CHAPTER 4.2
LANDSCAPING, BUFFERING, SCREENING, NATURAL RESOURCE PROTECTION, AND LIGHTING

Section 4.2.10 - PURPOSES

The City recognizes the aesthetic and economic value of landscaping and encourages its use to establish a pleasant community character, unify developments, and buffer or screen unsightly features; to soften and buffer large-scale structures and parking lots; and to aid in energy conservation by providing shade from the sun and shelter from the wind. The community desires and intends all properties to be landscaped and maintained.

This chapter prescribes standards for landscaping, buffering, and screening, as well as some standards for natural resource protection and lighting. While this chapter provides standards for frequently encountered development situations, detailed planting plans and irrigation system designs, when required, shall be reviewed by the City with this purposes clause as the guiding principle.

Section 4.2.20 - GENERAL PROVISIONS

a. Significant Plants, Habitat Areas, and Trees

1. **Significant Plants and Trees Defined** - Significant plant and tree specimens should be preserved to the greatest extent practicable and integrated into the design of a development. Trees of 8 in. or greater diameter measured at a height of 4 ft. above grade (dbh - diameter at breast height) and shrubs (excluding blackberries, poison oak, and similar noxious vegetation) over 4 ft. in height are considered significant.

   Also considered significant are plants, plant communities, and habitat areas for fish and wildlife found on the site that are listed as threatened or endangered with the National Marine Fisheries Service or the U.S. Fish and Wildlife Service, as well as significant native vegetation as defined in the Oregon Natural Heritage Plan (1998), which may include certain woodlands, grasslands, wetlands, riparian vegetation, and plant species.

2. **Preservation Plan** - Where the preservation of significant natural features is required by this Code, by a particular proposal, and/or by conditions of approval, no development permits shall be issued until a significant natural features Preservation Plan has been reviewed and approved by the Director. The Preservation Plan shall be developed by a certified arborist and shall comply with the purposes clause and specific standards in this chapter and any proposal(s) and/or conditions of approval that apply to the particular project. Additionally, plants to be saved and methods of protection shall be indicated on the Preservation Plan submitted for approval. Trees shall be preserved as specified in "3" below.

3. **Preservation Method for Trees, Vegetation and Habitat Areas** - Existing trees may be considered preserved only if no cutting, filling, or compaction of the soil takes place between the trunk of the tree and the perimeter of the tree's "circle of protection." A circle of protection is created by a radius in feet that equals the diameter in inches of the tree trunk at 4 ft. above grade (e.g., a 15-inch diameter tree creates a 15-ft. radius of protected area). Existing vegetation and habitat areas may be considered preserved only if no cutting, filling, or compaction of the soil takes place within the vegetation's or habitat area's circle of protection.

   A circle of protection for vegetation or a habitat area is created by defining a circle around the vegetation or habitat area, the perimeter of which is located 5 ft. outside of the vegetation's dripline or edge, or habitat area's edge, whichever is applicable. In addition, the tree, vegetation, or habitat area shall be protected from damage during construction by a construction fence located outside the identified circle of protection. All construction fencing shall be installed prior to any grading and excavation of a development site.

b. Required Landscaping

1. **Landscaping and Irrigation Plans** - Where a landscape plan is required by this Code, by a particular proposal, and/or by conditions of approval, detailed planting plans, irrigation plans, and other related plans shall be submitted for review and approval with building permit applications and/or prior to the recordation of a Final Plat. Building permits (including foundation permits) shall not be issued until the Director has determined that the plans comply with the purposes clause and specific standards in this chapter, and any specific proposal(s) and/or conditions of approval that apply to the particular project. On a case-by-case basis, and where no significant natural features would be impacted, the Director may grant an exception and allow the issuance of permits. Required landscaping shall be reviewed and approved by the Director, and in no case shall landscaping be less than that required by this chapter. Landscaping shall consist of groundcover, shrubbery, and trees.

2. **Installation** - All required landscaping and related improvements (irrigation, etc.) shall be completed prior to the issuance of a Certificate of Occupancy. Additionally, all required landscaping and related improvements within the public right-of-way, and/or required by conditions of approval in conjunction with recording of the Final Plat, shall be completed or financially guaranteed prior to the recording of a Final Plat. If an applicant chooses to financially secure landscaping and related improvements in order to record a Final Plat, such financial security shall be consistent with the provisions of this Code, shall be reviewed and approved by the Director, and shall be for an amount at least equivalent to 120 percent of the cost of the installation of the landscaping and related improvements.

