. The applicant shall provide street lighting for all development in the Residential Suburban Low Density (RSL), Residential Suburban Medium Density (RSM), Residential Multi-Family (RMF), Commercial Limited (CL), Commercial General (CG), and Industrial (I) zone districts. The applicant shall also comply with the standards for illumination contained in Section 4-250, Illumination Standards, as applicable.

1. Cooperation With Local Electrical Company. Lighting shall be designed in cooperation with the local electrical company serving the proposed area.

2. Coordinate With Other Public Improvements. The design shall be submitted with the public improvement plans. The lighting shall be constructed at the same time as all other public improvements construction.

3. Maintenance. Responsibility for continuing maintenance of the streetlights shall be outlined and submitted with the road plans.

SECTION 4-680 WATER SUPPLY STANDARDS

A. Potable Water Supply. Potable water supply shall be made available to all platted lots and other developments.

1. Public Water Supply Accessible. Where an approved public water supply is located within four hundred (400) feet of the proposed development, the developer shall connect to such system and install water lines and appurtenances to make the water supply available at the property line of each lot within the development.

2. Public Water Supply Not Accessible. Where an approved water supply is not reasonably accessible or procurable, the applicant shall, at the discretion of the Board of County Commissioners, either:

a. Install Central Water System. Install a central water supply system and water lines to each lot from wells or other approved sources that complies with the standards of the Colorado Department of Public Health and Environment and receives the approval of the State Engineer; or

b. Submit Evidence of Adequate Supply. Submit evidence satisfactory to the State Engineer that an adequate water supply that complies with the standards of the Colorado Department of Public Health and Environment and Eagle County will be available to each lot in the proposed development. The water supply may be from individual wells using groundwater, provided the lots are of adequate size, as specified herein, and provided the other standards specified herein are met.

3. Calculation of Adequacy of Supply. The adequacy of the water supply for any proposed system shall be calculated based on the total planned development of the subdivision, using standard engineering practices, based on per capita water usage derived from peak demand, storage and fire protection requirements. Fire protection requirements shall be related to location and character of the development.

a. Individual Supplies. If individual water supplies are to be used, a report confirming the adequacy of the supply and stating the expected aquifer depths shall be furnished.

b. Large Developments. For a development containing more than fifteen (15) lots or water taps or a development on land having varying geology, the report shall be comprehensive so as to be applicable to all lots in the proposed development.

c. Community Water System. Where a community water system is proposed, the availability and adequacy of the water sources and associated rights shall be delineated and certified by a Professional Engineer licensed in the State of Colorado.

d. Analysis of Water Samples. Representative samples of the water source shall be analyzed by a reputable laboratory to determine conformance with Colorado drinking water standards.

4. Submission Standards. The preliminary plans for the development shall contain a design of

the water supply system at a preliminary engineering level sufficiently detailed to fully represent the mechanics of how the system will operate. The final plans for the development shall contain a design of the system at an engineering level sufficiently detailed to permit accurate cost estimates.

5. Construction and Administration of Facilities.

a. Construction Standards. The water supply system in the proposed development shall conform to the standards and specifications of the nearest district that supplies water in the event future connection can be made.

b. Phased Construction Permitted. Construction of facilities may be phased upon approval of a phasing plan by the Board of County Commissioners.

c. Administration. Where a central water system is to be installed, an organization shall be set up to administer the operation of this system. Administration shall be by an incorporated town, water district or an approved corporation.

B. Fire Fighting Facilities. The developer shall provide fire hydrants, water tanks, cisterns and/or dry hydrants within the development capable of providing a fire fighting water supply. Such hydrants, water tanks, cisterns and/or dry hydrants shall be of the type, size and number, and shall be installed in locations as specified in Section 4.430.E.1.a, Water Supply of these Land Use Regulations, or as may be alternatively approved by the Local Fire Authority Having Jurisdiction. *(am 12/17/02)*

SECTION 4-690 SANITARY SEWAGE DISPOSAL STANDARDS

A. Sanitary Sewage Disposal System Required. No lots shall be platted and no development shall be permitted unless an economical and reliable method of disposal of sanitary sewage is available to that lot or development.

1. Public Sanitary Sewer System Accessible. Where a public sanitary sewer system is located within four hundred (400) feet of the proposed development, the applicant shall connect to such sanitary sewer system where and whenever feasible and provide adequate connection lines and appurtenances to make the sewer facilities available at the property line of each lot of the development.

2. Public Sanitary Sewer Not Accessible. Where a public sanitary sewer is not located within four hundred (400) feet of the proposed development, the applicant shall install sewage disposal facilities, or lot owners shall install individual sewage disposal systems for each lot, provided the lots are of adequate size, and provided the other standards specified in the Eagle County Public Health Agency On-Site Wastewater Treatment System (OWTS) Regulations are met. *(amd. 07-29-2014)*

B. Standards for Central Sanitary Sewer System. Where a central sanitary sewer system is to be constructed, the design and construction of the system shall comply with the regulations of the Colorado Department of Public Health and Environment and shall be reviewed and approved by that

Department and by the Board of County Commissioners through their authorized representative.

1. **Treatment Facilities.** Sewage treatment facilities of an approved design shall be constructed to adequately treat all collected sewage. All proposed sewer plants shall make provisions for the handling and disposal of sewage sludge.

2. **Collection Sewers.** Collection sewers shall be designed and provided to service each lot.

3. **Conformance With Standards of Nearest District.** The system shall conform to the standards and specifications of the nearest district that supplies sewage treatment facilities, in the event future connection can be made.

4. **Administration.** Where a community sewage system is to be installed, an organization shall be set up to administer the operation of this system. Administration shall be by an incorporated town, a sanitation district, or an approved corporation with a Public Utilities Commission permit.

C. Standards for On-Site Wastewater Treatment Systems (OWTS).

1. **Individual Design.** Each lot in the development shall be individually designed so that an individual sewage disposal system may be constructed on it that complies with the Eagle County Public Health Agency On-Site Wastewater Treatment System (OWTS) Regulations. The applicant shall identify a primary site and an alternative site for on-site sewage disposal. *(amd. 07-29-2014)*

2. **State and County Review Required.** Each development wherein individual systems are proposed for the disposal of sewage shall be reviewed by the County Environmental Health Manager, to determine their compliance with the County's standards for such systems. The County Environmental Health Manager may refer the development plans to the Colorado Department of Public Health and Environment for comment and approval, if required.

3. **Required Tests.** The applicant shall furnish to the satisfaction of the County Environmental Health Manager or Colorado Department of Public Health and Environment a report summarizing the percolation, groundwater and soil characteristics tests performed.

   a. **Minimum Number and Spacing of Test Holes.** The tests shall be performed in a sufficient number in separate test holes spaced uniformly over the proposed absorption field sites, such that the results of said tests indicate that site conditions are adequate to permit the installation of the proposed type of soil absorption system without creating sanitation or pollution problems.

      (1) **Test Methods.** The absorption and percolation rates shall be determined by the methods prescribed by the County Environmental Health Division determines to be equivalent in accuracy.

      (2) **Developments Having Varying Geology.** In developments on land having varying geology, tests shall be run at sufficient locations to assure that each lot will have an acceptable primary and alternate location for an individual system.

b. Qualifications. The tests shall be performed by a registered professional engineer licensed in the State of Colorado or a qualified geologist.

D. Submission Standards. The preliminary plans for the development shall contain a design of the sewage disposal system at a preliminary engineering level sufficiently detailed to fully represent the mechanics of how the system will operate. The final plans for the development shall contain a design of the system at an engineering level sufficiently detailed to permit accurate cost estimates.

DIVISION 4-7. IMPACT FEES AND LAND DEDICATION STANDARDS

SECTION 4-700 SCHOOL LAND DEDICATION STANDARDS

A. Formulas. Pursuant to Section 30-28-133(4)(a), C.R.S., 1973, as amended, the subdivider of land in each residential subdivision or portion of a subdivision intended for residential use shall allocate and convey sites and land areas for schools, when such are reasonably necessary to serve the proposed subdivision and the future residents thereof, as determined by Eagle County, based upon the School District's long range capital plan and evidence of the impact of the subdivision on the District, by applying the formulas set forth herein. *(am 05/15/01)*

1. Single-Family Units.

Number of units X 0.0151 = dedication requirement in acres.

2. Duplex and Multi-Family Units, excluding Townhouse Units.

Number of units X 0.0025 = dedication requirement in acres.

3. Townhouse Units, Defined as Multi-Family Units Where Each Unit is Located on a Separate Platted Lot.

Number of units X 0.0054 = dedication requirement in acres.

4. Mobile Home Units.

Number of units X 0.0151 = dedication requirement in acres.

B. Land Shall Be Usable. When land is dedicated for the purpose of providing a school site, it shall be that which is usable by the respective School District for such purpose, as determined by Eagle County, and shall be maintained by the School District in a reasonable manner until developed. Said land shall be held by the County for the School District until required by the School District. In the event that the School District determines subsequent to dedication that such school site is not reasonably necessary, the Board may, at the request of the School District, sell such land. *(am 05/15/01)*

C. Cash-in-Lieu of Land Dedication. When sites and land areas for schools are not reasonably necessary to serve the proposed subdivision and the future residents thereof, the Board, with recommendations from the School District and other affected entities, shall require, in lieu of such conveyance of land, the payment in cash by the subdivider of an amount not to exceed the current full market value of such sites and land area for schools. The Board of County Commissioners shall determine the amount of such payment after considering information and testimony presented at the hearing for the final plat. *(am 09/02/03)*

1. Appraisal of Land to Be Subdivided. The subdivider shall provide, as part of the application for the final plat, an appraisal of the land area to be platted, prepared by an appraiser licensed or certified in Colorado, of the current full market value of the land area being platted. The appraisal report shall be completed as a Summary Appraisal Report using the market approach to appraisal, and shall be dated no more than six (6) months prior to the date of application for the final plat. Full market value shall be based on anticipated market value after completion of platting. *(am 09/02/03)*

2. Money Shall Be Held By the Board. When money in lieu of land is required or when monies have been paid to the Board from the sale of such dedicated sites for schools, it shall be held by the Board for the acquisition of reasonably necessary sites for the construction of school facilities. *(am 09/02/03)*

D. Dedication Requirements Shall Apply Only Once. School land dedication requirements shall apply only once to the same land area. Dedications shall not be required of re-subdivisions of the same land when a dedication has previously been made unless a net gain in residential units is realized as a result of a re-subdivision. In these instances, school land dedication requirements will be calculated proportionally, based upon the difference between the total number of allowed residential units prior to and after re-subdivision occurs. *(am. 7/29/04)*

E. Dedication Shall Occur at Final Plat. The actual dedication or payment shall occur at the Final Plat stage.

SECTION 4-710 ROAD IMPACT FEES *(orig. 05/15/01)*

A. Short Title, Authority, and Application

1. Title. This Regulation shall be known and may be cited as the "Road Impact Fee Regulation."

2. Authority. The Board of County Commissioners has the authority to adopt this Regulation pursuant to the Colorado Constitution and " 29-20-101-107, 30-28-106, 30-28-133, C.R.S. and all other relevant laws of the State of Colorado.

3. Application. This Regulation shall apply to all lands within unincorporated Eagle County and, pursuant to intergovernmental agreements, all other lands within the county lying within the boundaries of Participating Municipalities.

B. Intent and Purpose.

1. Intent. This Regulation is intended to implement and be consistent with the Transportation Plan, Road Capital Improvement Plan (CIP), Road Impact Fee Study, the Eagle County Master Plan, and the master plans of Participating Municipalities.

2. Purpose. This purpose is accomplished in this Regulation by the establishment of a system for the imposition of road impact fees to assure that new development contributes its proportionate share of the cost of providing, and benefits from the provision of, Road Capital Improvements identified as needed to be built in the Road CIP.

C. Level of Service (LOS) Standard. The Major Road System shall operate at Level of Service "C" (LOS C) or better on roadway segments, and intersections, both signalized and unsignalized, shall operate at Level of Service "D" (LOS D) or better during peak hours.

D. Definitions. Certain words or phrases unique to this Section shall be construed as herein set out unless it is apparent from the context that they have a different meaning.

1. **Affordable Employee Housing** means units restricted for 'Qualified Employees' meeting income, employment and net worth limitations and the other criteria under 'Low Income Housing', 'Moderate Income Housing' and 'Qualified Employees' as defined hereinafter. . *(am. 07/29/04)*

2. **Building Permit** means that building permit issued in accordance with the Eagle County Building Resolution before any building or construction activity can be initiated on a parcel of land.

