

- (2) **Width.** Connector trails shall have a minimum right-of-way width of ten feet and a minimum constructed width of six feet.

## **DIVISION 5: LANDSCAPING**

### **A. GENERAL PROVISIONS**

#### **Sec. 21-7500. Applicability**

These landscaping standards shall apply to all new development within the municipal boundaries of the city and natural area buffer zones. For purposes of this section, new development refers to the development of any lot, including the construction on any previously developed properties of building additions, additional structures, additional parking facilities or lots, vehicle drive areas or any other impervious surface.

#### **Sec. 21-7501. Landscape Upgrade**

- (1) Lawfully established landscaping conditions on developed sites which existed prior to the adoption of this land development code may be continued until such time as a change in gross floor area is requested, or when a change of use is proposed. Upon such increase or change, the existing landscaping shall be upgraded as provided in the Landscaping Upgrade table below if such landscaping does not already meet the requirements herein. For the purposes of this section, a change of use shall be deemed to occur when any of the following occurs as a result of changes proposed to an existing use or structure:
- (a) A new review process is required under the provisions of this land development code;
  - (b) There is an alteration or change in square footage in the structure and/or use;
  - (c) There is an alteration or change to the parking area requirements that results in expansion, excavation and/or resurfacing of the parking area; or
  - (d) There is a substantial change proposed in drainage, circulation, landscaping, noise, or lighting at the site.

Table VII–11. Landscape Upgrades

LANDSCAPE UPGRADE TABLE	
Building Addition (Gross Floor Area- GFA)*	Landscape Area Upgrade
0- 25% change in GFA; or change in use with no increased GFA	Upgrade area by 25% of base standard
26-50% change in GFA	Upgrade area by 50% of base standard
Over 50% change in GFA	Upgrade area by 100% of base standard
<i>*For the purposes of this table, outdoor display shall be treated as GFA.</i>	

- (2) The amount of landscaping necessary to satisfy the percentage of upgrade shall be calculated by first determining the total amount of landscaping required under the full provisions of this land development code. The upgrade percentage shall then be applied to the total to determine the extent of the required upgrade.
- (3) The landscaping upgrades required in the table above shall be accomplished in the following order of priority unless otherwise determined by the city:
  - (a) Landscaping around the perimeter of the site adjacent to public rights-of-way.
  - (b) Landscaping in required buffer areas.
  - (c) Landscaping within the parking areas; then
  - (d) Other landscaping interior to the site.
- (4) **Exceptions.** Single-family residences are required to upgrade the landscape area by 100 percent of base standard for any addition over 200-square feet.

#### **Sec. 21-7502. Landscape Standards Cumulative**

The landscape standards set forth in this division shall be cumulative in nature. As an example, the landscape plan of a parking lot that is located next to an arterial street must meet the parking lot landscape requirements in addition to the landscape requirements established for lots adjoining streets.

#### **Sec. 21-7503. Landscape Plans Required**

Landscape plans are required for the following development applications and are subject to the review procedures for the type of development application involved: conditional use permit, development plan, PUD permit, use-by-permit, variance, height exception, and zoning or rezoning.

**Sec. 21-7504. Approved Landscape Plan Compliance**

The landscaping, as planted, shall comply with the approved landscape plan. Amendments to an approved landscape plan must be approved in writing by the city.

**Sec. 21-7505. Guidelines for Approval**

The following guiding principles shall be made a part of any landscape plan submitted to the city:

- (1) Reinforces and extends any existing patterns of outdoor spaces and vegetation where practicable;
- (2) Supports functional purposes such as spatial definition, visual screening, creation of privacy, management of microclimate or drainage;
- (3) Enhances the appearance of the development and neighborhood;
- (4) Protects significant trees, natural systems and habitat;
- (5) Enhances the pedestrian environment;
- (6) Identifies all landscape areas and all landscaping elements within each landscape area;
- (7) Contains plants that are well suited for healthy growth along the Colorado front range; and
- (8) Meets or exceeds the standards of this land development code and the requirements contained in the city’s approved plant list and landscaping specifications document.

**B. REQUIREMENTS AND STANDARDS**

**Sec. 21-7510. Landscape Areas**

- (1) **Definition.** Landscape areas shall include all areas on a site that are not covered by buildings, structures, paving or impervious surface, except outdoor space that is located in an agricultural zone district and maintained in active agricultural use or single-family residential properties. For single-family residential properties, the landscape area is limited to the front yard and any side yard on a street, park, or other open space..

- (2) **Elements Permitted in Landscape Areas.** Landscape areas may include the following elements:
- (a) Turf grass. High-use areas should be planted with irrigated turf grass. Non-irrigated, shortgrass prairie grasses or other adapted grasses that have been certified as Xeriscape landscaping, may be established in remote, low-use, low-visibility areas.
  - (b) Planting beds. Shrub and ground cover planting beds shall be separated from turf grass with edging, curbing, or stone borders and shall have open surface areas covered with mulch.
  - (c) Detention and Retention Ponds. Detention and retention ponds may be used as long as they are physically, functionally, and visually integrated into landscape uses through the use of topography, building and parking lot placement, plantings, permanent water features, recreational or open space amenities, or other methods. Slopes shall not exceed a 4:1 ratio or be flatter than 2 percent.
  - (d) Drainage Zones. Areas that are irrigated by runoff water and that may support wetlands and native species adapted to riparian conditions. All drainage conveyance, detention, and retention areas should be landscaped using a “naturalized” palette of materials that reduce irrigation water use and encourage habitat development.
  - (e) Hardscape. Landscape areas also may include, by way of example but not by way of limitation, the following areas: plazas, basketball courts, pools, tennis courts, playgrounds, or similar recreational areas or uses. Vehicle drive or parking areas shall not be considered hardscape.
  - (f) Tree lawns. Tree lawns landscaped in connection with development in accordance with the standards contained in this land development code.

**(3) Elements Required in Residential Landscape Areas.** Residential developments shall install landscaping elements as follows:

**Table VII–12. Residential Development Landscape Requirements**

Development Type	Landscape Area	Trees	Shrubs	Material	Turf	Mulch	Tree-Lawn	Additional Requirements
Single-Family Detached 8,000 sq. ft. lot size or less *	Front and side yard	Minimum of 1 tree.	Minimum of 6 shrubs: 50% must be deciduous.	Landscape area must contain 75% live plants	Max of 50% of landscape area	One type required	Yes-spaced 40 feet apart along all property street frontages	Turf not required by City, but some HOAs may require.
Single-Family Detached greater than 8,000 sq. ft. lot.*	Front and side yard	Minimum of 2 trees	Minimum of 12 shrubs: 50% must be deciduous.	Landscape area must contain 75% live plants	Max of 50% of landscape area	One type required	Yes-spaced 40 feet apart along all property street frontages	Turf not required by City, but some HOAs may require.
Single-Family Attached (Duplex)*	Front and side yard	Minimum of 1 deciduous tree and 1 evergreen tree per unit.	Minimum of 6 shrubs per unit; 50% must be deciduous.	Landscape area must contain 75% live plants	Max of 50% of landscape area	One type required	Yes-spaced 40 feet apart along all property street frontages	Turf not required by City, but some HOAs may require.
Multi-Family (three or more units attached) up to 5 acres	Entire area	Minimum of 1 deciduous tree and 1 evergreen tree per two units.	Minimum of 6 shrubs per two units; 50% must be deciduous.	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	Yes-spaced 40 feet apart along all property street frontages	Minimum Open Space Requirement. See section 21-4310.
Multi-Family (three or more units attached) greater than 5 acres	Entire area	Minimum of 1 deciduous tree and 1 evergreen tree per two units.	Minimum of 6 shrubs per two units; 50% must be deciduous.	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	Yes-spaced 40 feet apart along all property street frontages	Minimum Open Space Requirement. See section 4310.