3. **Coverage within Three Years** - All required landscaping shall provide a minimum 90 percent ground coverage within three years. A financial guarantee shall be provided for new residential development (with the exception of areas within single-family or duplex lots), new nonresidential development, and nonresidential redevelopment that involves a 3,000 sq. ft. or 20 percent expansion (whichever is less, except that 20 percent expansions less than 500 sq. ft. are exempt). The financial guarantee shall cover maintenance for a 3-year period from the date that the landscaping was installed by the applicant and accepted by the City. This guarantee shall be established prior to the issuance of a Final Certificate of Occupancy and prior to recording of a Final Plat. Additionally, this guarantee shall be consistent with the provisions of this Code, shall be reviewed and approved by the Director, and shall be for an amount that is at least equivalent to 50 percent of the cost of installation of required landscaping and related improvements, plus 20 percent of the 50 percent figure.

   To release this guarantee at the end of the 3-year period, the developer shall provide a report to the Director. This report shall be prepared by a licensed arborist or licensed landscape contractor and shall verify that 90 percent ground coverage has been achieved (either by successful plantings or by the installation of replacement plantings). The Director shall approve the report prior to release of the guarantee.

c. Appropriate care and maintenance of landscaping onsite and landscaping in the adjacent right-of-way is the right and responsibility of the property owner, unless City ordinances specify otherwise for general public and safety reasons. A City permit is required to plant, remove, or prune any trees in a public right-of-way. Landscaping, buffering, and screening required by the Code shall be maintained. If street trees or other plant materials do not survive or are removed, materials shall be replaced in kind.

d. Planters and boundary areas used for required plantings shall have a minimum diameter of 5 ft. Where the curb or the edge of these areas are used as a tire stop for parking, the planter or boundary plantings shall be a minimum width of 7.5 ft.

e. With the exception of single-family and duplex development, irrigation systems shall be required in all zones to ensure survival of plant materials in required landscape areas, unless waived by the Director. Where required, a detailed irrigation system plan shall be submitted with building permit applications. The plan shall indicate source of water, pipe location and size, and specifications of backflow devices. The irrigation system shall use 100 percent sprinkler head-to-head coverage or sufficient coverage to ensure 90 percent coverage of plant materials in three years.

f. In no case shall shrubs, conifer trees, or other screening be permitted within vision clearance areas of street, alley, or driveway intersections, or where the City Engineer otherwise deems such plantings would be hazardous to pedestrians and vehicles.

Section 4.2.30 - REQUIRED TREE PLANTINGS

Tree plantings in accordance with the following standards are required for all landscape areas, including but not limited to parking lots for four or more cars, public street frontages, private streets, multi-use paths, sidewalks that are not located along streets, alleys, and along private drives more than 150 ft. long.

Along streets, trees shall be planted in designated landscape parkway areas or within areas specified in a City-adopted street tree plan. Where there is no designated landscape parkway area, street trees shall be planted in yard areas adjacent to the street. Along alleys, trees shall be planted on the sides of the alleys at a minimum of one tree per lot and the trees shall be located within 10 ft. of the alley. Along sidewalks and multi-use paths not located along streets (e.g., pedestrian and bicycle connections between cul-de-sacs or between residential areas and neighborhood centers, etc.), a minimum 5-ft.-wide landscaping buffer is required on either side of the facility. Within these buffers, trees shall be planted at least every 30 ft. Conditions of approval for individual development projects may require additional tree plantings (e.g., to mitigate removal of other trees, or as part of landscape buffering or screening efforts).

The distance between required trees shall be determined by the type of tree used. Trees in parking areas shall be dispersed throughout the lot to provide a canopy for shade and visual relief.

4.2.30.01 - Street Trees

Table 4.2-1

Medium-canopy trees (trees that normally reach 30-50 ft. in height within 30 years)	-	Maximum 30 ft. on center spacing
Large-canopy trees (trees that normally reach 30-50 ft. in height within 30 years, but exceed 50 ft. in height at maturity)	-	Maximum 50 ft. on center spacing

4.2.30.02 - Parking Lot Trees

Table 4.2-2

Medium-canopy trees (trees that normally reach 30-50 ft. in height within 30 years)	-	Minimum one tree per 8 cars
Large-canopy trees (trees that normally reach 30-50 ft. in height within 30 years, but exceed 50 ft. in height at maturity)	-	Minimum one tree per 12 cars

