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Article 23: Landscape and Buffering Standards

23.010 Purpose and Concept

- (1) Trees, shrubs and living ground-cover provide shade and shelter, aiding in energy conservation and moderating local climate in developed areas. Plant materials eliminate pollutants from the air we breathe, and maintain physical health and mental equilibrium by fulfilling an instinctive need for contact with the natural environment. Major gateways to the City and key travel routes through the City and urbanizing area give a lasting impression to the visitor for good or ill, an impression critical to our tourist economy. The knowledgeable use of plant materials by experienced professionals can achieve these extraordinary benefits at very little cost.
- (2) In these terms, landscaping is a significant factor in maintaining the livability and economic viability of the community. The purpose of this Article is to provide standards for Landscaping and Buffering within the Grants Pass Urban Growth Boundary Area.

23.020 Landscaping Required

Landscaping shall be required in all the following areas:

- (1) In all required front and exterior side yards, as provided in Section 23.030, Types A, B & C.
- (2) As provided in the Major Thoroughfare and Gateway Plan, and special area plans such as the Downtown Plan, including landscaping, street trees, sidewalk treatment and street furniture. Where a conflict exists between such area plans and the base standards of Section 23.030, the area plans shall prevail.
- (3) At vehicle parking, loading, access and maneuvering areas, as provided in Section 23.035, Type E.
- (4) At buffering between zones, as provided in Section 23.034, Type D.
- (5) At required interior open space and recreation areas, as provided in Section 22.102.

(6) In addition, screening or design consideration shall be given for refuse areas, service corridors and light and glare, as provided in Section 23.036, Type F.

¹23.030 Landscape and Buffering Development Standards

All required landscaped yards and buffer strips shall meet the standards of the appropriate Landscape and Buffer Type and the general provisions of this Section.

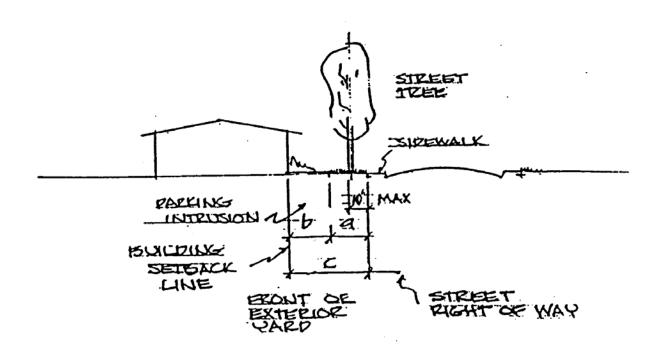
- 23.031 Type A: Residential Front and Exterior Yards

 6(1) The following landscape standards shall apply to residential uses in residential zones:
 - (2) Required front and exterior yards shall be landscaped, and building setbacks shall be maintained, according to the Type A Concept Sketch and Schedule 23-1. Minimum landscape requirements per 1000 square feet of a required front or exterior yard, or any portion thereof, shall be the following:
 - One tree at least six feet in height, and one inch in caliper measured three feet from the base. Select from street tree list, Section 23.076, and plant within 10' of right-of-way limit as per Type A Concept Sketch.
 - (b) Four one gallon shrubs or accent plants.
 - 6(c) Remaining area treated with attractive living ground-cover, as defined in Article 30. Coverage with shrubs or living ground-cover shall be at least 50% upon installation and 90% after 3 years.
 - (d) If a sidewalk is required, no plant materials shall be installed between the curb and the sidewalk except in accordance with an approved landscape plan.
 - (3) No vehicle parking shall be permitted within a required landscaped yard, except the following:
 - (a) For single family and duplex dwellings, two vehicle spaces per dwelling unit, provided that a ten foot width of continuous landscaped area is maintained between the street right-of-way and the vehicle parking area.

- (b) For all uses in R-3 and R-4 zones, up to a five foot depth of continuous parking intrusion, but only when all the following conditions are met:
 - Landscaping equal in area to the parking intrusion is provided elsewhere between the front building line and the street right-ofway.
 - 2) Parking is screened as provided in Section 23.035, Type E.
 - 3) The required front or exterior yard is not also serving as a required buffer strip, as provided in Section 23.034, Type D.
- (4) Approved plant materials installed in the area between the curb and the sidewalk may be used in meeting the landscaping requirements for front and exterior yards.

Residential Yard, Setback and Parking Intrusion - Schedule 23-1				
	Type A Co	oncept Sketch Dis	tance	
Zone	(a) Parking Setback	(b) Parking Intrusion	Require	c) ed Yard xterior
UR	10'	up to 2 vehicles/d.u.	20'	10'
R-1	10'	up to 2 vehicles/d.u.	20'	10'
R-2	10'	10' up to 2 vehicles/d.u.		10'
R-3	10'	up to 5 ft.	20'	10'
R-4	10'	up to 5 ft.	10'	10'

* = see 23.031(2)(a)
d.u. = dwelling unit.
ft. = linear feet.



Type A: Concept Sketch See Schedule 23-1 for (a), (b) and (c) distances

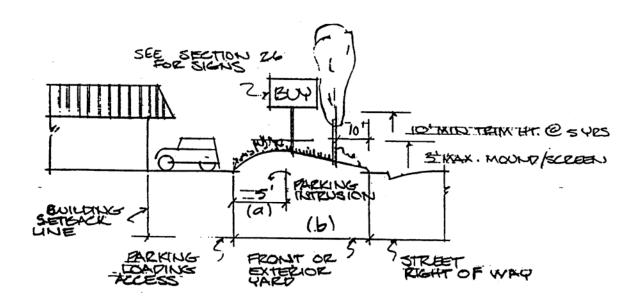
23.032 <u>Type B:</u> <u>Commercial and Indoor Industrial Front and Exterior Yards</u>

- ⁶(1) The following landscape standards shall apply to commercial and indoor industrial uses in residential, commercial, and indoor industrial zones; and to residential uses in commercial and indoor industrial zones.
- (2) Required front and exterior yards shall be landscaped, and building setbacks shall be maintained, according to the Type B Concept Sketch and Schedule 23-2. Minimum landscape requirements per 1000 square feet of a required front or exterior yard, or any portion thereof, shall be the following:
 - one and one-half inches in caliper measured three feet from the base. Select from street tree list, Section 23.076, and plant within 10 feet of the right-of-way as per Type B Concept Sketch. Trees may be offset to permit signs in the Landscape Yard, but only as provided in Section 26.050, Landscape Yard Signs. Trees shall be kept trimmed of branches up to 14' from base five years following planting.
 - (b) Five five-gallon and ten one-gallon shrubs or accent plants.
 - (c) Remaining area treated with attractive living ground-cover, as defined in Article 30. Coverage with shrubs and living ground-cover shall be at least 50% upon installation and 80% after 3 years.
- (3) No vehicle parking shall be permitted within a required landscaped yard, except up to a five foot depth of continuous parking intrusion, but only when all the following conditions are met:
 - (a) Landscaping equal in area to the parking intrusion is provided elsewhere between the front building line and the street right-of-way.
 - (b) Parking is screened as provided in Section 23.035, Type E.
 - (c) The required front or exterior yard is not a required buffer strip, as provided in Section 23.034, Type D.

