

1009 LANDSCAPING

1009.01 PURPOSE

Section 1009 is adopted to:

- A. Promote sustainable development practices, including energy efficiency, water conservation, reduced use of pesticides and synthetic fertilizers, and onsite storm water containment;
- B. Support clean air and water, wildlife habitat, greenhouse gas reduction, and the retention of existing natural features;
- C. Create compatibility between adjacent land uses, with particular emphasis on mitigating off-site impacts to residential areas;
- D. Provide outdoor recreational space in residential developments;
- E. Encourage the planting of edible gardens;
- F. Create an attractive, safe, and functional pedestrian environment;
- G. Facilitate the safe and efficient movement of traffic through parking lots; and
- H. Enhance the appearance of development.

1009.02 GENERAL PROVISIONS

- A. Landscaping materials shall be selected and sited to produce a hardy and low-maintenance landscaped area with an emphasis on fast-growing plants. Selection shall include consideration of soil type and depth, spacing, exposure to sun and wind, slope and contours of the subject property, building walls and overhangs, and compatibility with existing vegetation to be preserved. Notwithstanding the requirement for hardiness, annuals are permitted as provided in Subsection 1009.02(B).
- B. A variety of plants, intermixed throughout landscaped areas, shall be provided, as follows:
 - 1. Evergreen and deciduous;
 - 2. Trees, shrubs, and groundcover;
 - 3. Plants of varying textures;
 - 4. Plants of varying widths and heights at maturity; and
 - 5. Plants with seasonal color interest (e.g., foliage, flowering perennials, annuals).

- C. The planting of invasive non-native or noxious vegetation shall be prohibited, and existing invasive non-native or noxious vegetation shall be removed.
- D. Landscaped areas shall not be used for other purposes, such as storage or display of automobiles, equipment, merchandise, or materials.
- E. Landscaping of the unimproved area between a property line and the improved portion of an adjacent road right-of-way shall be required when there are no immediate plans to develop or otherwise disturb the unimproved area, and one or more of the following apply:
 - 1. The subject property is located inside the Portland Metropolitan Urban Growth Boundary;
 - 2. Landscaping is necessary to present an appearance consistent with the proposed development as viewed from the road;
 - 3. Landscaping is necessary to reduce dust, noise, erosion, or fire hazard; or
 - 4. The road is designated as a scenic road on Comprehensive Plan Map 5-1, *Scenic Roads*.
- F. Landscaping shall be used to highlight public entrances to buildings, except that this requirement will be waived where buildings are not set back from the front property line.
- G. Where feasible, landscaping shall be required adjacent to walkways and other areas intended for pedestrian use.

1009.03 MINIMUM AREA STANDARDS

- A. Table 1009-1, *Minimum Landscaped Area*, establishes the minimum percentage of the area of the subject property that shall be landscaped.
 - 1. The minimum landscaping percentage shall be calculated after subtracting any public dedications from the area of the subject property.
 - 2. Landscaping in adjacent rights-of-way shall not count toward compliance with the minimum landscaping percentage.
 - 3. Requirements for surface parking and loading area landscaping, screening and buffering, landscaping strips, and outdoor recreational areas set forth in Section 1009 apply regardless of whether compliance with those requirements results in landscaping a greater percentage of the site than is required by Table 1009-1.

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

4. Notwithstanding Subsection 1009.03(A), additions to a commercial, industrial, or institutional development which does not currently comply with the minimum landscaping percentage standard, shall require additional landscaping area, as follows:
 - a. Structural additions of 1,000 to 1,999 square feet: An additional five percent of the subject property, but no more than the percentage required by Table 1009-1;
 - b. Structural additions of 2,000 to 4,999 square feet: An additional 10 percent of the subject property, but no more than the percentage required by Table 1009-1;
 - c. Structural additions of 5,000 square feet or more: The percentage required by Table 1009-1; and
 - d. Where successive structural additions occur at different times, the required landscaping percentage shall increase until total conformance is reached.