3. **Capacity** means the maximum number of vehicles that have a reasonable expectation of passing over a given section of a road during an average week day at the desired Level of Service, expressed in terms of vehicles per day.

4. **Existing Traffic-Generating Development** means the most intense use of land within the twelve (12) months prior to the time of Commencement of Traffic-Generating Development.

5. **Expansion** of the capacity of a road includes any widening, intersection improvement, signalization or other capital improvement designed to increase the existing road's capacity to carry vehicles.

6. **Fee payer** means a person commencing Traffic-Generating Development who is obligated to pay a road impact fee in accordance with the terms of this Regulation.

7. **Impact Fee Administrator** means the County Administrator or County officials that the County Administrator may designate to administer the various provisions of this regulation.

8. **Level of Service (LOS)** means a qualitative measure describing operational conditions, from "A" (best) to "F" (worst), within a traffic stream.

9. **Low Income Housing** means Affordable Employee Housing Units provided for households who earn the equivalent of between 60% and 80% of the Area Median Income (AMI) for Eagle County, as determined annually by the Department of Housing and Urban Development (HUD) and that are initially offered at a purchase price that provides for monthly housing payments and homeowner association/condominium dues in an amount that does not exceed 30% of gross household income based on a 30-year mortgage with 5% down payment. Once initially sold, the unit's affordability shall be maintained in perpetuity by an appreciation cap. *(am. 07/29/04)*

10. **Major Road System** means all major roads in Eagle County, including state and federal highways, identified in Exhibit "C," which is attached hereto and incorporated herein by reference.

11. **Moderate Income Housing** means Affordable Employee Housing Units provided for households who earn the equivalent of between 80% and 100% of the Area Median Income (AMI) for Eagle County, as determined annually by the Department of Housing and Urban Development and that are initially offered at a purchase price that provides for monthly housing payments and homeowner association/condominium dues in an amount that does not exceed 30% of gross household income based on a 30-year mortgage with 5% down payment. Once initially sold the affordability shall be maintained perpetuity by an appreciation cap. ***(am. 7/29/04)***

12. **Participating Municipalities** means one or more municipalities within Eagle County that have entered into an intergovernmental agreement with the County to collect and administer road impact fees jointly with the County and any other participating municipalities.

13. **Person** means an individual, corporation, governmental agency or body, business trust, estate, trust, partnership, association, two (2) or more persons having a joint or common interest, or any other entity.

14. **Qualified Employee** means a person(s) meeting the income, employment and net worth limitations as follows: *(am. 07/29/04)*

a) He/She must intend to use the residence as his/her primary domicile;

b) He/She is currently employed at a business located within Eagle County (or within three (3) miles of the county boundary) and must have worked an average of at least thirty (30) hours per week for at least eight (8) months in the previous twelve (12) months;

c) He/She has been hired for a job in Eagle County (or within three (3) miles of the county boundary) on a permanent basis (meaning that there is an expectation that the employment will continue for a period of at least six (6) months) to work at least thirty (30) hours per week, which employment will be his/her primary source of income and will maintain his/her residence in Eagle County upon commencing the job;

d) He/She must be employed an average of 30 hours each week on an annual basis, and must maintain this level of employment for as long as he or she owns the unit OR, he/she must demonstrate that at least 75% of his/her income and earnings are earned by working in Eagle County;

e) He/She is over the age of sixty (60) and has earned a living primarily in Eagle County by having worked an average of at least thirty (30) hours per week for the previous five (5) years or for five (5) years immediately prior to his or her retirement (working a minimum of eight (8) months for each year employed);

f) He/She is a disabled person who has been a full time employee in Eagle County (or within three (3) miles of the county boundary) a minimum of two years immediately prior to their disability;

g) He/She is the spouse or dependant of a Qualified Employee as defined herein, and who is currently living in Eagle County; or

h) He/She is a single parent with one or more dependents, with at least one being under the age of five (5) and/or enrolled full-time in a school in Eagle County (or within three (3) miles of the county boundary). A pregnancy may be counted toward this requirement as long as a note from a medical doctor is provided

15. **Road Capital Improvement** includes the transportation planning, preliminary engineering, engineering design studies, land surveys, alignment studies, right-of-way acquisition, engineering, permitting, and construction of all necessary features for any eligible project on the Road CIP, undertaken to accommodate additional traffic resulting from new traffic-generating development, including but not limited to: (a) construction of new through lanes, (b) construction of new bridges, (c) construction of new drainage facilities in conjunction with new road construction, (d) purchase and installation of traffic signals, including new and upgraded signalization, (e) construction of curbs, gutters, sidewalks, medians and shoulders, (f) relocating utilities to accommodate new road construction, (g) the construction and reconstruction of intersections, (h) the widening of existing roads, (i) bus turnouts, (j) acceleration and deceleration lanes, (k) interchanges, and (l) traffic control devices. Direct access improvements are not included in the definition of Road Capital Improvement. Direct access improvements include but are not limited to the following: (a) driveways and streets linking the development to the Major Road System; (b) right and left turn lanes leading to those driveways and streets; (c) traffic control measures for those driveways and street; and (d) those improvements required by the State Highway access code.

16. **Road Capital Improvement Plan (Road CIP)** means the list of improvements to the Major Roadway System needed to accommodate growth along with descriptions and cost estimates, which is attached to this Regulation as Exhibit "B."

17. **Road Impact Fee Board** means the body that serves as the appeal board for all decisions on independent fee calculations, credits, and refunds made by the Road Impact Fee Committee and that authorizes the expenditure of road impact fee funds. In the event that there are no Participating Municipalities, the Eagle County Board of County Commissioners shall serve as the Road Impact Fee Board. Otherwise, the Road Impact Fee Board shall consist of one elected official from Eagle County and each of the Participating Municipalities, who is appointed by a majority vote of the governing board of the Participating Municipality. Members of the Road Impact Fee Board may be removed by their governing bodies at any time, and shall cease to be members when their term of elective office expires.

18. **Road Impact Fee Committee** means the body responsible for administering independent fee calculation studies, credits, and refunds for the road impact fee program, recommending the expenditure of impact fee funds to the Road Impact Fee Board, preparing an annual report and

initiating a periodic review of the impact fee program. The Road Impact Fee Committee shall consist of the public works director, engineer and planning director of Eagle County and any Participating Municipality.

19. **Road Impact Fee Study** means the Road Impact Fee and School Fee-In-Lieu Study for Eagle County Colorado, prepared by Duncan Associates in December 1999, and the Update to the Road Impact Fee Study, October 2007, prepared by Eagle County, as may be amended. *(am. 01/22/08)*

20. **Transportation Plan** means the document entitled Eagle County 2025 Road Capital Improvement Plan, Phase I, Technical Memorandum: Year 2025 Traffic Forecasting, prepared by Felsburg Holt & Ullevig, July 2004; and County 2025 Road Capital Improvement Plan, Phase II, Technical Memorandum: Preliminary Opinions of Probably Cost for Roadway Capacity Improvements,, prepared by Felsburg Holt and Ullevig, October 2007 as may be amended. *(am. 01/22/08)*

21. **Traffic-Generating Development** means land development designed or intended to permit a use of the land that will contain or convert to more dwelling units or floor space than the most intensive use of the land within the twelve (12) months prior to the Commencement of Traffic-Generating Development in a manner that increases the generation of vehicular traffic.

22. **Traffic-Generating Development, Commencement of**, occurs upon the issuance of a building permit or other applicable approval process, on a lot or other parcel of land for which road impact fees have not previously been determined and paid. ***(am. 7/29/04)***

23. **Trip** means a one-way movement of vehicular travel from an origin (one trip end) to a destination (the other trip end).

24. **Trip Generation** means the attraction or production of trips caused by a certain type of land development.

E. Imposition of Fee.

1. Time of Fee Obligation and Payment.

a. After the effective date of this Regulation, upon the Commencement of Traffic-Generating Development within unincorporated areas of the county, a road impact fee, pursuant to the terms of this Regulation, shall be imposed on each Lot (or other portion) of the development. The amount of the fee shall be determined and paid to the Impact Fee Administrator at the time of issuance of a building permit for the development, or other associated actions of Eagle County having the effect of permitting the development of land. The obligation to pay the impact fee shall run with the land, and, therefore, the unpaid obligation to pay fees passes with title for purposes of these regulations. No building permit will be issued or other land use activity requiring Eagle County approval will commence until all fees due hereunder with respect to the Lot or, parcel of land which is the subject of the building permit application or, other applicable approval process have been paid in full. If any credits are due pursuant to Section 4-710.H, Credits, they shall also be determined at that

time. The fee shall be computed separately for the amount of construction activity covered by the permit, if the building permit is for less than the entire development. If the fee is imposed for a Traffic-Generating Development that increases traffic impact because of a change in use, the fee shall be determined by computing the difference in the fee schedule between the new Traffic-Generating Development and the existing Traffic-Generating Development. The obligation to pay the impact fee shall run with the land. *(am 03/12/02) . (am. 07/29/04)*

b. Any person who prior to the effective date of this Regulation agreed as a condition of development approval to pay a road impact fee, shall be responsible for the payment of the fee under the terms of any such agreement, and the payment of such fee by the developer will be offset against any impact fees due pursuant to the terms of this Regulation.

c. The Board of County Commissioners or participating municipality may use any non-impact fee funds to pay the road impact fees, for any project that furthers adopted County or Community goals, objectives, and policies.

2. Exemptions. The following shall be exempt from the terms of this Regulation. An exemption must be claimed by the fee payer at the time of application for a building permit.

a. Alterations, expansion, or replacement of an existing building where no additional dwelling units are created, the use is not changed, and no additional vehicular trips will be produced.

b. The construction of accessory buildings or structures that will not produce additional vehicular trips over and above that produced by the principal building or use of the land.

c. The replacement of a destroyed or partially destroyed building or structure with a new building or structure of the same size and use, provided that no additional trips will be produced over and above that produced by the original use of the land.

d. Any development of a lot having been legally created prior to the effective date of this regulation (orig. 05/15/01) shall be exempt from the payment of road impact fees, unless a re-plat occurs. The following types of re-plat will not necessitate payment of Road Impact Fees: *.(am. 7/29/04)*

- Minor Type 'B' Subdivisions for the purpose of subdividing condominium space in duplex, triplex, multifamily or non-residential structures;
- Minor Type 'B' Subdivisions for the purpose of subdividing residential duplex, triplex, townhomes, and non-residential structures where no net gain in residential units or, non-residential square footage will be realized;
- Amended Final Plats for the purpose of adjusting internal lot lines where no net gain in residential units, or non-residential square footage will be realized;
- Correction Plats.

e. Private recreational facilities within a residential subdivision that are restricted for the use of residents and will not generate additional traffic.

3. Waiver by the Board of County Commissioners. The Board of County Commissioners may waive the applicable Road Impact Fee on the development of low or moderate-income housing or affordable employee housing as defined by Eagle County government in this Section 4-710 of these Land Use Regulations, pursuant to C.R.S. 29-20-104.5(5). *.(am. 7/29/04)*

F. Administrative Calculation of Fee. Any person who causes the Commencement of Traffic-Generating Development, except those persons exempted or preparing an independent fee calculation study pursuant to Section 4-710.G, Independent Fee Calculation Study, shall pay a road impact fee calculated by the Impact Fee Administrator in accordance with the following provisions.

1. Use Specified in Fee Schedule. If the type of Traffic-Generating Development for which a building permit is requested is specified on the fee schedule in Exhibit "A," which is attached to this Regulation and incorporated herein by reference, the Impact Fee Administrator will calculate the fee based on the fee schedule. The descriptions of the land use codes in the 7th edition of the report titled Trip Generation prepared by the Institute of Transportation Engineers (ITE) shall be used to determine the appropriate land use type. *(am. 01/22/08)*

2. Use Not Specified in Fee Schedule. If the type of Traffic-Generating Development for which a building permit is requested is not specified on the fee schedule, the Impact Fee Administrator shall determine the fee in one of the following two ways. In determining the appropriate road impact fee under this subsection, the Administrator shall be guided by the data contained in the most current edition of the report titled Trip Generation prepared by the Institute of Transportation Engineers (ITE), articles or reports appearing in the ITE Journal, studies or reports done by the U.S. Department of Transportation or Colorado Department of Transportation, and other published information from similar sources.

a. The Impact Fee Administrator shall determine the fee on the basis of the fee applicable to the most nearly comparable type of land use on the fee schedule, based on similar trip generation characteristics; or

b. If the Impact Fee Administrator determines that there is published data that more accurately represents the likely trip generation of the proposed use than the most comparable land use in the fee schedule, the Administrator shall determine the fee using trip generation rates derived from published data, and applying the formula set forth in Section 4-710.G.2, Independent Fee Calculation Study Formula.

