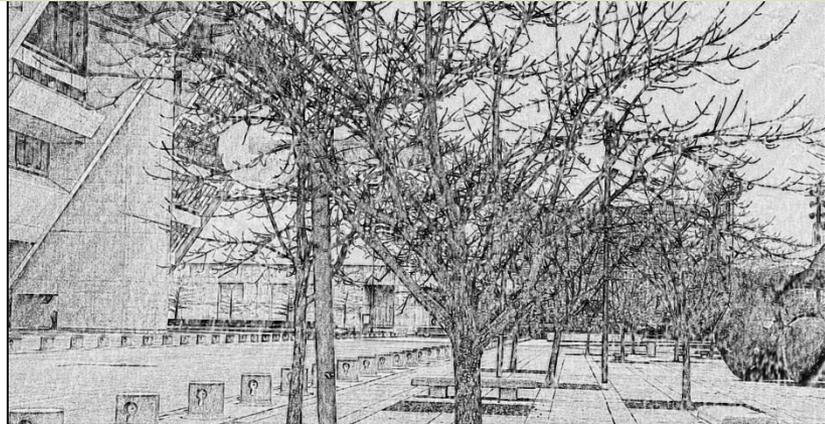




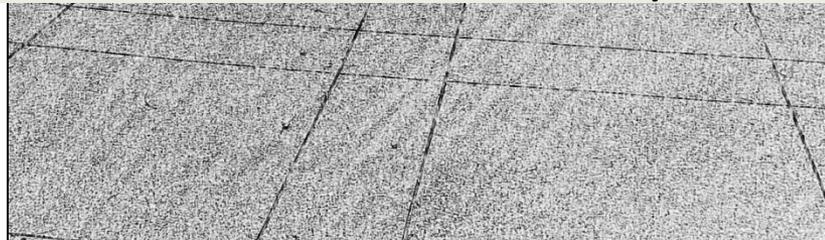
Article X Landscape Regulations



Shared Access Development



July 23, 2015



LANDSCAPING

Shared Access Development (SAD)

Current:

(single family districts)

3 trees for each individual lot

- 1 may be located anywhere in the SAD
- 2 of required 3 must be located in the frontyard of the SAD

(districts other than single family)

- 20% of SAD lot must be designated landscape area
- Minimum 1 tree/4,000 sf of SAD required
- Plus; minimum 1 tree/25' of street frontage, minimum 2.

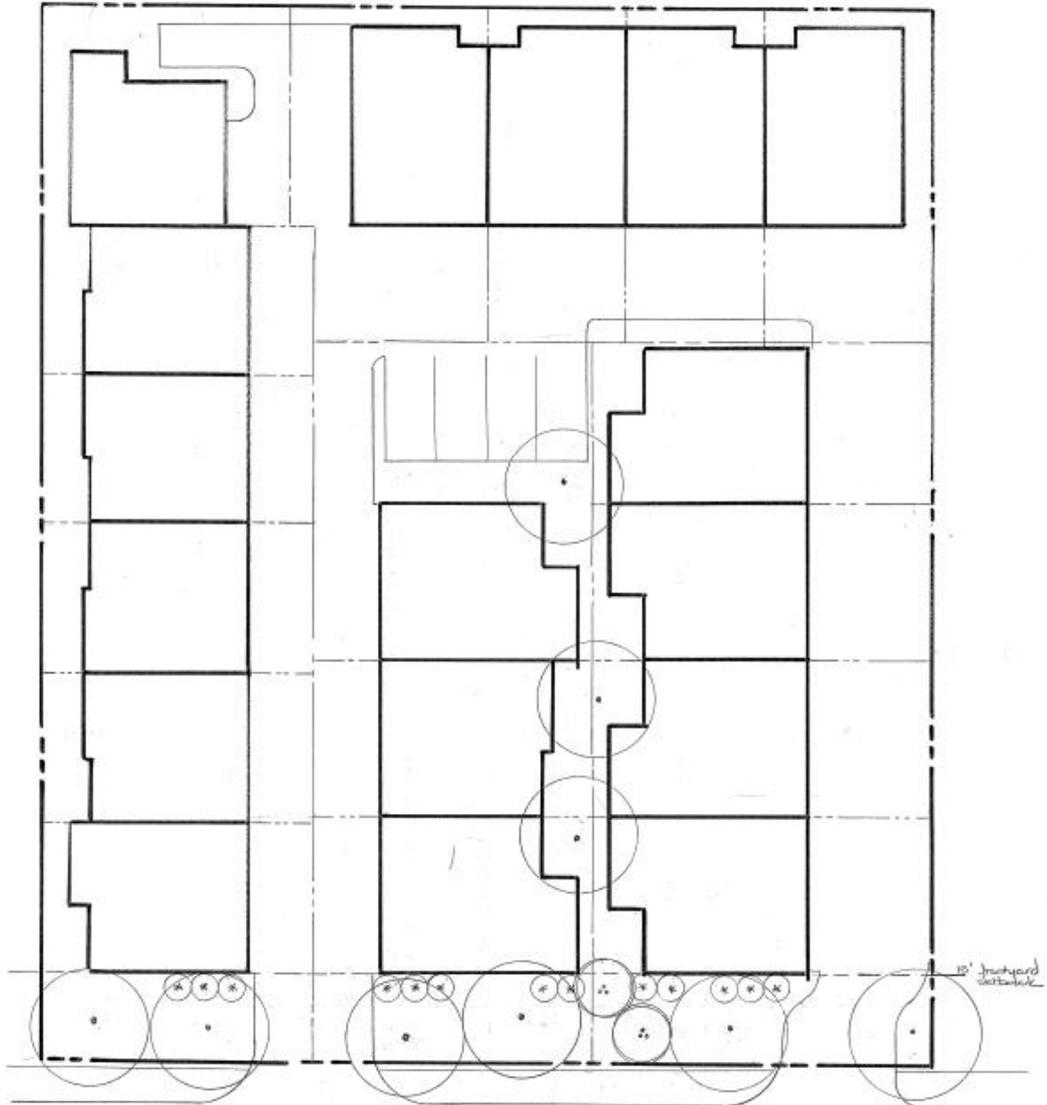
Proposed:

(any district it is allowed in)

- Min. 20% of SAD must be designated landscape area
- Minimum of 50% or half of the required landscape area, or 10' of lot depth from the R.O.W., to be "common landscape area" and located along and contiguous to street frontage
- 1 tree/ 4,000 sf of SAD
- Plus; minimum 1 group/40' of street frontage.
 - One large canopy tree and three small trees.
 - One large canopy tree and three large evergreen shrubs.
 - One large canopy tree, two small trees, and one large evergreen shrub.
 - One large canopy tree, one small tree, and two large evergreen shrubs.
 - When local utility conflict: 3 small trees in lieu of 1 large canopy tree.