4.2.30.03 - Tree Planting Restrictions

a. Trees may not be planted within 5 ft. of permanent hard surface paving or walkways, unless special planting techniques and specifications are used and particular species of trees are planted as approved by the Director. These limitations apply most frequently in areas such as landscape parkways, pedestrian walkways, and plaza areas (where there may be tree grates).

b. Unless approved otherwise by the City Engineer, trees also may not be planted:

1. Within 10 ft. of fire hydrants and utility poles;

2. Within 20 ft. of street light standards;

3. Within 5 ft. from an existing curb face (except where required for street trees);

4. Within 10 ft. of a public sanitary sewer, storm drainage, or water line; or

5. Where the Director determines the trees may be a hazard to the public interest or general welfare.

c. Trees shall be pruned to provide a minimum clearance of 8 ft. above sidewalks and 12 ft. above street and roadway surfaces.

4.2.30.04 - Trees Planted near Weather Protection

Where street trees are required in combination with weather protection features (such as awnings), the trees shall be allowed to grow and their canopies shall be trimmed above the weather protection features.

Section 4.2.40 - BUFFER PLANTINGS

Buffer plantings are used to reduce apparent building scale, provide a transition between contrasting architectural styles, and generally mitigate incompatible or undesirable views. They are used to soften rather than block viewing. Where required, a mix of plant materials shall be used to achieve the desired buffering effect. At minimum, this mix shall consist of trees, shrubs, and groundcover, and may also consist of existing vegetation (e.g., in natural areas that will be preserved).

At minimum, buffering is required in areas identified through conditions of approval, in areas required by other provisions within this Code, in through-lot areas, and as required below.

4.2.40.01 - Parking, Loading, and Vehicle Maneuvering Areas

Buffering is required for parking areas containing four or more spaces, loading areas, and vehicle maneuvering areas. Boundary plantings shall be used to buffer these uses from adjacent properties and the public right-of-way. A perimeter landscaping buffer a minimum of 5 ft. wide shall be provided around parking areas; a perimeter landscaping buffer a minimum of 10 ft. wide shall be provided around trees. Additionally, where parking abuts this perimeter landscape buffer, either parking stops shall be used or planters shall be increased in width by 2.5 ft. Onsite plantings shall be used between parking bays, as well as between parking bays and vehicle maneuvering areas. Low-lying ground cover and shrubs balanced with vertical shrubs and trees shall be used to buffer the view of these facilities. Decorative walls and fences may be used in conjunction with plantings, but may not be used alone to comply with buffering requirements.

In addition to any pedestrian refuge areas, each landscaped island within and around parking lot areas shall include one or more shade canopy trees. Each island shall be of a length greater than 8 ft. in its smallest dimension, include at least 80 sq. ft. of ground area per tree to allow for root aeration, and have raised concrete curbs. Connecting walkways through parking lots shall have one or more canopy shade trees per 40 linear ft. of such walkway, planted in landscape areas within 5 ft. of the walkway. Driveways through or to parking lots shall have one or more canopy shade trees per 40 linear ft. of and along each side of such driveway, planted in landscape areas within 5 ft. of the driveway.

Section 4.2.50 - SCREENING (HEDGES, FENCES, WALLS, AND BERMS)

Screening is required where unsightly views or visual conflicts must be obscured or blocked and/or where privacy and security are desired. Fences and walls used for screening may be constructed of wood, concrete, stone, brick, wrought iron, or other commonly used fencing/wall materials. Acoustically designed fences and walls shall also be used where noise pollution requires mitigation.

Where landscaping is used for required screening, it shall be at least 6 ft. in height and be at least 80 percent opaque, as seen from a perpendicular line of sight, within 18 months following establishment of the primary use of the site.

A chainlink fence with slats shall qualify for screening only if a landscape buffer is provided in compliance with section 4.2.40 above.