\*If lot is on a corner, double the required number of trees and shrubs.

\*\*For lots greater than 24,000-square feet in size, double the required number of trees and shrubs in front and side yard.

**(4) Elements Required in Mobile Home Parks.** The following elements are required in addition to any other zone district requirements found in section 21-4320 (Mobile Home Park District). A mobile home park shall provide a permanent and maintained landscaped area at least 25 feet in width around those portions of the park perimeter (exterior property lines)

that border public rights-of-way. A six-foot solid wall or opaque fence may be provided in the said landscaped area. The wall or fence shall be setback a distance not less than 25 feet from the exterior property lines that border public rights-of-way. The area between the wall or fence and the exterior property lines shall be landscaped with a mixture of evergreen and deciduous plantings. The mobile home park perimeters that do not border rights-of-way shall meet residential buffer zone requirements as provided in the Landscape Regulations. Additional landscaping may be required based on the specific layout of the park. Each mobile home lot shall be provided with at least one tree. The property owner shall be responsible for the installation and continual maintenance of the required landscaping.

**(5) Elements Required in Non-residential Landscape Areas.** Non-residential developments shall install landscaping elements as follows:

**Table VII–13. Non-Residential Development Landscape Requirements**

Development Type	Landscape Area	Trees	Shrubs	Material	Turf	Mulch	Tree-Lawn	Additional Requirements
Commercial or Industrial up to 40,000-sq. ft. lot area	Entire yard	1 for every 600-sq. ft. of landscape area	1 for every 300-sq. ft. of landscape area	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	*Yes-spaced 40 feet apart along all property street frontages	20-foot depth of landscaping from ROW required for industrial uses
Commercial or Industrial greater than 40,000-sq. ft. lot area to 5 acres	Entire yard	1 for every 600-sq. ft. of landscape area	1 for every 300-sq. ft. of landscape area	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	*Yes-spaced 40 feet apart along all property street frontages	20-foot depth of landscaping from ROW required for industrial uses
Commercial or Industrial greater than 5 acres	Entire yard	1 for every 1200-sq. ft. of landscape area	1 for every 300-sq. ft. of landscape area	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	*Yes-spaced 40 feet apart along all property street frontages	20-foot depth of landscaping from ROW required for industrial uses
Public/institutional land uses on any size lot	Entire yard	2 for every 600 sq. ft. of landscape area	2 for every 300 sq. ft. of landscape area	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	*Yes-spaced 40 feet apart along all property street frontages	

Development Type	Landscape Area	Trees	Shrubs	Material	Turf	Mulch	Tree-Lawn	Additional Requirements
Mixed use	Entire yard	2 for every 600-sq. ft. of landscape area	2 for every 300-sq. ft. of landscape area	Landscape area must contain 75% live plants	Max of 50% of landscape area	Two types required	*Yes-spaced 40 feet apart along all property street frontages	Urban hardscape substitutions allowed

- (6) **Elements Required in Mixed Use Developments.** All developments 1 acre or greater in size shall be required to dedicate 15 percent of the lot to landscaping including, without limitation, landscape buffers, seating areas, natural walking paths separate from sidewalks, and so on.
- (7) **Optimal Landscape Concepts and Approval.** In reviewing the required landscape plan, the city shall have the authority to approve the optimum placement and interrelationship of required landscape plan elements such as trees, vegetation, turf, irrigation, screening, buffering and fencing, based on the following criteria:
- (a) Protecting existing trees, natural areas and features;
  - (b) Enhancing visual continuity within and between neighborhoods;
  - (c) Providing tree canopy cover;
  - (d) Creating visual interest year round;
  - (e) Complementing the architecture of a development;
  - (f) Providing screening of areas of low visual interest or visually intrusive site elements;
  - (g) Establishing an urban context within mixed-use developments;
  - (h) Providing privacy to residents and users;
  - (i) Conserving water;
  - (j) Avoiding reliance on excessive maintenance;
  - (k) Promoting compatibility and buffering between and among dissimilar land uses; and
  - (l) Utilizing curb breaks to capture runoff water as shown below:

*Figures VII-3. Examples of Curb Breaks for Stormwater Runoff*



**Sec. 21-7511. Water Conservation Requirement**

All landscaping plans shall be designed to incorporate water conservation materials and techniques. Xeriscape landscaping is encouraged but does not include or allow artificial turf or plants, mulched (including gravel) beds or areas without landscape plant material, paving of areas not required for walkways, plazas or parking lots, bare ground, weed covered or infested surfaces, or any landscaping that does not comply with the standards of this section. Smart-water conservation landscaping principles include the following techniques:

- (1) Grouping plants with similar water requirements together on the same irrigation zones;
- (2) Limiting high-irrigation turf and plantings to appropriate high-use areas with high visibility and functional needs;
- (3) Use of low-water demanding plants and turf where practicable;
- (4) Use of efficient irrigation systems;
- (5) Incorporation of soil improvements;
- (6) Use of mulches; and



- (7) Provision of regular and attentive maintenance.

**Sec. 21-7512. Irrigation Required**

All landscape areas shall include adequate, permanent, automatic irrigation of all plant material, except certified xeric landscaping that does not require permanent irrigation for survival once established. In such case, the landscape plan must provide for temporary irrigation to ensure the proper establishment of the xeric elements.

**Sec. 21-7513. General Landscape Materials, Maintenance, and Replacement Standards**

- (1) **Topsoil.** To the maximum extent feasible, topsoil that is removed during construction activity shall be conserved for later use on areas requiring re-vegetation and landscaping.
- (2) **Soil Amendments.** The soil in areas that have been compacted or disturbed during construction or other activities shall be thoroughly loosened. Organic soil amendments shall also be thoroughly incorporated into the soil at a rate of a minimum of five cubic yards per one thousand square feet of landscape area and be tilled to a depth of at least six inches.
- (3) **Plant Materials.** Plant materials should be selected from the city's approved plant list and landscaping specifications. Prohibited species referenced in these specifications are not allowed in the city.
- (4) **Plant Quality.** All plants shall be A-Grade or No. 1 Grade, free of any defects, and shall be of normal health, height, leaf density, and spread appropriate to the species as defined by American Association of Nurserymen Standards.
- (5) **Plant Size.** The caliper of deciduous trees shall be measured six inches above the base. Plant material sizes shall meet the following requirements of table 7-14:

