

Section 7

IMPROVEMENTS STANDARDS

7.1 PURPOSE

These improvement standards establish requirements which are designed to promote the health, safety, convenience, order, prosperity and welfare of the present and future citizens of Ouray County and will insure adequate and convenient open spaces for public streets and other forms of access, recreation, drainage facilities for protection against flood, and safe, potable water supplies and adequate sanitary disposal systems.

7.2 REQUIRED IMPROVEMENTS

The developer shall provide, construct, furnish or make available all the improvements described in this Code as they apply to the particular development.

- A. Grading and Paving: All highways, streets and alleys shall be graded and paved or gravel surfaced to the widths and grades as described in the Ouray County Road Standards. The developer shall improve any roads necessary or used to provide access from the development to a public road, whether within the development or off-site.
- B. Curbs and Gutters: Concrete curb and gutters may be required along all highways and streets in nonresidential areas of PUDs and along all highways and streets in residential areas of PUDs where, by virtue of clustering or other means, the density is four (4) or more dwelling units per net acre.
- C. Sidewalks: Concrete sidewalks may be required as described in Section 7.3(E)(6) of this Code.
- D. Retaining Walls: Retaining walls may be required whenever topographic conditions warrant, or where necessary to retain fill or cut slopes within the rights-of-way or slope easements.
- E. Water Supply and Fire Protection: Provisions shall be made for such domestic water and fire protection as may be necessary to protect public health and property. Such water may be supplied by:
 - (1) Connection to a public utility, in which case, a letter from the public utility company shall be submitted, showing its ability to serve the proposed subdivision and evidence indicating that a satisfactory agreement has been entered into for the installation of such service which shall provide water connection for each lot.

[7.2 E 2]

(2) Establishment of a new water system. Any water system designed to serve twenty-five (25) people or fifteen (15) taps must be reviewed and approved by the Colorado Department of Health. The developer shall give such guarantee or shall post such bond as deemed necessary to insure installation of an adequate and safe system which would provide for water connection for each lot.

(3) Wells, springs and other water rights showing adequate evidence that a water supply which is sufficient in terms of quality, quantity and dependability will be available to insure an adequate supply of water for the type of development proposed. Such evidence may include, but shall not be limited to:

(a) Evidence of ownership or right of acquisition of or use of existing and proposed water rights.

(b) Historic use and estimated yield of claimed water rights.

(c) Amenability of existing rights to a change in use.

(d) Evidence that public or private water owners can and will supply water to the proposed development, stating the amount of water available for use within the development and the feasibility of extending service to that area.

(e) Evidence concerning the potability of the proposed water supply for the development. Such evidence must take into account that some water source areas in Ouray County produce water with undesirable substances not included in State water quality standards. Ouray County may impose requirements in addition to those of the State for potable water.

F. Sewage Disposal: Provisions shall be made for adequate sewage disposal by:

(1) Connection to sanitary sewer when available, in which case, a letter from the governing board of the sewer system shall be submitted, showing the ability of the system to handle sewage from the proposed development and evidence that a satisfactory agreement has been entered into for connection to the system.

[7.2 F (2)]

(2) Individual or community septic tank systems or other approved sewage disposal systems will be permitted, provided that detailed plans shall be submitted to the County. Any system with a design capacity of two thousand (2,000) gallons per day or more must also have the site application approved by the Colorado Department of Health. No construction shall be commenced upon any such systems until the same has been approved in writing by the County and the Colorado Department of Health, provision has been made for future operation and maintenance, and the developer has given such guarantee or posted a bond as deemed necessary to insure the installation of proper facilities within the proposed development.

G. Trees and Landscaping: The developer may be required to install trees and/or other landscaping materials where existing vegetation has been destroyed by grading or other construction activities. Additional landscaping may be required to meet requirements of the Visual Impact Regulations.

Existing trees to be preserved shall be clearly marked prior to any grading or construction work and protected during construction of the development.

H. Fills: All filling of lands shall be accomplished in accordance with the requirements and recommendations of the soils investigation report, required by Section 7.3(F).

I. Drainage and Flood Control: All necessary structures and facilities for storm water drainage and flood water control shall be provided as required in the provisions of the Flood Hazard Regulations (Section 10 of this Code) and as required and recommended by the PUD drainage plan, as required in Section 7.3(D).