4.2.50.01 - Height Limit

The height of hedges, fences, walls, and berms shall be measured from the lowest adjoining finished grade, except where screening is required for parking, loading, storage, and similar areas. In these cases, height shall be measured from the finished grade of such improvements. Screening is not permitted within vision clearance areas, as determined by the City Engineer.

a. Hedges, fences, and walls shall not exceed 3 ft. in height within any required yard adjacent to a street or within the through-lot easement area of a lot. The Director may grant an exception to this provision under the following circumstances:

1. Where required by the Planning Commission to meet screening requirements;

2. Where an applicant wishes to allow portions of a screen to encroach up to 2 ft. into an exterior side yard (excluding the front yard area). This type of encroachment pertains to a screen that is designed and constructed with offsets to prevent visual monotony. In this situation, the hedge, fence, or wall shall not exceed 5 ft. in height and shall maintain vision clearance standards; or

3. Where an applicant wishes to allow portions of a screen to encroach up to 5 ft. into a through-lot easement area. This type of encroachment pertains to a screen that is designed and constructed with offsets to prevent visual monotony. In this situation, the hedge, fence, or wall shall maintain an average setback of 20 ft. from the rear property line, shall not exceed 5 ft. in height, and shall maintain vision clearance standards. Gates are required in rear-yard fences on through lots since it remains the property owner's responsibility to maintain the area outside the fence. In multi-dwelling developments or planned developments and subdivisions, a 20-ft.-wide planting area shall be established between the sidewalk and the fence. The planting area shall be designed to minimize maintenance and to ensure that coniferous trees are planted at least 15 ft. from the sidewalk.

b. Notwithstanding the height restrictions outlined in "a" above, the height of solid fences and walls shall be limited to a maximum of 4 ft. along the boundaries of sidewalks and multi-use paths, provided these facilities are not adjacent and not parallel to streets (e.g., pedestrian and bicycle connections between cul-de-sacs or between residential areas and neighborhood centers, etc.). The limitation on these solid forms of screening is intended to increase visibility and public safety. Portions of fences above 4 ft. in height are allowed, provided that the fences and/or walls are designed and constructed of materials that are open a minimum of 50 percent. Fence and wall heights shall be measured from the grade of the sidewalk or multi-use path. Fences and walls along sidewalks and multi-use paths shall be located outside of any associated rights-of-way and/or easement areas.

c. Hedges, fences, and walls may exceed 3 ft. in rear and interior side yards, except when these yards abut a sidewalk or multi-use path, in which case provisions in "b" above apply. Fences and walls over 6 ft. high require building permit approval prior to construction.

d. Earthen berms up to 6 ft. in height may be used to comply with screening requirements. The slope of a berm may not exceed 3:1. The faces of a berm's slope shall be planted with ground cover, shrubs, and trees.

e. Long expanses of fences and walls shall be designed to prevent visual monotony through the use of offsets, changes of materials and textures, or landscaping.

f. Chainlink fences are prohibited within 100 ft. of the identified gateway within the Limited Industrial-Office Zone, unless they are screened in accordance with landscape screening requirements in this chapter.

4.2.50.02 - Service Facilities and Outdoor Storage Areas

Trash dumpsters, gas meters, ground-level air conditioning units and other mechanical equipment, other service facilities, and outdoor storage areas shall be appropriately screened with a fence, wall, or plantings, consistent with the landscape screening provisions in this section. When located adjacent to a residential zone, outdoor components associated with heat pumps, ground-level air conditioning units and similar kinds of equipment that create noise, shall not be placed within any required setback area. Additionally, if such equipment is located adjacent to a residential zone and between 5 - 10 ft. of a property line, it shall be screened with a solid fence or wall at least 1 ft. higher than the equipment. When such equipment is located adjacent to a residential zone and outside a required setback line, and is greater than 10 ft. from a property line, standard screening requirements in this section shall apply.

4.2.50.03 - Swimming Pools

Swimming pools more than 18 in. deep shall be surrounded and screened with a minimum 4-ft. high secured fence or wall. The fence or wall must have a self-latching gate in accordance with Chapter 9 of the City's Municipal Code.

4.2.50.04 - Detention Facilities

Detention facilities (such as ponds) shall be graded so that the sides of the facilities are no steeper than 3:1. Additionally, the facilities shall be landscaped with plant materials that provide erosion control and biofiltration.

Section 4.2.60 - PROHIBITED STREET TREES

Section 10.01.020 of the Municipal Code prohibits the following species of trees within public rights-of-way and parking strips: bamboo, poplar, willow, conifer, cottonwood, fruit and nut trees (other than ornamental), and ailanthus. Additionally, because of concerns regarding tree root interactions with sanitary sewer lines, Section 10.01.030 of the Municipal Code prohibits willow, cottonwood, and poplar trees from being planted

anywhere in the City, unless the City Manager approves an exception for a situation where the tree roots are unlikely to interfere with a public sewer.

