

# Development Manual

(Updated 05-18-2022)

This document is to augment the LDC and set forth the process which applicants need to follow in order to gain approval of site development permits and pursue construction of land improvements in Pasco County.

The intent of the Development Manual is to establish development application review procedures while providing clear and concise descriptions of the process. The Development Manual is not intended to replace or supersede Pasco County Comprehensive Plan Policies, Pasco County Land Development Code Requirements, previous Development Agreements, or any other regulatory agency's requirements.

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## SITE DEVELOPMENT IN PASCO COUNTY

### Comprehensive Plan

On June 16, 1989, Pasco County adopted the Pasco County Comprehensive Land Use Plan. This document was a requirement of Chapter 163, Florida Statutes. The intent of the Comprehensive Plan is to encourage the most appropriate use of land, water, and resources consistent with the public interest. The Pasco County Comprehensive Plan is a state mandated document designed to guide the future growth and development of Pasco County. The Comprehensive Plan was amended in June 2006 and after a settlement agreement became effective on January 26, 2007; all development orders approved after January 26, 2007, are required to comply.

### Zoning

In 1975, Pasco County adopted the original Zoning Ordinance. When the Zoning Ordinance was originally enacted, all land in Pasco County was inspected and a zoning district applied to that parcel of land. The zoning district on a piece of land must be consistent with the Comprehensive Plan. There are 27 zoning districts within Pasco County. These zoning districts list permitted uses, accessory uses, conditional uses, special exception uses, minimum lot sizes, width, setback and height requirements. If a person wishes to change the zoning district on a piece of land, then a public hearing process must be conducted. Zoning amendments and conditional uses require a public hearing before the Planning Commission (PC) and the Board of County Commissioners (BCC). Special exception uses require a public hearing before the PC only. Approval or disapproval of any zoning amendment, conditional use or special exceptions is accomplished by resolutions, which, in the case of conditional use and special exceptions, may, or may not, contain conditions. These resolutions are then recorded on the County GIS layer.

### Site Development

Approval or disapproval of all development applications is done in written form with or without conditions and must be acknowledged by the applicant. All land development activities must be in accordance with the Comprehensive Plan, Land Development Code (LDC), and other State and local rules and regulations.

A commercial building permit application can be submitted after receiving initial comments on the site plan review, but the building permit cannot be issued until the site plan is approved. With a few exceptions, a building permit application for a structure in a subdivision cannot be issued until Record Plat approval is complete.

### Record Plat

All Record Plats are reviewed for compliance with the development orders, Comprehensive Plan, LDC, and the Florida Statutes. Once reviewed, the Record Plat is submitted to the BCC for acceptance and then recorded in the Public Records of Pasco County.

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## Pertaining to All Site Development Applications:

### **Applicability and General Provisions ([LDC 301](#))**

### **Authority to File Development Applications ([LDC 303.2](#))**

### **Authority to Access the Property ([LDC 303.3](#))**

### **Fees ([LDC 303.4](#))**

In accordance with [Resolution 18-266](#) (\*3.24.2020-anticipated BCC hearing of Fee Schedule) adopting the Development Services Fee Schedule:

“Where work has commenced without obtaining a permit, the permit application fee shall be double.”

### **Preapplication Consultation ([LDC 303.5](#))**

Preapplication consultations are required prior to the submittal and acceptance of applications for:

Zoning Amendment, Conditional Use, Special Exception, Preliminary Site Plan (PSP), Preliminary Development Plan (PDP), Minor Rural Subdivision (MRS), and Operating Permits.

### **Preapplication Consultation Waiver Request**

Where an applicant desires to waive an otherwise required preapplication consultation, unless otherwise determined by the County Administrator or designee, the request must include the following elements:

1. The owner/applicant/agent (applicant) must provide a signed letter. This signature may be a pdf scan of a wet signature on the letter, or an electronic/digital signature. A basic signature in a text font is not acceptable. The letter should be written on the applicant's professional letterhead. It should be addressed to the Development Review Manager.
2. Include the name of the project as it will be named for the application for review.
3. If a file has been created in Accela for the preapplication consultation or the review submittal application, those numbers should be included on the letter for reference.
4. The letter needs to include a brief narrative of the project.
5. The letter must include the language below.

As the applicant for this project I affirm that I understand not participating in a pre-application meeting places this development application at increased risk for review delays and/or denial. I affirm that it is my obligation to understand Pasco County's Land Development Code, Zoning and MPUD requirements as they relate to this project, as well as review and resubmittal timeline requirements, and Statutory deadlines for determinations on development applications. I understand that by waving the pre-application meeting, certain research generally done by the County for that meeting will need to be completed during the initial submittal timeline which may cause delays in receiving initial round comments. In requesting to waive the pre-application meeting requirement I am also agreeing to waive the Statutory timeline requirements (120/180 days as applicable). I affirm that I will convey these requirements and agreements to any agents, heirs, or successors. Furthermore, I agree to hold the County harmless for any and all costs associated with review delays and/or denial determination that may occur as a result of this request.

6. The applicant must sign the bottom of the document with a digital signature or handwritten signature (not simply a cursive font). This letter should be provided as a PDF document via email.

The County reserves the right to decline any preapplication consultation waiver request at the County's sole discretion.

### **Application Submittal and Acceptance ([LDC 303.6](#))**

### **Application Review ([LDC 303.7](#))**

### **Required Public Hearings for Development Approval Applications ([LDC, Table 303-5](#))**

<b>Application</b>	<b>PC</b>	<b>LPA</b>	<b>BCC</b>
Development of Regional Impact (DRI)	X		X
DRI Substantial Amendment (NOPC)	X		X
DRI Non-Substantial Amendment (NOPC)			X
DRI Development Order Amendment (no NOPC)			X
DRI Abandonment			X
DRI Rescission			X
Zoning Amendment	X		X
MPUD Amendment	X		X
MPUD Substantial Amendment	X		X
Conditional Use	X		X
Special Exception	X		
Conditional Use and Special Exception Revocation			X
Operating Permits (Except Minor Land Excavation)	X		X
Zoning Variance	X		
Alternative Relief	X		
Alternative Standards as Specified in <a href="#">LDC, Section 407.5 C and D</a>	X		
Wireless Facilities (Tier III)	X		X
Review of Staff Tier II Wireless Facility Determination			
Appeals of Administrative Determinations	X		
Appeals of Zoning Interpretations			X
Appeals of PC Decisions			X
Development Agreement		X	X

**Required Public Notice for Development Approval Applications ([LDC, Table 304-1](#))**

<b>Application</b>	<b>Mailed</b>	<b>Published</b>	<b>Posted</b>
Development of Regional Impact (DRI)	X	X	X
DRI Substantial Amendment (NOPC)	X	X	X
DRI Non-Substantial Amendment (NOPC)		X	X
DRI Development Order Amendment (no NOPC)		X	
DRI Abandonment	X	X	X
DRI Rescission	X	X	X
Zoning Amendment*	X	X	X
MPUD Substantial Amendment*	X	X	X
MPUD Non-Substantial Amendment**			X
Conditional Use*	X	X	X
Special Exception*	X	X	X
Minor Land Excavation*			
Zoning Variance	X		X
Alternative Relief	X		X
Alternative Standards as Specified in <a href="#">LDC, Section 407.5 C and D</a>	X		X
Wireless Facility (Tier II)	X		X
Appeals ( <a href="#">see LDC, Section 407.1</a> )	X	X	X
Preliminary Site Plan and Substantial Modifications to	X		
Preliminary Development Plans and Substantial Modifications to	X		
Mass Grading and Substantial Modifications to	X		
Vested Rights	X		X

\*See [LDC, Section 305](#) & [Section 306](#) for Neighborhood Meeting and Neighborhood Notice Requirements.

\*\*Posted notice to occur within two (2) business days of the final written approval.

**Neighborhood Meeting ([LDC 305](#))**

A Neighborhood Meeting is mandatory for the following development approval applications:

Zoning Amendment within the four (4) rural areas depicted on Map 2-13 of the Comprehensive Plan, Land Excavation and Minor Land Excavation, Mining, Construction and Demolition Debris Disposal Facilities, Yard Trash Processing Facilities, Sanitary Landfills, Wireless Facilities (Tier III), and Helipad(s) and/or Airport Landing Facilities.

**Neighborhood Notice ([LDC 306](#))**

**Construction and Inspection of Improvements ([LDC 309](#))**

**Review Timeframe where Public Hearing is required:**

	<b>Content Review</b>	<b>Final Public Hearing*</b>
<b>Review Time (Calendar Days)</b>	5	180

\*Final Public Hearing Action shall be made on or before the end of the 180-day period.

**Review Timeframe where no Public Hearing is required:**

\*Final Action (Approve, Approve with Conditions, or Deny) shall be made on or before the end of the 120-day review period.

**Standard Review Timeframe:**

	<b>Content Review</b>	<b>Initial Review</b>	<b>Max Days w/ Applicant</b>	<b>Resubmittal Review</b>	<b>Final Review</b>	<b>Memo Crafting</b>
<b>Review Time (Calendar Days)</b>	5	28	60	2	21	7

- Post Comment Meeting (Optional)

- If an application is not approvable after the Final Review, the applicant may request, and may be granted at the County’s discretion, one or more additional rounds of review. The applicant is required to pay the additional fee for each additional round of review. In requesting one or more additional rounds of review, the applicant agrees to waive all Statutory review timelines. After the Final Review round, or following any subsequent round, the applicant may request a determination be made on the application, though the County is under no obligation to make an approval determination for an application deemed to not meet the LDC requirements.

**Expedited Review Timeframe:**

	<b>Content Review</b>	<b>Initial Review</b>	<b>Max Days w/ Applicant</b>	<b>Resubmittal Review</b>	<b>Final Review</b>	<b>Memo Crafting</b>
<b>Review Time (Calendar Days)</b>	5	21	60	2	14	7

- Shorter initial and final review times
- Post Comment Meeting (Optional)
- Collaborative Comment Review – Comments may be discussed outside of the Post Comment Meeting

**PRE-SUBMITTAL REVIEW TIMEFRAME WAIVER**

If an applicant feels they will be unable to provide the required information within the timeframes noted above, they shall submit a written request along with the Initial Submittal of the project and required submittal documents. The request shall provide a clear explanation of the unique circumstances that would prevent the project’s review from being completed within the set timeframe for review. If the request is approved the applicant will be permitted to extend their time to respond to Initial Review comments by sixty (60) days or, where Public Hearing is required, will extend the Final Action date by sixty (60) days, and shall pay the Review Timeframe Waiver Fee as noted on the Pasco County Fee Schedule (\*3.24.2020-anticipated BCC hearing of Fee Schedule).

**Review Timeframe where Public Hearing is required:**

	<b>Content Review</b>	<b>Final Public Hearing*</b>
<b>Review Time (Calendar Days)</b>	5	180 + 60

**Review Time Frame where no Public Hearing is required:**

\*Final Action (Approve, Approve with Conditions, or Deny) shall be made on or before the end of the 120-day + 60 days review period.