J. Underground Utilities: Where feasible, all utility distribution facilities (including, but not limited to, electric, communication and cable television lines), installed in and for the purpose of supplying service to any development shall be placed underground, except street lights and equipment normally installed on the surface which is appurtenant to underground facilities, such as surface-mounted transformers, pedestal-mounted terminal boxes and meter cabinets, concealed ducts and similar items.

The developer is responsible for compliance with the requirements of this Section and shall make the necessary arrangements for the installation of said facilities.

[7.2 J]

All underground facilities, sanitary sewers and storm drains installed in streets, service roads, alleys or highways, shall be constructed prior to the surfacing of such streets, service roads, alleys or highways. Service connections for all underground utilities and sanitary sewers shall be outside of any road right-of-way.

Amended
7/29/96

K. Signs: Signs shall be designed and placed in accordance with County specifications as described in Section 8 of this Code.

L. Subdivision Monumentation:

(1) Permanent Monuments: Permanent survey monuments shall be set within all subdivisions in accordance with the provisions of Title 29, Article 51, Colorado Revised Statutes, as amended. At least two (2) permanent monuments shall be set in each block; they shall be within sight of each other and be readily accessible. These monuments may be either on the street centerline or on a line parallel to, and offset from the centerline and properly documented on the Final Plat. Permanent monuments shall be not less substantial than six (6) inch diameter concrete, twenty-four (24) inches long, or thirty (30) inch long No. 5 rebar steel, the upper twelve (12) inches of which are encased in concrete, with the exact point marked by a copper or brass pin two (2) inches long. The concrete monument shall be used in all street and surface areas. The top of the monument shall be six (6) inches below the finished pavement grade and shall be encased by a cast iron monument box and cover, set flush with the finished pavement and supported independently of the monument.

(2) Staking: In making the survey, the engineer or surveyor shall take all corners and angle points in the exterior boundary of the subdivision and all angle points and curve points in the right-of-way lines of all streets, alleys, easements or other lands to be dedicated for public use. Stakes shall be not further apart than one hundred (100) feet and not less substantial than three-quarter (3/4) inch iron pins eighteen (18) inches long, driven flush with the ground, the corner point being marked by a metal tag stamped with the registration number of the engineer or surveyor. All lot corners, angle points and curve points shall be staked with three-quarter (3/4) inch iron pins eighteen (18) inches long. Said stake shall be driven to a depth of not less than two (2) inches below the finished grade of the lot and shall be permanently monumented on the surface.

[7.2 L 3]

(3) Inspection and Installation: All monuments shall be subject to the inspection and approval of the County and shall be installed prior to the issuance of any building permits for the subdivision.

M. Off-Street Parking: Parking shall be provided on the property for which it is needed in accordance with the following schedule. Parking requirements for buildings or developments containing more than one (1) unit shall be established by determining the required number of spaces for each separate use.

NO.	USE	NUMBER OF PARKING SPACES REQUIRED
1.	Single and two-family dwellings	2 per dwelling unit
2.	Multi-family dwellings 1 bedroom 2 bedroom 3 bedroom Each additional bedroom over three	1.5 per unit 2.0 per unit 2.5 per unit 2.5 per unit plus 0.5 spaces per additional bedroom
3.	Hotel, Motel	1 per guest room, plus 1 space per 3 employees
4.	Mobile Home Park	2 per mobile home, plus 1 for each 200 square feet of gross floor area (GFA) of any permanent structures
5.	Ski Area	1 per employee, plus 1 space per 4 potential skiers based on the capacity of the mountain
6.	Restaurant, Cafe and Drinking Establishments	1 for each 150 square feet of gross floor area (GFA)
7.	Hospital	1 per bed
8.	Medical Office or Clinic	1 for each 150 square feet GFA