LANDSCAPING

Shared Access Development (SAD)



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SAD Example

Site: 21,600 sf

Street length: 146'

MF District – 15' required front yard

Site Trees required: 5

20% Landscape Area: 4,320 sf

10% Common Landscape Area along Street: 2,160 sf

14.7' wide Common Landscape Area along street

4 groups of plantings

1 tree, 2 small trees, 1 lg evergreen shrub

1 tree, 3 lg evergreen shrubs

1 tree, 3 lg evergreen shrubs

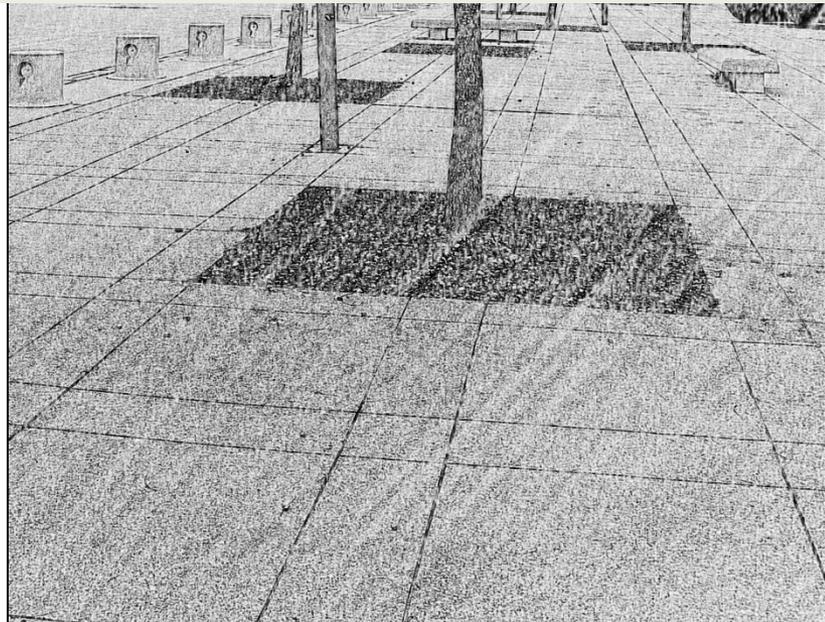
1 tree, 3 lg evergreen shrubs



Article X Landscape Regulations



Landscaping Standard Provisions



LANDSCAPING

RECAP OF BASE STANDARDS

Proposed

- **STREET BUFFER ZONE (SBZ)** – avg. 10'/15'/20'
 - Street Trees (1:50 lf)
- **RESIDENTIAL BUFFER ZONE (RBZ)** –avg. 10'
 - Plant groups (1:50 lf)
- **INTERIOR ZONE (IZ)** – 21 parking spaces and greater.
 - VUA: Parking spaces within 70' of tree.
- **SITE TREES:** 1:4,000 SF (except 1:6,000 SF in specific uses) – no established minimum and inclusive of all trees on the lot.

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STREET BUFFER ZONE (SBZ)

Proposed

- 1 large canopy tree must be provided within the SBZ for each 50 feet of frontage.
- The buffer area includes paved access into the lot.
- If existing or proposed conditions do not allow for planting of a large canopy tree, 3 small trees may be substituted for the tree. Conditions include:
 - Existing utility conflict restricting large/medium tree in maximum buffer area.
 - Existing planting conditions in area due to existing building proximity, proposed building location in a minimum building setback, or limited soil surface area in the SBZ with an approved buffer configuration (ex.: 5' wide section).
 - Inability to plant, or choosing to not plant, in the parkway.

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STREET BUFFER ZONE (SBZ)

Proposed

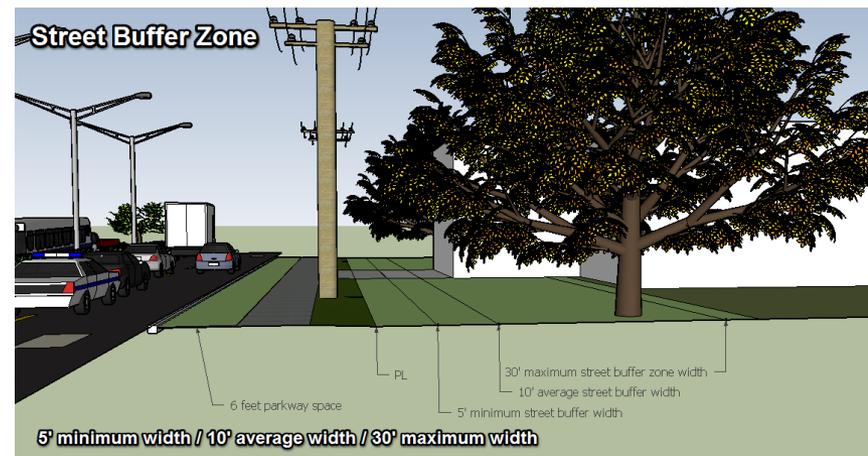
- The Street Buffer Zone area is calculated for each individual street frontage.
- For properties less than 20,000 Square Feet in area, each SBZ need not exceed 5% of the lot area, except it may not be less than 5 feet in depth.

LANDSCAPING

STREET BUFFER ZONE (SBZ)