**Standard Review Timeframe:**

	<b>Content Review</b>	<b>Initial Review</b>	<b>Max Days w/ Applicant</b>	<b>Resubmittal Review</b>	<b>Final Review</b>	<b>Memo Crafting</b>
<b>Review Time (Calendar Days)</b>	5	28	60 + 60	2	21	7

- Post Comment Meeting (Optional)
- If an application is not approvable after the Final Review, the applicant may request, and may be granted at the County’s discretion, one or more additional rounds of review. The applicant is required to pay the additional fee for each additional round of review. In requesting one or more additional rounds of review, the applicant agrees to waive all Statutory review timelines. After the Final Review round, or following any subsequent round, the applicant may request a determination be made on the application, though the County is under no obligation to make an approval determination for an application deemed to not meet the LDC requirements.

**Expedited Review Timeframe:**

	<b>Content Review</b>	<b>Initial Review</b>	<b>Max Days w/ Applicant</b>	<b>Resubmittal Review</b>	<b>Final Review</b>	<b>Memo Crafting</b>
<b>Review Time (Calendar Days)</b>	5	21	60 + 60	2	14	7

- Shorter initial and final review times
- Post Comment Meeting (Optional)
- Collaborative Comment Review – Comments may be discussed outside of the Post Comment Meeting

## EMERGENCY REVIEW TIMEFRAME WAIVER

If an applicant feels they will be unable to provide the required information within the timeframes noted above due to a Declaration of Emergency by Executive Order by the Office of the Governor of the State of Florida they shall submit a written request to the county stating such. This waiver would extend the applicant's time by sixty (60) days to receive a Final Action on the development application.

## POST SUBMITTAL REVIEW TIMEFRAME WAIVER

If an applicant feels they will be unable to provide the required information within the timeframes noted above, they shall submit a written request along with supporting information/documentation identifying the reason for the request. If the request is approved the applicant will be permitted to extend their time to respond to Initial Review comments by sixty (60) days or, where Public Hearing is required, will extend the Final Action date by sixty (60) days, and shall pay the associated fee as noted on the Pasco County Fee Schedule (\*3.24.2020-anticipated BCC hearing of Fee Schedule). The County Administrator or designee reserves the right to evaluate requests on a case-by-case basis and may waive this fee if deemed, at the County's sole discretion, that certain circumstances warrant the fee be waived.

### Review Timeframe where Public Hearing is required:

	Content Review	Final Public Hearing*
Review Time (Calendar Days)	5	180 + 60

### Review Time Frame where no Public Hearing is required:

\*Final Action (Approve, Approve with Conditions, or Deny) shall be made on or before the end of the 120-day + 60 days review period.

### Standard Review Timeframe:

	Content Review	Initial Review	Max Days w/ Applicant	Resubmittal Review	Final Review	Memo Crafting
Review Time (Calendar Days)	5	28	60 + 60	2	21	7

- Post Comment Meeting (Optional)
- If an application is not approvable after the Final Review, the applicant may request, and may be granted at the County's discretion, one or more additional rounds of review. The applicant is required to pay the additional fee for each additional round of review. In requesting one or more additional rounds of review, the applicant agrees to waive all Statutory review timelines. After the Final Review round, or following any subsequent round, the applicant may request a determination be made on the application, though the County is under no obligation to make an approval determination for an application deemed to not meet the LDC requirements.

### Expedited Review Timeframe:

	Content Review	Initial Review	Max Days w/ Applicant	Resubmittal Review	Final Review	Memo Crafting
Review Time (Calendar Days)	5	21	60 + 60	2	14	7

- Shorter initial and final review times
- Post Comment Meeting (Optional)
- Collaborative Comment Review – Comments may be discussed outside of the Post Comment Meeting

**Each Development Application has standards/requirements for Review and Approval. It is the Applicant's responsibility to review the applicable Florida State Statutes, rules and regulations of other government agencies having jurisdiction, Pasco County Comprehensive Plan Policies, Pasco County Land Development Code Requirements, previous Development Agreements, and the Florida Building Code.**

## **COMPREHENSIVE PLAN AMENDMENT [reserved]**

Petitions for a CPA have specific requirements ([Application](#) / [Submittal Requirements](#)). A Preapplication Consultation is required for CPAs. Please engage with the [Long Range Planning](#) Division in the [Planning & Development](#) Department regarding specific questions pertaining to CPAs.

## **ZONING AMENDMENT [reserved]**

Petitions for a Euclidean Zoning Amendment, a [Conditional Use](#), or a [Special Exception](#).

## **MPUD ZONING AMENDMENT [reserved]**

Petitions for an MPUD Zoning District have specific requirements ([Application](#) / [Submittal Requirements](#)). A Preapplication Consultation is required for MPUDs. Please engage with the [Current Planning](#) Division in the [Planning & Development](#) Department regarding specific questions pertaining to MPUDs.

## **PRELIMINARY DEVELOPMENT PLAN – RESIDENTIAL [reserved]**

Applications for residential subdivisions will also need to comply with [Construction Plans](#) and [Stormwater Management Plan & Report](#). Prohibitions pertaining to subdivisions and platting can be viewed in [LDC, Section 700.10, Prohibitions](#). Model Center Typical reviews are submitted in conjunction with the PDP.

## **PRELIMINARY DEVELOPMENT PLAN – NON-RESIDENTIAL/MIXED USE**

### **[reserved]**

Applications for non-residential or mixed use subdivisions will also need to comply with [Construction Plans](#) and [Stormwater Management Plan & Report](#). Prohibitions pertaining to subdivisions and platting can be viewed in [LDC, Section 700.10, Prohibitions](#). When residential uses are proposed, the Model Center Typical reviews are submitted in conjunction with the PDP.

## **PRELIMINARY SITE PLAN [reserved]**

Applications for preliminary site plan will also need to comply with [Construction Plans](#) and [Stormwater Management Plan & Report](#) unless otherwise noted.

## **FILL [reserved]**

Applications for Fill Permits shall be submitted through Building Construction Services – Central Permitting.

## **MASS GRADING [reserved]**

## **LIMITED FAMILY LOT DIVISION [reserved]**

## **TARGETED REDEVELOPMENT**

### **- PASCO COUNTY MARKET AREAS**

- [Harbors \(West\)](#)
- [Gateway Crossing \(South\)](#)
- [Midlands \(Central\)](#)
- [Highlands \(East\)](#)
- [Countryside \(North\)](#)

**- REDEVELOPMENT LANDSCAPING ([LDC, Table 403.10-A](#))**

Circumstance		Conformity Required
Existing structure floor area is expanded	Twenty-five (25) percent or less	<ul style="list-style-type: none"> <li>Building perimeter landscaping shall be required adjacent to any addition.</li> </ul>
	Twenty-six (26) percent or more	<ul style="list-style-type: none"> <li>Building perimeter landscaping shall be required adjacent to the addition/additional structure(s), and, where feasible, adjacent to any existing structure(s) requiring building perimeter landscaping per this Code.</li> </ul>
Value of work associated with redeveloped, remodeled, or renovated structure. (except ordinary repair and maintenance)	Between twenty-five (25) and fifty (50) percent of the appraised building value	<ul style="list-style-type: none"> <li>Buffers shall be installed along roadways and adjacent to residential properties.</li> <li>Building perimeter landscaping adjacent to addition.</li> </ul>
	Between fifty-one (51) and seventy-five (75) percent of the appraised building value	<ul style="list-style-type: none"> <li>All property buffers.</li> <li>Building perimeter landscaping adjacent to any addition/additional structure(s), and, where feasible, adjacent to any existing structure(s) requiring building perimeter landscaping per this Code.</li> <li>All vehicular use landscaping.</li> </ul>
	Exceeds seventy-five (75) percent of the appraised building value	<ul style="list-style-type: none"> <li>All property buffers.</li> <li>All building perimeter landscaping, where possible.</li> <li>All vehicular use landscaping.</li> </ul>
Alteration of vehicular use area other than restriping, resealing, or resurfacing		<ul style="list-style-type: none"> <li>Expanded area shall provide the required minimum landscape area as required in Table 905.2.C.</li> </ul>

**Operating Permits:**

[Minor Land Excavation](#)

[Land Excavation](#)

[Mining](#)

[Construction and Demolition Debris Facilities](#)

[Land Spreading](#)

[Yard Trash Processing](#)

**[SIGNS](#) [reserved]**

Applications for Sign Permits shall be submitted through Building Construction Services – Central Permitting.

**[BILLBOARDS](#) [reserved]**

Applications for Billboard Permits shall be submitted through Building Construction Services – Central Permitting.

## **DIGITAL BILLBOARDS [reserved]**

Applications for Digital Billboard Permits shall be submitted through Building Construction Services – Central Permitting.

Digital Billboard applications will also require a Section 70.20, Florida Statutes, Agreement, a demolition permit, a building permit, and an operating permit.

## **RIGHT-OF-WAY USE PERMIT [reserved]**

Applications for Right-of-Way Use Permits shall be submitted through Building Construction Services – Central Permitting.

## **GARDEN PLAN PERMITS [reserved]**

## **VILLAGES OF PASADENA HILLS**

### **CONNECTED CITY**

- **DEVELOPING IN CONNECTED CITY**
- **ENABLING DOCUMENTS**

### **Relief Procedures:**

**Appeals**

**Zoning Variances**

**Administrative Variances**

**Alternative Relief**

**Alternative Standards**

**Vested Rights**

**Unintended Consequences Relief**

### **SPECIAL DEVELOPMENT STANDARDS:**

The special development standards may apply to your development proposal in addition to all other development standards noted in [LDC, Section 900, Development Standards](#).

**Vehicle Dealerships**

**Large Scale Commercial Retail Design Standards**

**Hurricane Hazards**

**Flood Damage Prevention**

**Self-Storage Facilities Design Standards**

### **MISCELLANEOUS STRUCTURE REGULATIONS:**

**Docks and Seawalls [reserved]**

**Wireless Communication Facilities [reserved]**

**Gates, Fences, and Walls [reserved]**

**OVERLAYS AND SPECIAL DISTRICTS:**

[Traditional Neighborhood Development](#) (TND) [reserved]

[Pasadena Hills](#) [reserved]

[Connected City Stewardship District](#) [reserved]

[Northeast Pasco Rural Protection Overlay](#) [reserved]

**CONCURRENCY** [reserved]

## ACCELA FOR SITE DEVELOPMENT

\*Please note: the Accela link below is for Site Development, the horizontal development of the land.

Follow the link below to create an account and begin your development application.