Table VII-14. Minimum Plant Size Requirements

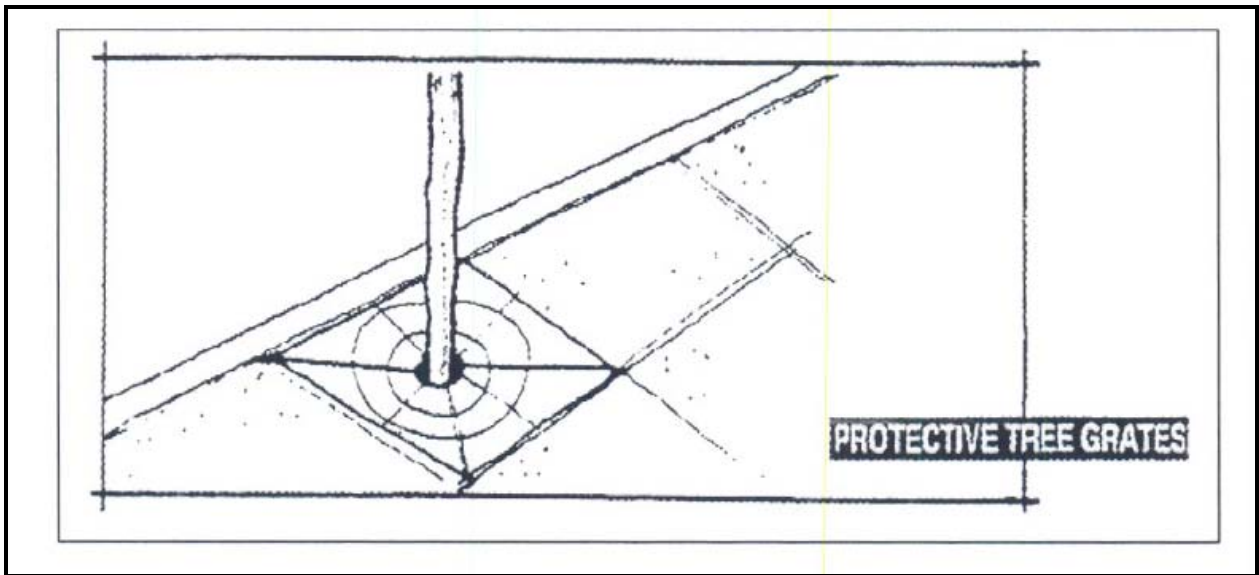
Plant Material Size	
<i>Plant Type</i>	<i>Minimum Size</i>
Shade Tree	2-inch caliper
Evergreen	6-foot height
Ornamental Tree	1.5-inch caliper
Shrubs	5 gallon
Ornamental Grasses	1 gallon

- (6) **Grading.** Prior to the installation of the required landscaping and irrigation, all proposed landscape areas shall be graded to allow for proper site drainage.
- (7) **Installation.** All landscaping shall be installed according to sound horticultural practices in a manner designed to encourage quick establishment and healthy growth. All landscaping in each phase shall either be installed or the installation shall be secured with a letter of credit, escrow or performance bond for 125 percent of the value of the landscaping prior to the issuance of a certificate of occupancy for any building in such phase.
- (8) **Maintenance.** Trees and vegetation, irrigation systems, fences, walls and other landscape elements shall be considered as elements of the project in the same manner as parking, building materials and other site details. The applicant, landowner or successors in interest shall be jointly and severally responsible for the regular maintenance of all landscaping elements in good condition. All landscaping shall be maintained free from disease, pests, weeds and litter, and all landscape structures such as fences and walls shall be repaired and replaced periodically to maintain a structurally sound condition.
- (9) **Replacement.** Any landscape element that dies or is otherwise removed shall be promptly replaced based on the requirements of this land development code.

#### **Sec. 21-7514. Tree Standards**

- (1) **Identification.** All existing street trees that are located on city rights-of-way abutting the development shall be accurately identified by species, size, location and condition on required landscape plans, and shall be preserved and protected in accordance with the standards below.
- (2) **Tree Planting.** All developments shall establish tree lawns and canopies along all city streets, in and around parking lots, and in all landscape treatment areas in order to establish at least a partial urban tree canopy. These trees may also be combined or interspersed with other landscape areas in remaining portions of the development to accommodate views and functions such as active recreation and storm drainage.
- (3) **Tree Grates.** Where trees are planted in paved areas, such as patios, pedestrian plazas, or sidewalks, a protective tree grate shall be provided.

Figure VII-4. Protective Tree Grate Example



(4) **Significant Trees.** Existing significant trees (greater than eight inches in caliper) shall be preserved to the maximum extent feasible and may help satisfy the landscaping requirements set forth above. Such trees shall be considered "protected" trees within the meaning of this section, subject to the exceptions contained in subsection (c) below. Streets, buildings, and lot layouts shall be designed to minimize the disturbance to significant existing trees. All required landscape plans shall accurately identify the locations, species, size, and condition of all significant trees, each labeled showing the applicant's intent to either remove, transplant, or protect.

(a) **Replacement.** A significant tree that is removed shall be replaced with trees sufficient to mitigate the loss of value of the removed significant tree. The applicant shall select a qualified landscape appraiser to determine such loss based upon an appraisal of the tree to be removed by using the most recent published methods established by the Council of Tree and Landscape Appraisers. Replacement trees shall be planted on the development site and shall meet the following minimum size requirements:

Table VII-15. Replacement Tree Minimum Size Requirements

Replacement Tree Minimum Size Requirements	
Canopy Shade Tree	1:1 caliper replacement of any removed canopy shade tree
Ornamental Tree	1:1 caliper replacement of any ornamental tree
Evergreen Trees	1:1 caliper replacement of any evergreen tree

- (b) Protection. The following tree protection specifications should be followed to the maximum extent feasible for all projects with protected existing trees:
  - (i) Within the drip line of any protected existing tree, there shall be no cut or fill over a four-inch depth unless a qualified arborist or forester has evaluated and approved the disturbance.
  - (ii) Prior to and during construction, barriers shall be erected around all protected existing trees with such barriers to be of orange fencing a minimum of four feet in height, secured with metal T-posts, no closer than six feet from the trunk or 1/2 of the drip line, whichever is greater. There shall be no storage or movement of equipment, material, debris or fill within the fenced tree protection zone.
  - (iii) Large property areas containing protected trees and separated from construction or land clearing areas, road rights-of-way and utility easements may be ribboned off, rather than erecting protective fencing around each tree as required in subsection (b)(ii) above. This may be accomplished by placing metal t-post stakes a maximum of 50 feet apart and tying ribbon or rope from stake-to-stake along the outside perimeters of such areas being cleared.
  - (iv) During the construction stage of development, the applicant shall prevent the cleaning of equipment or material or the storage and disposal of waste material such as paints, oils, solvents, asphalt, concrete, motor oil or any other material harmful to the life of a tree within the drip line of any protected tree or group of trees.
  - (v) No damaging attachment, wires, signs or permits may be fastened to any protected tree.
  - (vi) The installation of utilities, irrigation lines, or any underground fixture requiring excavation deeper than 6 inches shall be accomplished by boring under the root system of protected existing trees at a minimum depth of 24 inches. The auger distance is established from the face of the tree (outer bark) and is scaled from tree diameter at breast height, as described in the chart below.