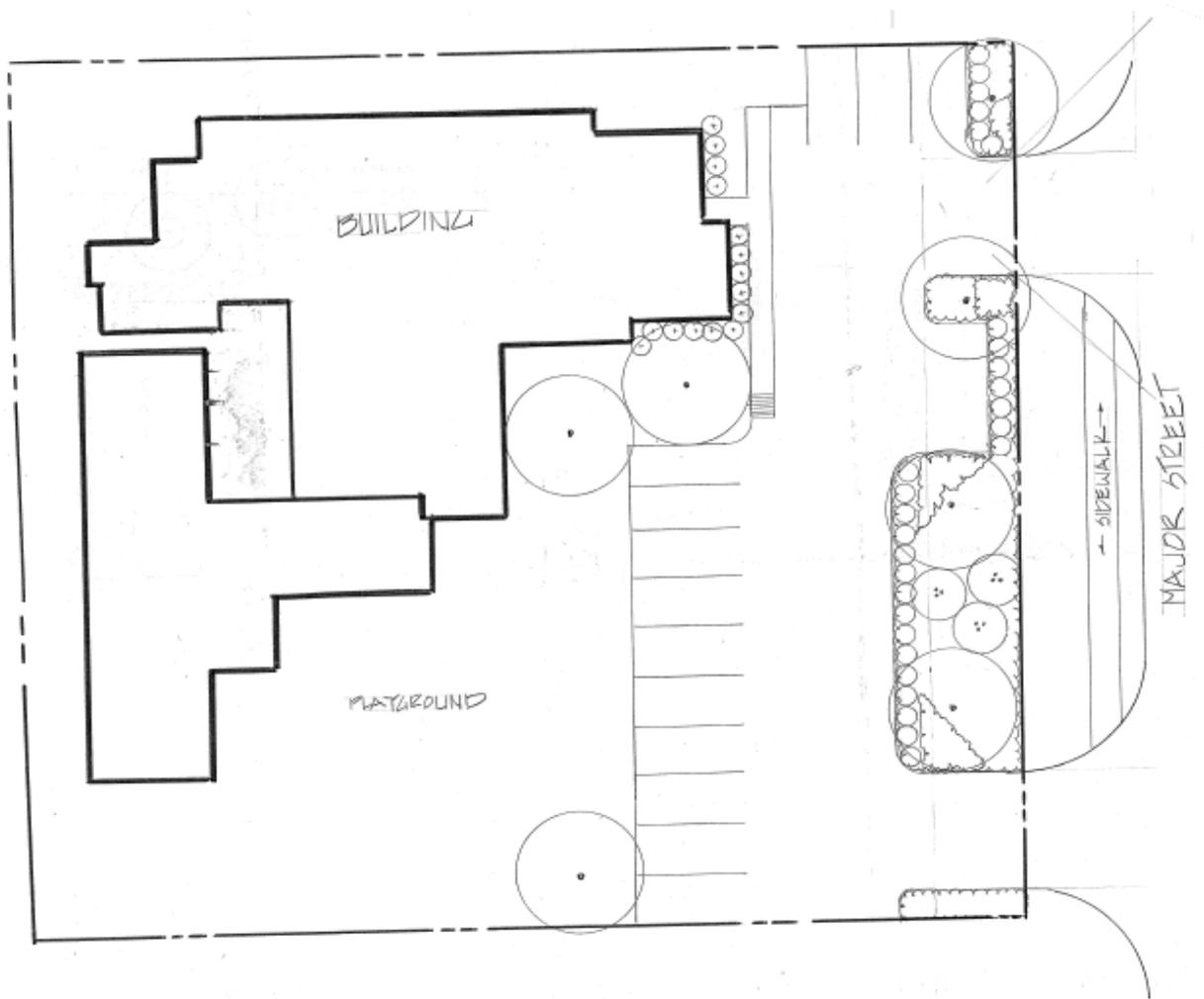
Proposed

- Street tree designations are measured from the property line, not the projected curb (current ordinance).
- Large and medium canopy trees must be planted at least 20' horizontally from the center alignment of the aerial electric utility.
- Parkways may be used for SBZ planting requirements if minimum required planting conditions for large or medium trees can be achieved. The SBZ area on the property may be reduced for equal area in the approved parkway, except at least 5 feet of SBZ must be designated on the property. Licensing or other jurisdictional authorization is required.
- When SBZ's and Residential Buffer Zones overlap, the more stringent condition applies. Both SBZ and RBZ areas may be calculated within the overlap space.



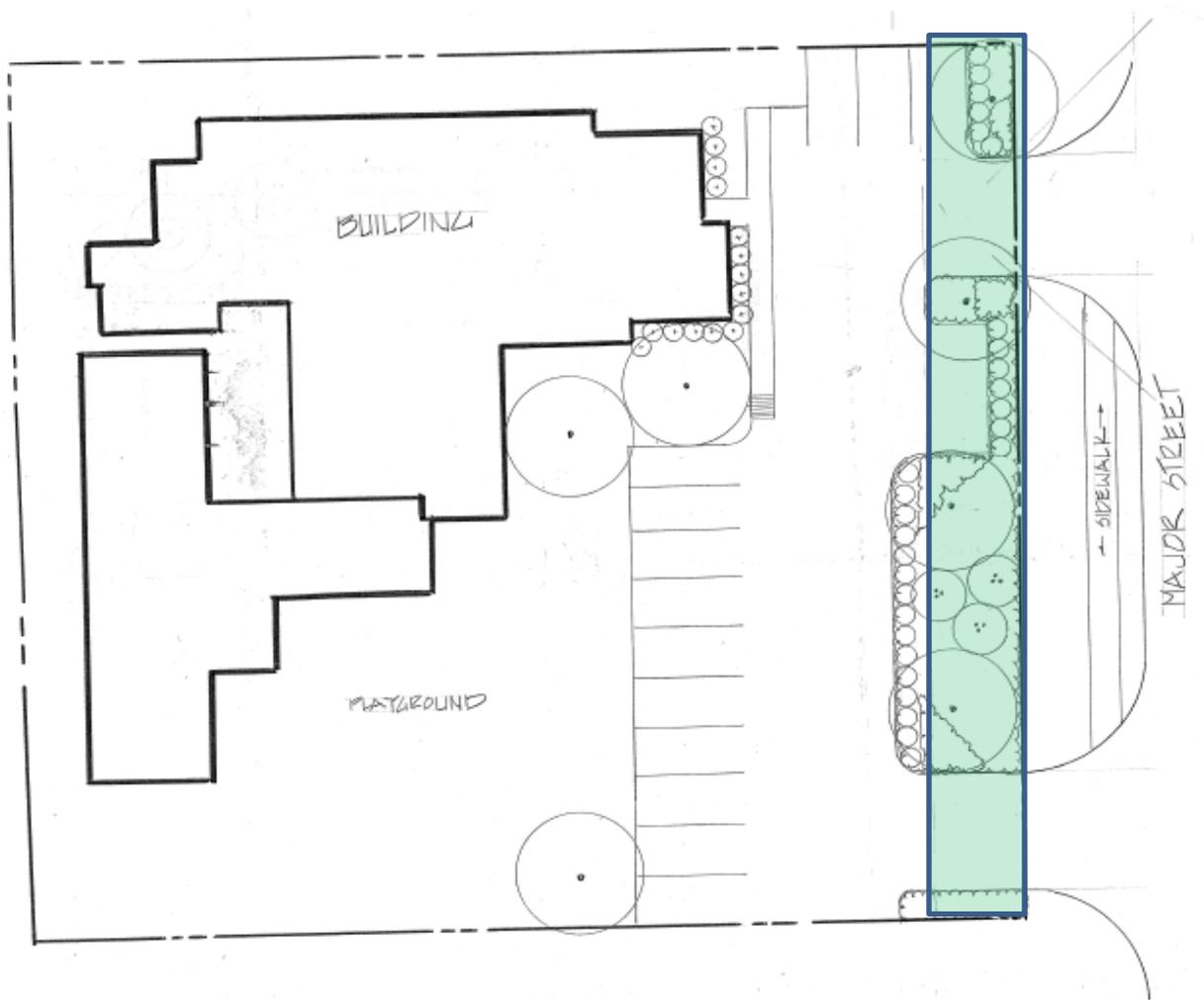
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Landscaping Example 1



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Landscaping Example 1



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Landscaping Example 1

Site: 29,751 sf

Site Trees required: 7

Required Parking: 14 spaces

Street Buffer Zone:

Major – 15' wide, 150' = 2,250 sf

Trees required – 3 (1/50')