- 4) Signs may be permitted in required landscaped yards, subject to the provisions of Section 26.050, Landscape Yard signs.
- (5) Approved plant materials installed in the area between the curb and the sidewalk may be used in meeting the landscaping requirements for front and exterior yards.

Commercial/Indoor Industrial Yard, Setback and Parking Intrusion - Schedule 23-2				
	arking inci-	abion beneaut		
	Type B Conc	cept Sketch Dist	ance	
Zone	(a) (b)		o)	
	Parking	Required Yard	and Building	
	Intrusion	Setl	oack	
		Front /	Exterior	
NC	5 '	20 '	10'	
GC	5 '	10'	10'	
CBD	5 '	None*	None*	
BP	5 '	10'	10'	
IP	5 '	20 '	10'	
	Sidewark creatment and screet crees required per			
D+ D1				

Downtown Plan. See Section 23.020 (2).

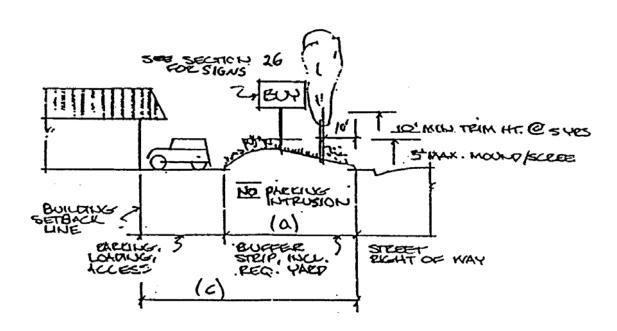


Type B Concept Sketch

23.033 Type C: Outdoor Industrial Front and Exterior Yards

- ⁶(1) The following landscape standards shall apply to outdoor industrial uses in outdoor industrial zones; and to residential, commercial, and indoor industrial uses in outdoor industrial zones:
- (2) Required front and exterior yards shall be landscaped, and building setbacks shall be maintained, according to the Type C Concept Sketch and Schedule 23-3. Minimum landscape requirements per 1000 square feet of a required yard, or any portion thereof, shall be the following:
 - for three trees at least ten feet in height and two inches in caliper measured three feet from the base. Select from street tree list, Section 23.076, and plant within 10 feet of the right-of-way as per Type C Concept Sketch. Trees may be offset to permit signs in the Landscape Yard, but only as provided in Section 26.050, Landscape Yard Signs. Trees shall be kept trimmed of branches up to 14' from base five years following planting.
 - (b) Fifteen five-gallon shrubs or accent plants.
 - (c) Remaining area treated with attractive living ground-cover, as defined in Article 30. Coverage with shrubs and living ground-cover shall be at least 50% upon installation and 80% after 3 years.
- (3) No vehicle parking or maneuvering shall be permitted within a required landscaped yard.
- (4) Signs may be permitted in required landscaped yards, subject to the provisions of Section 26.050.
- (5) Approved plant materials installed in the area between the curb and the sidewalk may be used in meeting the landscaping requirements for front and exterior yards.

⁷ Outdoor Ind		Setback and Parking Intrusion			
	Schedi	ıle 23-3			
	Type C Concept Sketch Distance				
Zone	(a)	(b)			
	Parking	Required Yard and			
	Intrusion	Building Setback			
		Front/Exterior			
I	-	10' 10'			



Type C Concept Sketch

- 23.034 Type D: Buffering Between Zones. Buffering shall be required between zones. The property owner of each proposed development is responsible for the installation and maintenance of required buffers. The Director may waive the buffering requirements of this Section where such has been provided on the adjoining property in conformance with this Code.
 - (1) Required buffer strips shall be landscaped, and building setbacks shall be maintained, according to the appropriate Type D Concept Sketch and Schedule 23-4. Buffer strips facing a street shall include any required front or exterior yard, and shall not be required in addition to such yard.

- (2) Buffer strips facing a street shall require minimum planting as follows:
 - (a) For Commercial/Indoor Industrial Zones facing a Residential Zone, Type B planting, Section 23.032 (1).
 - (b) For Outdoor Industrial Zones facing either Commercial or Indoor Industrial Zones, Type C planting, Section 23.033 (1).
- (3) Buffer strips facing a property line shall require minimum planting of at least one row of trees, not less than eight feet high and one and one-half inches in caliper for deciduous trees and five feet high for evergreen trees at the time of planting, and spaced not more than 15 feet apart. Appropriate species may be counted as parking lot trees on an interior buffer, but only for those parking spaces abutting the buffer strip. The area beneath the trees shall be planted with a living ground-cover or shrubs giving 50% coverage at planting and 100% coverage within 3 years.
- (4) No parking, loading or vehicle maneuvering area shall be permitted within a required buffer strip, excepting only a bike path.
- Type D-4 interior buffers may be approved only upon the written agreement of all abutting parties, and the filing of a reciprocal maintenance and use easement by the appropriate party. Installation of plant materials and irrigation shall be at the expense of the party initially developing and as found in Section 23.050, responsibility for ongoing maintenance shall be specified in the easement document as required in Schedule 23-4. Minimum plantings shall meet the requirements of Type A, Section 23.031, when facing a residential zone, and shall meet the requirements of Type B, Section 23.032, when facing a commercial zone.
- (6) Sound obscuring walls shall be of attractive masonry construction, or a combination of masonry and earth mound. Masonry materials shall be limited to brick, slump block or split block, all with integral color other than gray.