Table VII-16. Auger Distance for Excavation

Tree Diameter at Breast Height (inches)	Auger Distance From Face of Tree (feet)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
Over 19	15

- (c) Exceptions. Trees that meet one or more of the following removal criteria shall be exempt from the requirements contained in this subsection (4):
- (i) Dead, diseased, or naturally fallen trees, or trees found to be a threat to public health, safety or welfare;
  - (ii) Trees that are determined by the city to substantially obstruct clear visibility at driveways and intersections; or
  - (iii) Tree species that constitute a nuisance to the public such as cotton-bearing cottonwood, Siberian or Chinese elm, Russian olive and female box-elder. Native cotton-bearing cottonwood trees and female box-elder trees, when located in a natural area buffer zone, are not nuisance tree species.

**Sec. 21-7515. Prohibited Practices and Elements**

- (1) **Monoculture.** The extensive use of a single species of trees or shrubs shall be limited as outlined in the table below to minimize the potential for disease or pests to strike a particular species resulting in significant same-species loss:

Table VII-17. Monoculture Restrictions

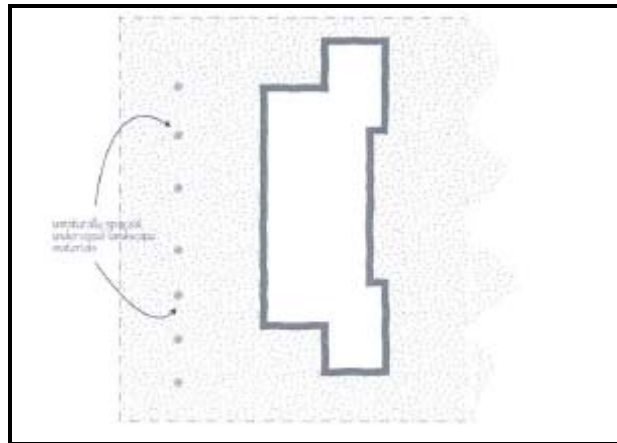
Number of Tree Plantings	Maximum Use of Same Species
10-19	50%
20-39	33%
40-59	25%
Over 60	15%

- (2) **Native Seed.** Primary landscape areas, including detention ponds when incorporated into the landscape design, should not utilize native-seeding practices as landscape coverage. Native seed is hereby restricted to use for the purpose of temporary erosion control, dust control, and/or for the

purpose of temporarily maintaining vacant lots until such time as the land becomes developed.

- (3) **Undesirable Design.** The use of undersized landscape materials or landscape in an unnatural spaced design is highly discouraged, unless specifically addressed in this land development code.

*Figure VII-5. Example of Unnaturally Spaced Landscape Design*



- (4) **Artificial Turf.** Partial or entirely synthetic material designed and manufactured to simulate living turf grass shall be prohibited, with the exception of public or private recreation fields.

**Sec. 21-7516. Buffering Between Incompatible Uses and Activities**

- (1) **Buffer Zones.** Buffer zones are required on properties in the MHP, R-3, R-4, C-1, C-2, C-3, MU-1, I-1, I-2, and I-3 districts when they adjoin properties in certain zoning districts as set forth in the table below. The second table specifies the requirements for each buffer zone type listed in the first table.

Table VII-18. Buffer Requirements by Zoning District or Use

Zoning District of Proposed Use	Adjacent Zoning District or Land Use: AG, R-1, R-2	Adjacent Zoning District or Land Use: MHP, R-3, R-4	Adjacent Zoning District or Land Use: C-1, C-2, C-3, MU-1, I-1	Adjacent Zoning District or Land Use: I-2, I-3
MHP, R-3, R-4	Type A	Type A	Type A	Type C
C-1, C-2, C-3, MU-1, I-1	Type B	Type A	N/A	Type B
I-2, I-3	Type C	Type C	Type B	N/A

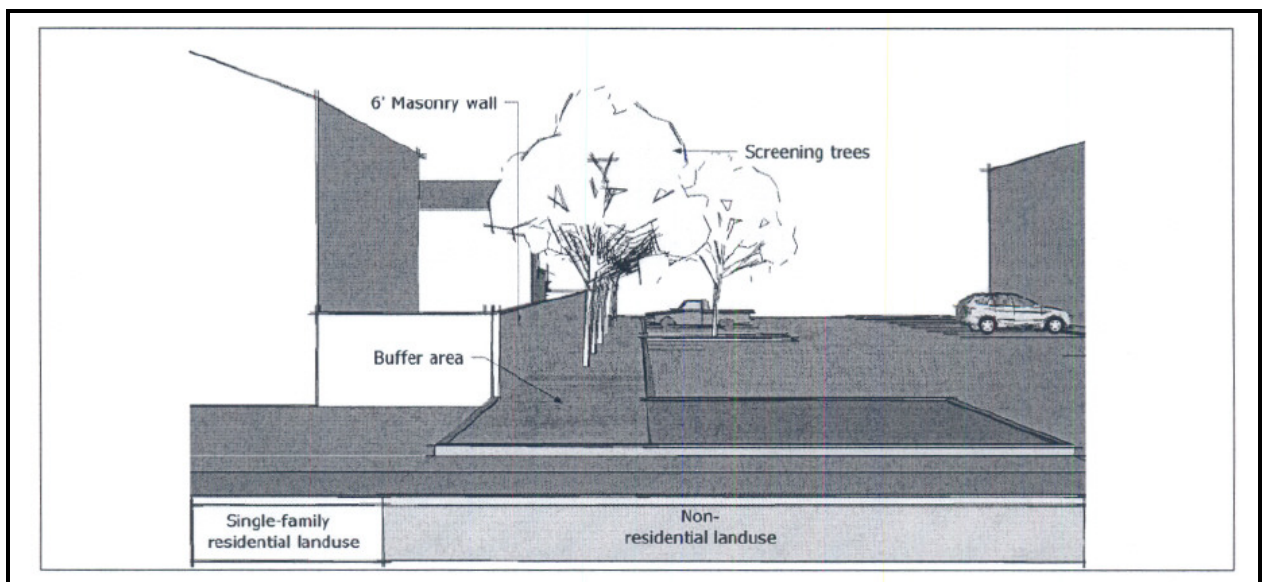
Feature	Buffer Zone "A"	Buffer Zone "B"	Buffer Zone "C"
Width in feet of buffer zone	10	15	20
Required trees – every 100 feet	3	5	8
Required shrubs – every 100 feet	5	8	10

- (a) For purposes of this section, an adjacent zoning district or land use, as described above, includes all zoning districts or land uses on properties abutting the subject property. Where the property shares a boundary with more than one zone district, the width of the most intense buffer shall be required along that particular property line.
  - (b) When agricultural districts are considered for buffer requirements, the future land use designation in the Comprehensive Plan shall be used to determine buffer requirements, unless otherwise specified herein.
  - (c) Trees and shrubs planted as part of the buffer requirement cannot be used to meet any other landscaping requirement in this land development code.
  - (d) The existence of access ways or driveways within a buffer zone will not reduce the minimum requirements for trees and shrubs.
  - (e) Evergreen trees are required for buffer zone Types B and C, while either deciduous or evergreen trees may be used in buffer zone Type A.
  - (f) All areas of the buffer zones outside of trees, shrubs, and/or flowerbeds shall be covered with a city-approved mulch.
  - (g) The buffer zone requirements of this section apply whether or not the property in the adjacent zoning district as set forth in the first table is developed.
  - (h) For reasons of conflicting uses, unfavorable topography, or other unique or extraordinary circumstances, the director may increase or decrease landscape plantings in any required buffer zone if any increase or decrease is found to be necessary to reasonably achieve the intent of this section.
- (2) **Types of Buffering.**
- (a) In situations where the city determines that the arrangement of uses or design of buildings does not adequately mitigate conflicts reasonably anticipated to exist between dissimilar uses or building

designs, one or more of the following landscape buffering techniques shall be used to mitigate the conflicts.