Section 4.2.70 - GATEWAY PROVISIONS

Development in designated gateway areas, as defined in the Comprehensive Plan, shall comply with the additional provisions of this section.

4.2.70.01 - Gateway Provisions for Development along South Third Street

Within the Limited Industrial-Office (LI-O), Mixed Use General Commercial (MUGC), and Mixed Use Community Shopping (MUCS) zones, the following standards shall apply:

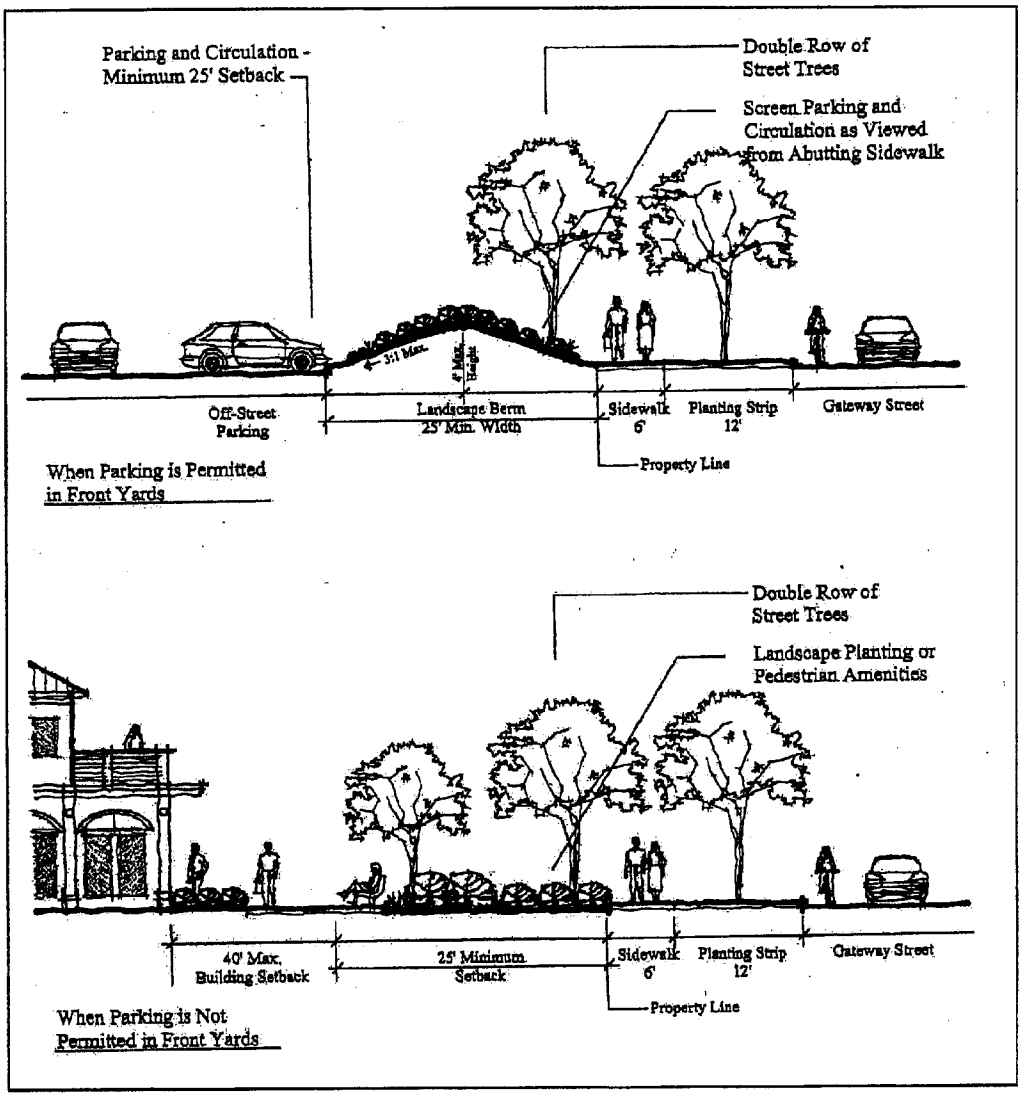
a. **Street Trees and Streets** - A double row of street trees along street frontages as shown below shall be required. Properties zoned MUCS are exempt from this double row of trees requirement. Other street improvements, such as for sidewalks, bicycle lanes, transit facilities, and roadways, shall conform to the provisions of chapters 4.0 through 4.10.

b. **Landscaping** - Areas within required setbacks adjacent to a Gateway Street (gateway landscape area) shall be landscaped with a combination of ground cover, shrubbery, and trees to serve as buffering between the development and the Gateway Street, in accordance with this chapter. While properties zoned MUCS shall provide required landscaping, they are exempt from the portion of this requirement that pertains to buffering of buildings.