⁷Zone Buffer Building Setback and Buffer Strip - Schedule 23-4

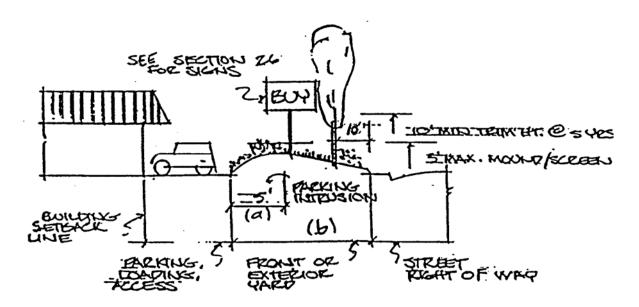
Buffering Between Zones	Buffer Type	Building Setback Line*	Buffer Strip	Facing Wall Building Openings	Fence or Wall Height
Commercial or Indoor Industrial to Residential at Street	D-1	at R1-R3: 30' at R-4: 20'	20' 10'	Yes Yes	None None
Outdoor Industrial to Residential at Street, or to Indoor Industrial at Street, or to Commercial at Street	D-2 D-2 D-2	30' 30' 30'	20' 10' 10'	No** No** No**	Fence or Wall 6' As required to meet sound standards Section 24.170. As required to meet sound Standards Section 24.170.
Commercial or Indoor Industrial or Outdoor Industrial to Residential at Property Line	D-3 D-3 D-3	20' 20' 30'	3' 3' 3'	Yes No No	Fence 6' Fence 6' Wall 8'
Outdoor Industrial to Commercial or to Indoor Industrial at Property Line	D-3	30'	3'	No	As required to meet sound standards Section 24.170
Manufactured Housing Park	D-3	10'	5'	Yes	Fence 6'
Commercial or Indoor Industrial or Outdoor Industrial to Residential Property Line Option	D-4 D-4 D-4	5' 5' 10'	Easement Easement Easement	No No No	Wall 6' Wall 6' Wall 8'

Fence = Sight obscuring fence

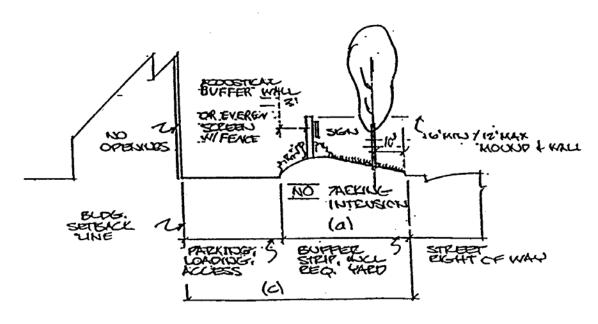
Wall = Sound obscuring wall, of attractive materials as provided in Section 23.034 (6)

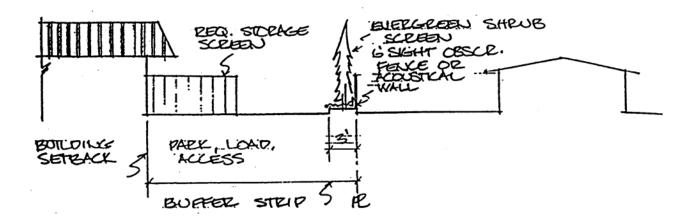
^{*} Building Setback Line measured from street right-of-way.

^{**} Windows and person-doors for customer entrances are permitted into office areas, lobbies, and similar areas that do not contain noise or odor producing equipment, materials, or machinery, provided sound standards of Section 24.170 are met. Overhead doors and other openings are prohibited.