3. Uses With Extraordinary Impacts. Notwithstanding the foregoing provisions, if the Impact Fee Administrator concludes that the nature, timing, or location of the proposed development make it likely to generate impacts costing substantially more to mitigate than the amount of the fee that would be generated by the use of the fee schedule or published data on trip generation, the Administrator may determine the fee according to an independent fee calculation study prepared pursuant to Section 4-710.G.

4. Appeal of Administrative Calculation.

a. A fee payer affected by the administrative calculation of a road impact fee may appeal such decision to the Road Impact Fee Board, by filing with the Impact Fee Administrator within ten (10) days of the date of the written decision, a written notice stating and specifying briefly the grounds of the appeal. The Impact Fee Administrator shall place the appeal on the Road Impact Fee Board's agenda for the next regularly scheduled meeting.

c. The Road Impact Fee Board, after a hearing, shall have the power to affirm or reverse the decision of the Impact Fee Administrator. In making its decision, the Road Impact Fee Board shall make written findings of fact and conclusions of law, and apply the standards in this Section 4-710.F, Administrative Calculation of Fee. If the Road Impact Fee Board reverses the decision of the Impact Fee Administrator, it shall direct the Administrator to recalculate the fee in accordance with its findings. In no case shall the Road Impact Fee Board have the authority to negotiate the amount of the fee or waive the fee. The decision of the Road Impact Fee Board shall be final.

5. Amount of Impact Fee. For this section a development application shall include all types of applications except for PUD Sketch Plan and Subdivision Sketch Plan: *(orig. 01/22/08)*

a. For all lots where the development application of the lot was determined complete (as defined in Section 5-210.3) **after** the effective date of this regulation as amended (orig. 03/01/2008), the amount of the impact fee shall be from Column A in Exhibit "A", Road Impact Fee Schedule. *(orig. 01/22/08)*

b. For all lots where the development application of the lot was determined complete (as defined in Section 5-210.3) **before** the effective date of this regulation as amended (orig. 03/01/2008), the amount of the impact fee shall be from Column B in Exhibit "A", Road Impact Fee Schedule. *(orig. 01/22/08)*

c. For all lots that are applicable to Section 4-710.E.2.d shall be subject to said section. *(orig. 01/22/08)*

G. Independent Fee Calculation Study.

1. General.

a. The impact fee may be computed by the use of an independent fee calculation study at the election of the fee payer. The impact fee may also be computed by the use of an independent fee calculation study upon the request of the Road Impact Fee Committee for any proposed Traffic-Generating Development interpreted as not one of those types listed on the fee schedule or as one that is not comparable to any land use on the fee schedule, or for any proposed Traffic-Generating Development for which the Road Impact Fee Committee concludes the nature, timing, or location of the proposed development make it likely to generate impacts costing substantially more to mitigate than the amount of the fee that would be generated by the use of the fee schedule.

b. The preparation of the independent fee calculation study shall be the responsibility of the fee payer.

c. Any person who requests to perform an independent fee calculation study shall pay an application fee for administrative costs associated with the review and decision on such independent fee calculation study.

2. Formula. The independent fee calculation study for the road impact fee shall be calculated by the use of the following formula:

Impact Fee	=	TRIPS x NETCOST/TRIP
Where:		
TRIPS	=	TRIPRATE x % NEW
NET COST/TRIP	=	COST/TRIP - FUNDING/TRIP
COST/TRIP	=	GROWTHCOST □ NEWTRIPS
FUNDING/TRIP	=	FUNDING □ EXISTTRIPS x PVF
GROWTH COST	=	COST - DEFICIENCY - CDOT
Where:		
TRIP RATE	=	Average daily trip ends on a weekday (ADT) per unit of development (e.g., dwelling unit or 1,000 square feet)
% NEW	=	% of ADT that are primary as opposed to passby or diverted-link trips
COST	=	Total cost of growth-related improvements required to maintain LOS C over planning horizon
DEFICIENCY	=	The cost of remedying existing level-of-service deficiencies
CDOT	=	Anticipated state/federal project funding for growth-related improvements over the planning horizon
NEW TRIPS	=	Projected increase in average of winter and summer average daily trip ends in Eagle County over the planning horizon
FUNDING	=	Average annual historic expenditures by local governments in Eagle County on capacity-expanding road improvements, including debt service payments
EXIST TRIPS	=	Average of winter and summer average daily trip ends in Eagle County generated by existing development
PVF	=	Present value factor for converting an annual funding stream for the next 20 years (life of road facility) into equivalent lump sum payment based on a discount rate representing a typical rate of return on investment (e.g., 5.5%)

3. Data Sources. The fee calculation shall be based on data, information, or assumptions contained in this Regulation or independent sources, provided that:

a. The independent source is an accepted standard source of transportation engineering or planning data or information; or

b. The independent source is a local study on trip characteristics carried out by a qualified traffic planner or engineer pursuant to an accepted methodology of transportation planning or engineering.

4. Procedure.

a. An independent fee calculation study shall be undertaken through the submission of an application for an independent fee calculation. A potential Fee payer may submit such an application. The Road Impact Fee Committee shall submit such an application for any proposed Traffic-Generating Development interpreted as not one of those types listed on the fee schedule or as one that is not comparable to any land use on the fee schedule, and for any proposed Traffic-Generating Development for which it is concluded the nature, timing, or location of the proposed development make it likely to generate impacts costing substantially more to mitigate than the amount of the fee that would be generated by the use of the fee schedule.

b. Within ten (10) days of receipt of an application for independent fee calculation study, the Road Impact Fee Committee shall determine if the application is complete. If the Road Impact Fee Committee determines that the application is not complete, a written statement specifying the deficiencies shall be sent by mail to the person submitting the application. The application shall be deemed complete if no deficiencies are specified. The Road Impact Fee Committee shall take no further action on the application until it is deemed complete.

c. When the Road Impact Fee Committee determines the application is complete, the application shall be reviewed and the Road Impact Fee Committee shall render a written decision in thirty (30) days on whether the fee should be modified, and if so, what the amount should be, based on the standards in this Section 4-710.G, Independent Fee Calculation Study.

5. Standards. If on the basis of generally-recognized principles of impact analysis it is determined the data, information and assumptions used by the applicant to calculate the independent fee calculation study satisfies the requirements of this subsection, the fee determined in the independent fee calculation study shall be deemed the fee due and owing for the proposed Traffic-Generating Development. The adjustment shall be set forth in a Fee Agreement. If the independent fee calculation study fails to satisfy the requirements of this subsection, the fee applied shall be that fee established for the Traffic-Generating Development in Section 4-710.F, Administrative Calculation of Fee.

6. Appeal of Independent Fee Calculation Study Decision.

a. A fee payer affected by the administrative decision of the Road Impact Fee Committee on an independent fee calculation study may appeal such decision to the Road Impact Fee Board, by filing with the Road Impact Fee Committee within ten (10) days of the date of the written decision, a written notice stating and specifying briefly the grounds of the appeal. The Road Impact Fee Committee shall place the appeal on the Road Impact Fee Board's agenda for the next regularly scheduled meeting.

b. The Road Impact Fee Board, after a hearing, shall have the power to affirm or reverse the decision of the Road Impact Fee Committee. In making its decision, the Road Impact Fee Board shall make written findings of fact and conclusions of law, and apply the standards in this Section 4-710.G, Independent Fee Calculation Study. If the Road Impact Fee Board reverses the decision of the Road Impact Fee Committee, it shall direct the Committee to recalculate the fee in accordance with its findings. In no case shall the Road Impact Fee Board have the authority to negotiate the amount of the fee or waive the fee. The decision of the Road Impact Fee Board shall be final.

H. Credits.

1. General Standards.

a. Any person causing the Commencement of a Traffic-Generating Development may apply for credit against road impact fees otherwise due, up to but not exceeding the full obligation for impact fees proposed to be paid pursuant to the provisions of this Regulation, for any contributions, construction, or dedication of land accepted or received by Eagle County or a Participating Municipality for Road Capital Improvements.

b. Credits for contributions, construction or dedication of land for Road Capital Improvements shall be transferable within the same development, but shall only be used to offset road impact fees for the same development.

c. Credit shall be in an amount equal to fair market value of the land dedicated for right-of-way at the time of dedication, the fair market value of the construction at the time of its completion, or the value of the contribution or payment at the time it is made for construction of a Road Capital Improvement.

d. The credit shall not exceed the amount of the impact fees due and payable for the proposed Traffic-Generating Development, except pursuant to Section 4-710.H.2, Capital Contribution Front-Ending Agreement.

2. Capital Contribution Front-Ending Agreement. Eagle County may enter into a Capital Contribution Front-Ending Agreement with any person causing the Commencement of a Traffic-Generating Development who proposes to construct Road Capital Improvements. To the extent that the fair market value of the construction of these Road Capital Improvements exceeds the obligation to pay impact fees for which a credit is provided pursuant to this Section 4-710.H.1, Credits General Standards, the Capital Contribution Front-Ending Agreement may provide proportionate and fair share reimbursement.

3. Pre-Impact Fee Credits. The following provisions apply to credits for Road Capital Improvements completed prior to the effective date of this Regulation.

a. Application shall be made, on forms provided by the Impact Fee Administrator, within two (2) years after the effective date of this Regulation.

b. In the event that the development for which the credits are claimed is partially completed, the amount of the credits shall be reduced by the amount of the road impact fees that would have been charged for the completed portion of the development had this Regulation been in effect at 100 percent of the fees in Exhibit "A."

c. In the event that the development project has been fully completed, no credits shall be issued.

d. The value of the credits will be the fair market value of the land or construction at the time the dedication or construction was made, or the face value of the amount of any cash payment.

e. If the amount of the road impact fees that would be due for the entire development project for which the Road Capital Improvement was made is known with certainty, the credit will be expressed as a percent reduction and all road impact fees charged on the remaining building permits issued within the development will be reduced by that percentage. If the amount of the road impact fees that would be due for the entire development project for which the Road Capital Improvement was made is not known with certainty, the credit will be applied against the full amount of the fee that would be due for each building permit issued on a first come, first served basis until the amount of the credit has been exhausted. For example, suppose a credit of $75,000 applies to a 100-lot single-family subdivision, on which 50 houses have been built prior to the effective date of the impact fees. Suppose that the current road impact fee rate is $1,000 per single-family unit. The first step is to deduct the amount that would have been owed for the units already built, which is $50,000, leaving a net credit amount of $25,000 to be applied to the remaining units. The credit is 50 percent of the amount due for the remaining units, so all fees for this development are reduced by this percentage. On the other hand, if one of the remaining lots was a multi-family lot and the total fees due from the remaining development could not be determined, then up to the full amount of the fees would be credited as building permits are applied for until the credit is exhausted.

f. The application for a Credit Agreement shall include the following information:

(1) If the proposed application involves a credit for any cash contribution, the applicant shall provide a certified copy of the development approval in which the contribution was agreed and proof of payment.

(2) If the proposed application involves credit for the dedication of land, the applicant shall provide a drawing and legal description of the land; the appraised fair market value of the land at the date of dedication, prepared by a professional Real Estate Appraiser who is a member of the Member Appraisal Institute (MAI) or who is a member of Senior Residential

Appraisers (SRA); and if applicable, a certified copy of the development permit in which the land was agreed to be dedicated.

(3) If the proposed application involves credit for construction, the applicant shall provide a certified copy of the development permit in which the improvement was agreed to be constructed and evidence of the actual cost of improvement, which may include the cost of construction or reconstruction, the cost of all labor and materials, the cost of all lands, property, rights, easements and franchises acquired, financing charges, construction costs of plans and specifications, surveys, costs of professional services, and all other expenses necessary or incident to determining the feasibility or practicability of such construction or reconstruction.

4. Post-Impact Fee Credits. The following provisions apply to credits for Road Capital Improvements completed after the effective date of this Regulation.

a. The determination of any credit shall be undertaken through the submission of an Application for Credit Agreement, which shall be submitted to the Road Impact Fee Committee.

b. The application for a Credit Agreement shall include the following information:

(1) If the proposed application involves a credit for any cash contribution, the applicant shall provide a certified copy of the development approval in which the contribution was agreed; proof of payment, if payment has been made; or the proposed method of payment, if payment has not been made.