- (i) Separation and Screening with Plant Material. Planting groups of evergreen trees, canopy shade trees, ornamental trees, or shrubs;
  - (ii) Integration with Plantings. Incorporating trees, vines, planters, or other plantings into the architectural theme of buildings and their outdoor spaces to subdue differences in architecture and bulk and avoid harsh edges;
  - (iii) Establishing Privacy. Establishing vertical landscape elements to screen views into or between windows and defined outdoor spaces where privacy is important, such as where larger buildings are proposed next to side or rear yards of smaller buildings;
  - (iv) Visual Integration of Fences or Walls. Providing plant material in conjunction with a screen panel, arbor, garden wall, privacy fence or security fence to avoid the visual effect created by unattractive screening or security fences;
  - (v) Landform shaping: Utilizing berming or other grade changes to alter views, subdue sound, change the sense of proximity and channel pedestrian movement.
- (b) Buffers may be interrupted for necessary pedestrian access, and in some cases for vehicular movement.

*Figure VII-6. Buffering Between Uses*





### Sec. 21-7517. Screening

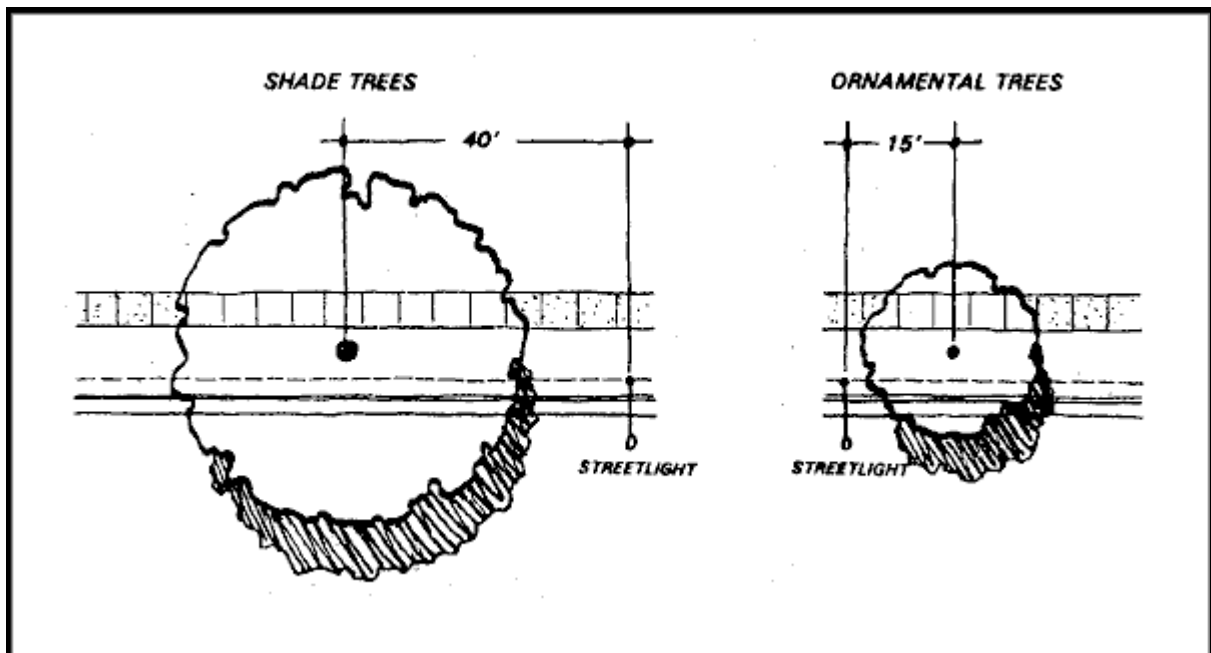
- (1) **Screening Areas of Low Visual Interest.** Areas of low visual interest or visually intrusive site elements (such as trash collection, open storage, service areas, drive-aisles, drive-up/drive-through lanes, and utility equipment) shall be screened from off-site view. Such screening shall be established on all sides of such elements except where an opening is required for access.
- (2) **Methods.** Required screening shall be provided in the form of new or existing plantings, walls, fences, screen panels, topographic changes, buildings, horizontal separation, or a combination of these techniques.

### Sec. 21-7518. Utilities

Landscape and utility plans shall be coordinated. This section sets forth minimum dimension requirements for the most common tree/utility separations. Exceptions to these requirements may be approved by the director where utilities are not located in their standard designated locations. Tree/utility separations shall not be used as a means of avoiding the planting of required street trees.

- (1) Forty feet between shade trees and streetlights. Fifteen feet between ornamental trees and streetlights (see figure VII-7.)

Figure VII-7. Tree/Streetlight Separations



- (2) Ten feet between trees and water or sewer mains.
- (3) Six feet between trees and water or sewer service lines.
- (4) Four feet between trees and gas lines.
- (5) Street trees planted within the utility easement may conflict with utilities. Additional conduit may be required to protect underground electric lines.

**Sec. 21-7519. Visual Clearance or Sight-Distance Triangle**

Except as specifically provided below, a visual clearance triangle free of any structures or landscape elements over 24 inches in height, shall be maintained at street intersections and driveways in conformance with the standards contained in the ECSS.

- (1) Fences shall not exceed 42 inches in height and shall be of an open design.
- (2) Deciduous trees may be permitted to encroach into the clearance triangle provided that the lowest branch of any such tree shall be at least six feet from grade.
- (3) Street trees shall be placed a minimum of eight feet from the corners of alleys and driveways and ten feet from intersections.

**Sec. 21-7520. Revegetation Required**

When the development causes any disturbance within any natural area buffer zone, the developer shall restore the land to its original condition, or as close thereto as possible, as determined by the city.

**C. SPECIAL LANDSCAPE TREATMENT AREAS**

**Sec. 21-7530. Detention/Retention Areas**

The landscaping of detention and retention ponds shall be in accordance with the following standards:

- (1) Detention/retention areas shall be permitted within buffer zones provided they do not hamper the intent of a buffer to provide screening or jeopardize plant material survival.
- (2) One deciduous or evergreen tree and 10 shrubs are required per 50 feet of pond perimeter, as measured along the top of the bank elevation, excluding the designated overflow area. The required landscaping shall be planted in a natural, random pattern, not limited to the top of the pond bank.