Table 1009-1: Minimum Landscaped Area

Zoning District	Minimum Landscaped Area
RTL, RCO, RCC, PMU, CC, SCMU ¹	10 percent
NC, C-2, C-3, RTC ² , RC, BP, LI, GI, RI, VCS, VO	15 percent
OC, OA, RCHDR	20 percent
MR-1, HDR, PMD, MRR, MR-2, CI, VTH, VA	25 percent
HR	25 percent for the development of conditional uses
R-2.5 through R-30, RR, RA-1, RA-2, RRRF-5, FF-10, HR, FU-10, VR-4/5, and VR-5/7	25 percent for the development of conditional uses
SHD	40 percent

¹ In the SCMU District, the minimum shall be 15 percent for developments of three-family or multifamily dwellings, including mixed-use developments that include these uses.

² In Government Camp, the minimum shall be 10 percent, except that there shall be no minimum for properties with frontage on Government Camp Loop from Wy'East Trail to Olive Street and on Little Trail from Olive Street to Church Street, where public plazas are provided in compliance with Subsection 1009.12(A).

- B. A minimum of 75 percent of the minimum landscaped area required by Table 1009-1—excluding any area occupied by pedestrian amenities, active recreational areas, or edible gardens—shall be landscaped with native or drought-tolerant plants.
- C. Outdoor recreational areas required by Subsection 1009.09, as well as outdoor recreational areas in the MRR District, shall count toward the minimum landscaped area required by Table 1009-1, except that impervious surface area exceeding 25 percent of the outdoor recreational area shall be excluded.
- D. Edible gardens may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1.
- E. Green roofs may comprise a maximum of 25 percent of the minimum landscaped area required by Table 1009-1.
- F. Turf lawn may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1. However, this limitation shall not apply to active recreational areas, provided that no other areas of the subject property are planted in turf lawn, and it shall not apply to cemeteries.
- G. Pedestrian amenities may comprise a maximum of one-third of the minimum landscaped area required by Table 1009-1. However, no more than 15 percent of the minimum landscaped area required by Table 1009-1 and developed with pedestrian amenities shall have an impervious surface.
 - 1. In the Clackamas Regional Center Area, as identified on Comprehensive Plan Map X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors, and Station Community*, pedestrian amenities used to meet the minimum landscaped area required by Table 1009-1 shall comply with the following standards:
 - a. Pedestrian areas include plazas, courtyards, outdoor seating areas for restaurants, pocket parks, and atriums when there is direct access for pedestrians. Pedestrian areas in front of buildings should be visible from the street.
 - b. Pedestrian areas shall include landscape planters and at least two of the following amenities for every 100 square feet of pedestrian area: lawn areas with trees and seating; awnings or other weather protection; kiosks; outdoor eating areas with seating; water features with seating; and drinking fountains.