No VUA requirements because less than 20 parking spaces

Design Option Points required: 15

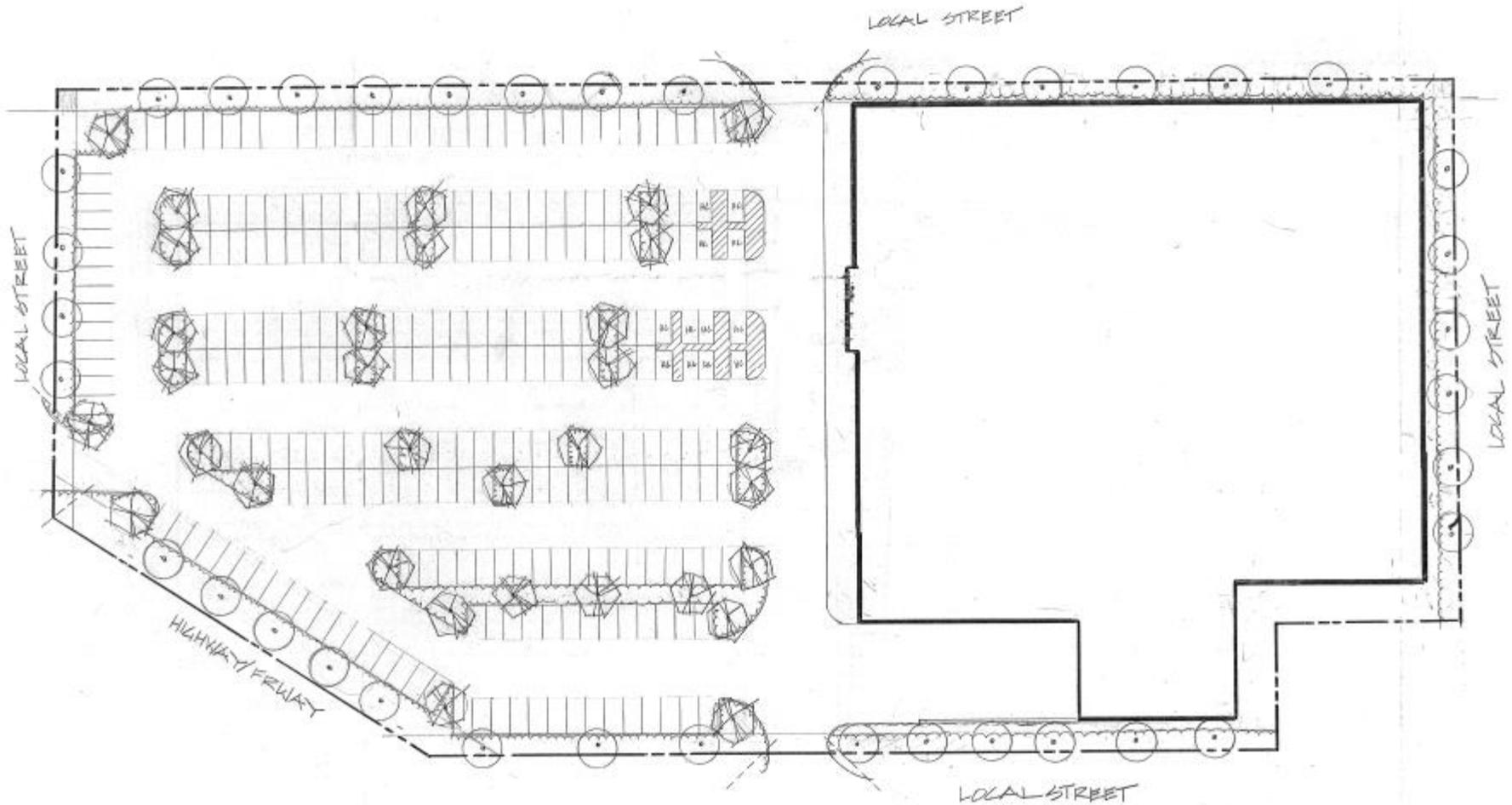
Design Options chosen:

Screening of off-street parking, enhanced - 10 points

Facade planting – 5 points

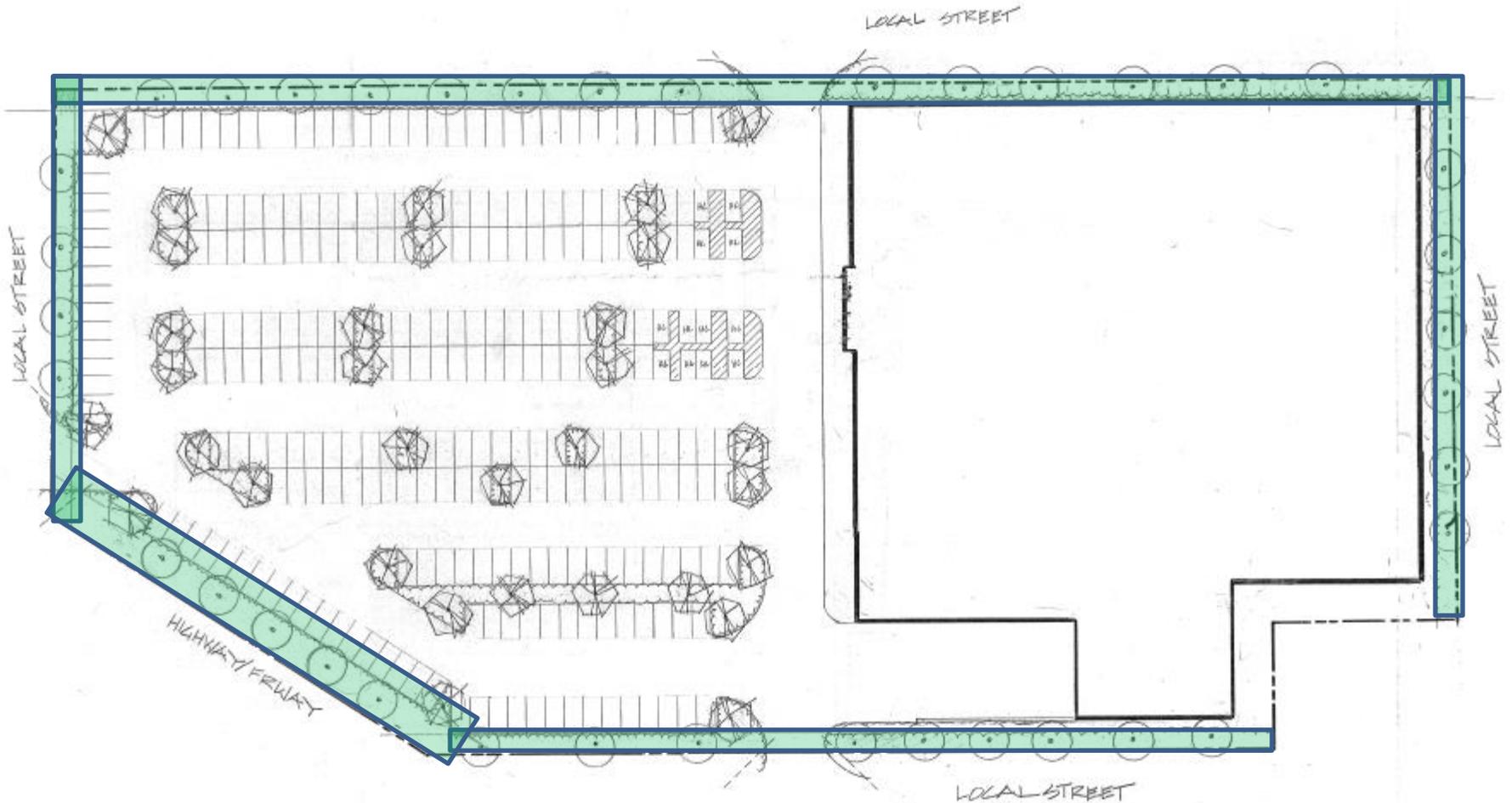
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Landscaping Example 2