   Screening shall block views of the paved surfaces of parking and circulation areas for pedestrians on the abutting public sidewalk (i.e., on South Third Street) in accordance with this chapter and the following special screening standards:

   1. Screening shall be provided with planted berms (maximum slope of 3:1) or other effective terrain features, but shall not block the view(s) of building facades from the Gateway Street (see graphic in section 4.2.70.01.a); and

   2. Mulch, rocks, and other non-plant ground cover material shall not be permitted as screening, but shall be allowed to aid in the establishment of plants and to control erosion.



c. **Fences and Walls** - Fences and walls within required setbacks adjacent to a Gateway Street shall not exceed 36 in. above finished grade, and shall have a minimum average setback of 12 ft. from the Gateway Street right-of-way. The setback shall be landscaped in accordance with "b" above. Straight fence or wall segments shall not exceed 50 ft. in length without an offset or pillar measuring at least 2 ft. in depth. Pillars shall have a clearly defined base and cap and be constructed of brick, masonry, wood, or similar quality material. Cyclone fences shall not be permitted. Fences and walls associated with required screening of service facilities (e.g., trash dumpsters, gas meters, ground-level air conditioning units and other mechanical equipment within required setback areas) shall be located no closer than 25 ft. from a Gateway Street.

d. **Signs, Facilities, and Features** - Monument signs, pedestrian and transit facilities, and water quality/quantity features (e.g., drainageways and detention ponds) approved by the City are allowed within the Gateway landscape area.

e. **Parking and Vehicle Circulation** - Parking and vehicle circulation areas shall not be placed closer than 25 ft. from a Gateway Street right-of-way. Such areas shall not be visible from a Gateway Street, as provided in "b," above. Where the Gateway Street is used to comply with section 3.22.40.09, parking and circulation areas shall not be placed between the subject building and the Gateway Street.

f. **Pole-Mounted Signs** - Pole-mounted signs are prohibited within 100 ft. of any Gateway Street's right-of-way.

g. **Monument Signs.** Monument signs on properties along Gateway Streets shall be limited to 8 ft. in height.

4.2.70.02 - Reserved for Gateway Provisions for other Parts of the City - (Provisions to be established as part of a future Code Update process)

Section 4.2.80 - SITE AND STREET LIGHTING

Pursuant to City Council Policy 91-9.04, *"The City of Corvallis is interested in well shielded, energy efficient street lighting sources that direct the light source downward where it is needed, not up or sideways where it is wasted and causes glare, light trespass, and bright skies."*

All developers shall submit for approval a proposed lighting plan that meets the functional security needs of the proposed land use without adversely affecting adjacent properties or the community. This criteria is satisfied upon compliance with the provisions listed below and shall be substantiated by the applicant's submittal of the necessary information to demonstrate compliance (e.g., information including but not limited to manufacturers' specifications):

a. For safety purposes, lighting shall be provided in all areas designed to include pedestrian activities (e.g., streets, sidewalks, multi-use paths, parking lots, buildings, and plazas).

b. With the exception of lighting for public streets, which is maintained by the City through a contract with an electric company, all other lighting used to illuminate streets, buildings, sidewalks, multi-use paths, parking lots, plazas, or the landscape, shall be evaluated during the plan review process associated with requests for permits.

c. Site lighting that may be confused with warning, emergency, or traffic signals is prohibited.

d. Light sources shall be concealed or shielded to the maximum extent feasible to minimize the potential for glare and unnecessary diffusion on adjacent property. Compliance with this provision shall be demonstrated by ensuring that, when evaluated from a point 4 ft. above the ground, bulbs of light fixtures are not visible from adjacent property.

e. All new subdivision street lights and future street-light luminaire replacements within the existing street-light system shall be flat-lens fully shielded luminaires.

f. Standard placement of street lights shall be at intersections, in the middle of long blocks, and in dead end streets and long cul-de-sacs.

g. Background spaces such as parking lots shall be illuminated as unobtrusively as possible to meet the functional needs of safe circulation and of protecting people and property. Foreground spaces, such as building entrances and plaza seating areas, shall use local lighting that defines the space without glare.