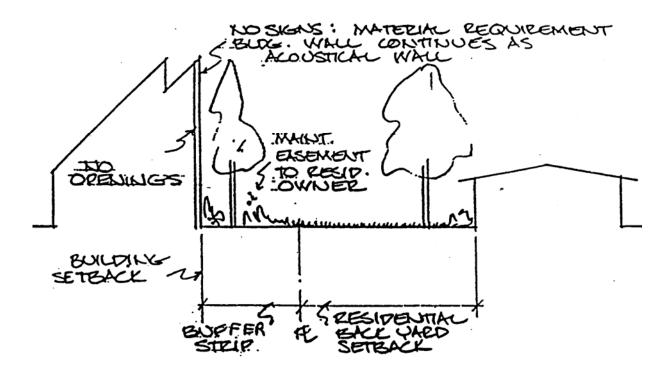


Type D-2 Concept Sketch
Industrial Buffering at Street



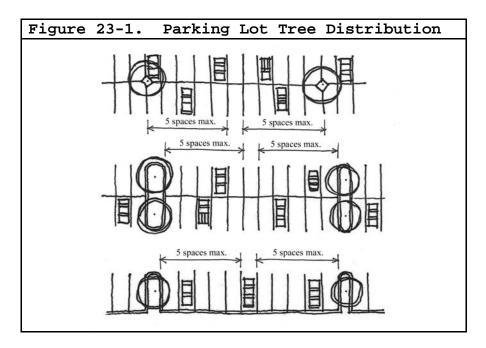


Type D-4 Concept Sketch
Commercial/Industrial Buffering Option at Property Line

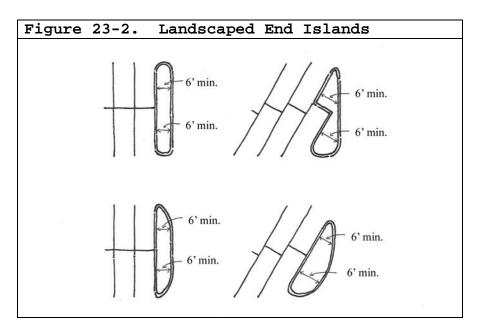


- 23.035 Type E: Parking Lot Landscaping and Screening
 All parking lots, which for purposes of this Section
 shall include areas of vehicle maneuvering, parking and
 loading, shall be landscaped and screened according to
 the appropriate concept sketch and criteria, as follows:
 - (1) Screening at Required Yards. Parking abutting a required landscaped front or exterior yard shall incorporate a sight obscuring hedge screen into the required landscaped yard. The screen shall grow to be 18 inches higher than the finish grade of the parking area. The screen height may be achieved by a combination of earth mounding and plant materials. Elevated parking lots shall screen both the parking and the retaining wall. See Type E-1 Concept Sketch.
 - (2) Screening Abutting Property Lines. Parking abutting a property line shall be screened by a 3' landscaped strip according to Schedule 23-5. Where a zone buffer is required, the screening shall be incorporated into the required buffer strip, and shall not be an additional requirement.
 - (3) <u>Landscape Standards</u>. Parking lot landscaping shall be provided at the ratio of 1 tree and 16 square feet landscaping per ten parking spaces, in order to create a canopy effect. Trees and landscaping shall be installed as follows and as shown in the Type E-2 Concept Sketch.
 - ⁸(a) Landscaping shall be designed so there are no more than 5 parking spaces between any parking space and a tree. See Figure 23-1.
 - (b) The tree species shall be an appropriate large canopied shade tree, and shall be selected from the street tree list to avoid root damage to pavement and utilities, and damage from droppings to parked cars and sidewalks.
 - (c) The tree shall be planted in a landscaped area such that the tree bole is at least 2 feet from any curb or paved area.
 - (d) The landscaped area shall be planted with shrubs and/or living ground-cover to assure 100% coverage within 2 years.

(e) Landscaped areas shall be evenly distributed throughout the parking area and parking perimeter at the required ratio.



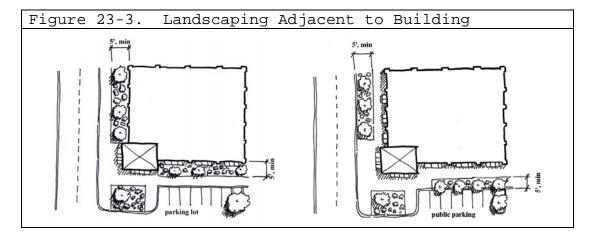
⁸(f) Landscaped end islands shall be provided at the end of parking rows. End islands shall be a minimum of 6 feet wide to the inside of curb at a point adjacent to the midpoint of the adjoining parking space. When there are unique site constraints, the Director may authorize minor modifications to this requirement, provided equivalent landscaping is provided. See Figure 23-2.



- (g) That portion of a required landscaped yard, buffer strip or screening strip abutting parking stalls may be counted towards required parking lot landscaping but only for those stalls abutting landscaping so long as the tree species, living plant material coverage and distribution criteria are also met. Front or Exterior yard landscaping may not be substituted for the interior landscaping required for interior parking stalls.
- ⁸(4) <u>Landscaping Adjacent to Building</u>. Development subject to the commercial design standards of Article 20 shall comply with the provisions of this Subsection. See Figure 23-3.
 - (a) Where a building face does not abut a landscaped yard or public sidewalk, landscape beds or planters at least 5 feet deep shall be incorporated adjacent to the building. If a concrete sidewalk with a minimum depth of 10 feet is present adjacent to the building, the landscape beds or planters may be located within the sidewalk area.
 - (b) The landscape beds or planters required in Subsection (a):
 - (i) shall be present along at least 30 percent of the building face when a sidewalk is present, or
 - (ii) along the full building face when a sidewalk is not present, except at points where pedestrian or vehicular access is present, such as a door or a loading dock.
 - (iii)are not required along the building face of a service corridor, service drive, or service courtyard that meets the requirements of Article 20.
 - (c) Landscape planters between parking spaces or at the end of a parking row do not count as part of the landscape bed or planter required by this Section.
 - (d) Minimum landscape requirements per 1000 square feet of required planter, or any portion thereof, shall be the following:

- (i) Ten five-gallon and twenty one-gallon shrubs or accent plants.
- (ii) Remaining area treated with attractive living ground-cover, as defined in Article 30.

 Coverage with shrubs and living ground-cover shall be at least 50% upon installation and 100% after 2 years.



- (e) Additional Landscaping and Sidewalks for Retail Development 30,000 Square Feet or Larger. In addition to the above requirements, any building 30,000 square feet or larger subject to this section shall provide all of the following along the façade. See Figure 23-4.
 - (i) A minimum 16-foot wide, 6-inch high raised concrete sidewalk along any building façade which faces a customer parking or circulation area.
 - (ii) Street trees selected from the street tree list shall be provided every 25 feet. The street trees shall be within minimum 5 foot by 5 foot tree grates or planters, and shall be located adjacent to the curb. The Director may authorize minor variations to the rhythm, spacing and distribution of trees to enhance the relationship to the building face, provided the required number of trees is not reduced and the trees generally remain equally distributed along the building face, with trees no closer than 20 feet on center. See Figure 23-5.
 - (iii) Street trees shall be protected from contiguous perpendicular parking spaces by use of wheel stops or 2-1/2 feet of additional sidewalk width between the tree and parking space as provided in Article 25.

Figure 23-4. Additional Sidewalks and Landscaping for Retail Development 30,000 Square Feet or Larger



Furnishing Zone Street Trees, Light Poles Trash Cans, Benches Bicycle Racks, Flower Pots Benches Pedestrian Zone Clear Pedestrian Path Frontage Zone
Planters,
Outdoor Seating,
Windows/Doors,
Canopy/Awning,
Façade Treatments

Figure 23-5. Alternate Spacing of Trees Along Building Face for Retail Development 30,000 Square Feet or Larger

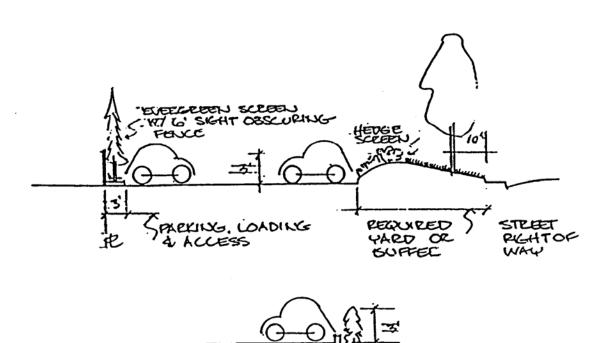


The top illustration shows the standard placement of trees at 25-foot intervals. The bottom sketch shows how the tree spacing could be revised to relate to building entrances.