<https://permits.pascocountyfl.net/CitizenAccess/Default.aspx>

### [Register for an Account](#)

### [Create an Application](#)

#### ▼ Planning General

- Access Management
- Administrative Variance
- Alternative Standards
- Appeal
- Comprehensive Plan Amendment
- No Improvement Plan
- Operating Permits
- Pain Management
- Plats
- Pre-Application Meeting
- Right of Way
- Site Development Permit
- Substandard Roads
- Timing and Phasing
- Variance

#### ▶ Planning General

#### ▼ Zoning

- Conditional Use
- Rezoning (Including MPUDs)
- Special Exception

#### ▶ Planning General

#### ▶ Zoning

#### ▼ Single Site/User Development

- (Preliminary) Site Plan/Simultaneous Submittal
- Construction/Stormwater Plan & Report
- Landscaping
- Mass Grading
- Site Development Permit

#### ▶ Planning General

#### ▶ Zoning

#### ▶ Single Site/User Development

#### ▼ Subdivision - Residential

- (Preliminary) Development Plan/Simultaneous Submittal (Residential)
- Construction/Stormwater Plan & Report
- Landscaping
- Mass Grading

- ▶ Planning General
- ▶ Zoning
- ▶ Single Site/User Development
- ▶ Subdivision - Residential
- ▼ Subdivision - Non-Residential/Mixed Use
  - (Preliminary) Development Plan/Simultaneous Submittal
  - Construction/Stormwater Plan & Report
  - Landscaping
  - Mass Grading

## GUIDELINES FOR PUBLIC NOTICING

Guidelines for Public Notice, Affidavit of Mailing, Neighborhood Notice Sample Letter, and Neighborhood Meeting Invitation Sample can be found under [Public Noticing Documents](#).

Creating mailing Labels for Public Notice can be done using [Pasco Mapper](#) and following the steps below (created 1/31/19).

- Click on the Pasco Mapper link above

OR

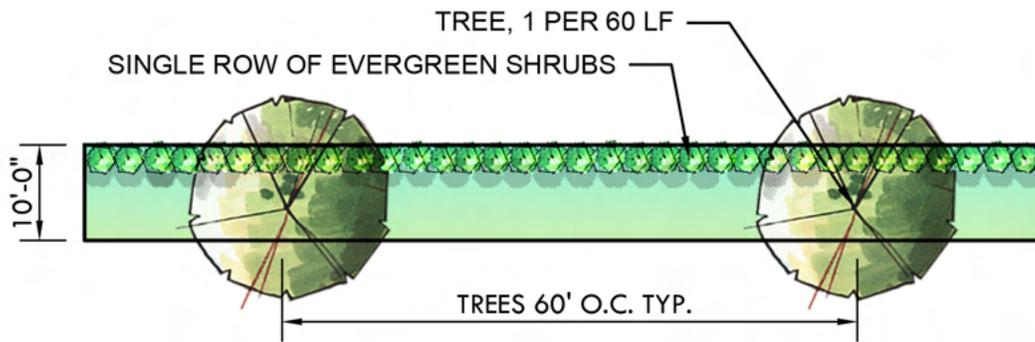
- Go to the Pasco County website at [www.pascocountyfl.net](http://www.pascocountyfl.net)
- Click on “Government” at the top then click on “Departments” and locate “Geographic Information Services (GIS)” and click the link
- On the GIS page click on “Pasco Mapper”

Then:

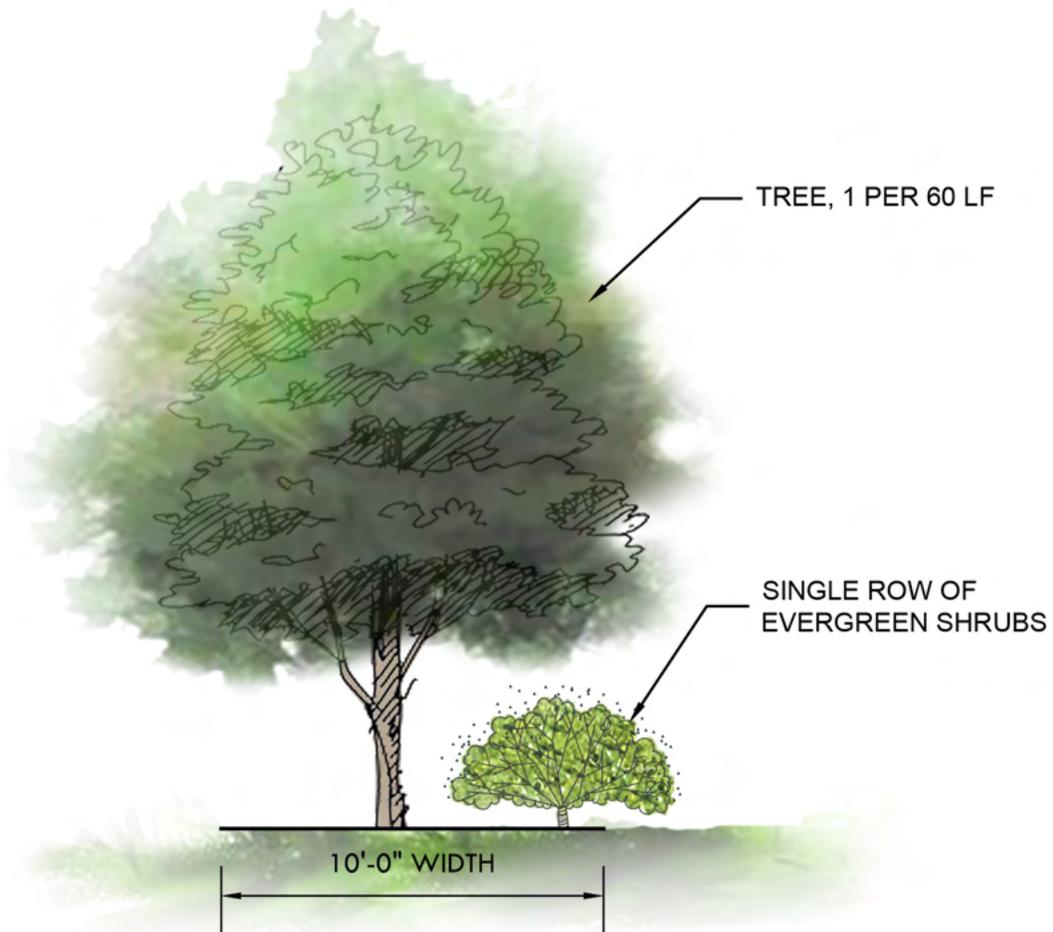
- In the search box in the upper left put your address, parcel ID, or street name, etc. and click the magnifying glass or hit Enter
- When your parcel shows up, find and click the “Public Notification” button at the bottom (it looks like an envelope), should be the third icon from the right
- The Public Notification dialogue box will open; click on “Polygon” (for an example – it’s the third icon from the right)
- Use your cursor to ‘draw’ around the perimeter of your parcel(s), clicking at corners and around curves, then double-clicking to end
- In the Public Notification dialogue box, click on the check box next to “Apply a search distance.” 500 Feet is the default but you can select another distance/measurement if desired. Please note some development projects required noticing within 1,000 feet of the project boundary.
- Once you click the check box, Pasco Mapper should populate a circle a distance around your project parcel(s) and in the dialogue box you will see a note that pops up at the bottom that tells you how many addresses showed up within your range and asks you if you want to continue.\*
- Click the “Download” button, click “Save” in the pop-up at the bottom, then click “Open” in the additional pop-up at the bottom of the screen.
- An Excel spreadsheet will open with all of your data you will need for your mailing labels.

\* You can also select the format that Pasco Mapper uses for the addresses in the “Format” dropdown in the dialogue box, for example, “PDF Label 1 X 4 inches; 20 per page.”