(2) If the proposed application involves credit for the dedication of land, the applicant shall provide a drawing and legal description of the land; the appraised fair market value of the land at the date a building permit is proposed to be issued for the Traffic-Generating Development, prepared by a professional Real Estate Appraiser who is a member of the Member Appraisal Institute (MAI) or who is a member of Senior Residential Appraisers (SRA), and if applicable, a certified copy of the development permit in which the land was agreed to be dedicated.

(3) If the proposed application involves credit for construction, the applicant shall provide the proposed plan of the specific construction prepared and certified by a duly qualified and licensed Colorado engineer or contractor; the projected costs for the suggested improvement, which shall be based on local information for similar improvements, along with the construction timetable for the completion thereof. Such estimated cost shall include the cost of construction or reconstruction, the cost of all labor and materials, the cost of all lands, property, rights, easements and franchises acquired, financing charges, construction costs of plans and specifications, surveys, costs of professional services, and all other expenses necessary or incident to determining the feasibility or practicability of such construction or reconstruction.

5. Procedure for Review of Credit Applications.

a. Within ten (10) days of receipt of the proposed Application for Credit Agreement, the Road Impact Fee Committee shall determine if the application is complete. If it is determined that the proposed Agreement is not complete, the Road Impact Fee Committee shall send a written statement to the applicant outlining the deficiencies. The Road Impact Fee Committee shall take no further action on the proposed Application for Credit Agreement until all deficiencies have been corrected or otherwise settled.

b. Once the Road Impact Fee Committee determines the proposed Application for Credit Agreement is complete, it shall be reviewed within thirty (30) days. The Application for Credit Agreement shall be approved if it complies with the standards in this Section 4-710.H, Credits.

c. If the Application for Credit Agreement is approved by the Road Impact Fee Committee, a Credit Agreement shall be prepared and signed by the applicant and Eagle County or the Participating Municipality where the land for which the credit is sought is located.

(1) Agreements for pre-impact fee credits shall state the dollar credit that is applicable to the development and the manner in which the credit will be applied to new building permits within the development.

(2) Agreements for post-impact fee credits shall specifically outline the contribution, payment, construction or land dedication, the time by which it shall be completed, dedicated, or paid, and any extensions thereof, and the dollar credit that will be available and the manner in which the credit will be applied to new building permits within the development.

6. Appeal of Credit Decision. A fee payer affected by the decision of the Road Impact Fee Committee regarding credits may appeal such decision to the Road Impact Fee Board by filing with the Road Impact Fee Committee, within ten (10) days of the date of the written decision, a written notice stating and specifying briefly the grounds of the appeal. The Road Impact Fee Committee shall place such appeal on the Road Impact Fee Board's agenda for the next regularly scheduled meeting. The Road Impact Fee Board, after a hearing, shall affirm or reverse the decision of the Road Impact Fee Committee based on the standards of this Section 4-710.H, Credits. If the Road Impact Fee Board reverses the decision, it shall direct the Road Impact Fee Committee to readjust the credit in accordance with its findings. The decision of the Road Impact Fee Board shall be final.

I. Benefit Areas.

1. Establishment. For the purpose of further ensuring fee payers receive sufficient benefit for fees paid, two Benefit Areas are established in the county. The Benefit Areas are shown in Exhibit "D", which is attached hereto and incorporated herein by reference.

2. Expenditure. Impact fee funds shall be spent within the Benefit Area within which the Traffic-Generating Development paying the fee is located, except that where a road on the Road System is used to define Benefit Area boundaries, the road demarcating the boundary shall be considered as part of both Benefit Areas that it bounds, and impact fees from both

Benefit Areas may be used to fund capital improvements for that road. The expenditure of impact fee funds shall be limited to those Road Capital Improvement projects included in the Road CIP. For projects that are wholly or partially needed to address existing deficiencies, only the eligible portion of the cost shall be funded with impact fee revenues, as identified in Exhibit "B."

3. Establishment of Trust Fund.

a. Eagle County hereby establishes the Road Impact Fee Trust Fund for the purpose of ensuring that fee payers receive sufficient benefit for road impact fees paid.

b. Each Participating Municipality also establishes a trust fund in their Regulations into which road impact fees collected within their jurisdiction shall be placed until transfer to the Impact Fee Administrator pursuant to this Regulation and the intergovernmental agreement with respect thereto, and placement into the Road Impact Fee Trust Fund.

4. Deposit in Trust Fund/General Requirements for Trust Fund.

a. All road impact fees collected by the Impact Fee Administrator shall be immediately deposited into the Trust Fund.

b. All road impact fees collected by a Participating Municipality shall be immediately deposited into that Participating Municipality's Trust Fund.

c. All refunds of Trust Fund monies received from CDOT or other agency shall be immediately deposited into the Trust Fund.

d. All proceeds shall be invested in an interest-bearing account. All income derived from these investments shall be retained in the trust fund until transferred or spent, whichever is appropriate. Record of each trust fund account shall be available for public inspection.

e. Quarterly, and pursuant to the intergovernmental agreements, the Participating Municipalities shall transfer the impact fee funds in their Trust Funds to the Impact Fee Administrator for deposit in the County's Trust Fund. All proceeds in the Trust Fund not immediately necessary for expenditure shall be invested in an interest bearing account. All income derived from these investments shall be retained in the trust fund. Record of the Trust Fund shall be available for public inspection in the Impact Fee Administrator's office, during normal business hours.

5. Timing of Expenditures. For the purposes of determining whether impact fee funds have been spent or encumbered, the first fees collected shall be considered the first monies spent or encumbered.

6. Annual Recommendation for Expenditure of Fees. Each year, at the time the annual County budget is reviewed, the Road Impact Fee Committee shall recommend appropriations to be spent from the Trust Fund to the Road Impact Fee Board. After review of the recommendation, the Road Impact Fee Board shall approve or modify the recommended expenditures of the trust fund monies. Expenditures shall be made from the Trust Fund only for those Road Capital Improvement projects on the Road CIP, or preparing updates to the CIP, updates to the Transportation Plan, or supporting studies. Any amounts not appropriated from the Trust Fund together with any interest earnings shall be carried over to the following

fiscal period.

7. Annual Report on Expenditures. Each year, after the decision of the Road Impact Fee Board about the expenditure of impact fee appropriations, the Road Impact Fee Committee shall prepare an annual report to the County and Participating Municipalities identifying the projects for which the Road Impact Fee Board has approved funds.

J. Refunds.

1. General. Any fees collected shall be returned to the fee payer or the fee payer's successor in interest if the fees have not been spent within ten (10) years from the date the building permit for the development was issued, along with interest of five percent (5%) a year. Fees shall be deemed to be spent on the basis of the first fee collected shall be the first fee spent.

2. Refund Procedure. The refund shall be administered by the Road Impact Fee Committee, and shall be undertaken through the following process:

a. A Refund Application shall be submitted within one (1) year following the end of the tenth (10th) year from the date on which the building permit was issued on the proposed development. The Refund Application shall include the following information:

(1) A copy of the dated receipt issued for payment of the fee;
(2) A copy of the building permit; and
(3) Evidence that the applicant is the successor in interest to the fee payer.

b. Within ten (10) days of receipt of the Refund Application, the Road Impact Fee Committee shall determine if it is complete. If the Road Impact Fee Committee determines the application is not complete, a written statement specifying the deficiencies shall be forwarded by mail to the person submitting the application. Unless the deficiencies are corrected, the Road Impact Fee Committee shall take no further action on the Refund Application.

c. When the Road Impact Fee Committee determines the Refund Application is complete, it shall be reviewed within thirty (30) days, and shall be approved if it is determined the fee payer or a successor in interest has paid a fee that has not been spent within the period of time permitted under this Section 4-710.J, Refunds. The refund shall include the fee paid plus interest of five percent (5%) a year.

3. Appeal of Refund Decision. A fee payer affected by a decision of the Road Impact Fee Committee may appeal such decision to the Road Impact Fee Board by filing with the Road Impact Fee Committee within ten (10) days of the date of the written decision, a written notice stating and specifying briefly the grounds of the appeal. The Road Impact Fee Committee shall place such appeal on the Road Impact Fee Board's agenda. The Road Impact Fee Board, after a hearing, shall affirm or reverse the decision of the Road Impact Fee Committee based on the standards in this Section 4-710.J, Refunds. If the Road Impact Fee Board reverses the decision of the Road Impact Fee Committee, it shall direct the Committee to readjust the refund in accordance with its findings. In no case shall the Road Impact Fee Board have the authority to negotiate the amount of the refund. The decision of the Road Impact Fee Board shall be final.

K. **Review Every Five Years**. At least once every five (5) years, the Road Impact Fee Committee shall recommend to the Road Impact Fee Board and to the County and Participating Municipalities whether any changes should be made to the Transportation Plan, Road Impact Fee Study, Road CIP, this Regulation, and the Regulations of the Participating Municipalities. The purpose of this review is to analyze the effects of inflation on actual costs, to assess potential changes in needs, to assess any changes in the characteristics of land uses, and to ensure that the road impact fees will not exceed a proportionate share. To be amended, the Road CIP must be approved by Eagle County and all Participating Municipalities.

L. **Final Determination Before Permit Approval.** No final plat or building permit shall be approved before final, un-appealable determination of the Road Impact Fee has been made, if applicable.

Exhibit A
ROAD IMPACT FEE SCHEDULE

Land Use Type*	Unit	Fee/Unit Column A	Legacy Fee/Unit Column B †
Single-Family Detached/Accessory Dwelling	Dwelling	$4,378	$1,600
Single-Family Detached/Accessory Dwelling > 5,000 sf	Dwelling	$5,691	$1,600
Townhouse**/Duplex	Dwelling	$2,678	$979
Townhouse**/Duplex > 4,000 sf	Dwelling	$3,481	$979
Multi-Family	Dwelling	$3,034	$1,109
Mobile Home Park	Site	$2,194	$802
Hotel/Motel/Lodge/Bed & Breakfast	Room	$2,577	$942
Retail/Commercial			
Shopping Center/General Retail <100,000 sf	1000 sq. ft.	$8,737	$5,805
Shopping Center/General Retail <250,000 sf	1000 sq. ft.	$9,026	$4,923
Shopping Center/General Retail <500,000 sf	1000 sq. ft.	$8,569	$4,232
Shopping Center/General Retail 500,000 sf+	1000 sq. ft.	$7,670	$3,504
Automobile Parts Sales	1000 sq. ft.	$11,204	$4,549
Automobile Sales	1000 sq. ft.	$3,695	$2,756
Automobile Service/Repair/Tire Store	1000 sq. ft.	$2,955	$2,118
Bank/Financial Institution	1000 sq. ft.	$3,939	$5,758
Building Materials & Lumber Store	1000 sq. ft.	$8,168	$3,317
Car Wash, Self-Service	Stall	$22,210	$9,018
Convenience Store	1000 sq. ft.	$5,261	$14,790
Discount Club	1000 sq. ft.	$8,251	$3,350
Discount Store	1000 sq. ft.	$11,179	$4,539
Discount Superstore	1000 sq. ft.	$9,271	$3,764
Electronics Superstore	1000 sq. ft.	$8,892	$3,611
Furniture Store	1000 sq. ft.	$420	$170
Gasoline Service Station	Fueling	$2,232	$3,263
Hardware/Paint Store	1000 sq. ft.	$10,554	$4,285
Home Improvement Superstore	1000 sq. ft.	$4,615	$1,874
Garden Center Store	1000 sq. ft.	$7,420	$3,013
Nursery	Acre	$19,784	$8,033
Pharmacy/Drug Store	1000 sq. ft.	$14,864	$6,035

Land Use Type*	Unit	Fee/Unit Column A	Legacy Fee/Unit Column B †
Quick Lubrication Vehicle Shop	Service	$4,755	$3,407
Restaurant, Fast Food	1000 sq. ft.	$24,541	$10,772
Restaurant, Sit-Down	1000 sq. ft.	$8,123	$5,708
Wholesale Market	1000 sq. ft.	$1,859	$755
Video Rental Store	1000 sq. ft.	$2,797	$1,136
Health Care			
Nursing Home	1000 sq.ft.	$2,148	$785
Hospital	1000 sq.ft.	$7,668	$2,802
Office, Medical	1000 sq.ft.	$16,516	$6,035
Congregate Care/Assisted Living	Dwelling	$987	$361
Office/Institutional			
Cemetery	Acre	$2,166	$792
Church	1000 sq. ft.	$4,168	$1,523
Day Care Center	1000 sq. ft.	$2,086	$3,176
Education Facility	1000 sq. ft.	$2,724	$995
Government Office Building	1000 sq. ft.	$7,879	$5,758
Library	1000 sq. ft.	$6,170	$4,509
Office, General <100,000 sf	1000 sq. ft.	$6,069	$2,218
Office, General <200,000 sf	1000 sq. ft.	$5,164	$1,887
Office, General200,000 sf+	1000 sq. ft.	$4,698	$1,717
Recreational			
Arena	Acre	$15,236	$5,568
Bowling Alley	1000 sq. ft.	$15,236	$5,568
Campground/RV Park	Acre	$33,992	$12,421
City Park	Acre	$731	$267
County Park	Acre	$1,042	$381
Golf Course (with ancillary uses)	Hole	$16,333	$5,969
Horse Racetrack	Acre	$19,651	$7,181
Movie Theater	1000 sq. ft.	$35,673	$13,036
Racquet Club	1000 sq. ft.	$7,833	$2,862
Recreational Community Center	1000 sq. ft.	$10,456	$3,821
Events/Performing Arts Center		***	***
Tennis Courts	Court	$14,185	$5,184
Industrial			
Industrial, General	1000 sq. ft.	$3,190	$1,166
Truck Terminal	1000 sq. ft.	$4,506	$1,647
Warehouse	1000 sq. ft.	$2,267	$828
Mini-Warehouse	1000 sq. ft.	$1,143	$418
Gravel Pit/Mining Operations		***	***

* Descriptions of the land use codes in the 6th edition of the report entitled Trip Generation prepared by the Institute of Transportation Engineers (ITE) shall be used to define the Land Use Types.