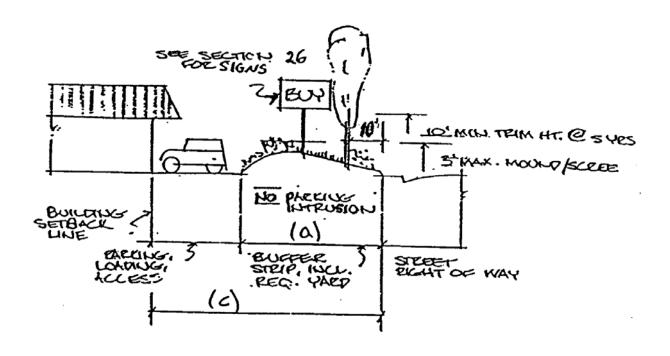
- (5)² Residential Screening. Where a parking area or driveway would be located adjacent to a window on a residential building, the review body may require a hedge, mound, or other screen between the parking area or driveway and the window as per Type E-3 Concept Sketch.
- (6) Wheel Guards. Parking lot landscaping shall be protected from damage by a secured wheel guard to prevent vehicles extending into landscaped areas.
- (7) <u>Hedge Screening</u>. The hedge screen required in this Section shall be installed as follows:
 - (a) Evergreen shrubs of a species, initial size and oncenter planting such that 50% of the desired screening is achieved in 2 years, 100% before 4 years, and the desired height is not exceeded.
 - (b) Living ground-cover in the screen strip such that 100% coverage is achieved within 2 years.
- (8) Hardship Variance of Parking/Landscape Standards.
 - (a) For pre-existing lots with pre-existing development requiring a Development Permit, and unable to meet both the parking and the landscape provisions of this Code due to pre-existing lot and building configurations, the Director may authorize departure from the parking and landscape standards as follows: Required parking spaces reduced by up to 25%, required landscaped area reduced by up to 10%.
 - (b) No standards relating to size of plant materials, amount of living plant material coverage, or irrigation shall be reduced or waived. Any further reduction of parking or landscape standards shall require the Major Variance procedure as provided in Article 6.

Parking Lot Screening Abutting Property Line						
	Schedule 23-5					
Use of	Use of	Required				
Proposed	Adjacent	Screening*				
Parking	Property					
Commercial or	Residential	6' sight obscuring fence				
Industrial		8'-12' height hedge screen				
	Commercial	18" height hedge screen				
	1					

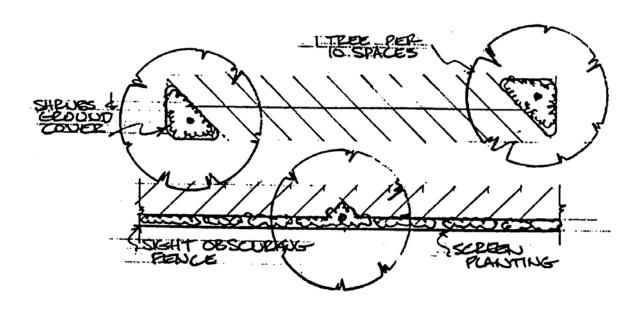
The minimum width of required hedge screening is 3 ft. The screen area shall be 100% covered with living groundcover within 2 years.

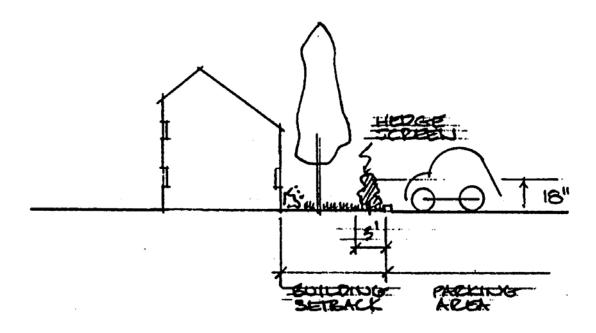


Type E-1 Concept Sketch
Parking Lot Screening



Type E-2 Concept Sketch
Parking Lot Screening





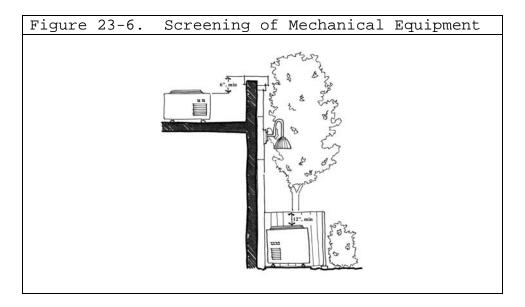
Type E-3 Concept Sketch Parking Lot Landscaping

- 23.036 <u>Type F: Other</u> <u>Screening</u>. Other screening and buffering shall be provided as follows:
 - (1) Refuse Container Screen. Except for single family detached dwellings, any refuse container or disposal area shall be screened from view by placement of a solid wood fence or masonry wall from five to eight feet in height. All refuse materials shall be contained within the refuse area.
 - (2) Service Corridor Screen. When adjacent to residential uses, commercial and industrial service corridors shall be screened with Type E-1 screening. Siting and design of such service areas shall be such as to reduce the adverse effects of noise, odor and visual clutter upon adjacent residential uses.
 - (3) <u>Light and Glare Screen</u>. Artificial lighting shall be so arranged and constructed as to not produce direct glare on adjacent residential properties or streets.
 - 8(4) <u>Mechanical Equipment</u>. Development subject to the commercial design standards of Article 20 shall comply with the provisions of this Subsection.

Mechanical equipment shall be located and screened in one or more of the following ways. See Figure 23-6.

- (a) It shall be oriented toward a service drive, service alley, service corridor, or service courtyard meeting the requirements of Section 20.320 (See Figures 20-11 & 20-13), or screened from public view in the same manner as outdoor service areas as required in Subsection (5) of this Section. See Figure 23-7.
- (b) It shall be located interior to the building, with all venting and exterior elements oriented toward a service drive, service alley, service corridor, or service courtyard meeting the requirements of Section 20.320 (See Figure 20-11 & 20-13), or screened from public view in the same manner as outdoor service areas as required in Subsection (5) of this Section. See Figure 23-7.
- (c) It shall be located on the roof and screened from public ground level view with a parapet at least 6 inches taller than the equipment, or

(d) It shall be located on the roof and screened from public ground level view with a rooftop equipment screen set back from the exterior wall, at least 6 inches taller than the equipment, with materials, colors, and detailing similar to the primary building materials and design.