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Landscaping Example 2



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Landscaping Example 2

Site: 235,563 sf

Site Trees required: 59

Required Parking (1/300 sf): 262 spaces, 268 provided

Vehicular Use Area: 110,765 sf

28 VUA trees required (1/4,000sf of VUA)

No parking space further than 70' from a tree

Terminus landscape islands

No more than 12 parking spaces between landscape islands unless abutting a landscape median or buffer zone

Street Buffer Zone:

Frwy/Hiwy – 20' wide, 236'

Local – 10' wide, 447'

Local – 10' wide, 227'

Local – 10' wide, 708'

Local – 10' wide, 290'

Total – 1908' = 38 trees (1/50')

Design Option Points required: 30

Design Options chosen:

Screening of off-street parking, enhanced - 10 points

Facade planting, enhanced – 10 points

Facade planting, grouped with small trees – 5

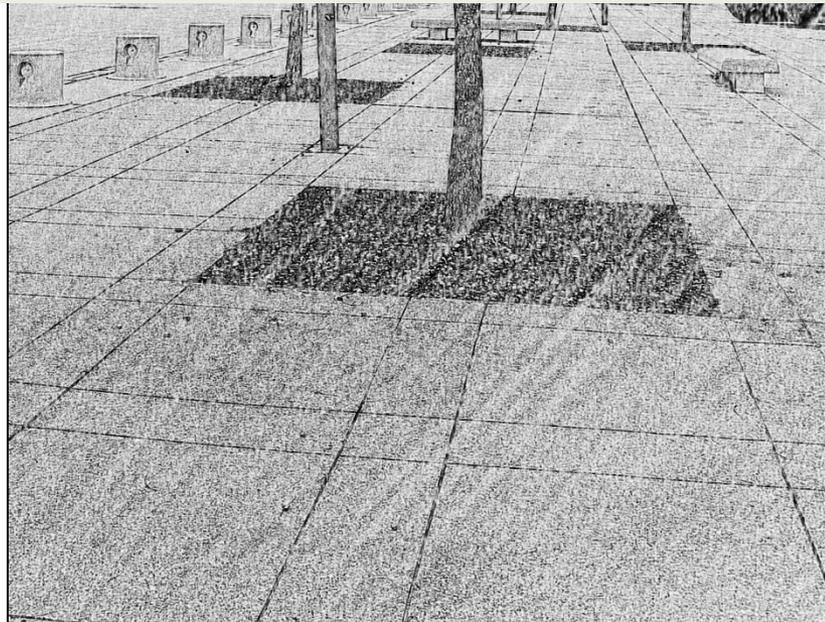
Parking islands, additional – 5



Article X Landscape Regulations



Point System and Design Options



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Point System

Proposed

- DESIGN OPTIONS ONLY shall be implemented through a comprehensive POINT SYSTEM.
- Points required are determined by factoring the size of the property.
- Tree preservation credits are provided.
- Comprehensive Design Options List to allow for site adaptability.

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Point System

- Site Points are calculated for every 1,000 square feet of lot area expansion for up to 10,000 square feet.
- Lots less than 1,000 square feet do not have a design option requirement.
- Point requirements increase on a tiered scale for a range of lot sizes.
- Larger properties with greater site area have more points required, but also have a greater variety of available options.
- Some options require professional design and implementation.
- Many design options may have additional tree mitigation credits available, especially as applicable on larger properties.

Points for Design Options

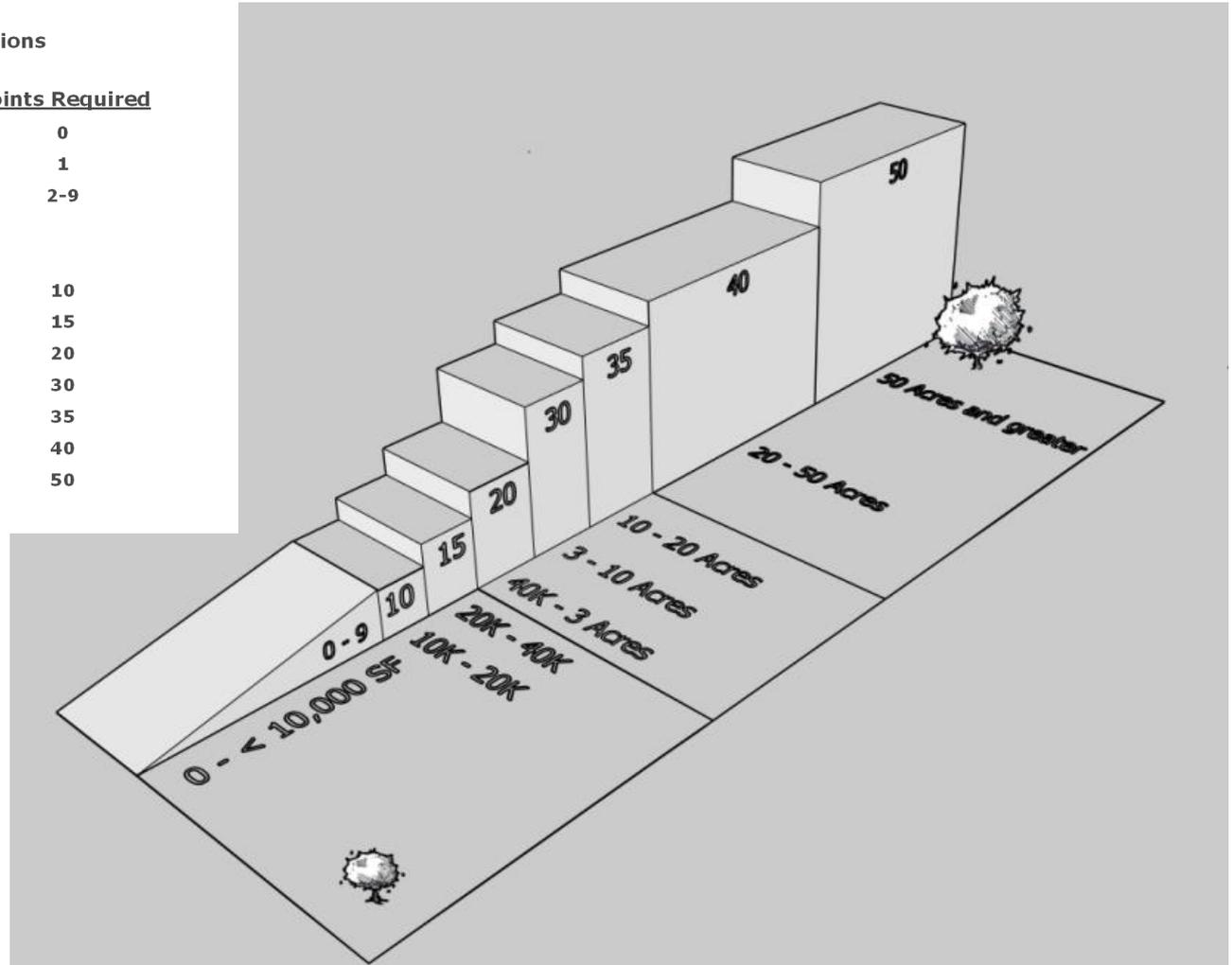
<u>Development Lot Area</u>	<u>Points Required</u>
0 to <1,000 SF	0
1,000 SF to <2,000 SF	1
2,000 to <3,000 SF; and each increase of 1000 SF up to <10,000 SF	2-9
10,000 SF to 19,999 SF	10
20,000 SF to 39,999 SF	15
40,000 SF to <3 Acres	20
3 Acres to <10 Acres	30
10 Acres to <20 Acres	35
20 acres to <50 Acres	40
50 Acres and Greater	50

