

## 9-9-12. - Landscaping and Screening Standards.

- (a) Purpose: The purpose of the landscaping and screening requirements set forth in this chapter is to:
- (1) Provide minimum requirements for the landscaping of lots and parcels, street frontages, streetscapes and paved areas;
  - (2) Provide minimum requirements to ensure the proper installation or cultivation, and maintenance of landscaping materials;
  - (3) Promote sustainable landscapes and improve the quality of the environment by enhancing air quality, reducing the amount and rate of stormwater runoff, improving stormwater runoff quality, the spread of noxious weeds, and increasing the capacity for groundwater recharge;
  - (4) Minimize the amount of water used for landscaping by promoting Xeriscape™ practices and improving irrigation efficiency;
  - (5) Enhance the appearance of both residential and nonresidential areas, and reduce the visual impacts of large expanses of pavement and rock; and
  - (6) Minimize impacts between uses both on-site and off-site. Landscaping can improve the compatibility of adjacent land uses and screen undesirable views. The landscaping standards also enhance the streetscape by separating the pedestrian from motor vehicles, auto fumes, and dust, providing shade, attenuating noise, and filtering air, buffering wind, and reducing glare.
- (b) Scope: This section and Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, apply to all nonresidential and residential developments unless expressly stated otherwise.
- (1) The standards in this section and Sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, shall be met prior to a final inspection for any building permit for:
    - (A) New development;
    - (B) Redevelopment involving expansion of the total building floor area which exceeds twenty-five percent of the value of the existing structure for any use except a property with three or fewer dwelling units;
    - (C) Redevelopment involving the expansion of the total floor area for a property that has three or fewer dwelling units, shall meet the landscaping standards as follows:
      - (i) Redevelopment valued at more than twenty-five percent, but less than fifty percent of the value of the existing structure shall require compliance with the street and alley tree requirements and the trash and parking screening requirements;
      - (ii)

Redevelopment valued at fifty percent or more, but less than seventy-five percent of the value of the existing structure shall require compliance with the street and alley tree requirements and the trash and parking screening requirements and the front yard landscape requirements; and

- (iii) Redevelopment valued at seventy-five percent or more of the value of the existing structure shall require compliance with the landscape regulations.
- (D) Redevelopment exceeding one hundred percent of the value of the existing structure and not involving expansion of the total building floor area; or
- (E) The addition of a dwelling unit.
- (F) For purposes of this paragraph (1), the applicant shall demonstrate the value of the existing structure by submitting, at the discretion of the applicant, either the actual value assessed by the Boulder County Assessor's Office or the fair market value determined by a real estate appraiser licensed in Colorado.
- (2) When additional parking spaces are provided, or for a change of use where new off-street parking spaces are provided, the provisions of Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, shall be applied as follows:
  - (A) When the number of additional parking spaces that will be provided exceeds twenty-five percent of the number of existing parking spaces on the site, all standards in Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, shall be met for the entire parking lot (existing and new portions) prior to the final inspection for a change of use or concurrent with the addition of the parking spaces.
  - (B) When the number of additional parking spaces that will be provided is less than twenty five percent of the number of existing parking spaces on the site, the standards in Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, shall be met for the new portions of the parking lot prior to the final inspection for a change of use or concurrent with the addition of the parking spaces.
- (c) Modifications to the Landscape Standards: The city manager is authorized to modify the standards set forth in this section and Sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, upon finding that:
  - (1) The strict application of these standards is not possible due to existing physical conditions;
  - (2) The modification is consistent with the purpose of the section; and
  - (3) The modification is the minimum modification that would afford relief and would be the least modification of the applicable provisions of this chapter.

The manager shall require that a person requesting a modification supply the information necessary to substantiate the reasons for the requested modification. The details of any action granting modifications will be recorded and entered in the files of the planning department.

(d) General Landscaping and Screening Requirements:

- (1) Landscaping Plan: A landscaping plan designed in accordance with this section and Sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, shall be provided for all developments. The site plan shall include the following:
- (A) A site plan with a north arrow showing the major details of the proposed landscaping and irrigation, prepared on a scale not less than one inch equals thirty feet providing sufficient detail to evaluate the features of the landscaping and irrigation required by this section and Sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981;
  - (B) The location of property lines and adjacent streets, the zoning and use of adjacent properties, the existing and proposed locations of all buildings, sidewalks and curb cuts, bike paths and pedestrian walkways, drive aisles and curb islands, utilities, and easements, and the existing location, size, and type of all trees one and one-half inch caliper or greater;
  - (C) The location of existing and proposed parking lots, including the layout of parking spaces and interior and perimeter parking lot landscaped areas, and the dimensions and total area (in square feet) for each interior parking lot landscaped area;
  - (D) The location, design, and materials of all other landscaped areas, including, without limitation, planting strips along all streets, earth berms, retaining walls, fences, water features, benches, trash enclosures, lights, and paved areas. Where fencing is used for required screening, a scaled drawing of the fence elevation must be included;
  - (E) The locations of all proposed plant material, drawn at the size the materials will be within five years of initial planting;
  - (F) The locations of all proposed planting of all ground surfaces. Grass surfaces must be identified as sod or seed with the blend or mix specified;
  - (G) The botanical and common names and sizes of all plant material;
  - (H) Location and dimensions of sight distance triangles at all intersections of streets and curb cuts;
  - (I) Location and type of irrigation and of plant groupings by water use zone;
  - (J) A chart comparing the landscaping requirements of Sections 9-9-13, "Streetscape Design Standards," and 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981, to the proposed materials, including, without limitation, the following information: total lot size (in square feet), total parking lot size, including all drives and driveways (in square feet), total number of parking stalls required and the total provided, total interior parking lot