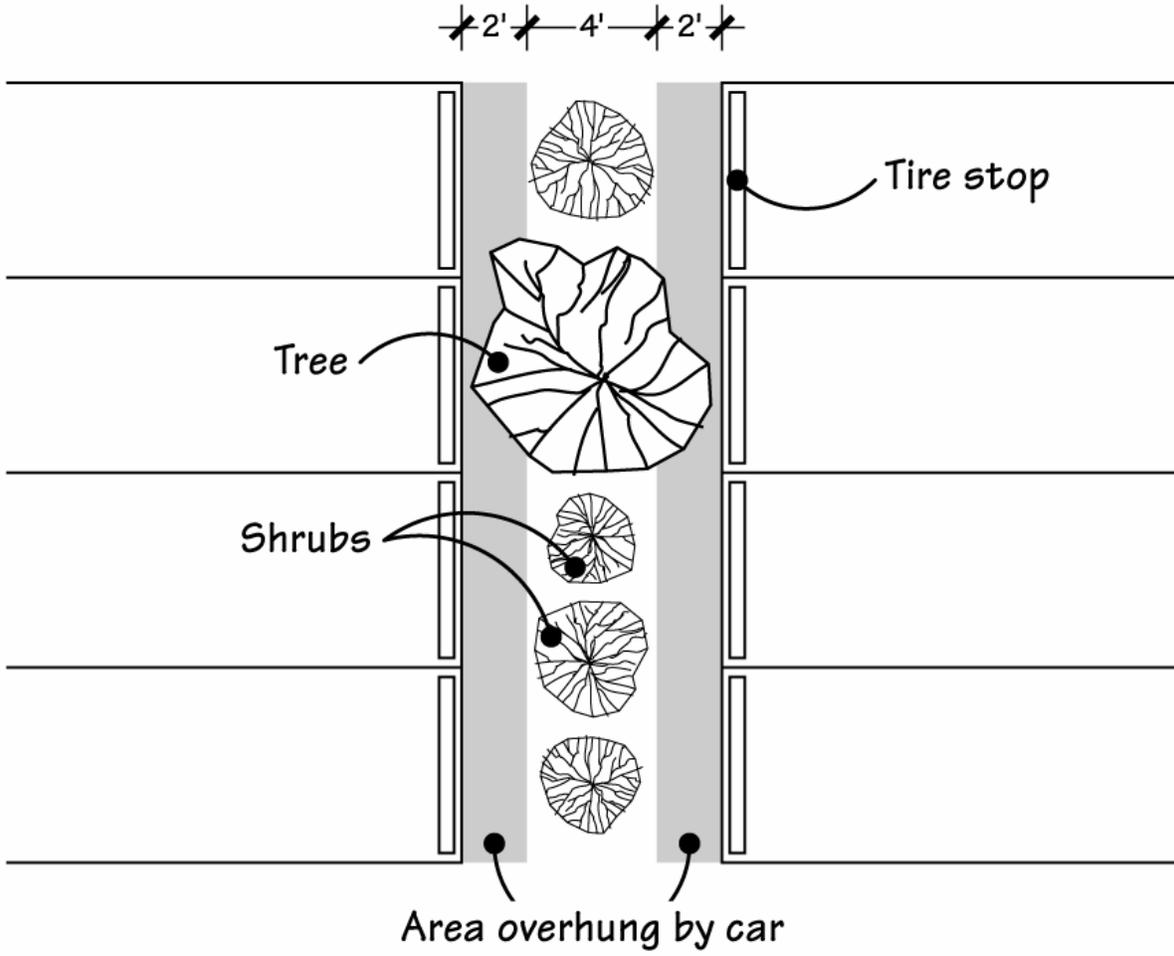
- H. Area occupied by walls, fences, or trellises constructed to comply with Subsections 1009.04 and 1009.05 shall count toward the minimum landscaped area required by Table 1009-1.
- I. In the MR-1, MR-2, and HDR Districts, the following may comprise a maximum of 20 percent of the minimum landscaped area required by Table 1009-1: interior courtyards, atriums, solar greenhouses, solariums, roof gardens, indoor recreational areas, and other comparable amenities.
- J. In the SHD District, the minimum landscaped area required by Table 1009-1 shall be met with outdoor surface areas, including the following: landscaping; courtyards; pedestrian plazas; areas dedicated for parks; onsite walkways and bikeways; recreational areas and facilities; and shared yards, decks, terraces, patios, and roof gardens. In addition, indoor recreational facilities identified in Subsection 315.05(F), and over and above the minimum standard set forth in Subsection 315.05(F), may be counted toward the minimum landscaped area required by Table 1009-1.
- K. In the RCHDR District, the minimum landscaped area shall be met with shared outdoor surface areas, including the following: landscaping; courtyards; pedestrian plazas; areas dedicated for parks; onsite walkways and bikeways; recreational areas and facilities; and yards, decks, terraces, patios, and roof gardens. In addition, indoor recreational facilities identified in Subsection 315.05(F), and over and above the minimum standard set forth in Subsection 315.05(F), may be counted toward the minimum landscaped area required by Table 1009-1. Also, private outdoor areas may be counted toward meeting the minimum landscaped area required by Table 1009-1, as follows:
 - 1. A maximum of 25 percent of the minimum landscaped area required by Table 1009-1 may be comprised of usable private outdoor space, except that the 25-percent cap does not apply to usable private open space facing streets and accessory to residential development.
 - 2. When living areas face the street, usable balcony space may be applied toward achieving the minimum landscaped area required by Table 1009-1 on a 1:2 ratio (one square foot of credit for every two square feet of balcony space facing the street). The balconies must have non-opaque sides, and be designed to incorporate landscaping or other decorative features.