# BUFFER TYPE A

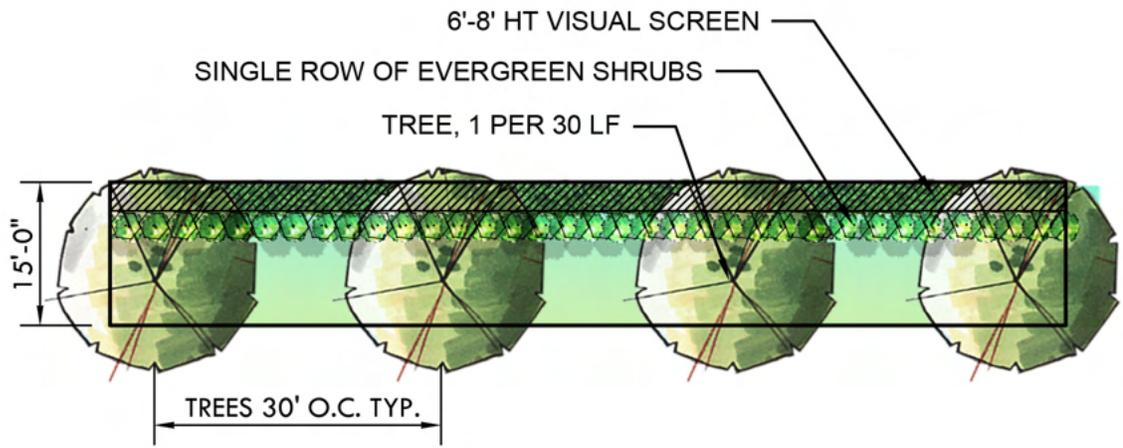


PLAN VIEW

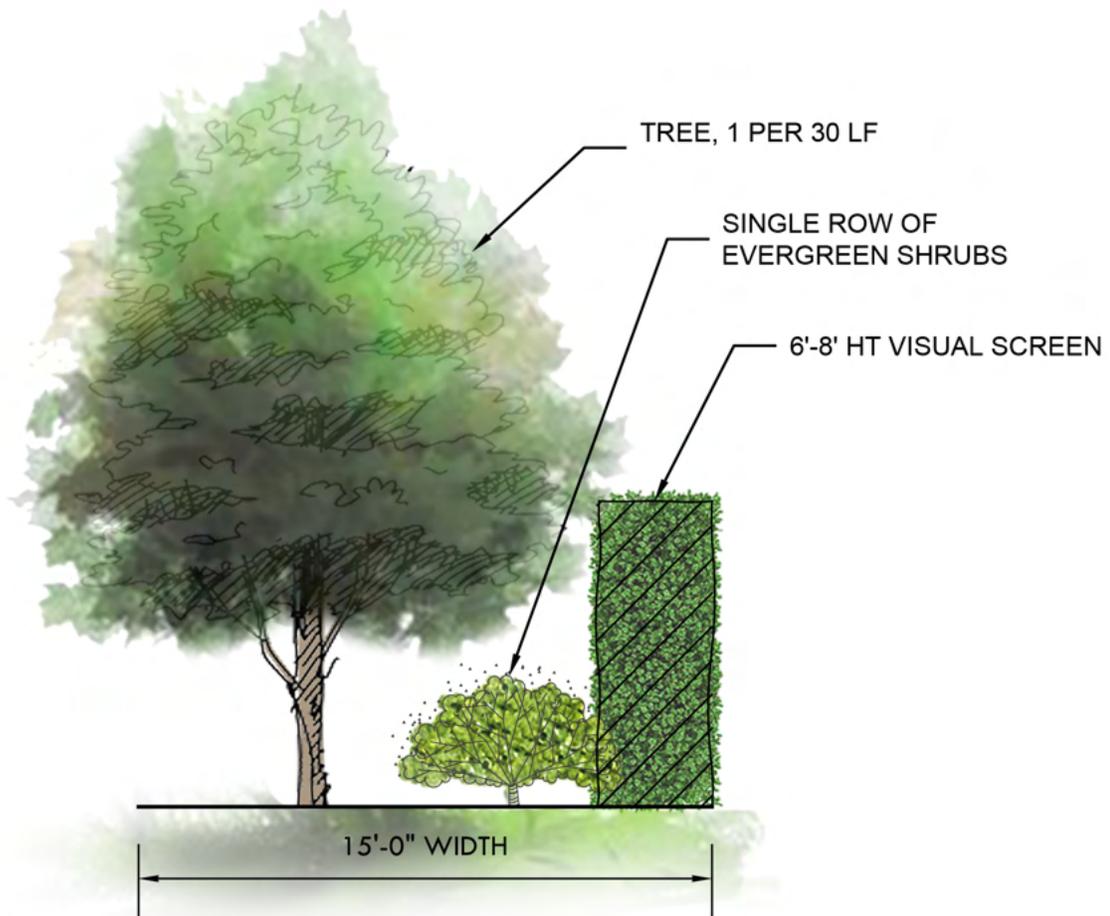


SECTION VIEW

# BUFFER TYPE B

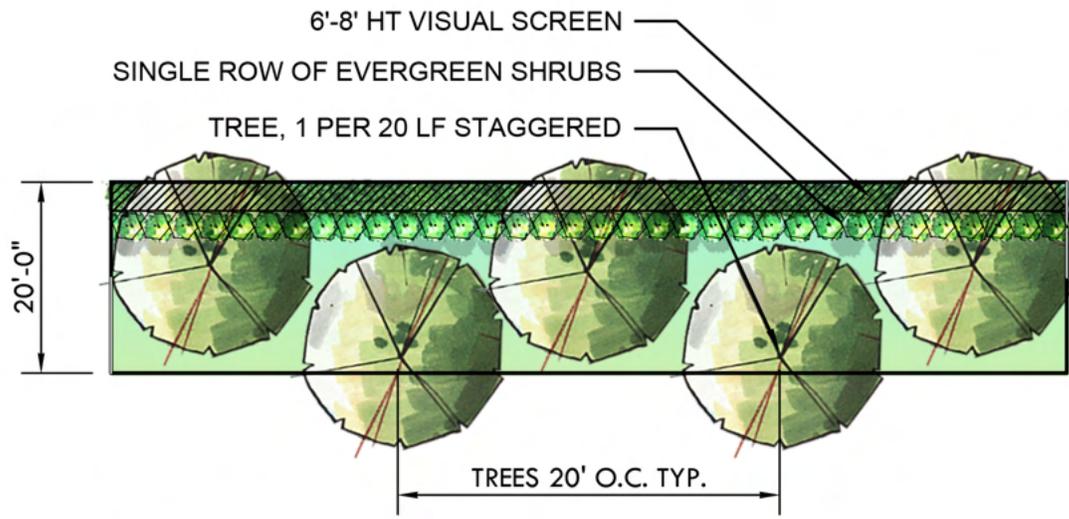


PLAN VIEW

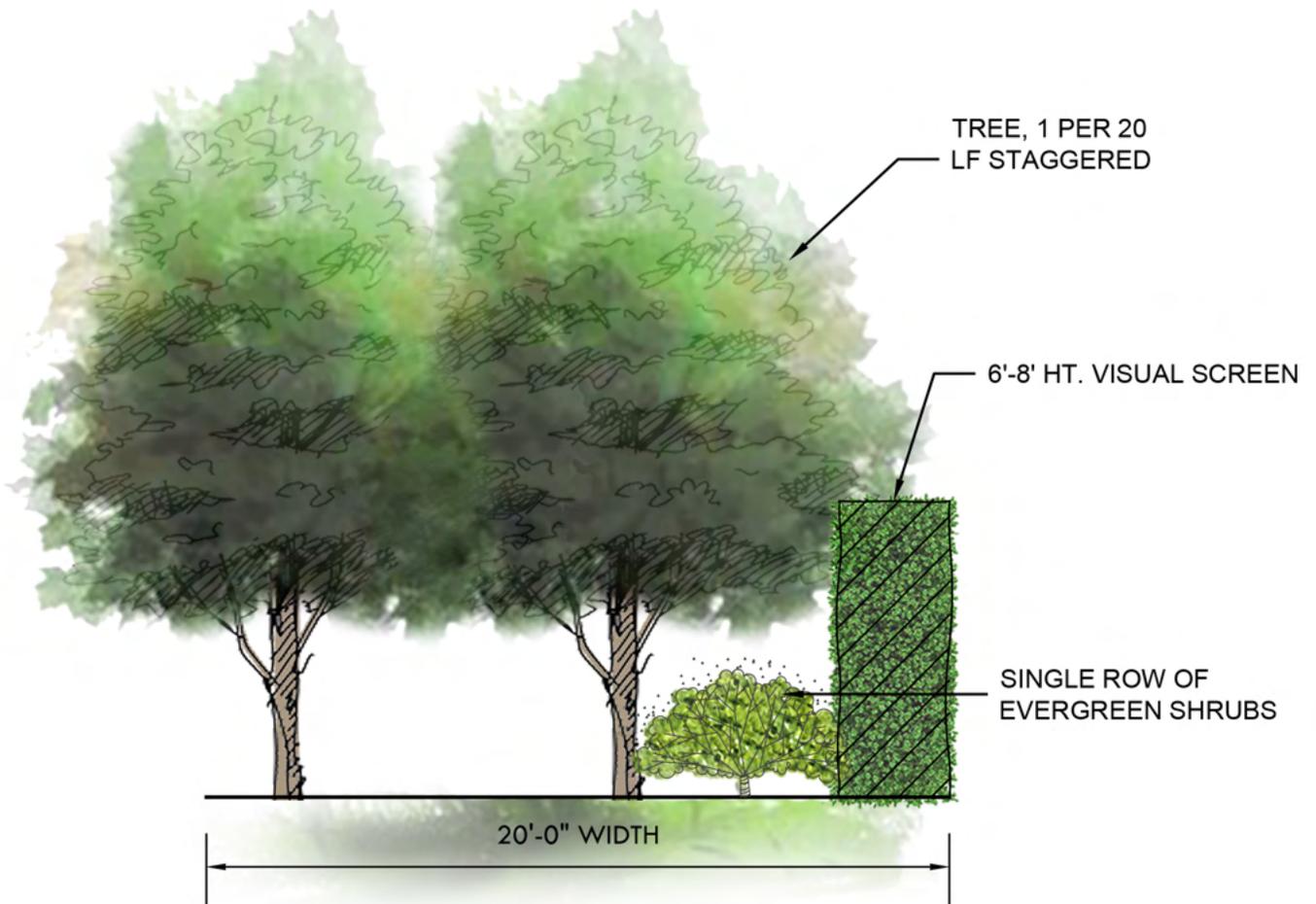


SECTION VIEW

# BUFFER TYPE C

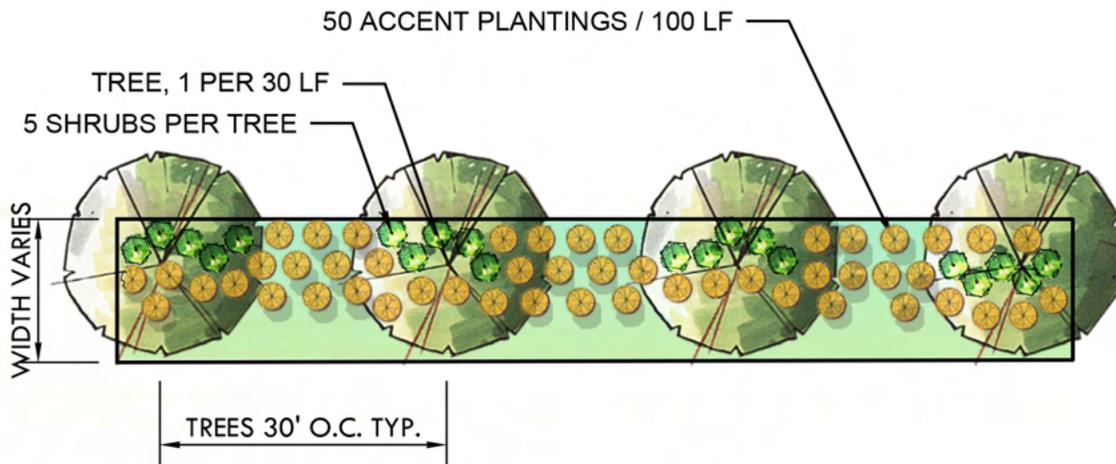