- 8 (5) <u>Screening of Outdoor Service Areas</u>. Development subject to the commercial design standards of Article 20 shall comply with the provisions of this Subsection.
 - (a) When the review body determines an outdoor service area cannot be oriented away from a public right-of-way or customer parking or circulation area per Section 20.320, the service area shall be screened with the following:
 - (i) A solid, opaque wood fence or masonry wall, or material with similar appearance, with a minimum height of 6 feet. The fence or wall shall be taller if necessary to screen the service functions from the right-of-way or customer parking and circulation area. It shall be at least 12 inches higher than the equipment it screens.

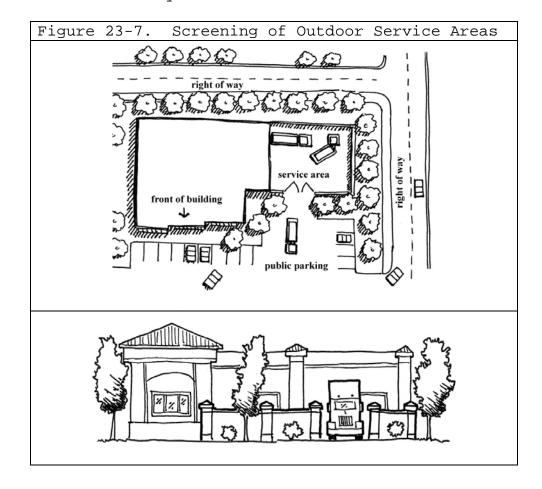
The fence or wall shall have materials, colors, and articulation similar to the primary building materials and design.

The fence or wall shall have a taller post or column a minimum of every 25 feet and where there is a change in height of the top of the fence or wall.

The fence or wall shall have a "cap" or "cornice" treatment with a finished surface that projects beyond the edge of the fence or wall surface, and the posts or columns shall have a "cap" or "capstone" treatment, such as a decorative top post feature or a finished surface that projects beyond the edge of the post or column.

See Figure 23-7.

(ii) A 10-foot deep landscape planter adjacent to the fence or wall, containing the plant materials that would be required for a Type B landscaped yard. If the fence or wall abuts a Type B landscaped yard, the requirements of this Subsection shall not be in addition to those requirements.



⁴23.037 Fencing

- (1) Fences in residential zones shall not exceed three feet in height in exterior yards and six feet in height in interior yards. However, a fence up to four and a onehalf feet high may be placed a minimum of five feet from the front or exterior side/rear property line provided a continuous hedge is placed between the fence and the property line. The hedge shall, at a minimum, consist of one-gallon or larger hedge plants with a minimum space of four feet, and shall achieve a minimum height of three feet in two years.
- (2) In commercial and industrial zones, any fence over three feet high shall be locate behind any required landscaped front or exterior/rear side yard. Any fence in an interior side or rear yard shall not exceed eight feet in height.
- (3) Fences required as part of a zone buffer, Section 23.034, may exceed the maximum height for structures in that zone.
- (4) A fence meeting required building setbacks may not exceed the maximum height for structures in that zone.
- (5) Where permitted, a fence over six feet high requires a building permit as required by the applicable Building Code.
- (6) No fencing shall conflict with the requirements of the clear vision area for streets and driveways.
- (7) Every fence shall be maintained in a condition of reasonable repair and not be allowed to become or remain in a condition of disrepair including noticeable leaning, or missing sections, broken supports, non-uniform height, and growing or noxious vegetation.
- (8) Link fencing less than seven feet in height shall be constructed in such a manner that no barbed ends shall be at the top.
- (9) Barbed wire fences are prohibited at less than six feet above grade.
- (10) Electric fences are prohibited.

(11) A fence height may be measured from the grade of either side of the fence, at the applicant's option, unless the fence is a retaining wall. A retaining wall for an area filled with soil, rocks or any other material used to raise the property is considered a fence. Its height shall be measured from the lower of the two finish grades.

623.040 Submittal Requirements

In accordance with the major site plan submittal requirements of Section 19.072, at the time of application for major site plan review the applicant shall submit:

- (1) A landscape plan including items specified in Section 23.041 and an irrigation plan with the items specified in Section 23.042; or
- (2) A Concept Plan including the items specified in Section 23.043, if the applicant has obtained prior approval from the Director of the Community Development Department to follow the optional concept plan process.
- 23.041 <u>Landscape Plan</u>. The required Landscape Plan shall include the following:
 - (1) Identification and location of all existing trees over 8 inches in diameter as measured 3 feet from ground level, with notations indicating whether they are to be removed or utilized in the development. Clusters of trees may be noted in approximate locations.
 - (2) Existing and finished grades, with sections showing cut and fill for areas to be excavated below soils containing organic matter.
 - (3) Indication of general drainage flow with arrows, and location of all surface drains and subsurface drainways.
 - (4) Location of all required yards, screening and buffering areas, easements, and public rights-of-way, building foundations or pads, parking areas, walkways and other impervious surfaces, and all accessways and private streets.

- (5) A schedule showing the percentage of impervious surface, landscaped area, and recreation open space, as a percentage of usable site area.
- (6) Plant materials, including identity and spacing, using both symbol and schedule if necessary.
- (7) Typical sections at building mass, planters in paved areas, landscape strips 10' in width or less, and landscaped berms, showing excavation, topsoil fill, finished grade, plant materials and irrigation.
- (8) Other items needed to meet requirements of this Code, of landscape conditions resulting from Development Permit review.
- 623.042 <u>Irrigation Plan</u>: The required irrigation plan shall include the following:
 - (1) Location of connection to the public water main and location of stub-outs to separate landscape areas.
 - (2) Identification of the type of irrigation system to be used, the location of irrigation facilities, and coverage to be achieved by the irrigation system.
 - (3) An accompanying letter from the designer of the landscape plan stating that the design of the proposed irrigation system can provide irrigation sufficient for the health and survival of the tree and plant species specified in the landscape plan.

623.043 Concept Plan Option:

The applicant may utilize the Concept Plan option, if approval from the Director of the Community Development Department is obtained prior to application submittal.

- (1) Concept Plan shall be submitted at time of application and the landscape and irrigation plans shall be submitted prior to issuance of the building permit as specified below.
- (2) The Concept Plan shall include the following information:
 - (a) Location of all proposed landscape areas and square footage calculation of each area.