1009.04 SURFACE PARKING AND LOADING AREA LANDSCAPING

Surface parking and loading areas shall be landscaped as follows:

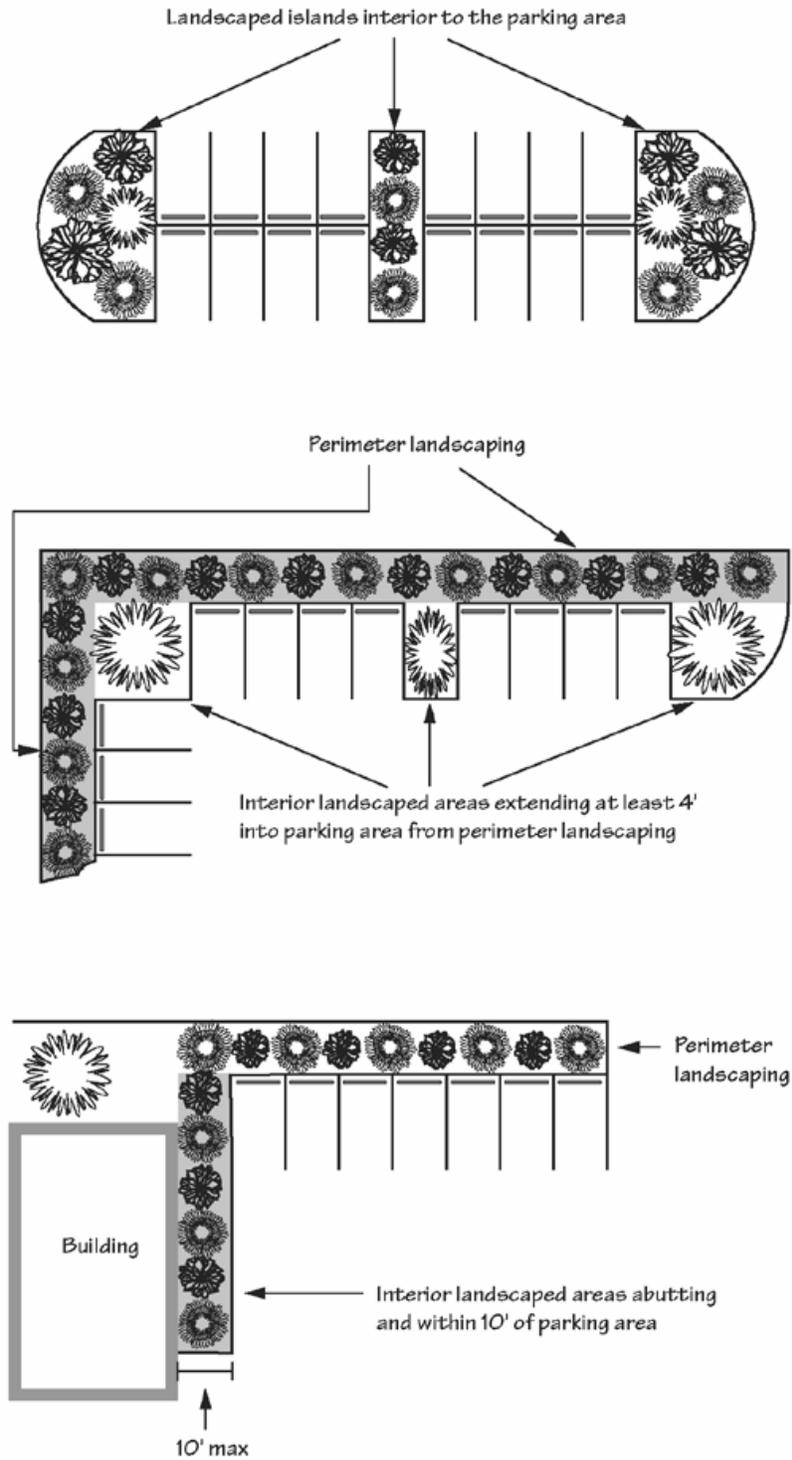
- A. Surface parking areas that include more than 15 parking spaces shall comply with the following landscaping requirements:
 1. Twenty-five square feet of landscaping per parking space, excluding perimeter parking spaces, shall be provided, except that the standard shall be reduced to 20 square feet for each parking space developed entirely with porous pavement.
 2. One landscape swale located between two rows of parking spaces, as shown in Figure 1009-1, is required for every six rows of parking spaces, unless all parking spaces are developed entirely with porous pavement. Additional swales beyond the minimum requirement are allowed.
 - a. For the purpose of Subsection 1009.04(A)(2), a “row” of parking spaces is one space deep, meaning that where two spaces abut at their ends, it is considered two “rows”.
 - b. Parking spaces separated by pedestrian or vehicle crossings perpendicular to the row of parking spaces are considered to be part of a single row.
 - c. The first required swale shall be developed for the entire length of the longest row of parking spaces.
 - d. Gaps in a required swale are permitted only to provide for pedestrian and vehicle crossings.
 - e. The parking lot shall be graded to allow surface water to flow into a swale. Curbs shall not separate parking spaces from the swale, and gaps between parking space tire stops are required to allow surface water to flow into a swale.
 - f. Swales shall be a minimum of four feet wide.
 - g. If the front portions of parking spaces are landscaped as allowed by Subsection 1015.04(B)(11), the landscaped portion of the parking space shall be adjacent and in addition to the swale, as shown in Figure 1009-1.
 - h. Turf lawn is prohibited in swales.