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Point System

Points for Design Options

<u>Development Lot Area</u>	<u>Points Required</u>
0 to <1,000 SF	0
1,000 SF to <2,000 SF	1
2,000 to <3,000 SF; and each increase of 1000 SF up to <10,000 SF	2-9
10,000 SF to 19,999 SF	10
20,000 SF to 39,999 SF	15
40,000 SF to <3 Acres	20
3 Acres to <10 Acres	30
10 Acres to <20 Acres	35
20 acres to <50 Acres	40
50 Acres and Greater	50



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Design Options – Gaining Points

- Design Options are scored in a range from 0.25 to 20 points.
- Basic landscape application is generally 5 points.
- Professionally designed improvements with landscape design qualities generally attain 10 points.
- Some option scores may vary based on meeting additional conditions for that option.
- Incremental scoring is available for partial completion of a design option.

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Design Options – Choose Any Applicable

- Buffer Zones – enhanced
- Screening of Parking
- Façade
- Pedestrian Uses
- Pavements
- Conservation
- Parking Lots
- General
- Plant Material Upgrade
- 20 points maximum
- 20 points maximum
- 15 points maximum
- 25 points maximum
- 15 points maximum
- 25 points maximum
- 30 pts. lots 10 ac. and >;
20 pts. Lots <10 ac.
- 10 points maximum
- 5 points maximum

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Example: 3,000 SF Area = 3 Points

Current Article X

4 site trees (minimum required)

2 street trees (minimum required)

Soil area: 25 sf per large tree;

16 sf per small tree.

2 Design Standards (required):

Screening/Parking, or

Foundation planting, or

Street Buffer (10' min./or
10% lot depth.)

Proposed Article X

1 site tree

1 street tree (1:50 feet) – or 3 small trees
with utility, or reduced planting space.

Soil area: street buffer zone (greater of 5'
min. width x length of lot frontage, or 5%
lot area).

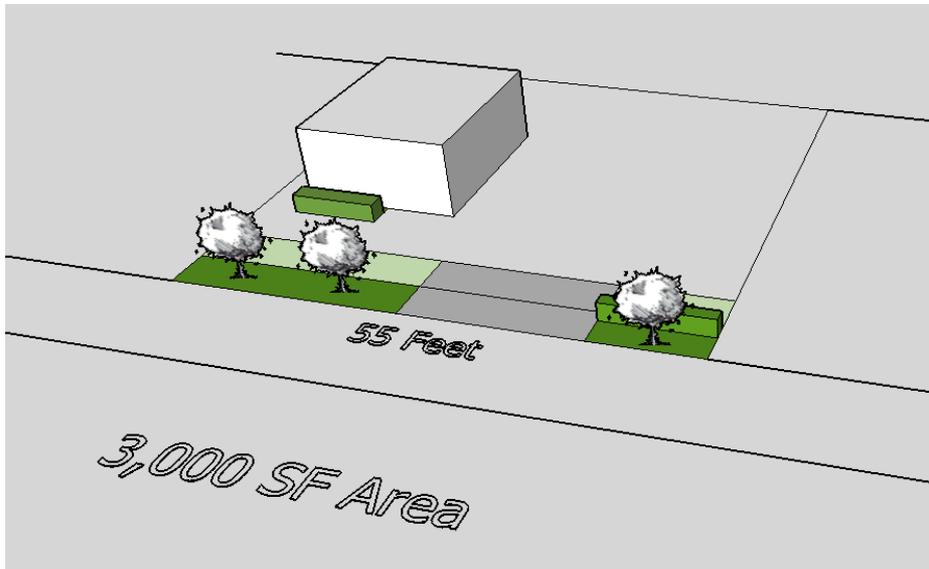
Choice of Design Options: 3 POINTS REQ.

Enhanced Buffer – 5 pts., 2 pts. +, or

Foundation planting – 5 pts., or

Screening/Parking – 5 pts., or

Additional Plants – min. 12 large shrubs
(0.25 x 12 large shrubs) – must be along the
front yard/street frontage. Option: add 3
large/medium trees (**1 pt. each**), or 6 small
trees (**0.5 pts. each**), or a combination, for
3 total points.



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Example: 5,000 SF Area = 5 Points

Current Article X

4 site trees (minimum required)

2 street trees (minimum required)

Soil area: 25 sf per large tree;

16 sf per small tree.

2 Design Standards:

Street buffer, or

Screening/Parking, or

Foundation planting, or

Enhanced perimeter buffer (RA)

Proposed Article X

1 site tree

1 street tree

Soil area: Street Buffer Zone (5' or 5% of lot) and Residential Buffer Zone (10' average x width of the lot).

Choice of Design Options: 5 POINTS REQ.

Foundation Planting – 5 Pts.

Screening/Parking – 5 Pts.