- (b) Minimum number and size of the trees, 5-gallon, and 1-gallon shrubs to be planted in each landscape area.
- (c) Location and size of existing trees that are to be removed and the trees that are to remain.
- (d) Location of the irrigation service from the public water main, and location of the stub-outs to each landscape area.
- (3) The landscape plan prepared in accordance with Section 23.041, and the irrigation plan prepared in accordance with Section 23.042 shall be submitted and approved prior to issuance of a building permit.
- 623.044 Coordination With Other Required Plans. The required landscape plan, irrigation plan, and concept plan may be combined with other plans required by this Code, such as the drainage plan, erosion control plan, and site plan, so long as all information required may be presented in a clear and understandable fashion.

623.050 General Landscape Design, Construction, and Maintenance Standards

All landscape and irrigation materials shall be designed, constructed, and maintained according to the standards of this Article and the following provisions:

⁶23.051 Design

- (1) Except single family residences and duplexes, all development shall provide an automatic underground irrigation system.
- (2) The landscape plan shall specify landscape materials which will achieve required levels of coverage as specified in this Article.

623.052 Construction

- (1) All landscaping materials and irrigation shall be installed according to approved plans.
- (2) Preservation of Existing Plant Materials:

- (a) The applicant shall provide methods for the protection of existing plant material to remain during the construction process. The plants to be saved shall be shown on the Landscape Plan or the Concept Plan and the method of protection shall be noted on the landscape plans. Example: Areas not to be disturbed can be temporarily fenced, as in snow fencing which can be placed around individual trees.
- (b) Existing trees shall not have construction occur within the drip line, where possible. Trees to be saved shall be kept free from truck abrasion or soil compaction during construction, nor shall cut and fill occur within the drip line. The landscape plan shall provide for the location and variety of replacement trees in case of the subsequent death of existing trees.

(3) Soil Treatment in Landscaped Areas:

- (a) Areas for required landscaping shall not be used as a waste dump or fill during the construction process. All waste material shall be removed from such areas prior to the application of topsoil.
- (b) Soils devoid of organic materials shall not be utilized as topsoil for required landscape areas. Where such areas have been excavated to soil levels containing no organic material, the landscape plan shall provide for further non-organic soils removal and replacement with topsoil.
- (c) The landscape plan shall provide specifications for topsoil, including depth, organic matter requirements, limits to sand, clay and gravel and other requirements designed to ensure the health and vitality of required landscaping.

⁶23.053 Maintenance

(1) All plant materials identified in the approved landscape plan shall be reasonably maintained. If any tree, shrub or living ground-cover dies or is relocated, it shall be the responsibility of the property owner to replace the landscaping, such that the landscaping continues to comply with the approved landscape plan.

- (2) If plant materials have not achieved the required coverage over time as required by this code, then the property owner shall plant additional materials to achieve the required coverage.
- (3) The property owner shall maintain the irrigation system in working condition to provide the irrigation necessary for the health and survival of the landscape materials.

23.060 Completion and Occupancy

23.061 Inspection Required

- (1) Inspection shall be made prior to planting to verify proper rough grade, installation of irrigation, soil preparation and topsoil application.
- (2) Plant materials shall be inspected prior to planting to insure that placement, quantity, size and variety conform to the approved landscape plan and the requirements of this Article. All plant specimens shall have the nursery tags identifying variety and species. All tags shall remain on plant specimens until final inspection.
- (3) Final inspection shall be made following planting. Plantings contrary to the approved landscape plan shall not be approved.
- ⁶(4) Inspection of the irrigation system shall be conducted prior to issuance of a Certificate of Occupancy. Water shall be turned on to demonstrate functionality of the system.

23.062 Completion Required.

- (1) Approval of landscape installation is required prior to occupancy. However, for all development requiring a Landscape Plan, temporary occupancy permits may be issued prior to the complete installation and approval of all required landscaping if security equal to 110% of the cost of plant materials and labor as determined by the Director is filed with the City, assuring such installation within nine months of issuance of the temporary occupancy permit. An extension of three months may be granted by the Director when circumstances beyond the control of the developer prevents earlier completion.
- ⁶(2) Prior to issuance of a Certificate of Occupancy, the applicant shall submit a letter from the contractor who installed the irrigation system, which states that the

irrigation system was installed according to approved plans and is functioning as designed.

23.063 Completion Guarantee

- (1) Required security may consist of a faithful performance bond payable to the City, cash, certified check, time certificate, or deposit, or builders/developers lending agency certification to the City that funds are being held until completion.
- (2) If the installation of the landscaping is not completed within the required period, the security may be used by the City to either complete the installation, or the security may be held by the City and other enforcement powers employed to prevent final occupancy until such time as the improvements are completed. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned.
- (3) The final landscape and irrigation inspection shall be made prior to any security being returned. Any portions of the plan not installed, or improperly installed, shall cause the inspection to be postponed until the project is completed or cause the security to be used by the City.

23.070 Street Tree Standards

- 23.071 Street Trees. All development fronting on public or private streets approved following the adoption date of this Code shall be required to plant street trees in accordance with the following standards. Street trees to be planted shall be chosen from the recommended list of street trees found in Section 23.076 below. Approval for the planting of alternate species may be given by the Director.
- Location for Street Trees. Street trees shall be located outside of street right-of-way except in cases where there is a designated planting strip in the right-of-way, and as specified in requirements and restrictions in Section 23.030 and Section 27.313.
- 23.073 Spacing, Placement and Pruning of Street Trees . All tree spacing may be made subject to special site conditions which may for reasons such as safety critically impact the decision. Any such proposed special condition shall be subject to the Director's

review with written explanation to the Director as to why the special conditions are requested.