** Townhouse for the purpose of these Road Impact Fees is defined as a single dwelling unit constructed as part of a series of three or more dwellings, all of which are attached to the adjacent dwelling by party walls with no visible separation. Each dwelling is located on a separate platted lot.

*** Independent Fee Calculation Study required

† Legacy Fee/Unit. See Section 4-710.F.5.

Exhibit B
ROAD CAPITAL IMPROVEMENT PROGRAM (CIP)

#	Area	Project Description	Total Cost	Eligible Cost
1	Gypsum	US 6, I-70 to Valley Rd	$30,290,141	$21,981,988
2	Gypsum	US 6 Valley Road to Cooley Mesa Road	$9,943,734	9,943,734
3	Gypsum/Eagle	US 6, Cooley Mesa Rd to Eby Creek Rd	$31,998,428	$15,386,804
4	Eagle	Eagle Spur Road (Eby Creek Rd)	$5,001,866	$2,470,274
5	Eagle/Wolcott	US 6 Eagle to Wolcott	$71,968,026	$71,968,026
6	Wolcott	US 6 Wolcott to Squaw Creek Road	$49,719,916	$49,719,916
7	Edwards	US 6 Squaw Creek Road to Lake Creek Road	$11,544,032	$7,716,821
8	Edwards	US 6 Lake Creek Road to Edwards Area	$4,159,041	$2,730,363
9	Edwards	US 6 Edwards Area	$17,210,233	$11,298,321
10	Edwards	US 6 Bull Run Road to Arrowhead	$21,306,030	$15,881,024
11	Edwards	US 6 Arrowhead Area	$4,138,826	$3,084,986
12	Edwards/Avon	US 6 Arrowhead Area to East Beaver Creek Area	$6,247,573	$4,656,797
13	Avon	US 6 Beaver Creek Area	$14,463,254	$10,780,576
14	Avon	US 6 Beaver Creek Area to Avon Road	$10,613,177	$7,910,818
15	Avon	US 6 Avon Road to Eagle Bend Apartments	$2,187,253	$1,451,076
16	Avon	US 6 Eagle Bend Apartments to Stonebridge Drive	$4,555,331	$3,022,116
17	Avon	US 6 Stonebridge Drive to Post Boulevard	$6,379,390	$4,232,241
18	Avon/ Eagle-Vail	US 6 Post Boulevard to Eagle Road	$5,937,835	$3,939,303
19	Eagle-Vail	US 6 Eagle Road to Commercial Area	$1,707,336	$1,132,688
20	Eagle-Vail	US 6 Through Commercial Area	$7,512,707	$7,512,707
21	Eagle-Vail	US 6 Commercial Area to Dowd Junction	$9,513,491	$6,311,479
22	Edwards	I-70 G (Edwards Spur Road) I-70 to US 6	$37,850,967	$20,466,389
23	Edwards	Edwards Village Boulevard	$719,965	$719,965
24	Edwards	US 6 and I-70 G (Edwards Spur Road) Intersection	$2,219,875	$2,144,483
25	Minturn	SH 24 Dowd Junction to Minturn	$14,022,330	$14,022,330
26	El Jebel	El Jebel Road Hwy 82 to JW Drive	$3,332,004	$2,667,975
27	El Jebel	Upper Cattle Creek Rd No. of JW Dr 0.5 miles	$3,297,154	$2,640,070
28	El Jebel	SH 82/El Jebel Road Intersection Improvements	$746,090	$597,403
29	El Jebel	Hwy 82 / Willits Lane Intersection	$629,487	$505,631
30	Basalt	Hwy 82 / Original Road Intersection	$600,000	$480,460
31	El Jebel/Basalt	SH 82 Through Eagle County	$37,342,250	$37,342,250
32	Minturn	SH 24 Minturn to Gilman	$31,096,183	$31,096,183

#	Area	Project Description	Total Cost	Eligible Cost
33	Edwards	Squaw Creek Road Shoulder Widening	$2,568,316	$2,568,316
34	Edwards	Homestead Drive Improvements	$528,767	$528,767
35	El Jebel/Basalt	Valley Road Improvements	$1,824,953	$1,824,953
36	Gypsum	Cooley Mesa Road, Valley Road to Gateway Area	$10,581,686	$10,581,686
		Total Needs 2008-2025	**$473,757,647**	**$391,318,919**

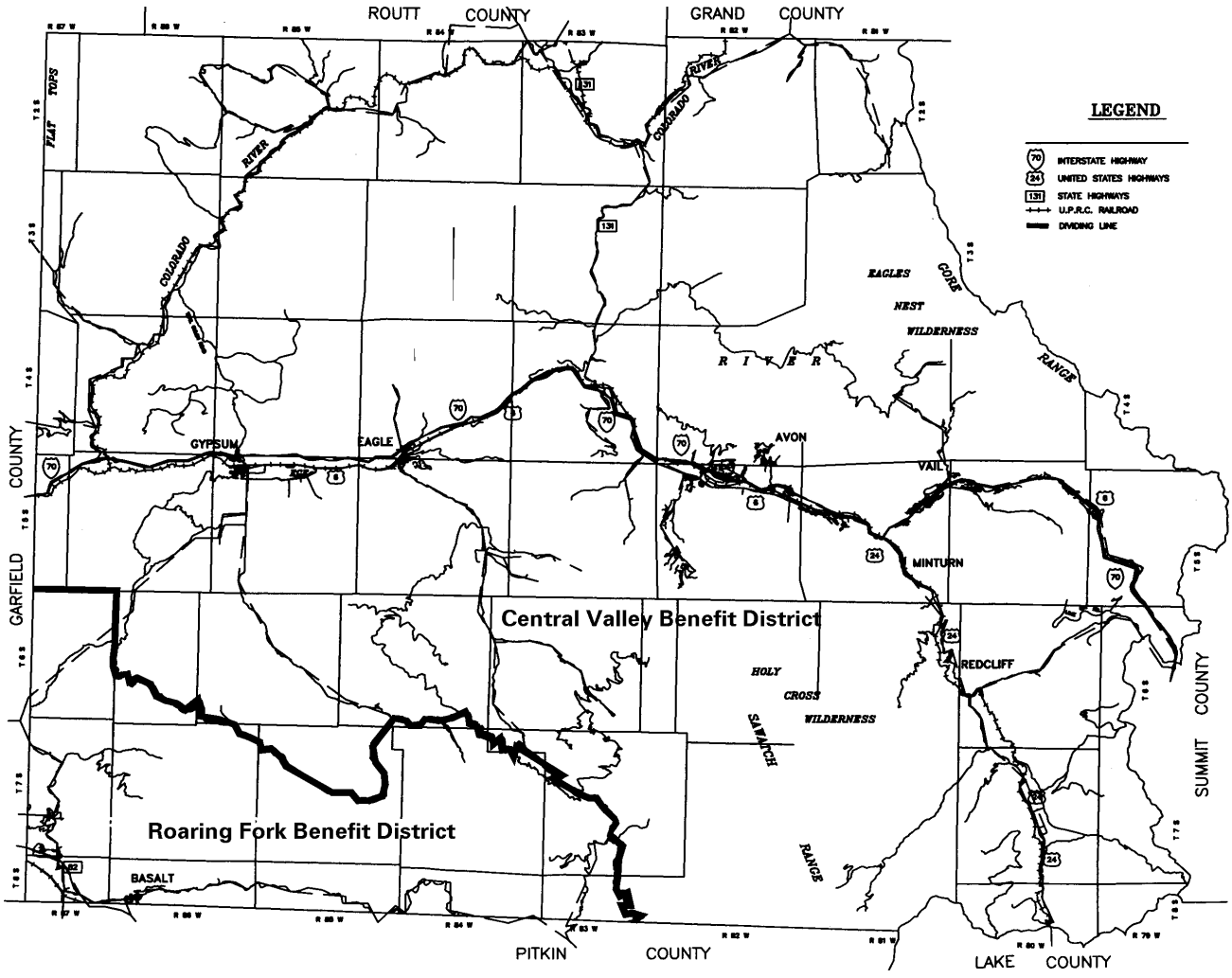
Exhibit C
MAJOR ROAD SYSTEM

Facility	Segment	Miles	Surface
I-70	Co. Line to Colo. River Rd	3.3	Paved
I-70	Colo R Rd to Interchange 140	6.2	Paved
I-70	Interchange 140 to 147	7.0	Paved
I-70	Interchange 147 to 157	9.5	Paved
I-70	Interchange 157 to 163	5.7	Paved
I-70	Interchange 163 to 167	3.8	Paved
I-70	Interchange 167 to 171	4.4	Paved
I-70	Interchange 171 to 173	2.3	Paved
I-70	Interchange 173 to 176	2.8	Paved
I-70	Interchange 176 to 180	3.8	Paved
I-70	Interchange 180 to Co. Line	9.5	Paved
I-70 Frontage Rd	E Vail to E end of Ford Park	2.6	Paved
I-70 Frontage Rd	E end of Ford Park to Vail Valley Dr	0.7	Paved
I-70 Frontage Rd	Vail Valley Dr to Main Roundabout	0.4	Paved
I-70 N Frontage Rd	Arosa Dr to W Vail Roundabout	0.4	Paved
I-70 N Frontage Rd	W Vail Roundabout to Buffer Creek	0.6	Paved
I-70 N Frontage Rd	Buffer Creek to Red Sandstone	1.1	Paved
I-70 N Frontage Rd	Red Sandstone to Main Round	1.2	Paved
I-70 S Frontage Rd	Main Roundabout to Hospital	0.2	Paved
I-70 S Frontage Rd	Hospital to Lionshead Parking Str	0.7	Paved
I-70 S Frontage Rd	Lionshead Parking to Forest Rd	0.6	Paved
I-70 S Frontage Rd	Forest Rd to Cascade Village	0.6	Paved
I-70 S Frontage Rd	Cascade Village to Gore Creek Dr	1.2	Paved
I-70 S Frontage Rd	Gore Creek Dr to W Vail Round	0.2	Paved
I-70 S Frontage Rd	W Vail Roundabout to end	1.2	Paved
US 6	I-70 (Gypsum) to Brush Creek Rd	7.6	Paved
US 6	Brush Creek Rd to SR 131	9.3	Paved
US 6	SR 131 to Squaw Creek Rd	4.2	Paved
US 6	Squaw Creek Rd to Lake Creek Rd	2.3	Paved
US 6	Lake Creek Rd to Intersection 171	8.9	Paved
US 24	I-70 to Tigiwan Rd	5.2	Paved
US 24	Tigiwan Rd to Shrine Pass Rd	6.2	Paved
US 24	Shrine Pass Rd to Co. Line	12.4	Paved