Figure 1009-1: Parking Lot Swale



3. Interior landscaping not developed as swales pursuant to Subsection 1009.04(A)(2) shall comply with the following standards:
 - a. It shall be arranged in areas at the ends of rows of parking or between parking spaces within rows of parking. See Figure 1009-2.
 - b. It may join perimeter landscaping as long as the interior landscape area extends at least four feet into the parking area from the perimeter landscape line. See Figure 1009-2.
 - c. Landscaping that abuts, but does not extend into, the parking area may be included as interior landscaping if all of the following are met:
 - i. The abutting landscaped area must be in addition to required perimeter landscaping;
 - ii. Only the first 10 feet of the abutting landscaped area, measured from the edge of the parking area, may be included as interior landscaping; and
 - iii. The landscaped area is not abutting and parallel to required perimeter landscaping. See Figure 1009-2.
 - d. The interior length and width of landscaped areas shall be a minimum of four feet.

Figure 1009-2: Interior Landscaping



4. Interior landscaped areas, including swales, shall include a minimum of one tree located every eight interior parking spaces, or fraction thereof, except in the OA, VA, VCS, and VO Districts, where a minimum of one tree shall be located every six interior parking spaces.
 - a. Where necessary to accommodate other design considerations, variable spacing of the trees required by Subsection 1009.04(A)(4) is allowed, but in no case shall there be less than one tree planted in every 12 parking spaces.
 - b. The species of trees required shall be determined on the basis of the growth habit and the need to provide maximum shading of surface parking areas.
- B. Perimeter landscaping requirements for surface parking and loading areas adjacent to abutting properties or rights-of-way are as follows:
 1. A landscaping strip with a minimum width of five feet shall be provided adjacent to the perimeter of the surface parking or loading area, except:
 - a. In the OA, VA, VCS, and VO Districts, the minimum width shall be 10 feet;
 - b. In the BP and LI Districts, the minimum width shall be 15 feet abutting a front lot line; and
 - c. In the GI District, the minimum width shall be 10 feet abutting a front lot line.
 2. The required landscaping strips shall comply with the following standards:
 - a. Sufficient low shrubs shall be planted to form a continuous screen three feet high and 95 percent opaque, year-round; or a three-foot-high masonry wall or a berm may be substituted for the shrubs. When applied along front lot lines, the screen or wall is to be placed along the interior side of the landscaping strip.
 - b. In addition, one tree is required for every 30 linear feet of landscaping strip, or as otherwise required to provide a tree canopy over the landscaping strip.
 - c. Ground cover plants must fully cover the remainder of the landscaped area.

3. A perimeter landscape strip is not required for a surface parking or loading area adjacent to an abutting property if one or more interior driveways connect the two properties and if the abutting property also is developed with a surface parking or loading area adjacent to the shared property line.
4. Required walkways may cross perimeter landscaping strips.

1009.05 SCREENING AND BUFFERING

- A. Screening shall be used to eliminate or reduce the visual impacts of the following:
 1. Service areas and facilities, such as loading areas and receptacles for solid waste or recyclable materials;
 2. Storage areas;
 3. Ground-mounted rainwater collection facilities with a storage capacity of more than 100 gallons;
 4. Parking lots within or adjacent to an Urban Low Density Residential, VR-5/7, VR-4/5, RA-1, RA-2, RR, RRFF-5, FF-10, FU-10, or HR District; and
 5. Any other area or use, as required by this Ordinance.
- B. Screening shall be accomplished by the use of sight-obscuring plant materials (generally evergreens), vegetated earth berms, walls, fences, trellises, proper siting of disruptive elements, building placement, or other design techniques.
- C. Screening shall be required to substantially block any view of material or equipment from any point located on a street or accessway adjacent to the subject property. Screening from walkways is required only for receptacles for solid waste or recyclable materials. A sight-obscuring fence at least six feet in height and up to a maximum of 10 feet shall be required around the material or equipment.
- D. Buffering shall be used to mitigate adverse visual impacts, dust, noise, or pollution, and to provide for compatibility between dissimilar adjoining uses. Special consideration shall be given to the buffering between residential uses and commercial or industrial uses, and in visually sensitive areas.
- E. Buffering shall be accomplished by one of the following:
 1. A landscaping strip with a minimum width of 15 feet and planted with:

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

- a. At least one row of deciduous and evergreen trees staggered and spaced not more than 30 feet apart;
 - b. At least one row of evergreen shrubs, spaced not more than five feet apart, which will grow to form a continuous hedge at least five feet in height within one year of planting; and
 - c. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area;
2. A berm with a minimum width of ten feet, a maximum slope of 40 percent on the side away from the area screened from view, and planted with a dense evergreen hedge;
 3. A strip with a minimum width of five feet, and including:
 - a. A masonry wall or sight-obscuring fence not less than five feet in height;
 - b. An evergreen hedge, vines, trees, or shrubs; and
 - c. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area; or
 4. Another method that provides an adequate buffer considering the nature of the impacts to be mitigated.
- F. Required walkways shall be accommodated, even if such accommodation necessitates a gap in required screening or buffering.

1009.06 SCENIC ROADS

In the RA-1, RA-2, RRF-5, FF-10, FU-10, MRR, and HR Districts, structures built on lots adjacent to roads designated as scenic roads on Comprehensive Plan Map 5-1, *Scenic Roads*, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.