9.	Offices and Office Buildings	1 for each 300 square feet GFA
10.	Retail Stores, Shops, Banks, other financial institutions, except grocery stores	1 for each 200 square feet GFA
11.	Grocery and Food Stores	1 for each 150 square feet GFA
12.	Golf Courses	3 for each golf hole
13.	Churches	1 for each 4 seats (in the principal assembly area)
14.	Auditorium, Theater, Convention Hall or similar place of public use	1 for each 4 seats (bench capacity computed as 1 seat for each 20 inches)
15.	Boardinghouse, Lodging house or Tourist Home	1 for each guest bedroom
16.	Elementary, Junior High and Private Schools (non-commercial)	2 for each classroom or parking required for auditorium, whichever is greater.
17.	Senior High School	4 per classroom and parking for any auditorium
18.	Child Day Care Facility	1 per 2 staff employees or staff volunteers; 1 per 8 children; 1 per each day care facility vehicle
19.	<p>Parking spaces for uses not listed above shall be determined based on the following considerations:</p> <ul style="list-style-type: none"> (a) The design capacity of the proposed facility. (b) An overall plan for concentration or concentrations of parking with appropriate consideration of designed landscaping and relationship to surroundings; (c) Trade-offs or alternative use of parking areas by uses which occur during different hours, days or seasons. 	

[7.3]

7.3 DESIGN STANDARDS

A. Site Considerations

(1) Where steep land (10 percent slope or greater for the majority of lots), unstable land and areas having inadequate drainage or problems of such a nature as to endanger health, life or property exists, areas with such problems shall not be platted unless acceptable provisions are made by a registered engineer. Such plans must be approved by the County which shall judge the same by generally accepted principles of engineering adapted to the particular circumstances. All development in the subdivision shall be carried out in conformity with the plans as finally approved.

(2) Any land within the designated one hundred (100) year flood plain shall not be subdivided or built on unless in conformance with the Ouray County Flood Damage Prevention Regulations.

(3) Existing features which would add value to residential development or to the County as a whole, such as trees, watercourses, historic spots and similar irreplaceable assets, shall be included in the design of the PUD. No trees shall be removed from any PUD or any change in the grade of the land effected until the Preliminary Plan is approved by the County Commissioners. All trees on the plat intended to be retained shall be preserved and all trees, where required, shall be protected against change in grade.

(4) In all cases, materials used, preparation of base, methods of placing materials, workmanship, grading and tests of materials shall not be less than those standards required by the most recent standard specifications of the County, except where special provisions are required.

B. Streets and Highways

(1) General Design:

(a) Streets shall be related appropriately to the topography. All streets shall be arranged so as to result in as many building sites at, or above, the grades of streets as possible. A combination of street grades and curves should be avoided.

(b) Local streets shall be laid out to discourage use by through traffic, to permit efficient drainage and utility systems, and to require the minimum number of streets necessary to provide convenient and safe access to property.

[7.3 B 1 (c)]

(c) Streets with off-set intersections shall have a minimum separation of one hundred twenty-five (125) feet from centerline to centerline of the streets, or shall be aligned with existing intersections.

(d) Dead-end streets, with the exception of cul-de-sacs, shall be prohibited unless they are designed to connect with future streets in adjacent land that has not been platted, in which case, a turn-around easement of forty-five (45) feet radius shall be provided. Full width paving and curb and gutter may be required for the temporary turn-around.

(e) Access to an arterial or collector street shall occur only at intersection approved by the County, which shall determine the intersection or intersections for access based upon standards for efficient traffic movement and safety for drivers and pedestrians.

(f) Fire lanes may be required where necessary to protect the area during the period of development and when developed and shall be at least twenty (20) feet in width and remain free of obstructions and provide access at all times.

(2) Centerlines: The centerlines of all roads and highways shall be the continuations of the centerlines of existing roads and highways or adjacent and contiguous territory or subdivisions. In cases where straight continuations are not physically possible, such centerline may be continued by curves and shall be in general conformity with the plans made for the most advantageous development of the area in which the subdivision lies.

(3) Widths: Widths of arterial, collector and local access roads and highways shall be as described in the County Road Standards. However, increased width may be required where streets are to serve non-residential properties, where projected traffic volumes warrant additional width or where physical considerations require additional width.

(4) Road Intersections: Roads and driveways which intersect county roads shall intersect at an angle as near to a right angle as is practical, or as nearly radially as possible in the case of an intersection on a curve. At any such intersection, view triangles may be required, depending on site distance requirements, to incur safety and to facilitate traffic movement. At any such intersection, the corners shall be rounded at the property lines by a radius of not less than twenty (20) feet.