- (3) The edge and landforms of the pond shall be sculpted to filter and soften views of the pond.
- (4) The pond shall be landscaped to replicate a natural environment with trees and shrubs, in a wide variety, clustered around the basin.
- (5) The maximum slope of a bank or side of a pond shall be designed and constructed in a way that protects the general public health, safety, or welfare of the community. Deep ponds with steep slopes will require a 42-inch wrought-iron or other decorative fence style to be placed around the perimeter for public safety.
- (6) Trees must be planted above the freeboard line of the pond. Shrubs planted below the freeboard line of the pond must be tolerant of wet or moist soil conditions. The location of plant material shall consider the need to provide access for and minimize disruption of plant material during routine pond maintenance.
- (7) Wood and synthetic mulches are prohibited from all detention and retention areas.

#### **Sec. 21-7531. Landscaping on Slopes**

- (1) Slope banks 5 feet or greater in vertical height with slopes between 1.5:1 and 2:1 shall, at a minimum, be irrigated and landscaped with an appropriate groundcover for erosion control.
- (2) Slope banks five feet or greater in vertical height with slopes greater than or equal to 3:1 shall, at a minimum, be irrigated and landscaped with appropriate groundcover for erosion control and to soften their appearance as follows:
  - (a) One 15-gallon or larger tree per each 600-square feet of slope area;
  - (b) One gallon or larger shrub for each 100-square feet of slope area; and
  - (c) Appropriate groundcover.
- (3) Slope banks in excess of 8 feet in vertical height with slopes greater or equal to 2:1 shall also provide one 5-gallon or larger tree per each 1000-square feet of slope area in addition to the requirements of this section.
- (4) All trees and shrubs should be planted in staggered clusters to soften and vary the slope plane. Slope planting required by this section shall include a permanent irrigation system to be installed by the developer prior to occupancy.

## Sec. 21-7532. Urban Hardscapes

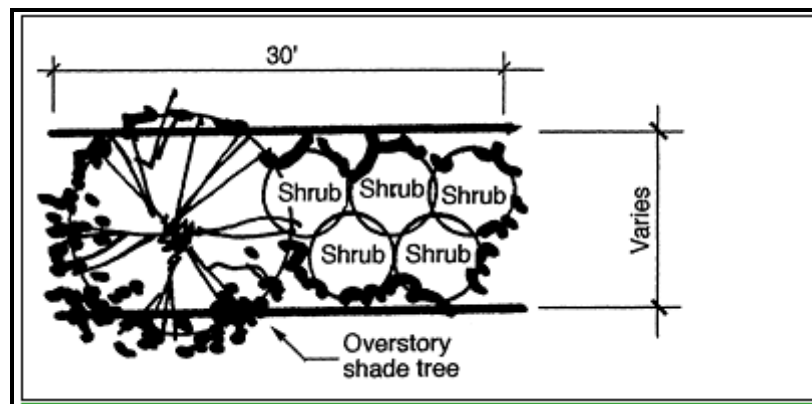
In certain situations and contexts, a more urban landscape may be proposed to meet the intent of this land development code. For developments that strive to achieve an urban context through the use of setbacks, site planning, architecture, etc. the following alternative landscape treatments exist: trees in tree grates, flower pots or hanging baskets, movable planters, sculptures, canopies, trellises, brick pavers, tile walkways, murals, or water features are identified as acceptable landscape (hardscape) features and recognized as acceptable substitutes to existing landscaping standards.

### D. PARKING LOT LANDSCAPE STANDARDS

## Sec. 21-7540. Perimeter Landscaping

- (1) Except for single-family residential development, the perimeter of parking areas shall be landscaped with at least 1 tree and 5 shrubs for every 30-linear feet along a street, right-of-way, or abutting another property. Perimeter parking area landscaping may be included with other buffer requirements, as applicable. Parking areas shall include a landscape buffer at least 10-feet wide between parking lots on abutting properties, or for a parking area abutting another property or a shared driveway, unless a wider landscape buffer is required between different types of uses or different zoning districts.

Figure VII-8. Landscaping Requirements - Perimeter Parking Areas



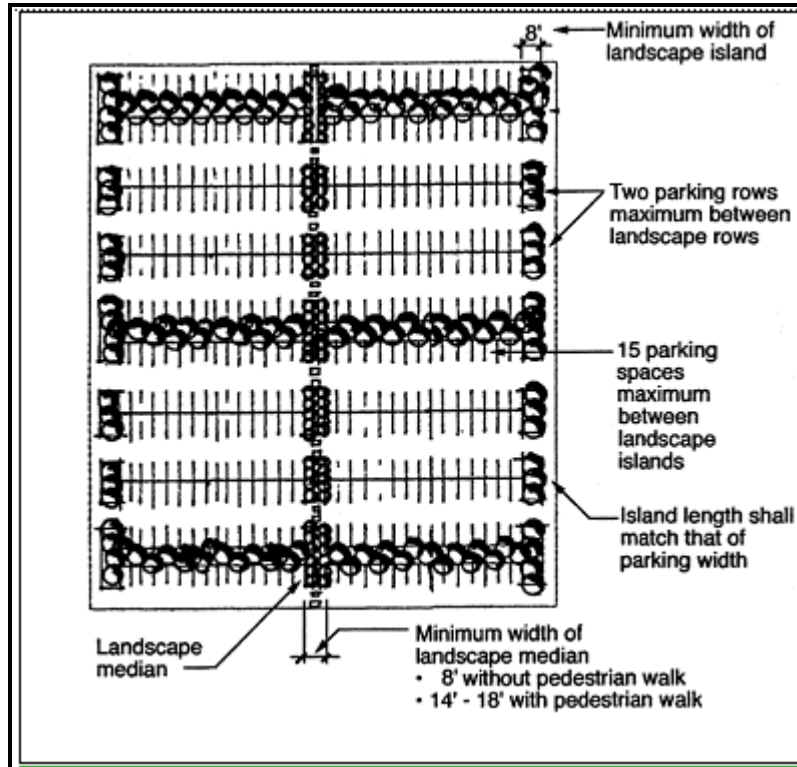
- (2) Trees may be spaced irregularly in informal groupings or be uniformly spaced, as consistent with larger overall planting patterns and organization.

## Sec. 21-7541. Interior Landscaping

Parking lots that have interior rows of parking spaces shall comply with the provisions of this section.

(1) Landscaping Requirements.