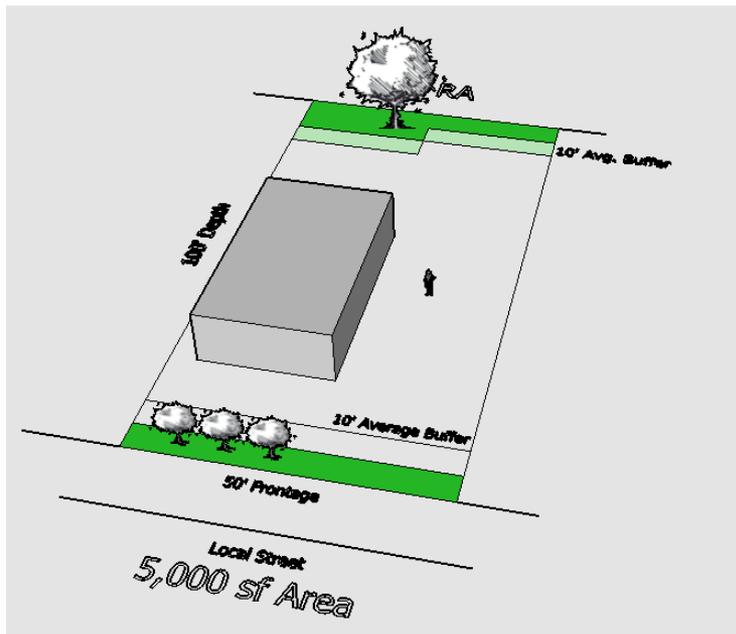
Pedestrian Uses – 5-10 Pts.

Enhanced Buffer Zones – 2-5 Pts.

Additional Plants – 1-5 Pts.

Conservation – 2-5 Pts.

Or, Combination of above and others.



LANDSCAPING

Example: 15,000 SF Area = 10 Points

Current Article X

4 site trees (minimum required)
2 street trees (minimum required)
Parking lot (120' tree/parking space)
Soil Area: 25 sf min./large tree; 16 sf min.
Small tree

Design Standards:

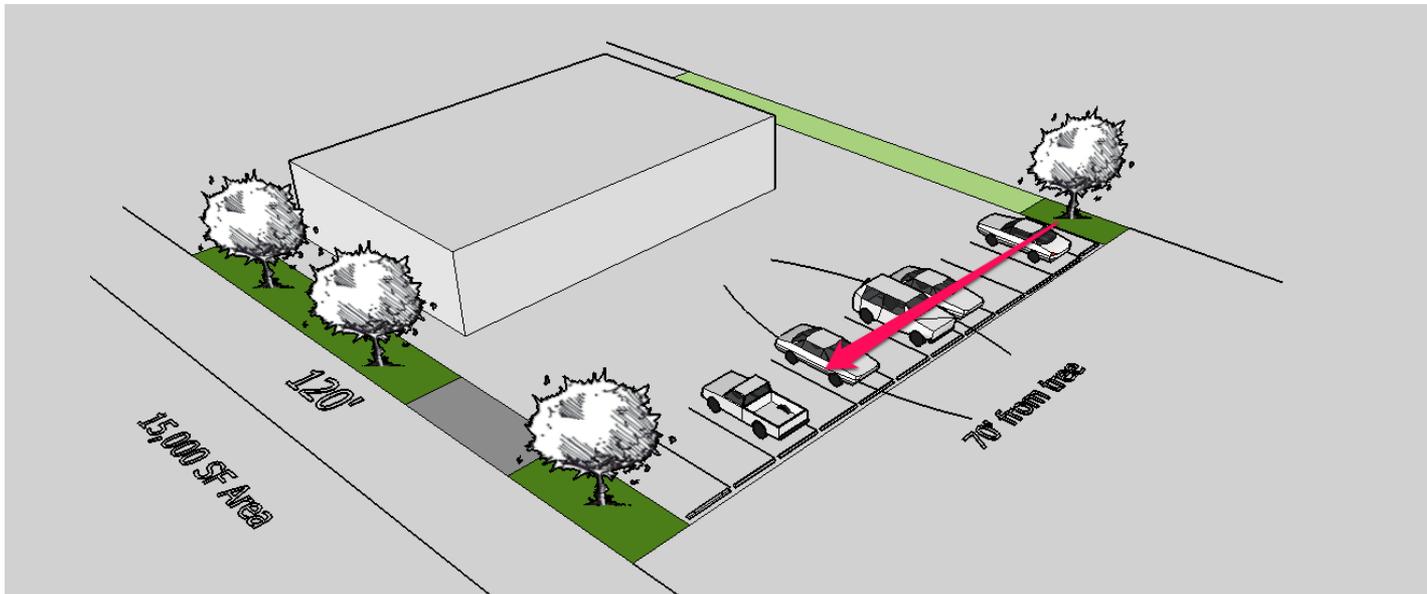
Street buffer (10' wide x length of lot)
Screening/Parking (3' wide min.)
Foundation Planting (3' wide min.)
Various pavement applications

Proposed Article X

4 site trees
2 street trees
Parking lot (70' tree/parking space)
Soil Area: 10' wide avg. SBZ x width of lot +
160 sf soil area for parking lot tree.

Design Standards:

Screening/Parking – **5 Pts./10 Pts.**
Foundation Planting – **5 Pts./10 Pts.**
Enhanced Buffer Zone – **2-5 Pts.**
Pedestrian Uses – **5-10 Pts.**



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Design Options

Choose any applicable design options.

Design Options	Points	Max.
Plant Material Upgrade		TBD
Large/Medium Tree Increase, or upgrade, by one interval.	1	Added plant materials must be in the front yard. Available when site is deficient up to 5 points.
Small Tree Increase, or Upgrade, by one interval.	0.5	
Large Shrub Increase, or Upgrade, by one interval.	0.25	
Buffer Zones		20
Enhanced Buffer Zone (minimum of 5' avg. above required.)	5	Not applicable if reduced to 5% of lot area.
Enhanced Buffer Zone (incremental by each 2' increase.)	2	Not applicable if reduced to 5% of lot area.
Upgrade Required Wall or Fence (material or design)	5-10	Undulating wall with bump outs; design flexibility
Application of engineered solutions for soil volume increase to threshold.**	10-15	
Screening		20
Screening of Off-Street Parking - OPTION 1 - Standard	5	Choose option 1 or 2, but may use up to 3 options.
Screening of Off-Street Parking - OPTION 2 - Enhanced*	10	
Screening of Off-Street Parking - OPTION 3 - Grouped beds*	5	
Screening of Off-Street Parking - OPTION 4 - With Screen Wall/Fence	5	
Screening of Off-Street Parking - OPTION 5 - Berm with full groundcover	5	

- Plant material upgrades are available for increasing plant counts, or up-scaling size, to provide additional points.
- Average buffer zones may be increased by 5', or obtain fewer points for every 2' increase.
- Screening provides a large variety of options to allow up to 20 points depending on the combination of materials and space used.
- * Some improvements (Enhanced Screening – OPTION 2) require landscape architect design. ** Other improvements require additional professional/engineering design.