(5) Road Extensions: Where a proposed development adjoins unplatted land, the proposed development shall provide direct access to a public road for the unplatted land, if no other access is available. Such access may be in the form of either a dedicated right-of-way or a perpetual easement. The width of the access shall be determined by the Planning Commission based on the proposed density of the proposed development; it shall be assumed that the unplatted land, should it be developed, will not be developed at a density greater than that of the proposed development. The County Road Standards shall form the basis for determining the required access width.

(6) Cul-de-Sac Streets: The bulb or end, of cul-de-sac streets shall have a right-of-way no less than ninety (90) feet in diameter, with a driving surface diameter no less than eighty (80) feet. No cul-de-sac shall exceed 1,320 feet in length except as approved by the County Commissioners in a Planned Unit Development.

(7) Road Names: All road names shall be subject to the approval of the Planning Commission. Duplication of existing names will not be allowed unless the streets are obviously in alignment with existing streets and not so far removed as to be confusing.

(8) Grades: Grades shall not exceed eight percent on major or secondary highways or ten (10) percent on any street unless approved otherwise in a Planned Unit Development.

(9) Centerline Radii: The centerline radii for all streets shall not be less than one hundred (100) feet except as approved through a Planned Unit Development Plan.

(10) Service Roads: Where a subdivision abuts a state highway or arterial roadway of major importance, the Planning Commission may require parallel service roads or may limit the number of access points allowed for the proposed development

(11) Slope Easements: Where a cut or fill road slope is outside the normal right-of-way of the street, then a slope easement shall be provided having sufficient width to permit maintenance of the slopes by the County. Such slopes shall not exceed 3:1.

(12) Road Beds: Road beds shall be designed according to soil tests of the subgrade material and shall be in accordance with the specifications of the County Road Standards or by such other method as is in general use by the County and considered to be sound practice.

(13) Street signs: Street signs shall be provided at all intersections. Such signs shall be in accordance with county road and bridge standards.

(14) Project Identification Signs: A project identification sign shall be provided at all principal entrances for each development. Such signs shall indicate the name of the development, and as necessary, the project address in a manner acceptable to emergency service and utility providers.

C. Alleys and Easements

(1) Where Required: Alleys shall be required in the rear of all prospective commercial property, except where topography makes the use of alleys impractical. Such alleys, when required, may be dedicated to the County as public thoroughfares, at the discretion of the County.

(2) Minimum Width: Alleys shall be not less than twenty (20) feet wide.

(3) Alley Intersections: Where two alleys intersect, view triangles ten (10) feet in length, measured along the produced property lines from the point of intersection, shall be provided.

(4) Public Utilities: Easements for the placement of, installation of and/or access to public utilities, drainage facilities, electrical lines, cable television lines, natural gas lines or other public utility facilities shall be shown and dedicated to the appropriate utility companies as necessary to provide said utilities. The width of the easement shall be as required by the utility company. In all cases, the developer shall consult with the utility company to see what is required for a particular development. Sanitary sewer easements shall be designed so that sewer lines flow under the road surface or between lots to avoid creating maintenance problems.

(5) Pedestrian Ways: Non-motorized vehicle, pedestrian and/or equestrian pathways may be required across long blocks or where necessary to provide access to public areas. Where required, sidewalks, curbs and gutters shall be constructed of Class B concrete, as defined in the Colorado Division of Highways Standard Specifications. Standard vertical curbs shall be used on all returns at street intersections where curb and gutters are required.

[7.3 D]

D. Drainage

(1) General Provisions

(a) All provisions for drainage and flood control shall be established on the minimum basis of the one hundred (100) year frequency storm for maximum periods of intensity for the entire drainage basin in which the subdivision is located, and shall be made in accordance with the approved Planned Unit Development Plan Drainage structures and ditches shall be of a size and nature to carry the calculated storm water from such drainage areas as based on standard engineering principles. Where free fall of water occurs, satisfactory means shall be provided to prevent erosion of soil. Culverts shall have concrete head walls and wing walls where conditions require. All required drainage structures and facilities shall be designed by an engineer registered in the State of Colorado who is experienced in drainage and storm water detention structures.