Facility	Segment	Miles	Surface
SR 131	US 6 to Landfill Rd	2.0	Paved
SR 131	Landfill Rd to Trough Rd	11.6	Paved
SR 131	Trough Rd to Co. Line	7.7	Paved
SR 82	Garfield Co Line to Pitkin Co.	5.2	Paved
Beard Creek Dr	I-70 to surface chg	1.4	Paved
Beard Creek Dr	Surface change to end	0.1	Unpaved
Beaver Creek Dr	I-70 to end	1.0	Paved
Bellyache Ridge Rd	I-70 to end	5.5	Paved
Bighorn Rd	I-70 to end of paving	1.7	Paved
Bruce Creek Rd	Brush Creek Rd to end	2.1	Unpaved
Brush Creek Rd	I-70 to E Brush Creek Rd	9.9	Paved
Brush Creek Rd	E Brush Creek Rd to Sylvan Lake	4.7	Unpaved
Brush Creek Rd	Sylvan Lake to County Line	11.0	No Plow
Buck Creek Rd	I-70 to end	1.4	Paved
Colorado River Rd	I-70 to Deep Creek Rd	1.7	Paved
Colorado River Rd	Deep Creek Rd to Sweetwater Rd	5.3	Paved
Colorado River Rd	Sweetwater Rd to end of paving	9.5	Paved
Colorado River Rd	End of paving to Derby Mesa	6.4	Unpaved
Colorado River Rd	Derby Mesa Loop to Poppy Creek	6.5	Unpaved
Colorado River Rd	Poppy Creek Rd to SR 131	5.3	Unpaved
Cooley Mesa Rd	Gypsum Creek Rd to US 6	4.0	Paved
Copper Spur Rd	SR 131 to County Line	2.5	Unpaved
Cottonwood Creek Rd	Sheephorn Creek Rd to end	1.9	Unpaved
Cottonwood Pass Rd	Gypsum Creek Rd to Gypsum Creek	0.8	Paved
Cottonwood Pass Rd	Gypsum Creek to no plow	2.0	Unpaved
Cottonwood Pass Rd	No plow to Co. Line	11.4	No Plow
Deep Creek Rd	Colorado River Rd to no plow	1.0	Unpaved
Deep Creek Rd	No plow to County Line	6.5	No Plow
Derby Mesa Loop	Colorado River Rd to Derby Mesa	15.0	Unpaved
E Brush Creek Rd	Brush Creek Rd to no plow	5.9	Unpaved
Eby Creek Rd	I-70 to end of paving	0.9	Paved
Eby Creek Rd	End of paving to priv gate	1.3	Unpaved
Fender Ln	Upper Cattle Creek Rd to surf chg	0.2	Paved
Fender Ln	Surface change to Co. Line	0.9	Unpaved
Frying Pan Rd	SR 82 to Co. Line	10.4	Paved
Frying Pan Rd	Co. Line to Co. Line (reservoir)	4.7	Paved
Gypsum Creek Rd	US 6 to end of paving	5.0	Paved
Gypsum Creek Rd	end of paving to end of plowing	8.2	Unpaved
Landfill Rd	SR 131 to end	1.5	Unpaved
Miller Ranch Rd	I-70G (Edwards Spur) to US 6	1.3	Paved
Piney Lake Rd	I-70 to E Meadow Creek Rd	6.6	Unpaved
Poppy Creek Rd	Colorado River Rd to Co. Line	1.6	Unpaved
Salt Creek Rd	Brush Creek Rd to end	2.9	Unpaved
Sheephorn Creek Rd	County Line to end	7.2	Unpaved

Facility	Segment	Miles	Surface
Shrine Pass Rd	US 24 to 0.8 miles east	0.8	Paved
Shrine Pass Rd	0.8 miles east to Co. Line	8.0	Unpaved
Simba Run Underpass	N to S I-70 Frontage Roads	0.1	Not Existing
Singletree Loop Rd	I-70 to I-70	2.0	Paved
Squaw Creek Rd	End of paving to end of road	2.1	Unpaved
Squaw Creek Rd	Hwy 6 to end of paving	3.1	Paved
Sweetwater Rd	Colorado River Rd to Co. Line	6.7	Unpaved
Trough Rd	SR 131 to County Line	9.1	Unpaved
Upper Cattle Creek Rd	SR 82 to end of paving	2.3	Paved
Upper Cattle Creek Rd	End of paving to Co. Line	4.6	Unpaved
W Lake Creek Rd	US 6 to end	3.6	Paved

Exhibit D
ROAD IMPACT FEE BENEFIT DISTRICTS



SECTION 4-720 EMERGENCY SERVICE IMPACT FEES *(orig. 12/13/05)*

A. Purpose. The purpose of this Section is to:

1. Provide a rational system for identifying and mitigating growth-related costs associated with growth and development and the expansion of emergency services and facilities made necessary by land development activities, a growing population and economic activity levels.

2. Implement the methodology and analysis for the determination of the impact of new development on the need for, and cost of, additional Emergency Service Capital Improvements.

3. Ensure that the Emergency Service Impact Fees established by this Section are based on, and do not exceed, the cost of providing additional Emergency Service Capital Improvements necessitated by new development.

4. Regulate the development of land to ensure that new development bears a proportionate share of the cost of Emergency Service Capital Improvements necessary to provide adequate emergency services within Eagle County.

5. Assure that the system of Emergency Service Impact Fees implemented in this Section is linked to an Emergency Service Capital Improvements program designed to provide the facilities and equipment for which the Emergency Service Impact Fees are imposed.

B. Definitions. The following terms as used in this Section shall have the meanings set forth unless it is apparent from the context that they have a different meaning.

1. Developer: A Developer as defined in Chapter 2 of these Eagle County Land Use Regulations.

2. Development: Development as defined in Chapter 2 of these Eagle County Land Use Regulations

3. Emergency Service Capital Improvement:

a. Includes:

(1) Fire Protection or emergency medical, rescue and ambulance service planning, preliminary architectural and engineering services, architectural and engineering design studies, land surveys, land acquisition, site improvements and off-site improvements associated with new or expanded facilities used for Fire Protection or emergency medical, rescue and ambulance service;

(2) Construction of buildings and facilities used for Fire Protection or emergency medical, rescue and ambulance services; and

(3) Purchase of fire suppression or emergency medical, rescue and ambulance apparatus and equipment, including communications equipment, with an average useful life of at least five years, necessary to adequately protect and serve new development and its inhabitants.

b. Excludes periodic or routine maintenance of facilities and equipment, personnel costs or operational expenses.

4. **Emergency Service-Generating Development:** Any development designed or intended to permit a use of the land that will contain or convert to more dwelling units or floor space than the most intensive use of the land within the twelve (12) months prior to the commencement of Emergency Service-Generating Development in a manner that increases the need for Emergency Service Capital Improvements as identified in the Fiscal Impact Fee Study.

5. **Emergency Service-Generating Development, Commencement of:** The issuance of a building permit or other applicable approval process on a lot or other parcel of land for which an Emergency Service Impact Fee has not previously been paid.

6. **Emergency Service Impact Fee:** A fee for Fire Protection or emergency medical, rescue and ambulance service established pursuant to this Section.

7. **Emergency Service Provider:** A governmental entity providing public Fire Protection, emergency medical, rescue or ambulance services or any combination of such services.

8. **Fire Protection:** The prevention and extinguishment of fire, protection of life and property from fire, enforcement of municipal, county, district, and state fire prevention codes, and provision of services authorized by statute or typically provided by a public fire department.

9. **Fiscal Impact Fee Study:** A study that mathematically calculates the fiscal impact of future demand for emergency services of the applicable Emergency Service Provider.

10. **Impact Fee Administrator:** The Impact Fee Administrator appointed as provided in Section 4-710 of these Eagle County Land Use Regulations, to administer the Emergency Service Impact Fee program established by this Section 4-720.

C. **Imposition of Emergency Service Impact Fees.** Any Developer who has not already dedicated land to defer anticipated impacts of a proposed Emergency Service-Generating Development shall upon Commencement of an Emergency Service-Generating Development pay an Emergency Service Impact Fee in the manner and amount set forth in this Section.

1. **Time of Fee Obligation and Payment.**

a) After the effective date of this Regulation, upon the Commencement of

the Emergency Service-Generating Development within unincorporated areas of the county, an Emergency Service Impact Fee, pursuant to the terms of this regulation, shall be imposed on each Lot (or other portion) of the Development. The amount of the Emergency Service Impact Fee shall be determined and paid to the Impact Fee Administrator at the time of issuance of a building permit for the Development, or other associated actions of Eagle County having the effect of permitting the development of land. The obligation to pay the Emergency Service Impact Fee shall run with the land, and, therefore, the unpaid obligation to pay fees passes with title for purposes of these regulations. No building permit will be issued, or other land use activity requiring Eagle County approval will commence until all fees due hereunder with respect to the Lot, or parcel of land which is the subject of the building permit application, or other applicable approval process have been paid in full. If any credits are due pursuant to Section 4-720.H, they shall also be determined at that time. The fee shall be computed separately for the amount of construction activity covered by the permit, if the building permit is for less than the entire Development. If the fee is imposed for an Emergency Service-Generating Development that increases emergency service impact because of a change in use, the fee shall be determined by computing the difference in the fee schedule between the new Emergency Service-Generating Development and the existing Emergency Service-Generating Development.

2. Exemptions. The following shall be exempt from the terms of this Regulation. An exemption must be claimed by the fee payer at the time of application for a building permit.

a) Alterations, expansion, or replacement of an existing building where no additional dwelling units are created, the use is not changed, and no additional need for Emergency Service Capital Improvements will be produced.

b) The construction of accessory buildings or structures that will not produce additional need for Emergency Service Capital Improvements over and above that produced by the principal building or use of the land.

c) The replacement of a destroyed or partially destroyed building or structure with a new building or structure of the same size and use, provided that no additional need for Emergency Service Capital Improvements will be produced over and above that produced by the original use of the land.

d) The following types of re-plat will not necessitate payment of Emergency Service Impact Fees

e) Private recreational facilities within a residential subdivision that are restricted for the use of residents and will not generate additional need for Emergency Service Capital Improvements.

3) Waiver by the Board of County Commissioners. The Board of

County Commissioners may waive the applicable Emergency Service Impact Fee on the development of low or moderate-income housing or affordable employee housing as defined by Eagle County government in Section 4-710 of these Land Use Regulations, pursuant to C.R.S. 29-20-104.5(5).

D. Emergency Service Impact Fee Amount. Upon application by an Emergency Service Provider, supported by a Fiscal Impact Fee Study, the amount of any Emergency Service Impact Fee to be charged shall be set and revised from time to time by resolution of the Board of County Commissioners adopted pursuant to Subsection J., except that the annual adjustment for inflation provided in Subsection J.1 shall be automatic and shall not require adoption of an implementing resolution.

E. Alternative Calculation Study. In lieu of charging the Emergency Service Impact Fee amount adopted pursuant to Subsection D above, a Developer may prepare and submit to the Impact Fee Administrator a site-specific Fiscal Impact Fee Study for the Emergency Service-Generating Development. The site-specific Fiscal Impact Fee Study shall be referred to the Emergency Service Provider serving the Development for comment and recommendations. The site-specific Fiscal Impact Fee Study shall follow the prescribed methodologies and formats established by the applicable Emergency Service Provider and shall show the basis upon which the proposed Emergency Service Impact Fee was calculated, and shall be based on the same level of service and service standards provided for in the Fiscal Impact Fee Study underlying the Emergency Service Impact Fee amount established under Subsection D.

The site-specific Fiscal Impact Fee Study shall be prepared and presented by professionals qualified in their respective fields. The Impact Fee Administrator shall consider the documentation submitted by the Developer and recommendation of the Emergency Service Provider but is not required to accept such documentation or recommendation. If the Impact Fee Administrator determines that an acceptable site-specific Fiscal Impact Fee Study has not been presented, the Developer shall pay the Emergency Service Impact Fee based upon the amount set pursuant to Subsection D above.

Determinations made by the Impact Fee Administrator pursuant to this Section may be appealed to the Emergency Services Impact Fee Board, consisting of the Board of County Commissioners, by filing a written request with the Clerk to the Board of County Commissioners within ten (10) days of the Impact Fee Administrator's determination. Following the submittal of such request, the Emergency Service Impact Fee Board shall hold a public hearing to determine the amount of the Emergency Service Impact Fee that shall be paid prior to issuing the requested building permit.