landscaped area required and the total provided, total perimeter parking lot landscaping required and total provided, total number of street trees required and the total provided, and total quantity of plant material required and the total provided;

- (K) The location, size, and species of all existing trees on the property and within the landscape setbacks of all properties adjacent to the development site; and
  - (L) The landscaping plan shall consider and attempt to avoid shading of new trees onto a solar zone required under the 2017 City of Boulder Energy Conservation Code.
- (2) Landscape and Screening Maintenance and Replacement: The property owner shall maintain all required landscaping and provide for replacement of plant materials that have died or have otherwise been damaged or removed, and maintenance of all non-live landscaping materials, including, but not limited to, fencing, paving, irrigation systems, and retaining walls from the issuance of a certificate of occupancy or certificate of completion.
  - (3) Open Space: Required useable open space shall meet the provisions of this section and Sections 9-7-1, "Schedule of Form and Bulk Standards," and 9-9-11, "Useable Open Space," B.R.C. 1981.
  - (4) Pedestrian Access: In all zones except A, P, RR, RE, RL, and RM, paved pedestrian walkways, a minimum of three feet in width, shall be provided as follows:
    - (A) Between at least one building entrance and the sidewalk adjacent to the street;
    - (B) Between the parking lot and the entrance to any buildings larger than 10,000 square feet in size.
  - (5) Screening of Trash Collection and Recycling Areas, Service Areas, and Loading Areas: In nonresidential and multi-family residential developments, trash collection and recycling areas, service areas, and loading areas shall be screened on all sides so that no portion of such areas are visible from public streets and alleys and adjacent properties. Required screening may include new and existing plantings, walls, fences, screen panels, doors, topographic changes, buildings, horizontal separation, or any combination thereof.
  - (6) Outdoor Service Yards and Storage Areas: Service yards and outdoor storage areas in commercial and industrial areas shall be screened from public areas, streets, alleys, and adjacent areas through the use of one or more of the following: walls, fencing, or plantings.
  - (7) Setbacks: All setbacks adjacent to a street shall be landscaped in accordance with the standards set forth in Section 9-9-13, "Streetscape Design Standards," B.R.C. 1981, including, without limitation, that area between the property line and the edge of the pavement or curb of the adjacent street.
  - (8) Minimum Overall Site Landscaping: In all zones except A, P, RR, RE, RL and RM, one tree and five shrubs are planted for each 1,500 square feet of lot area not covered by a building or required parking.

- (9) Materials: All material required in a landscaped area shall be live plant material, except as approved by the city manager to provide attractive screening, plazas, or pedestrian access. Plant materials shall be planted in sufficient quantity to completely cover within five years of initial planting, all landscaped areas, including temporary mulched areas, and under trees.
- (10) Mulches:
- (A) Temporary mulches are required in all shrub, tree, and perennial planting beds until full plant coverage is achieved. Organic mulches include wood and bark chips, straw, grass clippings, and seed hulls. Inorganic or inert mulches include weed-barrier fabrics, gravel, and rock.
  - (B) Non-living materials such as bark or rocks shall only be used as temporary mulch until full plant coverage is achieved, or as permanent mulch under shrubs if specifically approved as part of a final landscape plan.
  - (C) Rocks larger than three inches in diameter shall not be used in the public right-of-way or adjacent to sidewalks, and shall be used only upon approval of the city manager as a decorative feature. Rock mulches shall not be used in landscaped areas on the south, west, or southwest-facing sides of buildings or in interior parking lot landscaped areas except under the following conditions:
    - (i) All plants within the rock mulched area are from very low, low, or moderate water use zones and spaced to fill the beds within three years of initial planting; or
    - (ii) Rock is used as a specific ornamental feature in a limited area or as a pedestrian path.
- (11) Minimum Plant Sizes: All materials planted under the provisions of this title shall meet the following requirements:
- (A) Deciduous trees are at least two-inch caliper measured six inches above the ground, except ornamental and flowering trees, including, without limitation, the trees identified as "small maturing trees" on the approved street tree list in Section 3.03-1, City of Boulder Design and Construction Standards, that are at least one and one-half inch caliper measured six inches above the ground;
  - (B) Evergreens are at least five feet tall; and
  - (C) Shrubs are five-gallon container size.
- (12) Grading Standards for New Earth Berms: Berms adjacent to paved surfaces shall be graded to capture all irrigation runoff or to convey it to an appropriate water quality design feature as described in the Urban Storm Drainage Criteria Manual, Vol. 3 (Urban Drainage and Flood Control District, Denver, Colorado).
- (13) Soil Preparation and Planting Specifications: Site preparation and all planting shall be completed, at a minimum, in accordance with the City of Boulder Design and Construction Standards. Site preparation in any development shall include tilling the soil to a minimum

depth of six inches below the finished grade, together with soil amendments, including, without limitation, compost, manure, or peat, that are appropriate to ensure the health and sustainability of the landscaping to be planted.