- (1) Small or narrow stature trees (under 25 feet, less than 16 feet wide) may be spaced at any interval 20 feet apart or greater. Medium sized trees (25 to 40 feet tall, 16 to 35 feet wide) may be spaced at any interval 30 feet apart or greater. Large trees (over 40 feet, more than 35 feet wide) may be spaced at any interval 40 feet or greater.
- (2) Trees shall not be planted closer than 25 feet from the curb line of intersections of streets or alleys, nor closer than 5 feet from private driveways (measured at the back edge of the sidewalk), fire hydrants, or utility poles.
- (3) The Director may allow trees closer to specified intersections where intersections are signalized. No new utility pole location shall be established closer than 5 feet to any existing street tree. Tree pits shall be planned so as not to include premise services (water and gas meters, etc.) in the tree well. Premise services shall not be installed in existing tree well areas in the future.
- (4) Street trees shall not be planted closer than 20 feet to light standards. Except for public safety, no new light standard location shall be positioned closer than 10 feet to any existing street tree, and preferably such locations will be at least 20 feet distant.
- (5) Trees shall not be planted closer than 2-1/2 feet from the face of the curb except at intersections where it shall be 5 feet from the curb, in a curb return area.
- (6) Where there are overhead power lines, tree species are to be chosen that will not interfere with those lines.
- (7) Trees shall be planted within 2 feet of any permanent hard surface paving or walkway. Space between the tree and such hard surface may be covered by nonpermanent hard surfaces such as grates, bricks on sand, paver blocks, cobblestones, etc. This means that sidewalk cuts in concrete for tree planting shall be at least 4 X 4 feet to help allow for air and water into the root area.

- (8) Trees, as they grow, shall be pruned to provide at least 8 feet of clearance above sidewalks and 12 feet above street roadway surfaces.
- (9) Existing trees may be used as street trees if no cutting or filling takes place within the drip line of the tree. Sidewalks of variable width and elevation may be utilized to save existing street trees, subject to approval by the Director.
- Replacement of Street Trees. Existing street trees removed by development projects shall be replaced by the developer with those from the approved street tree list. The replacement trees shall be of size and species similar to the trees that are being removed, unless alternatives are approved by the Director. All replacement trees shall be a minimum of 1-3/4 inch caliper.
- 23.075 Exemptions. Exemptions from the street tree requirements may be granted by the Director on a case by case basis. Exemptions may be granted for example, if the location of a proposed line would cause potential problems with existing utility lines, etc.
- Approved Street Trees. The following tree species are recommended for use as street trees:

Small Trees - small or narrow stature trees (under 25 feet, less than 20 feet wide) may be spread at any interval 20 feet apart or greater. Sidewalk cuts to be a minimum of 4×4 .

- 1. Acer Ginnala Flame Flame maple
- 2. Cornus Florida Flowering Dogwood
- 3. Pyrus Calleryana Aristocrat Aristocrat Pear
- 4. Pyrus calleryana Glens Form chanticleer flowering pear
- 5. Prunus sargentii "columnaris" sargent columnar cherry
- 6. Cercis Canadensis Eastern Redbud

Medium Trees- medium size tree (25-40 feet tall, 16-35 feet wide) may be spread at any interval 30 feet apart or greater. Sidewalk cuts to be a minimum of 5×5 .

- 1. Acer platanoides "crimson king" crimson king maple
- 2. Prunus serrulata "kwanzan" kwanzan cherry
- 3. Cercis canadensis eastern redbud
- 4. Acer Rubrum "October Glory" October Glory maple
- 5. Pyrus calleryana "redspire" Redspire pear
- 6. Nyssa Sylvatica Black Tupelo
- 7. Prunus subhirtella "autumnalis Rosea" autumn flowering cherry

Large Trees - large trees (over 40 feet, more than 35 feet wide) may be spaced at any interval 40 feet or greater. Sidewalk cuts minimum 6 x 6.

- 1. Acer Rubrum "Armstrong" Armstrong Maple
- 2. Acer Rubrum "Franksred" Red Sunset Maple
- 3. Fraxinus Oxycarpa "Raywood" Raywood Ash
- 4. Tilia cordata "Greenspire" Greenspire Linden
- 5. Acer Saccharum "Green Mountain" Sugar Maple
- 6. Fraxinus Americana "Junginger" Autumn Purple Ash
- 7. Quercus palustris pin oak
- 8. Liriodendron tulipifera tulip tree
- 9. Fraxinus Pennsylvanica "Marshall" Marshall Ash

Trees to be planted Under Power Lines - Small Trees - small or narrow trees (under 25 feet, less than 20 feet wide) may be spread at any interval 20 feet apart or greater. Sidewalk cuts to be a minimum 4 x 4.

- 1. Cercis Canadensis Eastern Redbud
- 2. Acer Ginnala Flame Maple
- 3. Cornus Kousa Kousa Dogwood
- 4. Prunus Cerasifera "Thundercloud" Thundercloud Plum
- 23.077 <u>Prohibited Street Trees</u>. The following tree species are prohibited from use as street trees as their roots cause injury to sewers, pavements, and sidewalks:
 - 1. Salix spp willows
 - 2. Populus spp cottonwoods/poplars
- 23.078 Street Trees Not Recommended. The following tree species are not recommended for use as street trees, for the reasons listed after each species. These trees may be planted if the problems are satisfactorily met and accepted by the owner, and so noted on the site plan. Some are desirable trees in the right situation.

- 1. Acer macrophyllum big leaf maple; roots cause injury to sewers and pavement.
- 2. Acer Negundo box elder; subject to wind damage.
- 3. Ailanthus tree-of-haven; short lived, invasive roots.
- 4. Albizzia julibrissi silk tree; litter, aggressive roots.
- 5. Alnus rubra -red alder; short lived, brittle, favorite of tent caterpillars.
- 6. Betula spp birches; aphids, low branching, invasive roots, injury to sewers, pavements.
- 7. Catalpa invasive roots, short lived, messy sidewalk problems.
- 8. Crataegus spp hawthorns; insects and disease prone, aphids.
- 9. Platanus spp sycamore, london plane; vigorous roots, damage to sidewalks, sewers, serious anthracnose disease.
- 10. Robinia pseudoalacia a black locust; brittle, hazard, agressive roots, thorny.
- 11. Sorbus ausuparia mountain ash; large crop messy fruits may be sidewalk hazard.
- 12. Ulmus spp elms; elm leaf bettle, dutch elm disease, roots break walks, cause sewer problems.
- 13. Liquidambar Styraciflua Invasive root system, damage to curbs, gutters, and utilities.

Fruit trees - litter Nut trees - litter Conifers - needles, low branching

¹ Revised 10-22-93

² Revised 1-3-96

³ Revised 10-20-94

⁴ Revised 5-30-97

⁵ Revised 10-22-93

⁶ Revised 10-22-93

⁷ Revised 4-20-05 by Ordinance 5286

⁸ Revised 1-18-06 by Ordinance 5333