The decision of the Emergency Service Impact Fee Board is subject to judicial appeal. Pending a judicial appeal of the decision of the Emergency Service Impact Fee Board, the Developer may pay the Emergency Service Impact Fee determined by the Emergency Service Impact Fee Board and proceed with the Development.

F. Time for Payment of Emergency Service Impact Fee. A Developer requesting approval of an Emergency Service-Generating Development shall pay the Emergency Service Impact Fee at the time of issuance of a building permit for the Development, or other associated actions of Eagle County having the effect of permitting the development

of land. The obligation to pay the Emergency Service Impact Fee shall run with the land, and, therefore, the unpaid obligation to pay such fees passes with title to the property. No building permit will be issued until all Emergency Service Impact Fees due hereunder with respect to the lot that is the subject of the building permit application have been paid in full.

G. Use of Emergency Service Impact Fees.

1. All Emergency Service Impact Fees collected pursuant to this Section shall, within sixty (60) days following payment to the County, be transferred to the applicable Emergency Service Provider**.**

2. All Emergency Service Impact Fees collected pursuant to this Section shall be deposited by the applicable Emergency Service Provider, in an interest-bearing account that clearly identifies the category, account, or fund of capital expenditure for which such Emergency Service Impact Fee was imposed and the Development for which the Emergency Service Impact Fee was imposed. Any interest or other income earned on moneys deposited in said interest-bearing account shall be credited to the account**.**

3. Emergency Service Impact Fees shall be used exclusively for Emergency Service Capital Improvements**.**

4. No Emergency Service Impact Fees shall be used for periodic or routine maintenance, personnel costs, or operational expenses**.**

5. In the event bonds or similar debt instruments are used to fund Emergency Service Capital Improvements prior to collecting the necessary Emergency Service Impact Fees, once collected, Emergency Service Impact Fees may be used to pay debt service on such bonds or similar debt instruments**.**

6. In the County's discretion, the County may require the applicable Emergency Service Providers enter into intergovernmental agreements with the County regarding the method of collection and administration of the Emergency Service Impact Fee program, allocating or delegating such functions as the parties deem appropriate. In the event the County collects and administers the Emergency Service Impact Fee program, the County shall retain a reasonable administrative fee not to exceed six percent (6%).

H. Credit for Improvements.

1. General Standards.

a. Any person causing the Commencement of an Emergency Service-Generating Development may apply for credit against Emergency Service Impact Fees otherwise due, up to but not exceeding the full obligation for Emergency Service Impact Fees proposed to be paid pursuant to the provisions of this Regulation, for any contributions, construction, or dedication of land accepted or received by Eagle County or the applicable Emergency Service Provider, for purposes of providing

Emergency Service Capital Improvements necessitated by the Development.

b. Credit shall be in an amount equal to fair market value of the land dedicated for emergency Service Capital Improvements at the time of dedication, the fair market value of the construction at the time of its completion, or the value of the contribution or payment at the time it is made for construction of an Emergency Service Capital Improvement.

c. The credit shall not exceed the amount of the Emergency Service Impact Fees due and payable for the Emergency Service-Generating Development**.**

2. Emergency Service Impact Fee Credits.

a. The determination of any credit shall be undertaken through the submission of an application for credit agreement, which shall be submitted to the Emergency Service Impact Fee Committee, which shall consist of the Impact Fee Administrator and one (1) representative appointed by the applicable Emergency Service Provider.

b. The application for a credit agreement shall include the following information:

(1) If the proposed application involves a credit for any cash contribution, the applicant shall provide a certified copy of the Development approval in which the contribution was agreed; proof of payment, if payment has been made; or the proposed method of payment, if payment has not been made.

(2) If the proposed application involves credit for the dedication of land, the applicant shall provide a drawing and legal description of the land; the appraised fair market value of the land at the date a building permit is proposed to be issued for the Emergency Service-Generating Development, prepared by a professional Real Estate Appraiser who is a member of the Member Appraisal Institute (MAI) or who is a member of Senior Residential Appraisers (SRA), and if applicable, a certified copy of the Development permit in which the land was agreed to be dedicated.

(3) If the proposed application involves credit for construction, the applicant shall provide the proposed plan of the specific construction prepared and certified by a duly qualified and licensed Colorado engineer or contractor; the projected costs for the suggested improvement, which shall be based on local information for similar improvements, along with the construction timetable for the completion thereof. Such estimated costs shall include the cost of construction or reconstruction, the cost of all labor and materials, the cost of all lands, property, rights, easements and franchises acquired,

financing charges, construction costs of plans and specifications, surveys, costs of professional services, and all other expenses necessary or incident to determining the feasibility or practicability of such construction or reconstruction.

3. Procedure for Review of Credit Applications.

a. Within ten (10) days of receipt of the proposed application for credit agreement, the Emergency Service Impact Fee Committee shall determine if the application is complete. If it is determined that the proposed agreement is not complete, the Emergency Service Impact Fee Committee shall send a written statement to the applicant outlining the deficiencies. The Emergency Service Impact Fee Committee shall take no further action on the proposed application for credit agreement until all deficiencies have been corrected or otherwise settled.

b. Once the Emergency Service Impact Fee Committee determines the proposed application for credit agreement is complete, it shall be reviewed within thirty (30) days. The application for credit agreement shall be approved if it complies with the standards in this subsection 4-720.H.

c. If the application for credit agreement is approved by the Emergency Service Impact Fee Committee, a credit agreement shall be prepared and signed by the applicant and Eagle County or the applicable Emergency Service Provider where the land for which the credit is sought is located.

(1) Agreements for pre-impact fee credits shall state the dollar credit that is applicable to the Development and the manner in which the credit will be applied to new building permits within the Development.

(2) Agreements for post-impact fee credits shall specifically outline the contribution, payment, construction or land dedication, the time by which it shall be completed, dedicated, or paid, and any extensions thereof, and the dollar credit that will be available and the manner in which the credit will be applied to new building permits within the Development.

4. Appeal of Credit Decision. A fee payer affected by the decision of the Emergency Service Impact Fee Committee regarding credits may appeal such decision to the Emergency Service Impact Fee Board consisting of the Board of County Commissioners. The appeal shall be initiated by filing with the Emergency Service Impact Fee Committee, within ten (10) days of the date of the written decision, a written notice stating and specifying briefly the grounds of the appeal. The Emergency Service Impact Fee Committee shall place such appeal on the Emergency Service Impact Fee Board's agenda for the next regularly scheduled meeting of the Board of County Commissioners. The Emergency Service Impact Fee Board, after a hearing, shall affirm or reverse the decision of the Emergency Service Impact Fee Committee based on the standards of this

Section 4-720.H. If the Emergency Service Impact Fee Board reverses the decision, it shall direct the Emergency Service Impact Fee Committee to readjust the credit in accordance with its findings. The decision of the Emergency Service Impact Fee Board shall be final.

I. Unpaid Emergency Service Impact Fees. The Board of County Commissioners reserves the right to withhold or revoke any permits, certificates, or other approvals for any land or building for which the payment of Emergency Service Impact Fees is delinquent.

J. Adjustment and Review of Emergency Service Impact Fees. The amount of the Emergency Service Impact Fee shall be reviewed and adjusted as follows:

1. The Emergency Service Impact Fee shall be adjusted annually for inflation, effective January 15 of each year. The adjustment shall be based upon the percentage change in the United States Bureau of Labor Statistics Consumer Price Index for Denver-Boulder, all items, all urban consumers, or its successor index, or an equivalent index applicable to Eagle County. The applicable Emergency Service Provider shall annually notify in writing the Impact Fee Administrator of the amount of the annual adjustment for inflation.

2. The Board of County Commissioners may, annually, in conjunction with the presentation of the County's proposed budget, consider any further adjustments to the Emergency Service Impact Fee, following consultation with the applicable Emergency Service Provider**.**

3. No less frequently than every five (5) years, the applicable Emergency Service Provider shall provide to the Board of County Commissioners an updated Emergency Service Fiscal Impact Fee Study, and proposal to update the Emergency Service Impact Fee amount.

K. Application. The requirements of this Section shall apply only within the jurisdiction and boundaries of an Emergency Service Provider for which a resolution setting an Emergency Service Impact Fee has been adopted pursuant to Subsection D, above. Pursuant to Section 24-68-102.5, C.R.S., the provisions of this Section shall apply to all land use applications currently pending at the time this Section becomes effective.

DIVISION 4-8: SUSTAINABLE COMMUNITY INDEX *(org. 9/17/08)*

SECTION 4-800: PURPOSE

The Sustainable Community Index (SCI) is a development review tool to comprehensively analyze how new developments contribute toward sustainable community development. The intent of the SCI is to give staff, developers, and decision makers an indicator as to the level of sustainability a project includes within it, as well as its contribution to the broader community.

Sustainable Community shall be defined as: *a community which fosters economic opportunity and social capital while protecting and restoring the natural environment upon which people and economies depend.*

SECTION 4-810: APPLICABILITY

The SCI shall apply to all proposed PUDs, PUD amendments, Final Plats, Major Special Use Permits, and Zone Changes as a required finding to be met for approval.

SECTION 4-820 POINT REQUIREMENTS

The SCI shall utilize the following point thresholds to be incorporated into the SCI finding:

140+	EXCEEDS MINIMUM STANDARDS
70-139	MEETS MINIMUM STANDARDS
0-69	DOES NOT MEET MINIMUM STANDARDS
	NOT APPLICABLE

The point scale above assumes a maximum point score of 210, with 70 (meets minimum standards) and 140 (exceeds minimum standards) representing 33% and 66% thresholds of this maximum number, respectively. For proposals where certain line items from the SCI which are not applicable to the project, the total maximum points and point thresholds shall be adjusted and pro-rated accordingly. A non-applicable point or line item is one which is impossible to include in the project because of its location or existing condition. A point or line item cannot become non-applicable due to a proposed design or recent actions taken by the applicant.

For example, a project with 30 non-applicable points would have a maximum of 180 points and the following SCI finding thresholds would apply accordingly:

120+	*EXCEEDS MINIMUM STANDARDS*
60-119	*MEETS MINIMUM STANDARDS*
0-59	*DOES NOT MEET MINIMUM STANDARDS*
	NOT APPLICABLE

SECTION 4-830: POINT DETAILS

SECTION 4-830.1 SITE/LOCATION:

1.1 LOCATION INFILL/REDEVELOPMENT:

The project is either infill or adjacent to an existing town or community center (defined as an area with multiple private businesses and services within walking distance of each other).

a. Infill site: The site is surrounded on all sides by development. 4 points
b. Adjacent site: The site is adjacent to existing development as part of a town or community center on at least one side of the project. 2 points
c. Previously developed (deconstruction required): 1 point

1.2 TRANSIT:

Over 50% of the development is within walking distance (1/4 mile) to public transit.
5 points

1.3 PROXIMITY TO EXISTING WATER/WASTEWATER:

a. The project water distribution and sewer collection infrastructure connects to existing infrastructure on site or immediately adjacent to the property and is served by water and wastewater treatment facilities operated by the regional water and wastewater treatment provider. 4 points.

b. OR, the developer is working with an existing regional water and wastewater service provider to obtain efficient infrastructure tie-in and service. 2 points.

1.4 WILDLIFE/ECOLOGICAL COMMUNITIES:

Upon biological study of the area, a wildlife plan shall be completed to the satisfaction of the CPW for any critical wildlife habitats as defined by the CPW. Identify and protect any wildlife movement route/corridors on or near the property. 5 points.

1.5 RIPARIAN/WETLAND PRESERVATION:

For any site with wetland/stream/water body(s), any development is setback at least 100 feet from the edge of the delineated riparian/wetland vegetation, and avoids any floodplain. 1 point. For any project within 200 feet of a wetland, stream, or water body, a water quality management plan is submitted, including erosion and impact control measures and water quality testing before, during, and after construction to demonstrate no impact to water quality. 2 additional points.

1.6 AGRICULTURAL LAND PRESERVATION:

The project is either on previously developed land or is not located on land historically used for agriculture or suitable for agricultural use as defined by the Natural Resources Conservation Service. 2 points

1.7 EXISTING VEGETATION PRESERVATION:

The project avoids disturbance of existing trees and mature shrub species (2 points), or disturbs no more than 10% of existing trees/shrubs on the site (1 point). Such vegetation is fenced off outside of limits of disturbance during construction. If no such vegetation exists on site, item inapplicable.