PLAN VIEW

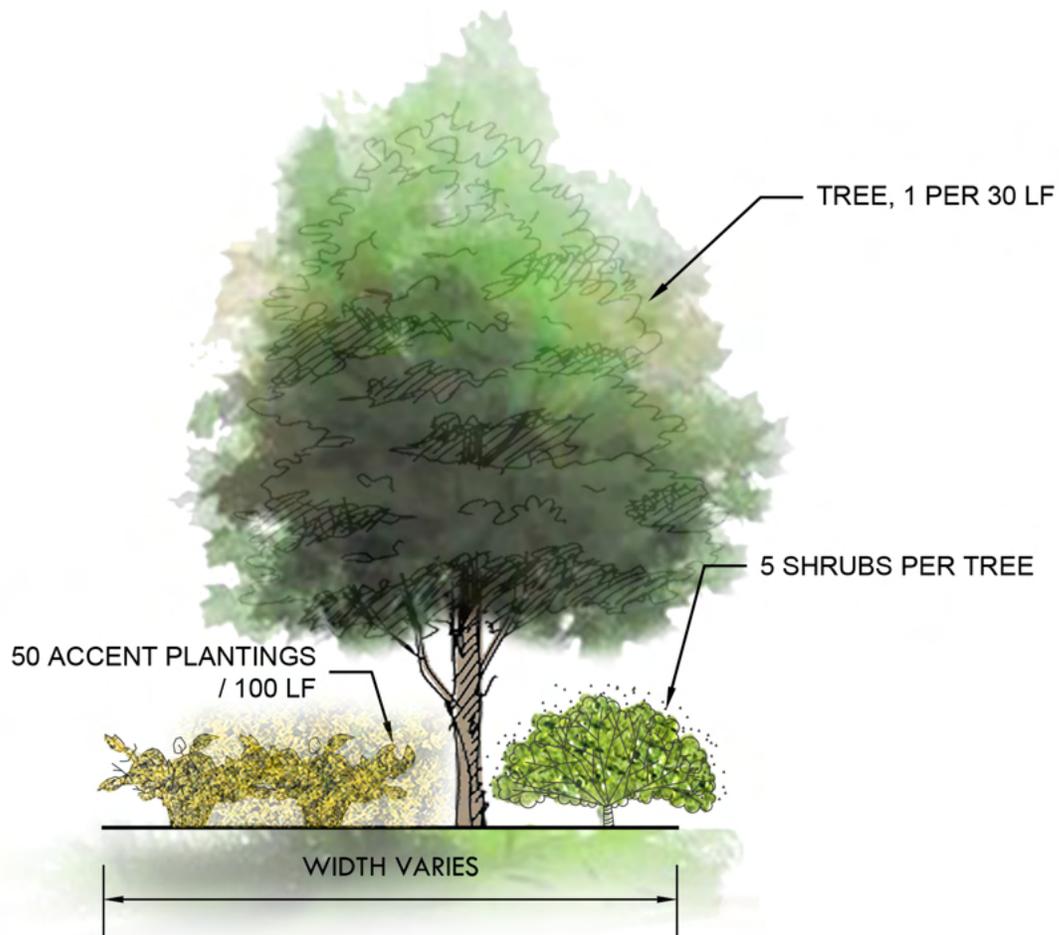


SECTION VIEW

# BUFFER TYPE D-1

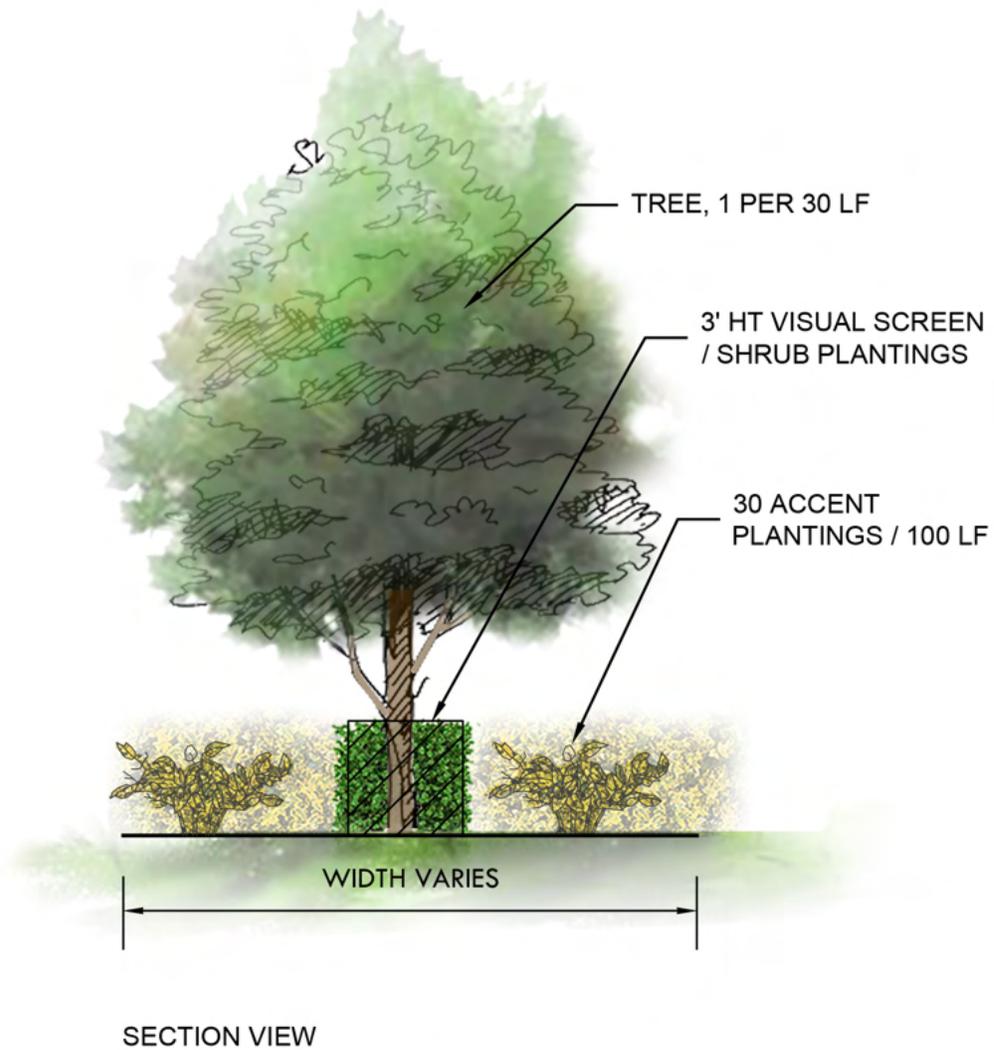
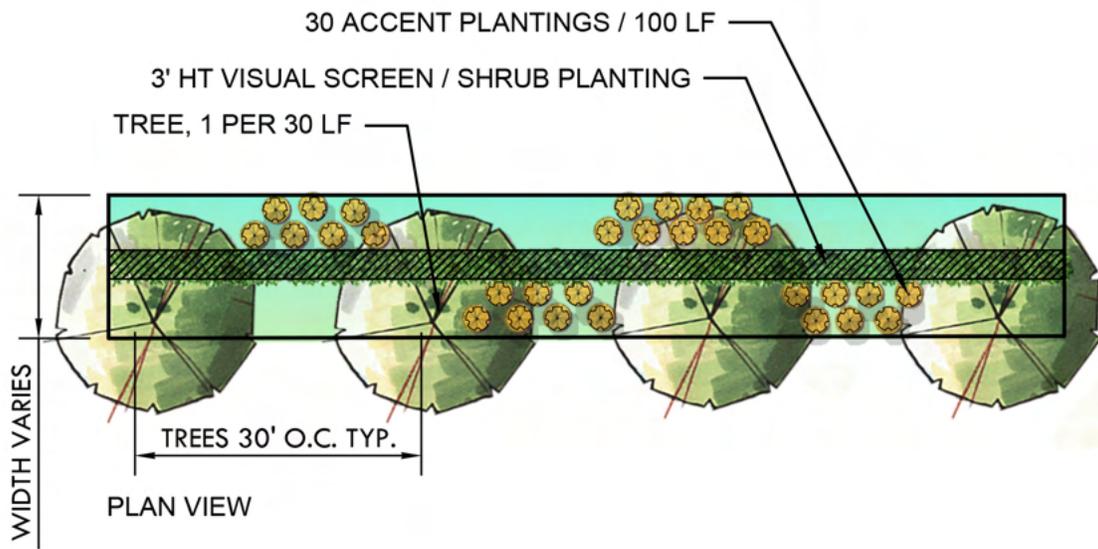


PLAN VIEW



SECTION VIEW

# BUFFER TYPE D-2



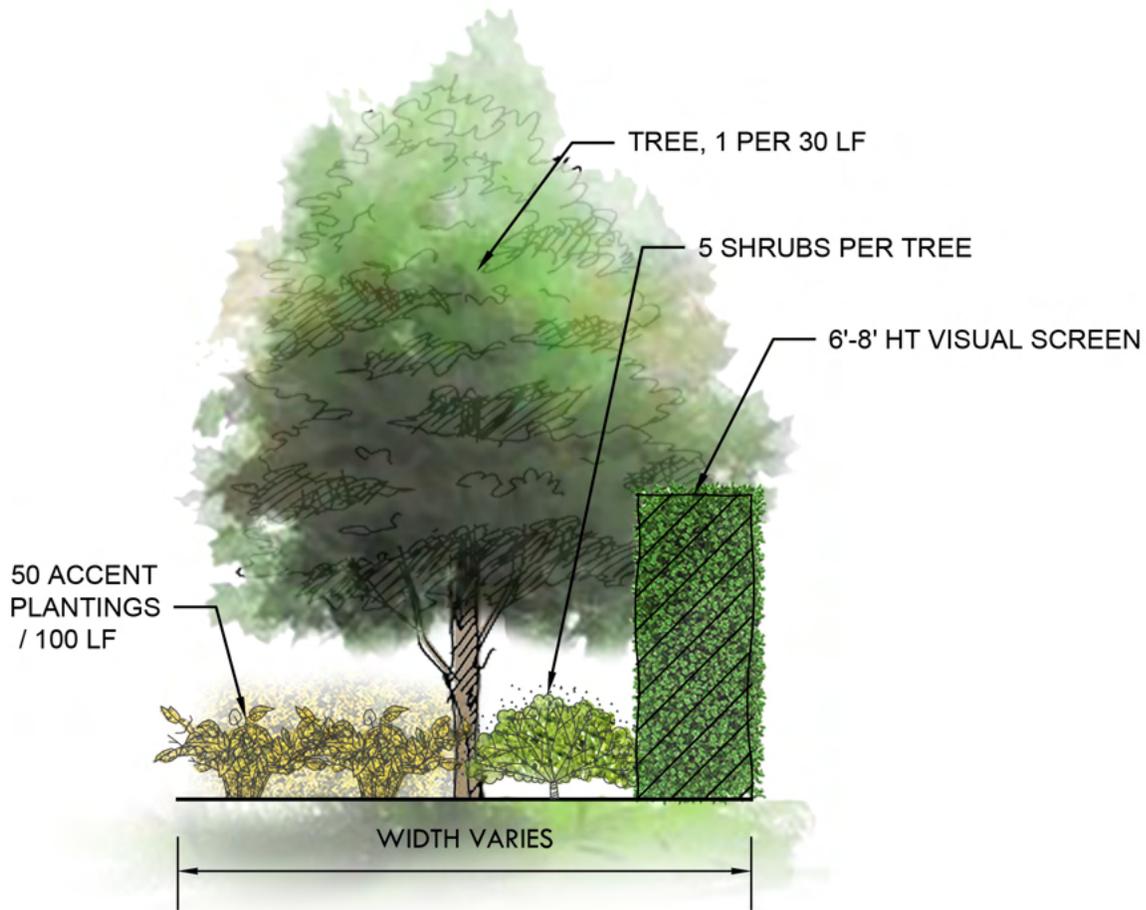
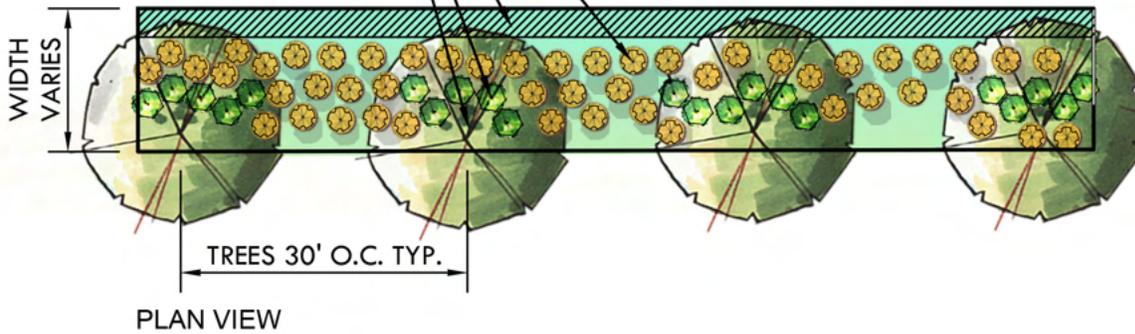
# BUFFER TYPE D-3