1009.07 LANDSCAPING STRIPS IN INDUSTRIAL ZONING DISTRICTS

- A. In the BP and LI Districts, a landscaping strip a minimum of 15 feet wide shall be provided along front lot lines.
- B. In the GI District, a landscaping strip a minimum of 10 feet wide shall be provided along front lot lines.

1009.08 FENCES

- A. In the CI District, periphery fences shall not be allowed. Decorative fences or walls may be used to screen service and loading areas, private patios or courts. Fences may be used to enclose playgrounds, tennis courts, or to secure sensitive areas or uses, such as vehicle storage areas or drainage detention facilities. Fences shall not be located where they impede pedestrian or bicycle circulation through or between site areas.
- B. In the BP District, street perimeter fences or walls and guard posts shall meet a minimum setback of 15 feet and shall be of a material, color, and design complementary to the development and to adjoining properties and public access roads.
- C. In the LI District, street perimeter fences or walls shall meet a minimum setback of 15 feet from the front lot line.
- D. In the GI District, street perimeter fences or walls shall meet a minimum setback of 10 feet from the front lot line.

1009.09 OUTDOOR RECREATIONAL AREAS

An outdoor recreational area shall be provided in developments of two-family, three-family, or multifamily dwellings in the MR-1, MR-2, and HDR Districts, and in developments of three-family or multifamily dwellings, including mixed-use developments that include these uses, in the SCMU District, as follows:

- A. A minimum of 200 square feet of usable outdoor recreational space per dwelling unit shall be provided for studio, one- bedroom, and two-bedroom units. The minimum shall be increased to 300 square feet per dwelling unit for units with three or more bedrooms. However, in the SCMU District:
 - 1. The requirement shall apply only to the first 20 dwelling units per acre, or prorated equivalent thereof; and
 - 2. The amount of required outdoor recreational area may be reduced, to the minimum extent necessary, if—when combined with the minimum landscaping requirements of Subsections 1005.10(L), 1009.04, and 1009.05—full compliance would result in landscaping more than 15 percent of the lot.
- B. Outdoor recreational areas may be designed for passive or active recreation, including edible gardening.
- C. Outdoor recreational areas shall be designed for adequate surveillance opportunities.
- D. Outdoor recreational areas shall be conveniently located and accessible to all dwelling units.

1009.10 EROSION CONTROL

- A. Graded areas shall be re-vegetated with suitable plants to ensure erosion control.
- B. Netting shall be provided, where necessary, on sloped areas while ground cover is being established.

1009.11 PLANTING AND MAINTENANCE

- A. Impervious weed barriers (e.g, plastic sheeting) are prohibited.
- B. Plants shall not cause a hazard. Plants over walkways, sidewalks, pedestrian pathways, and seating areas shall be pruned to maintain a minimum of eight feet below the lowest hanging branches. Plants over streets and other vehicular use areas shall be pruned to maintain a minimum of 15 feet below the lowest hanging branches.
- C. Plants shall be of a type that, at maturity, typically does not interfere with above- or below-ground utilities.
- D. Plants shall be installed to current nursery industry standards.
- E. Plants shall be properly guyed and staked to current nursery industry standards as necessary. Stakes and guy wires shall not interfere with vehicular or pedestrian traffic.
- F. Landscaping materials shall be guaranteed in writing by the developer for a period of one year from the date of installation. A copy of the guarantee shall be furnished to the County by the developer. The developer also shall submit a signed maintenance contract, or provide a financial guarantee pursuant to Section 1311, *Completion of Improvements, Sureties, and Maintenance*, covering the landscape maintenance costs during the guarantee period.
- G. Plants shall be suited to the conditions under which they will be growing. As an example, plants to be grown in exposed, windy areas that will not be irrigated shall be sufficiently hardy to thrive under these conditions. Plants shall have vigorous root systems, and be sound, healthy, and free from defects and diseases.
- H. When planted, deciduous trees shall be fully branched, have a minimum caliper of two inches, and have a minimum height of eight feet.
- I. When planted, evergreen trees shall be fully branched and have a minimum height of eight feet.
- J. Shrubs shall be supplied in minimum one-gallon containers or eight-inch burlap balls with a minimum spread of 12 inches.