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Design Options

Façade		15	
Façade Planting - OPTION 1 - Standard	5		
Façade Planting - OPTION 2 - Enhanced*	10		
Façade Planting - OPTION 3 - Grouped with medium/small trees	5		
Pedestrian Uses		25	
Pedestrian Facilities - OPTION 1 - Curb to Building Area*	10		Requires choice of amenities in narrow setback areas.
Pedestrian Facilities - OPTION 2 - Special amenities	5-10		Prerequisite + point for additional element.
Pedestrian Facilities - OPTION 3 - Adjacent to 'habitat restoration'	10-15		Buffer and wise use of riparian and slope areas.
Pedestrian Facilities - OPTION 4 - Athletic Fields	10		In Institutional and Recreation Uses
Pavements		15	
Enhanced Vehicular Pavement	5		Pavement at least 25% of vehicle surface area.
Permeable Vehicular Pavement**	5		Pavement at least 25% of vehicle surface area.
Enhanced Pedestrian Walkways	5		Area independent of façade design option use.
Cool Vehicular Pavement**	10		Verified application before landscape inspection.
Conservation		25	
Tree Preservation in development area**	2-10		Must qualify as conditioned in the landscape manual.
Habitat Preservation and Restoration - preserved and passive.	5		Variation from 'understory preservation'
Habitat Preservation and Restoration - new design/restoration - active**	10		
Habitat Preservation and Restoration - adjacent to sensitive area**	15		Sensitive area on or off development area.

- Façade, or Foundation, plantings have several options with the greater points given to enhanced and professional design.
- Pedestrian Uses vary by the use, the type of demand, and its location to public accessible or private amenities.
- Pavements are extended from the current Article X but with an added incentive of a 'cool vehicular pavement' for parking lots.
- Conservation includes points for tree preservation in the development area and credits habitat preservation on applicable properties, especially near streams and slopes.

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Design Options

Low Impact Development		20	
Rain Garden**	5		
Bioswale**	10		
Open Space**	5		
Provide application and demonstrate ability to attain iSWM minimum standards.**	10		
Parking Lots		30 for lots 10 acres and greater; 20 for lots less than 10 acres	
Protected and Shaded Pedestrian Pathway to Building from ROW	5		Wide landscape median with trees and walkway.
Parking islands - Interior - at 10 spaces between landscape islands	5		Lots at 60 spaces or more.
Parking islands - Interior (>200 sf minimum in area, per tree)	5		201 sf or more with large/medium tree. 75%+ of interior islands.
Parking islands - Interior (>300 sf minimum in area, per tree)	10		301 sf or more with large/medium tree. 50%+ of interior islands.
Parking islands - Interior (>300 sf minimum in area, per tree - individual)	2	10	Same as above, but counted individually in parking lot to 10 pts.
Landscape Medians - Interior - min. 10' wide	5		Minimum standard is 8' wide.
Landscape Medians - Interior - min. 12' wide	10		
Landscape Medians - Interior - min. 16' wide	15		
Large Trees in Minimum of 400 sf dedicated surface area.	2	20	
Pocket Park - Interior from buffer - minimum of 2500 sf contiguous soil surface.	20		Minimum of 6 large trees in 400 sf per tree.
General		10	
Provide application and demonstrate ability to attain SITES Certified level*	10		
Landscape Maintenance Plan - 3 year minimum*	5		
Water Wise Irrigation System implemented throughout property.**	5		

- Low Impact Development includes stormwater management designs and therefore requires technical design and skills for implementation. iSWM is currently being reviewed for potential credit applicability.
- Parking lot credits provide larger lots the opportunity to expand planting areas for shade trees in applicable locations. These will also be relevant in tree mitigation reduction proposals to follow later.
- General provisions pertain to improved 'water-wise' irrigation design standards, detailed landscape maintenance plans, and also an opportunity to score with SITES attainment²⁸

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Discussion Items

Landscape Plan Submission:

- Except as otherwise stated, any person may prepare the landscape plan required under this division....
A Landscape Architect is required to submit landscape plans for all permits for construction on building sites, or artificial lots, 3 acres or larger.

Application:

- Lot or tract is increased by more than 2,000 sf within a 24 month period, exclusive of pedestrian pathways.
- Increases the number of stories that increases the height of a building on the lot.

Definition:

PEDESTRIAN PATHWAY means an unobstructed space intended solely for the use of pedestrians and being provided for pedestrian circulation and distinguished from parking and driving surface by landscape barriers or a change in surface materials such as pavers, patterned concrete or flagstones.

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to be addressed or revisited

- Additional Design Options
- Golf Courses
- Driving Ranges
- Athletic Fields
- Parks
- Vehicle Display Lots
- Industrial uses
- Irrigation
- Underground Utility restrictions
- Landscape Manual
- Special Exceptions
- Compliance and enforcement
- Purpose and other sections as needed

NEXT.....

Tree Preservation - Introduction and Overview

APPENDIX

REFERENCES

REFERENCES:

- Trees, Parking, and Green Law: Strategies for Sustainability – K. Wolf
- Dallas Urban Heat Island Report
- City of Orlando Landscaping and Parking Lot ordinances
- City of Oklahoma City Landscape Ordinance
- City of Baton Rouge Landscape Ordinance
- Athens-Clarke County, Georgia Best Management Practices for Community Trees
- Prince George’s County, Maryland Landscape Manual

All reference material and other sources can be found on the website below

<https://sites.google.com/site/dallastrees/> (Dallastrees.net)

LANDSCAPING

Single Family and Duplex Uses

Current Code

Except as provided in Section 51A-10.127, a lot containing a single family or duplex use established after May 29, 1994, must comply with this subsection before the final inspection of any building on the lot. The lot must have at least three trees with a caliper equal to or exceeding two inches. At least two of these trees must be located in the front yard. The trees must be species listed in Section 51A-10.134. The trees may be located in the public right-of-way if all private licensing requirements of the city code and charter are met.

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Shared Access Development (Other than SF districts)

Current Code

- (B) **Districts other than single family districts.** Shared access developments in districts other than single family districts must comply with the following requirements:
- (i) **A minimum of 20 percent of the shared access development must be designated as landscape area.** Permeable pavement does not count as landscape area.
 - (ii) **One site tree must be provided for every 4,000 square feet within the shared access development.** Every site tree must have a planting area of at least 25 square feet. The trunk of any site tree must be located at least two-and-one-half feet from any pavement. Site trees must be species listed in Section 51A-10.134.
 - (iii) **In addition to any site trees, one large canopy street tree must be provided for every 25 feet of street frontage, excluding shared access points, with a minimum of two street trees required.** Street trees may be located within the front yard or parkway if all private licensing requirements of the city code and charter are met. In this subparagraph, parkway means the portion of a street right-of-way between the projected street curb and the front lot line or corner side lot line. **If the director determines that a large canopy tree would interfere with utility lines, a substitute street tree from a species listed in Section 51A-10.134 may be provided.**