Figure VII-9. Landscaping Requirements – Parking Lots with Interior Parking Rows

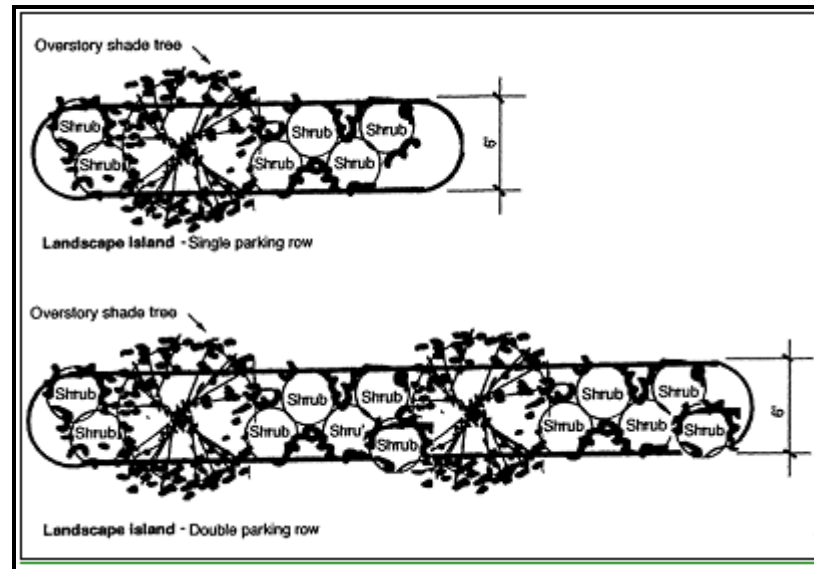


- (a) Visibility. To avoid landscape material blocking driver sight distance at driveway-street intersections, no plant material greater than 24 inches in height shall be located within 15 feet of a curb cut.
- (b) Maximized Area of Shading. Landscaped islands shall be evenly distributed to the maximum extent feasible.
- (c) Landscaped Islands. In addition to any pedestrian refuge areas, each landscaped island shall include 1 or more canopy shade trees, be of length greater than 8 feet in its smallest dimension, include at least 80-square feet of ground area per tree to allow for root aeration, and have vertical concrete curbs. In addition:
  - (i) Landscape islands shall have at least one tree per single parking row and two trees per double parking row. Shade trees shall comprise at least 75 percent of the trees within the landscape islands.
  - (ii) Landscape islands shall contain either mulch with at least six shrubs per single parking row and twelve shrubs per double

parking row, or an alternative design consisting of shrubs, flowers, or other live plant material.

- (iii) There shall be no more than 15 continuous parking spaces between landscape islands.

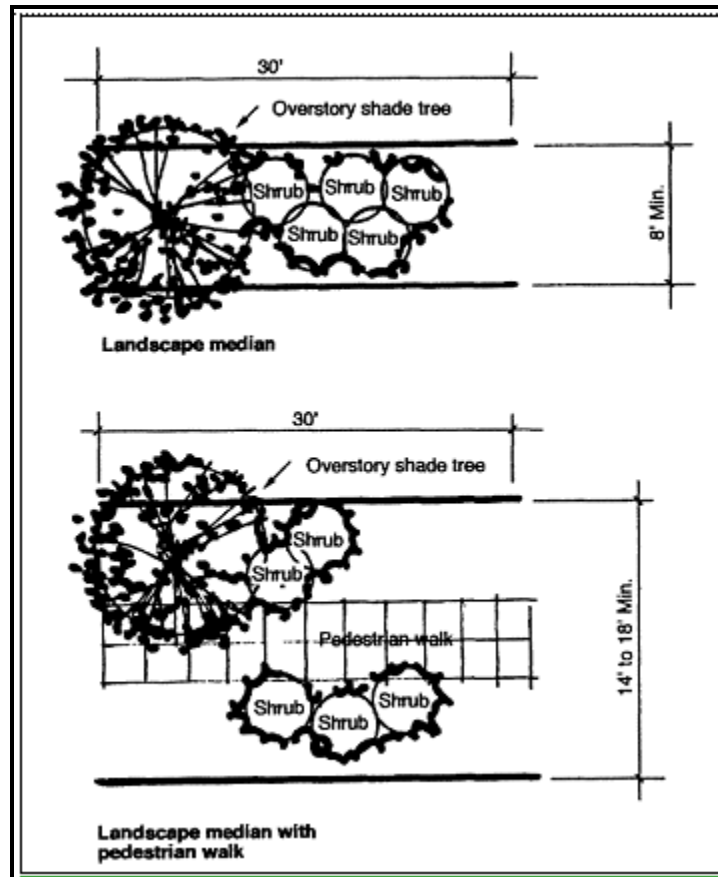
Figure VII-10. Requirements for Landscape Islands



- (d) Landscape Medians. Interior rows of parking spaces in parking areas shall be divided by landscape medians parallel to the parking rows, so that there are no more than six consecutive rows of parking spaces not adjacent to a landscape median. See figure VII-9. Additionally:
  - (i) Landscape medians shall have minimum dimensions of 8 feet without a pedestrian walk, or 14 to 18 feet, depending on the design, with a pedestrian walk by the length of the row of parking spaces.
  - (ii) Landscape medians shall have at least one overstory/shade tree and 5 shrubs for every 30-linear feet along the length of the median. Overstory/shade trees shall comprise at least 75 percent of the trees within the landscape medians.
  - (iii) Landscape medians shall contain mulch or irrigated grass.
  - (iv) A minimum of one concrete pedestrian walk, six to eight feet wide, depending on the location and design and determined by the city, shall be provided along the length of the landscape median closest to the building entrance. The walk

shall connect to perimeter pedestrian walks, whenever possible, and include raised or striped crosswalks.

Figure VII-11. Requirements for Interior Landscape Medians



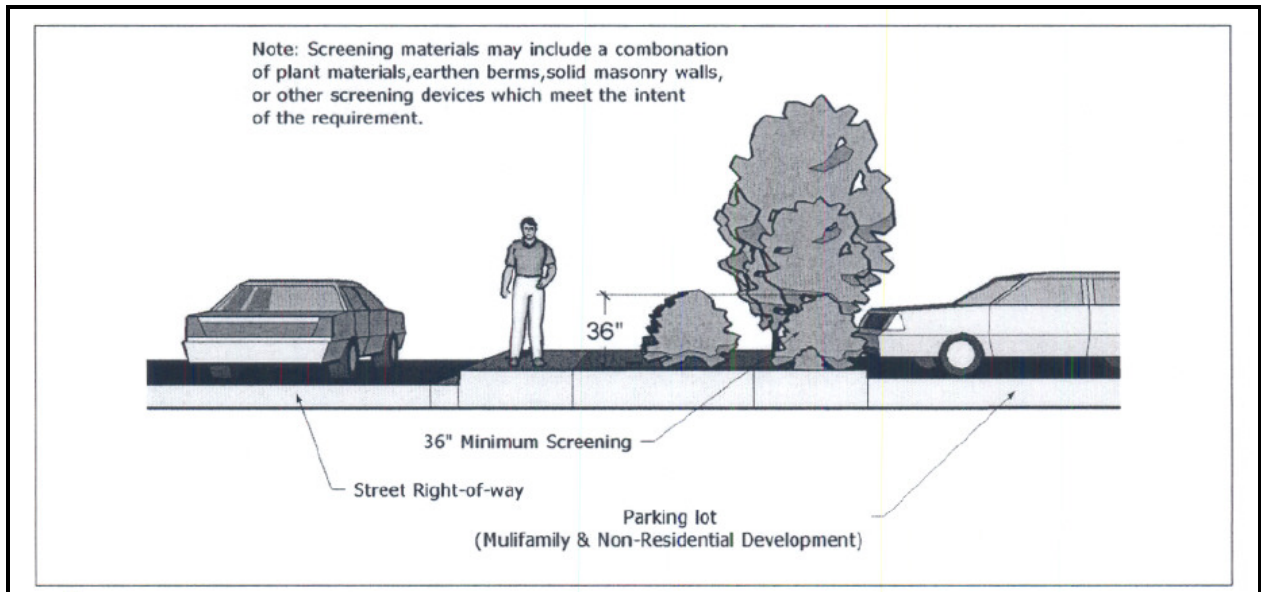
- (2) **Walkways and Driveways.** Connecting walkways through parking lots shall have 1 canopy shade tree per 30-lineal feet of such walkway planted in landscape areas within 5 feet of such walkway. Driveways through or to parking lots shall have 1 canopy shade tree per 30-lineal feet of and along each side of such driveway, in landscape areas within 5 feet of such driveway.
- (3) **Parking Bays.** Parking bays shall extend no more than 15 parking spaces without an intervening tree, landscape island, or landscape peninsula.