50 ACCENT PLANTINGS / 100 LF

6'-8' HT VISUAL SCREEN

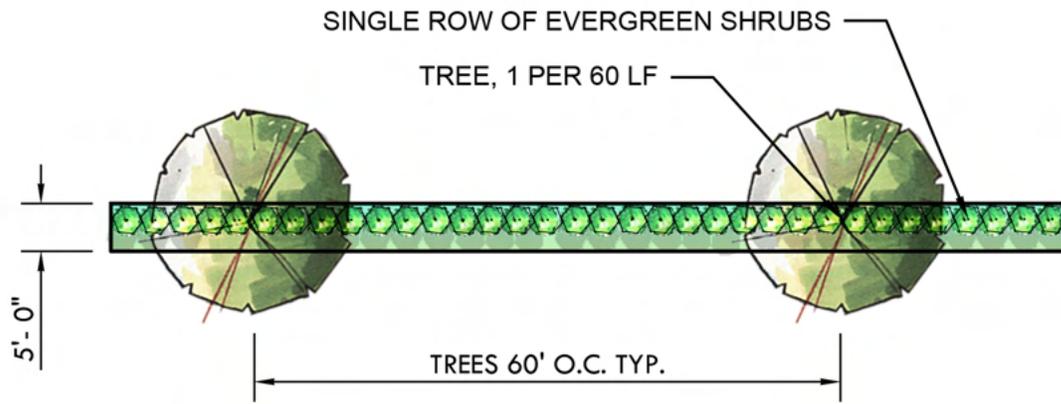
5 SHRUBS PER TREE

TREE, 1 PER 30 LF

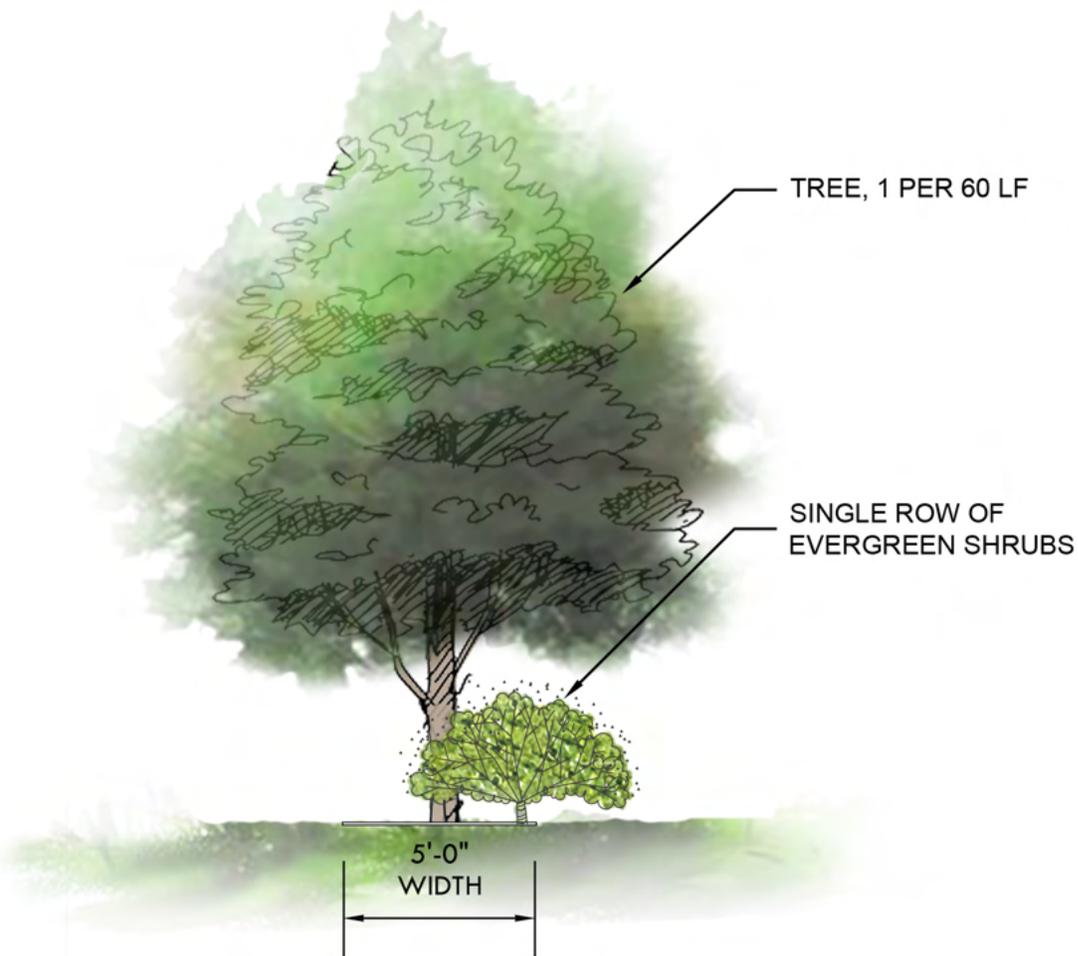


SECTION VIEW

# BUFFER TYPE E

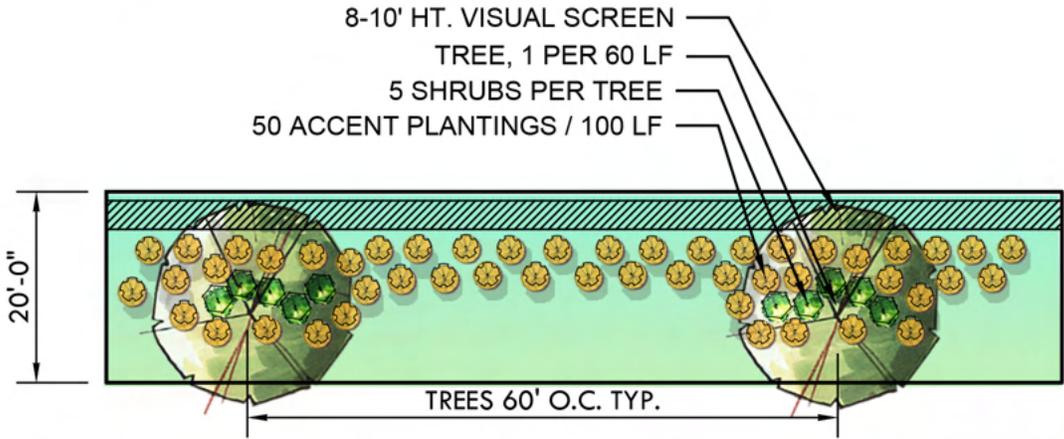


PLAN VIEW

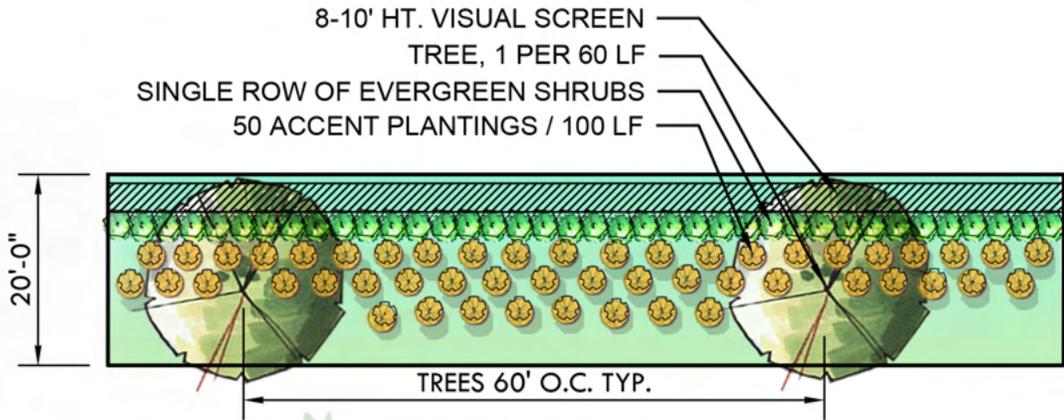


SECTION VIEW

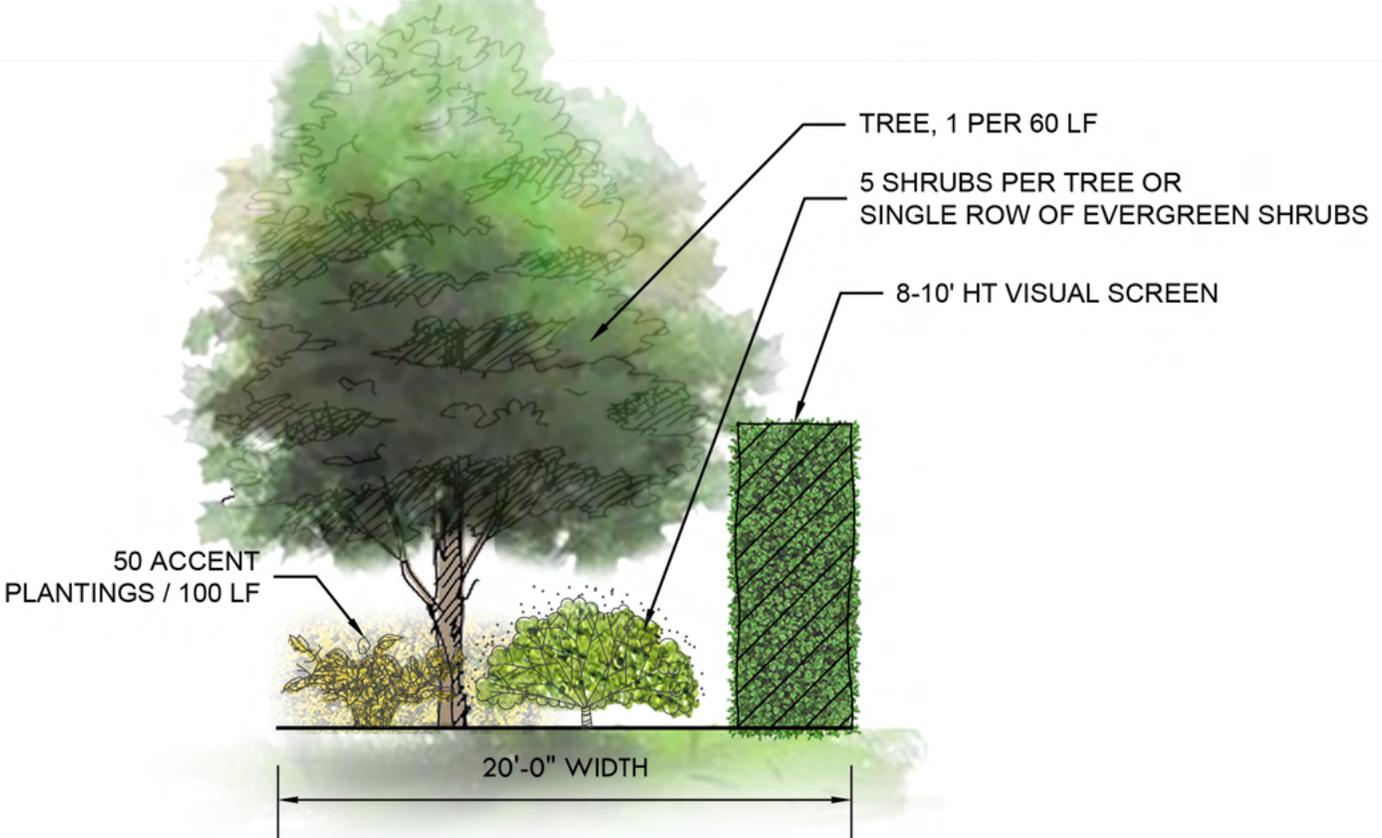
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PLAN VIEW - OPTION 1