1.8 BROWNFIELD/BLIGHT REDEVELOPMENT:

a. The project redevelops an area that is currently dilapidated or blighted. 'Blight' is defined as: an unsightly condition including the accumulation of debris, litter, rubbish, or rubble; fences or structures characterized by holes, breaks, rot, crumbling, cracking peeling, rusting or damage; and any other similar conditions of disrepair and deterioration regardless of the condition of other properties in the neighborhood. 2 points

OR

b. The project cleans up a brownfield lot. In this case 'brownfield' is a property with actual demonstrated past commercial or industrial contamination. A contamination cleanup plan would need to be documented and administered. 3 points

1.9 STEEP SLOPES/RIDGELINES:

The project avoids ridgelines and slopes steeper than 20%. 3 points

1.10 STORMWATER MANAGEMENT:

a. At least 30% of the runoff is reduced/detained during a 1-inch rain event. 1 point

b. 100% of surface runoff travels through bioswales, engineered wetlands, landscaped detention areas, and/or other vegetated drainage features that remove particulates and pollutants from surface runoff, provide onsite rainwater irrigation, and promote natural groundwater recharge. No vegetated drainage feature that drains to a live stream shall be less than 100'. 2 points

SECTION 4-830.2: CONNECTIONS/USES:

2.1 OPEN COMMUNITY:

The project is not gated; roads/paths/amenities are open to the public for use and connected to the community outside the development project. 2 points

2.2 PUBLIC ACCESS:

The project provides public access to existing or appropriate trailheads or access points to public lands or rivers (new access points must include approval from appropriate jurisdictional authority). 4 points.

2.3 COMPACT DEVELOPMENT:

Residential has a minimum average gross density of 7 units per acre. Non-residential has a minimum floor area ratio (FAR) of 0.50 for mixed use, 0.70 for non-residential only. 5 points

2.4 REDUCED FOOTPRINT:

The project is located entirely upon previously developed areas of the property. 1 pt.
And/or: Total footprint does not exceed 50% of the property: 1 point.

2.5 CLUSTERING

The project utilizes efficient infrastructure and reduced site impacts by concentrating development in compact clusters or nodes of development and creates or maintains open space on the property. (2 points)

2.6 OPEN SPACE:

The project creates or maintains open space **through conservation easement** that meets the intent of the Eagle County Open Space Criteria (available on the Eagle County website www.eaglecounty.us). The abbreviated criteria and associated points are as follows:

a. Scenic Landscapes and Vistas 3 points

Preserve the protect Eagle County's outstanding natural beauty and visual quality.

b. Regional Heritage, Agriculture and Ranching 3 points
Retain Eagle County's history, culture, and agricultural land uses.

c. Wildlife, Wildlife Habitat and Migration Routes 3 points
Set aside areas critical to the long-term health and vitality of indigenous wildlife.

d. Sensitive Lands and Environments 3 points
Protect and enhance riparian areas, flood plains, and other sensitive, unique, or endangered ecosystems or environments.

e. Physical and Visual Buffers 3 points
Promote community separation and distinction, and provide separation between developed areas and sensitive lands.

f. Access to Streams, Rivers, Public Lands, and Recreation Opportunities
Provide access to public and/or private lands, and improve opportunities for high quality dispersed recreation. 3 points

Open Space Potential points: 3 to 18 points

2.7 REDUCED PARKING FOOTPRINT:

a. No more than 20% of the total development footprint is represented in surface parking. 2 points 10% or less: 3 points

b. For nonresidential projects, 10% of parking spaces are reserved for carpool vehicles of 2 or more passengers. 1 point

c. Covered bicycle storage for minimum 15% of occupants. 1 point

d. Covered bicycle storage for minimum 25% occupants. 2 points

2.8 PARKING LOCATION:

For all non-residential and/or multi-family buildings, all surface parking must be at the side or rear of the structure, leaving building frontages and streetscapes free of parking lots. Side parking must be adequately screened. For single family/duplex units, garages cannot protrude from the front façade; side/rear parking, access via alley, etc. to promote pedestrian access.

a. Parking only to rear of structure(s), or no surface parking lots: 4 points

b. Parking to side of structure (not obstructing entrance): 2 points

2.9 REDUCED PARKING:

a. Onsite parking does not exceed LUR requirements by more than 5%. 1 point

b. A transportation demand management plan demonstrates at least a 15% reduction in parking need than required, and no offsite parking impacts are created: 2 points.

c. A 25% reduction in on-site parking: 3 points.
(Onsite parking does not exceed the plan's recommendations for parking.)

2.10 JOBS/HOUSING:

a. For a commercial project, at least 25% of the floor area is residential. Jobs that would provide incomes able to support 50% of potential residents either exist onsite or within a half mile of the project. 4 points

b. For a residential project, at least 25% of the floor area is for commercial uses. The commercial component would create jobs with incomes able to support 50% of potential residents. 4 points

2.11 SCHOOL PROXIMITY:

A public school is located within a mile of the project. Children are able to walk or ride from the development to the school safely on designated routes or paths. Distance is measured as traveled on such routes. 3 points.

2.12 DIVERSITY OF USES:

The project includes the following non-residential uses (one point for each type):

Bank	Pharmacy
Child care facility (licensed)	Church
Community/civic center	Police/fire station
Convenience store	Post office
Hair care	Restaurant
Hardware store	School
Health club or recreation facility	Senior care facility
Laundry/dry cleaner	Supermarket
Library	Theater
Medical/dental office	Bar
Office, general (not in-home)	Liquor Store

2.13 DIVERSITY OF HOUSING TYPES:

To enable citizens from a wide range of economic levels and age groups to live within a community, a diversity of housing types is necessary. One point for each housing type above 2 as defined in the following list:

Detached residential large (> 1800 ft2, not to exceed 3000 ft2)
Detached residential small (< 1800 ft2)
Duplex or townhouse large (> 1200 ft2, not to exceed 2000 ft2)
Duplex or townhouse small (< 1200 ft2)
Multifamily large (> 1000 ft2, not to exceed 2000 ft2)
Multifamily small (< 1000 ft2)
Live/work large (> 1200 ft2)

Live/work small (< 1200 ft2)
Accessory Dwelling Unit large (> 850 ft2, not to exceed 1000 ft2)
Accessory Dwelling Unit small (< 850 square feet)

2.14 AFFORDABLE HOUSING:

One points for each affordable housing unit provided above what is called for in the housing guidelines.

2.15 AFFORDABLE RENTAL HOUSING:

Onsite rental housing is provided.

a. Minimum 15% onsite rental housing is attainable for households up to 50% AMI 2 points.

b. Beyond item above, 15% additional onsite rental housing is available for households up to 80% AMI. 2 additional points.

SECTION 4-830.3: TRANSPORTATION:

3.1 WALKABLE STREETS:

a. Each building has a principle front entry that faces a functional public pedestrian space. A functional public pedestrian space is one that has gathering areas nearby and is connected to pedestrian walkways. 2 points

b. Sidewalks, footpaths, or woonerfs are available on all streets within and bordering the project. 2 points A 'woonerf' is defined as a multi-modal plaza or street where pedestrians and bicycles have legal priority over motorists. Cars have access through woonerfs, but their designed speed is 5 mph.

c. The public realm is entirely ADA accessible. REQUIRED

d. 10' wide sidewalks in front of non-residential buildings. 1 point

e. All streets facing non-residential mixed-uses have road designs for 25 mph or slower. 2 points

f. All streets in residential-only blocks have road designs for 20 mph or slower. 2 additional points

g. At least 50% of the building frontages have less than 18-foot setback and are contiguous to the sidewalk/public realm. 2 points

h. Functional entryways for non-residential/mixed-use buildings occur at least every 75 feet on average. 2 points

i. All ground-level non-residential interior space has at least 30% transparent glass on the ground-level façade. 2 points

j. No blank walls longer than 50 feet occur along sidewalks. Windows, doors, artwork or murals act as breaks to blank walls. 2 points

k. On-street parking is provided for at least 70% of streets. 2 points

l. Street trees occur between the street and sidewalk at least every 40 feet. 2 points

m. For non-residential projects, at least 50% of ground level space is retail or service (banks/real estate not included). 2 points

n. Trees, awnings, or other structures provide shade to at least 50% of sidewalks (tree shading at maturity). 2 points

o. Pet pickup stations are provided in appropriate locations throughout the development. 1 point

3.2 STREET NETWORK:

The project has a traditional small-block grid pattern. 2 points
If not a grid pattern, At least 50% of cul-de-sacs have a bicycle/pedestrian path through-connection. If topographic or other limitations prevent connection, those are not included in calculation. 1 point

3.3 TRANSIT FACILITIES:

Provide transit stops designed pursuant to Eco-Transit or RFTA design specifications for covered, partially enclosed, lighted facilities with bicycle racks, maps and route signage information. 2 points
Covered bicycle storage: 1 additional point.

3.4 WALKABLE VICINITY ACCESS:

Outside services and stores are within walkable distance to the project location. Use www.walkscore to establish the vicinity walkability of the project. A score of:

10-25 gets 1 point
26-50 gets 2 points
51-75 gets 3 points
76-100 gets 4 points

3.5 BICYCLE NETWORK:

The project provides accessibility and connection to bicycle paths and routes connecting it to a town of community center, Eco-Trails Core Valley Trail, or Mid-Valley Trail. 3 points

3.6 ACCESS TO PUBLIC SPACES:

90% dwelling units and/or non-residential spaces are within a 1/4 mile of a public green space that is at least ¼ acre in size (cannot be a narrow strip of greenspace). 2 points

3.7 ACCESS TO ACTIVE SPACE:

The project allows access to public outdoor recreation areas.

a. 90% of dwelling units are within ½ mile of a public active space of at least 1 acre (soccer felds, ball fields, basketball court, park with active recreational facilities, etc.) 2 points

b. 50% of dwelling units are located within ½ mile of a recreation path or network or that is least 3 miles in length. 1 point

c. 50% of dwelling units are located within ¾ mile of a dog park area (pickup stations required) 1 point.

3.8 LOCAL FOOD PRODUCTION:

a. The project allows for private gardens in sideyards, backyards, and/or balconies. 1 point

b. Neighborhood gardens exist as dedicated areas of 100 square feet per dwelling unit that include fencing, irrigation, and raised beds. 2 points

c. The project is within 3 miles of a farmer's market that has been in place at least 2 years and includes no less than 3 local agricultural producers. 1 point

SECTION 4-830.4: RESOURCE EFFICIENCY

4.1 LIMITED TURF/EFFICIENT TURF SPECIES:

a. Less than 25% of landscaped areas are irrigated turf grass. 1 point

b. Irrigated turf grass areas use a species that requires on average 25% or less irrigation than Kentucky blue grass. 1 point

4.2 DIVERSE NATIVE LANDSCAPING:

The project uses over 10 or more species of native low-water plant species as a part of its landscape plan. 2 points

4.3 XERISCAPE:

The landscape plan demonstrates utilization of the seven principles of xeriscape design: 2 points

a. Thoughtful landscape plan for dry/wet zones and plant maturity

b. Select low-water-use plants as identified by CSU or recognized source.

c. Minimize or eliminate turf areas

d. Use efficient irrigation (drip systems, EV schedules, etc.)

e. Improve the soil

f. Use mulches

g. Demonstrate appropriate maintenance plan

4.4 SOLAR ORIENTATION:

75% of all buildings in the project have solar orientation. The south-facing façade of the buildings must be at least 1.5 times the east-west façades. 3 points. At least 50% of the south-facing façade area is capable of mounting a solar collection device which would generate at least 90% of an ideal aspect as calculated on www.pvwatt.com. Additional 2 points

4.5 RENEWABLE ENERGY:

Provide on-site renewable energy system(s). 3 points for each 5% of total energy consumption offset by system(s).

4.6 INFRASTRUCTURE RECYCLED CONTENT:

Concrete and/or asphalt is at least 75% recycled content. 1 point

Any mulch is recycled wood waste chip, and/or recycled tire mulch (for play areas). 1 point

4.7 RECYCLING:

The project is designed with recycling containers for co-mingled, newspaper, and cardboard for non-residential, mixed-use, and multi-family projects (**REQUIRED).**

4.8 LIGHT POLLUTION:

The project utilizes dark sky fully shielded down-facing lighting for infrastructure. Lighting doesn't create glare or be unnecessarily overpowered. Buildings shall only have exterior illumination necessary for safety requirements and minimal signage illumination for commercial uses **(REQUIRED).**

4.9 INNOVATION IN DESIGN:

Demonstrate other components of the design that meet the intent of the Sustainable Design Index which is to promote resource efficiency, renewable power, reduced impacts, and social capital/equity. Points reviewed on a case by case basis.