(b) Structures proposed within the one hundred (100) year flood plain must meet all requirements of the Ouray County Flood Hazard Regulations (Section 10 of this Code).

(c) Water supply systems and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters. On-site waste water disposal systems shall be located so as to avoid impairment of them or contamination from them during or subsequent to flooding.

(d) The developer shall include in the covenants for the development provisions which prohibit the storage or processing of materials within the one hundred (100) year flood plain that, in times of flooding, would be buoyant, flammable, explosive or potentially injurious to human, animal or plant life. The PUD Plan must be designed to prevent substantial solid debris being carried downstream by flood waters.

(e) No lands subject to periodic inundation by the one hundred (100) year flood shall be subdivided except in conformance with the provisions and requirements of the Ouray County Flood Hazard Regulations.

(2) Mitigation Requirements

(a) Where a PUD is traversed by a watercourse, drainageway, channel, stream or irrigation ditch, there shall be provided an easement or drainage right-of-way conforming substantially to the lines of such watercourse and of such width and construction, or both, as will be adequate for the purpose. Wherever possible, it is desirable that the drainage be maintained by an open channel with landscaped banks and adequate width for maximum potential volume of flow and maintenance.

(b) Where topography or other physical conditions make impractical the inclusion of drainage facilities within street rights-of-way perpetual, unobstructed easements at least fifteen (15) feet in width for such drainage facilities shall be provided across property outside the street lines and with satisfactory access. Easements shall be indicated on the plat. Drainage easements shall be carried from the street to a natural watercourse or other drainage facility.

(c) When a proposed drainage system will carry water across private land outside the PUD appropriate drainage rights must be secured and indicated on the plat.

(d) The developer shall dedicate, either in fee simple or by a drainage conservation easement, adequate land on both sides of existing watercourses to a distance to be determined by the County.

E. Lots, Blocks and Sidewalks

(1) Zoning Requirements: All lots shall conform to the requirements of the zoning district within which the development is located or to the lot approved with the Planned Unit Development within which the subdivision is located.

The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits to build on all lots in compliance with this Land Use Code and in providing driveway access to buildings on such lots from an approved street.

[7.3 E (2)]

(2) Lot Drainage: Lots shall be laid out so as to provide positive drainage away from structures. Individual lot drainage shall be coordinated with the general storm drainage pattern for the area. Drainage shall be designed so as to avoid concentration of storm drainage water from each lot to adjacent lots.

(3) Side Lot Lines: Side lot lines shall be as near as possible to right angles or radial to the street right-of-way line upon which the lot faces.

(4) Double Frontage Lots: Except for corner lots, residential lots having double frontage shall not be approved, except where double frontage is necessitated by topographic or other physical conditions or where direct access to one of the streets is prohibited.

(5) Block Length: Long blocks shall generally be encouraged and they shall be provided adjacent to main thoroughfares for the purpose of reducing the number of intersections; however, blocks shall not exceed twelve hundred (1,200) feet in length unless existing conditions justify a variation from this requirement, in which case, the Planning Commission may grant exception thereto.

(6) Sidewalk Specifications:

(a) Sidewalks eight (8) feet in width may be required along both sides of streets fronted by commercial properties.

(b) Sidewalks five (5) feet in width may be required on both sides of all residential streets where residential densities will be equal to or exceed four (4) units per gross acre.

(c) Sidewalks or pathways of a width acceptable to the Planning Commission may also be required through the center of long blocks, to connect cul-de-sacs and/or to provide access to school, park, playground and river and/or lake areas.

(d) County Road Standards show the location and dimension of sidewalks relative to the various street cross-sections.

(e) Sidewalks may be eliminated on one or both sides of streets where the Planning Commission finds that the topography of the development, or other considerations, make them impractical or undesirable.

[7.3 F]

F. Filled Lands

Required fill shall be of suitable filling material and placed in such a manner as to insure that the finished elevation of all lots and roadway areas will be adequate to protect the development from flooding and has adequate provision for the passage of storm water run-off after settlement and compaction. No building or construction on filled land shall be commenced until satisfactory evidence has been submitted that the required elevation has been obtained and that the fill will provide a stable base for the construction proposed. Such evidence of satisfactory fill shall be submitted to the County Commissioners and the approval for construction of improvements upon said fill shall be granted by the County.