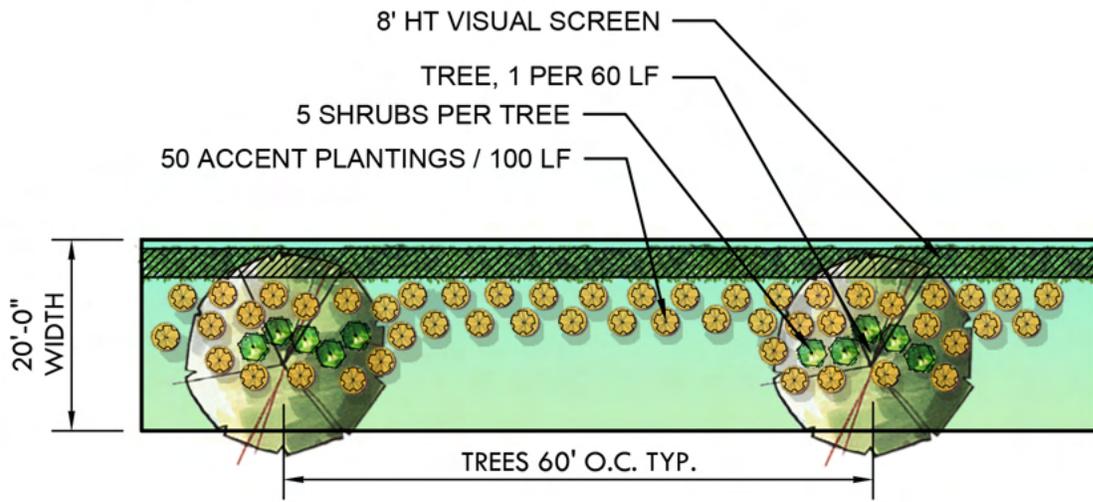


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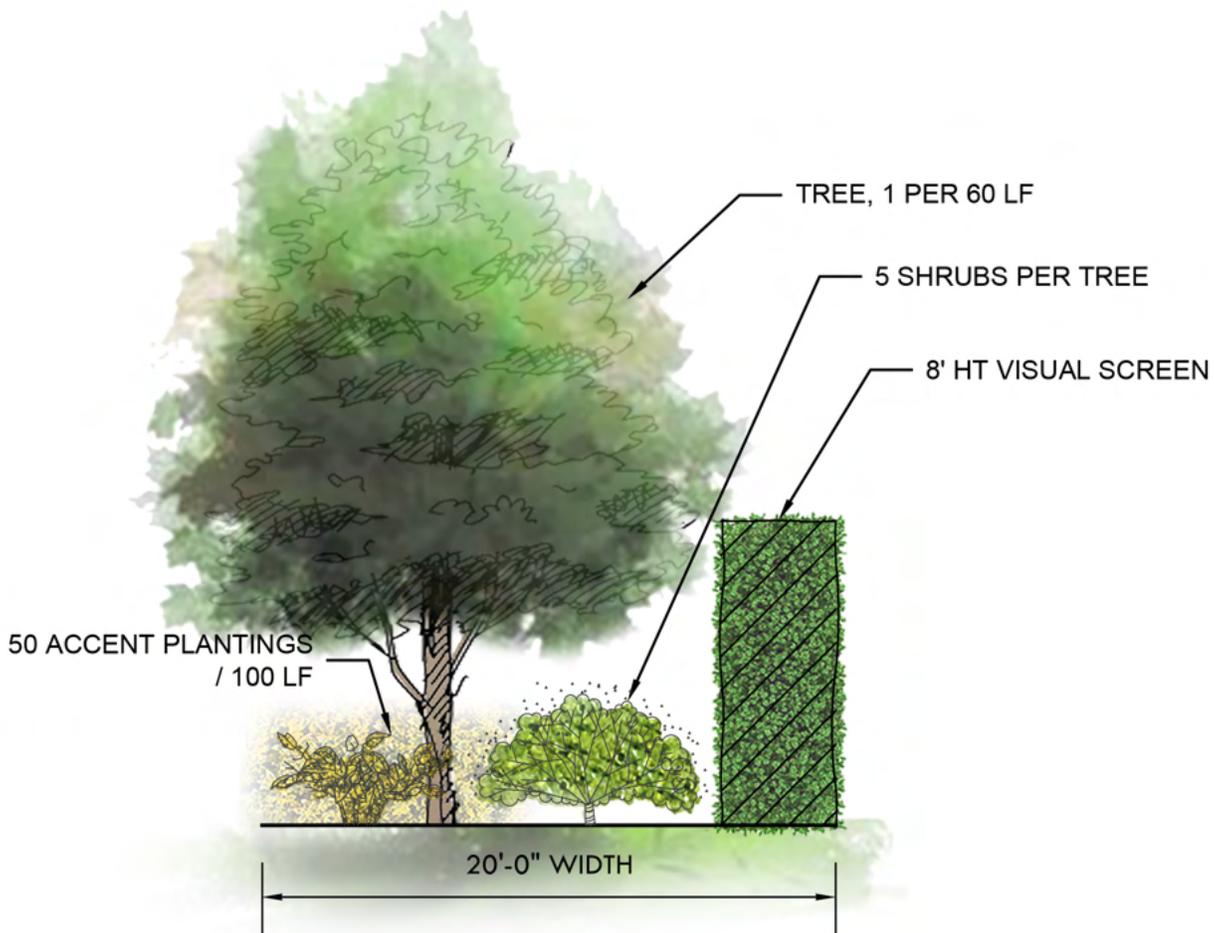


SECTION VIEW

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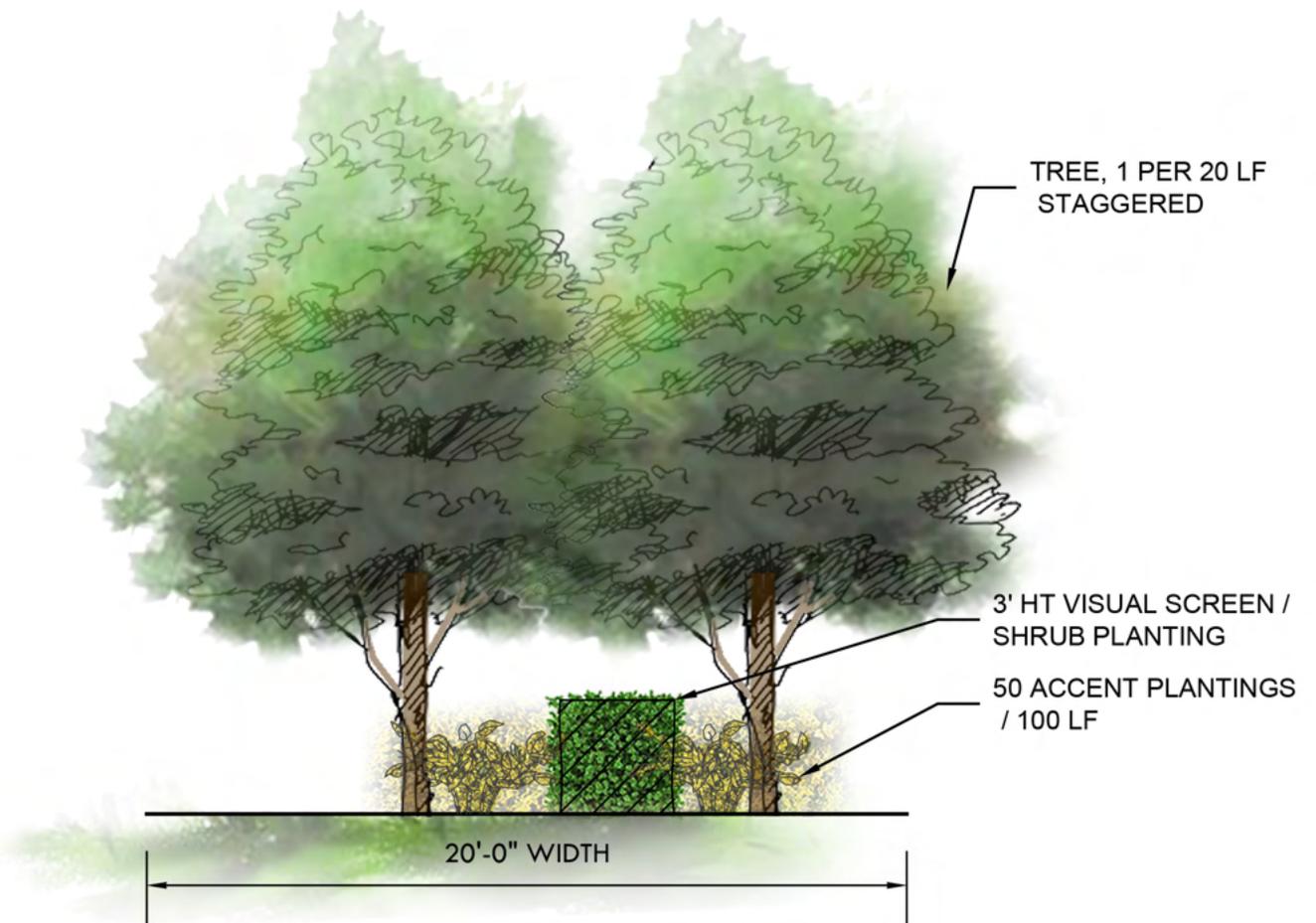
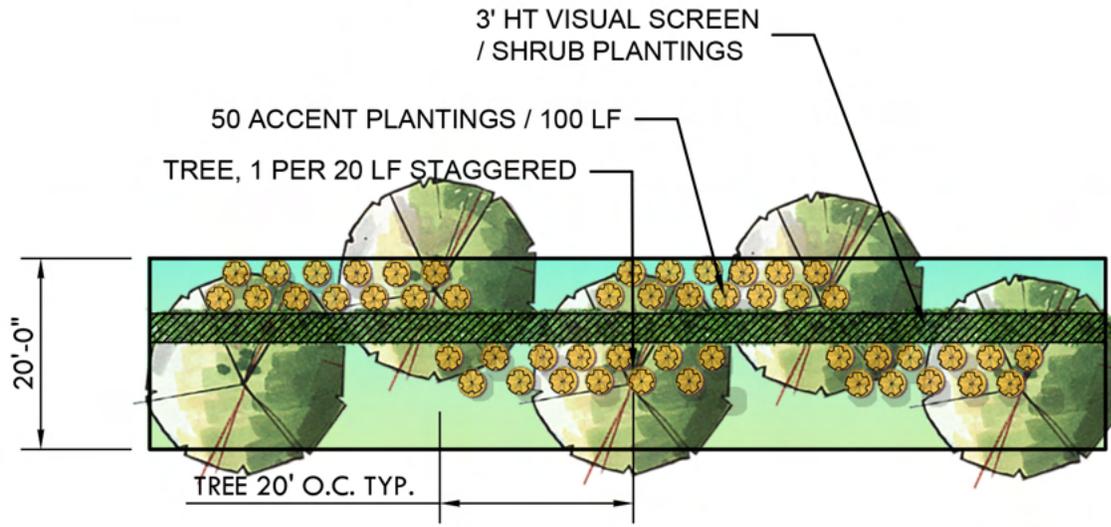