- (14) Water Conservation: Landscaping shall be designed to conserve water through application of all Xeriscape™ landscaping principles. Xeriscape™ landscaping principles do not include artificial turf or plants, mulched or gravel beds, or areas without landscape plant material, bare ground, weed-covered or infested surfaces, paving of areas not required for pedestrian access, plazas, or parking lots, or any landscaping that does not comply with the standards of this section. Xeriscape™ landscaping principles include:
- (A) Planning and design that ensures water-conserving techniques are coordinated and implemented in the landscape;
  - (B) Grouping plants with similar water and cultural requirements (such as sun and climate) together in the same water use zones and on the same irrigation zones;
  - (C) Limiting the use of high water use turf grass and plantings to high-use areas with high visibility or functional needs;
  - (D) Use of efficient irrigation systems;
  - (E) Use of mulches;
  - (F) Improving soils to allow better water absorption and proper drainage; and
  - (G) Continued maintenance, including weeding, pruning, fertilizing, pest control, and irrigation maintenance.
- (15) Xeriscape™ Landscape Standards: The following Xeriscape™ landscape standards shall apply to all required landscaped areas:
- (A) Plants from the same water use zone shall be grouped together on the same irrigation zones. Water use zones shall be consistent with the Waterwise Plant List as shown in the City of Boulder, Landscape Requirements for Streetscape, Parking Lots, and All Other Developments or based on other lists which meet the same criteria for water use and adaptability if approved by the city manager;
  - (B) The total amount of high water use zones on a property shall not exceed fifty percent of the total landscaped area. The total amount of high water use turf grass shall not exceed twenty-five percent of the total landscaped area. Turf grass areas designated for high use or a specific recreational use shall be excluded from the total landscaped area under this requirement. Trees in tree grates shall also be excluded from the total landscaped area under this requirement;
  - (C) The use of high-irrigation turf and plantings shall be limited to high-use areas with high visibility or functional needs;

- (D) High water use turf grass shall not be used in landscaped areas with any one dimension less than ten feet in width unless drip, subsurface, or low-volume irrigation is used in that area;
  - (E) Very low and low water use zone plants and turf grass shall be used to the extent practicable;
  - (F) Plants or turf grass from a high water use zone shall not be planted on slopes or berms at a 4:1 slope or greater.
- (16) Irrigation: The following standards shall apply to irrigation systems for required landscaped areas:
- (A) All landscaped areas, including, but not limited to, trees in tree pits, raised planters, planting in the public right-of-way, and all landscaping required in this chapter, shall be irrigated with a permanent, automatic irrigation system designed to provide efficient irrigation coverage with minimal overspray onto non-landscaped areas.
  - (B) The city manager may approve the use of temporary irrigation systems if all plant material is from the very low or low water use zones.
  - (C) Low-volume, drip, or subsurface irrigation systems shall be used in the following conditions:
    - (i) In landscaped areas where any one dimension is less than six feet in width and surrounded by impervious surfaces;
    - (ii) In all non-turf grass areas.
  - (D) Trees shall be zoned separately from turf grass when located in a low or very low water use zone.
  - (E) A soil moisture sensing device or other irrigation management system shall be required for irrigation systems in turf areas.
  - (F) The landscape plan shall indicate the nature, location, and specifications of the irrigation system which shall be used. Separate irrigation circuits should be specified for different zones on the landscape plan. The landscape plan shall have sufficient detail to show that adequate irrigation will be provided to all required landscape areas and plant materials.
  - (G) The irrigation system shall be designed to correlate to the organization of plants into zones with similar watering requirements.
  - (H) Irrigation systems shall be designed to maximize efficient water use and minimize the waste of water.
- (17) Noxious Weeds: All landscape plans must comply with the current state weed and nursery lists.
- (18)

Tree Protection: All existing trees six inches or more in caliper and located in any development in the required setback or on the property line shall be protected from construction impacts, unless the tree is a noxious weed. Trees over six inches in caliper shall be protected from construction impacts within the drip line of the tree in a manner that is consistent with the City of Boulder Design and Construction Standards' tree protection for construction site standards.

- (19) Final Inspection: Labels that identify the botanical or common name of the plant material shall be on all trees at the time of final inspection.

Ordinance Nos. 5930 (1997); 7079 (2000); 7088 (2000); 7279 (2003); 7331 (2004); 7713 (2011); 7921 (2013); 8018 (2014); 8166 (2017); 8323 (2019); 8409 (2020)