### Sec. 21-7542. Parking Lot Screening

Parking lots with six or more spaces shall be screened from abutting uses and from the street. Screening from residential uses shall consist of a fence or wall 3 feet in height in combination with plant material and of sufficient opacity to block at least 75 percent of light from vehicle headlights. Screening from the street and all nonresidential uses shall consist of a wall, fence, planter, earthen berm, plant material, or a combination of such elements, each of which shall have a minimum

height of 36 inches. Such screening shall extend a minimum of 70 percent of the length of the street frontage of the parking lot and also 70 percent of the length of any boundary of the parking lot that abuts any nonresidential use. Openings in the required screening shall be permitted for such features as access ways or drainage ways. Plant material used for the required screening shall achieve required opacity in its winter seasonal condition within three years of construction of the vehicular use area to be screened.

*Figure VII-12. Parking Lot Screening*



### **E. RIGHT-OF-WAY LANDSCAPING**

#### **Sec. 21-7550. Requirements for Landscaping in or Near Rights-of-Way**

- (1) Tree lawns shall be maintained by the owner of the property adjacent to the tree lawn.
- (2) Wherever the sidewalk is separated from the street by a tree lawn, canopy shade trees shall be planted at 30- to 40-foot intervals (spacing) in the center of all such tree-lawn areas.
- (3) In cases where the sidewalk meanders, grouping or clustering of trees may be allowed provided that the total number of trees are achieved.
- (4) Wherever the sidewalk is attached to the street, canopy shade trees shall be established in an area ranging from 3 to 7 feet behind the sidewalk at 30- to 40-foot spacing.
- (5) Wherever the sidewalk is attached to the street and is 10 feet or more in width, or extends from the curb to the property line, canopy shade trees



shall be established in planting cutout areas of at least 16-square feet at 30- to 40-foot spacing.

- (6) Ornamental trees shall be planted in substitution of the canopy shade trees where overhead lines and fixtures prevent normal growth and maturity.
- (7) The tree lawn planting design shall consist of turf grass and automatic irrigation system. Xeriscape design principles may be incorporated whenever appropriate in accordance with the requirements identified in the Planting Standards. Tree lawn planting designs in industrial areas may propose planting designs other than turf grass.
- (8) Trees must be planted in the center of the planting strip measured from the front of the sidewalk and back of the curb.
- (9) No street tree shall be planted closer to the street than two and a half feet from the back of the sidewalk. No tree planting shall be permitted where the distance between a curb and a detached sidewalk is less than five feet.
- (10) Larger maturing trees should be placed 40 feet apart and smaller maturing trees may be placed 30 feet apart. The director may require wider spacing if necessary for development of the tree or for safe use of the street or sidewalk. When space is limited or to achieve certain design effect, closer spacing may be considered.
- (11) No tree shall be planted closer than eight feet from any driveway or alley nor shall a tree be planted in such a manner than its eventual growth cannot be reasonably controlled so as to avoid interference with or obstruction to any improvements installed for public benefit.

#### **Sec. 21-7551. Northern Range Streetscapes**

The city has adopted corridor plans that provide design standards and guidelines for specified streetscapes within the city. These corridor plans shall be used in conjunction with this land development code. In the event of a conflict or inconsistency between these documents, the city shall determine which document controls. The corridor plans include:

- (1) East 96<sup>th</sup> Avenue
- (2) East 104<sup>th</sup> Avenue
- (3) East 120<sup>th</sup> Avenue
- (4) Highway 2

- (5) High Plains Parkway
- (6) Tower Road

**Sec. 21-7552. Right-of-Way that also is a State or Federal Highway**

This section is intended to provide as close to the full arterial landscaping requirement as allowed or recommended by the Colorado Department of Transportation (CDOT).

- (1) If curb and gutter is to be installed within the right-of-way with the development, full arterial right-of-way landscaping standards shall apply.
- (2) If curb and gutter is to be installed in the future, but not as part of this development as determined by the city, the applicant shall identify the clear zone on all plans and provide information on the plan as required under a final landscape plan to identify which portions of the full arterial standards will be installed with the development and for which portions the developer will pay cash in lieu.
- (3) If curb and gutter shall not be installed in the future as determined by the Public Works Department, the applicant shall provide information on the plan as required under a final landscape plan to identify the clear zone as defined and regulated by CDOT. Outside the clear zone, the applicant shall be required to install trees and shrubs in the quantities required per this code. The applicant will provide irrigated turf in the right of way outside the clear zone. The applicant shall also seed the right of way clear zone, using a suitable grass seed mixture and temporary irrigation until final acceptance by the city.
- (4) If full arterial landscaping is not to be installed in conjunction with the development or redevelopment public improvement construction, it shall be completed by the city at a later time. In the event of such deferment, the applicant shall seed the right of way, or any portion thereof, to ensure a viable grass stand using a suitable grass seed mixture and temporary irrigation and establish and maintain all such areas until final acceptance by the city. The applicant shall deposit with the city the dollar value of the required landscaping and other public improvements for future construction.

**F. VARIATIONS FROM STANDARDS**

**Sec. 21-7560. Alternative Compliance**

Upon request by an applicant, the city may approve an alternative landscape plan that may be substituted in whole or in part for a landscape plan meeting the standards of this article.

- (1) **Procedure.** Alternative landscape plans shall be prepared and submitted in accordance with submittal requirements for landscape plans. Each plan shall clearly identify and discuss the modifications and alternatives proposed and the ways in which the plan will better accomplish the purposes of this article than would a plan which complies with the standards of this article.
- (2) **Approval Criteria.** To approve an alternative plan, the decision maker must first find that the proposed alternative plan accomplishes the purposes of this division equally well or better than would a plan which complies with the standards of this division.
- (3) **Review Considerations.** In reviewing the proposed alternative plan for purposes of determining whether it accomplishes the purposes of this Section as required above, the decision maker shall take into account whether the alternative preserves and incorporates existing vegetation in excess of minimum standards, protects natural areas and features, maximizes tree canopy cover, enhances neighborhood continuity and connectivity, fosters non-vehicular access, or demonstrates innovative design and use of plant materials and other landscape elements.

#### **Sec. 21-7561. Variances**

An administrative variance not to exceed 50 percent of any requirement contained in this article may be granted by the director in accordance with the provisions of in section 21-3222 (Variances). If a variance exceeding 50 percent is sought, a variance from the board of adjustment must be obtained.