- K. Ground cover shall be planted a maximum of 30 inches on center with a maximum of 30 inches between rows. Rows of plants shall be staggered. Ground cover shall be supplied in minimum four-inch containers, except that the minimum shall be reduced to two and one-quarter inches or equivalent if the ground cover is planted a minimum of 18 inches on center.
- L. Plants shall be spaced so that ground coverage three years after planting is expected to be 90 percent, except where pedestrian amenities, rainwater collection systems, or outdoor recreational areas count as landscaping pursuant to Subsection 1009.03. Areas under the drip line of trees count as ground coverage.
- M. Irrigation of plants shall be required, except in wooded areas, wetlands, and in river and stream buffers. The irrigation system shall be automatic, except that hose bibs and manually operated methods of irrigation may be permitted in small landscaped areas close to buildings. Automatic irrigation systems are subject to the following standards:
1. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.
 2. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
 3. Narrow or irregularly shaped areas, including turf lawn, less than eight feet in width in any direction shall be irrigated with subsurface or low volume irrigation.
 4. Overhead sprinkler irrigation shall not be permitted within two feet of any non-permeable surface. Allowable irrigation within the two-foot setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:
 - a. The landscaped area is adjacent to permeable surfacing and no runoff occurs; or
 - b. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
 - c. The irrigation designer specifies an alternative design or technology, and clearly demonstrates strict adherence to Subsection 1009.11(M)(1).
 - d. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling.

- N. Appropriate methods of plant care and landscaping maintenance shall be provided by the property owner.
- O. Plants shall be protected from damage due to heavy foot traffic or vehicular traffic by protective tree grates, pavers, or other suitable methods.

1009.12 GOVERNMENT CAMP RTC DISTRICT STANDARDS

Subsection 1009.12 applies in Government Camp in the RTC District. Where these standards conflict with other provisions in Section 1000, *Development Standards*, Subsection 1009.12 shall take precedence.

A. Landscaping and Plaza Space: Development with street frontage on Government Camp Loop from Wy'East Trail to Olive Street and on Little Trail from Olive Street to Church Street may provide a combination of landscaping and onsite public plaza space. Plaza space shall be permanent space open to the public. The plaza space shall be integrated into the development and be both accessible and visible from Government Camp Loop or Little Trail where there is no frontage on Government Camp Loop. The following requirements shall apply along Government Camp Loop from Wy'East Trail to Olive Street and along Little Trail from Olive Street to Church Street, if plazas are established to comply with the landscaping requirements.

1. Square footage required: A minimum of 100 square feet of plaza space may be provided for developments with up to 1,999 square feet. Developments 2,000 square feet and larger may provide a minimum of 150 square feet. This shall be developed as one contiguous space. Developments 5,000 square feet and larger may develop the plaza as two separate plazas.
2. Plaza surface materials: Surface materials shall consist of textured concrete, concrete mixed with aggregate, rock, rock veneer, pavers, bricks, or wood. No asphalt is permitted.
3. Plaza landscaping: Ten percent of the total plaza area shall be landscaped with planters and/or hardy native vegetation.
4. Seating: A minimum of three permanent adult seating spaces shall be provided in the plaza for developments with up to 1,999 square feet of floor area. One additional seating space shall be provided for each 1,000 square feet of development. Seating spaces shall be constructed of wood, wrought iron, rock, rock veneer, or textured concrete.
5. Garbage receptacles: At least one garbage receptacle shall be provided in the plaza. Receptacles shall be clad in wood or stone.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-243, 9/9/13; Amended by Ord. ZDO-246, 3/1/14; Amended by Ord. ZDO-249, 10/13/14; Amended by Ord. ZDO-250, 10/13/14; Amended by Ord. ZDO-252, 6/1/15; Amended by Ord. ZDO-253, 6/1/15]