PLAN VIEW

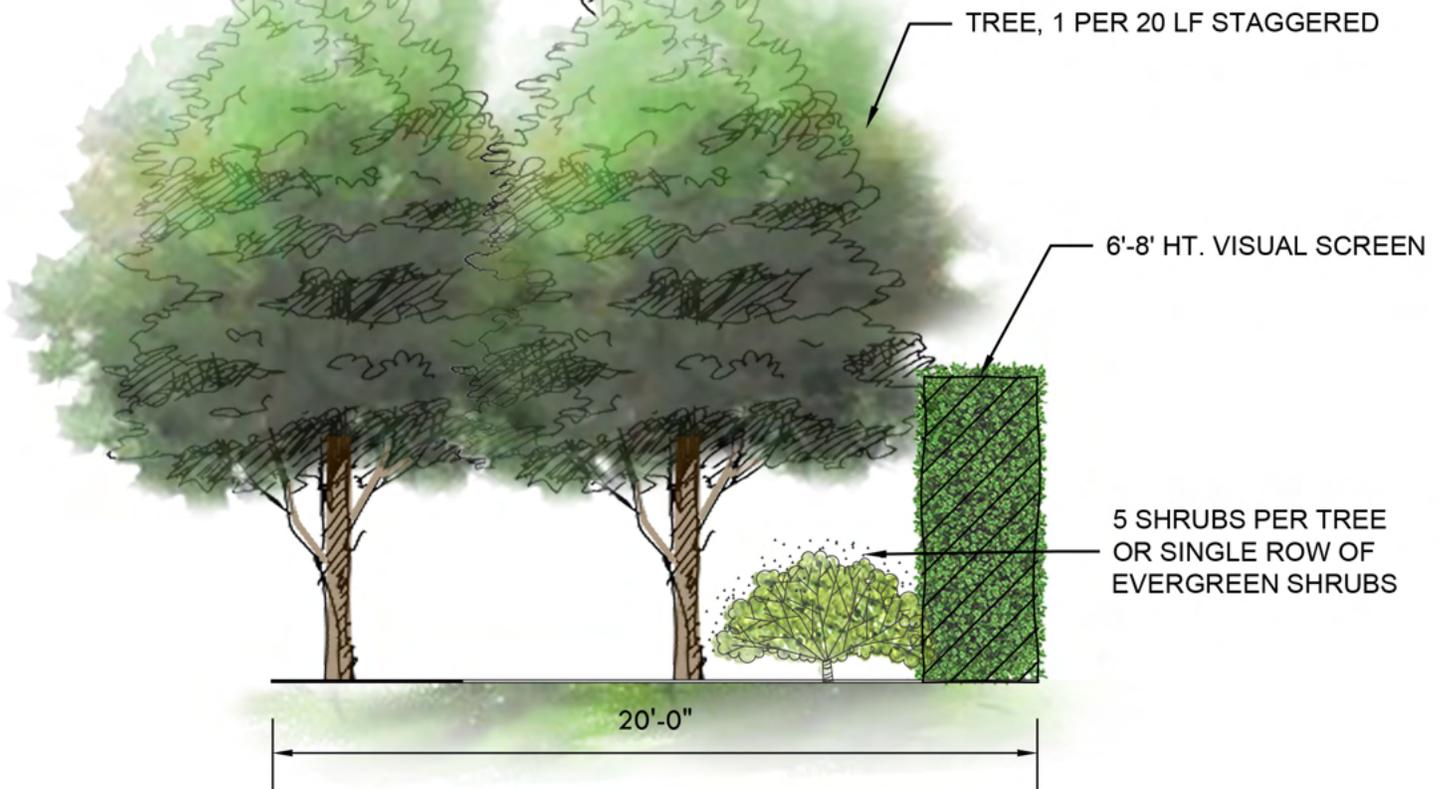
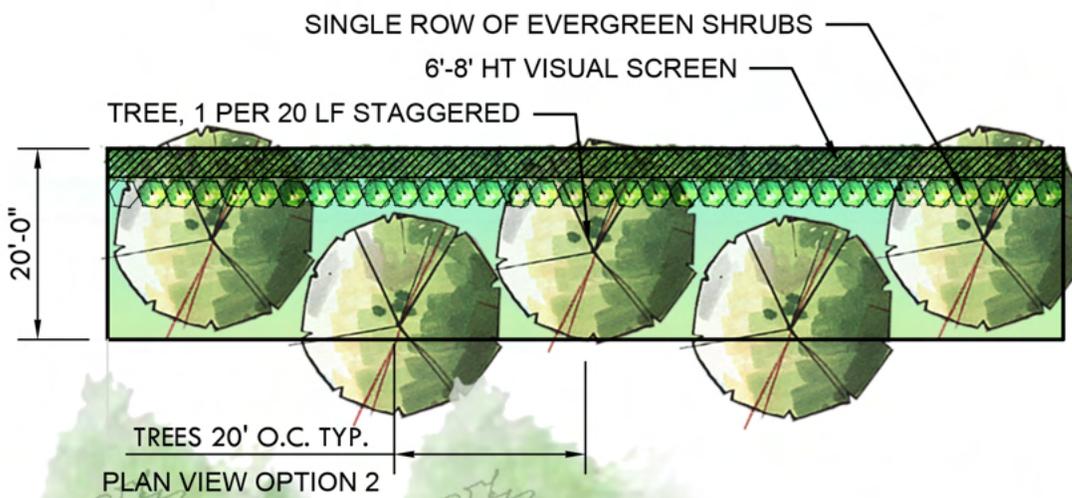
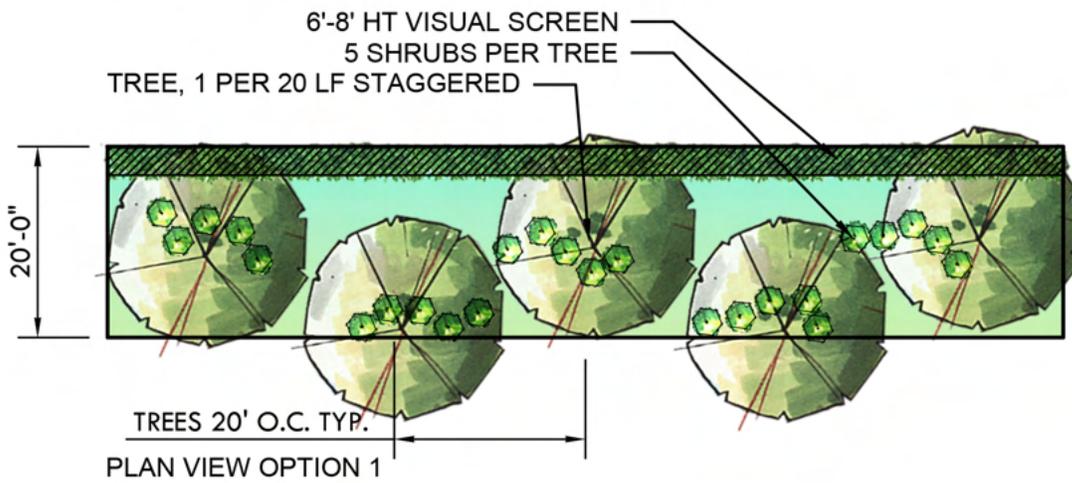


SECTION VIEW

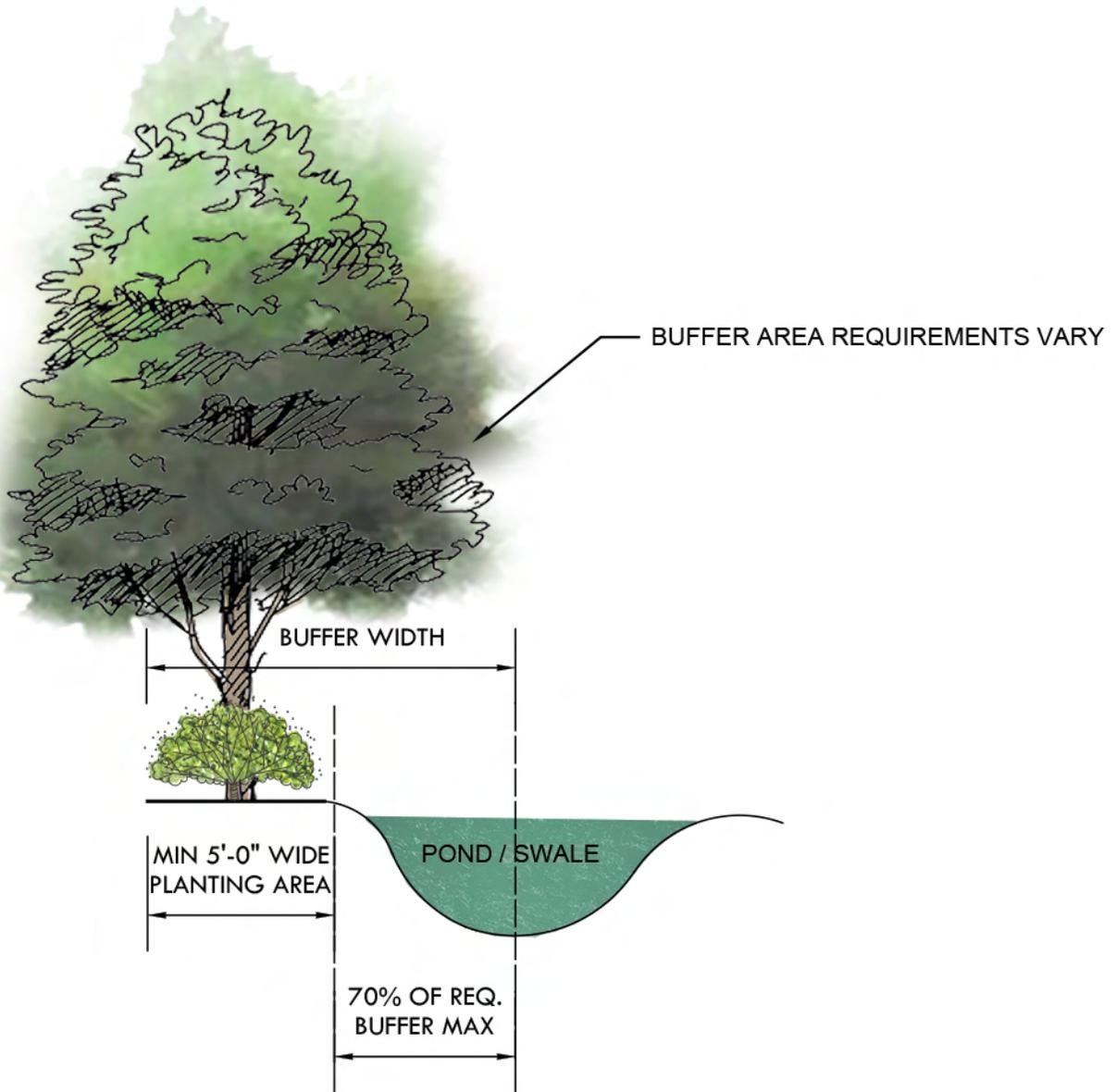
# BUFFER TYPE G



# BUFFER TYPE H

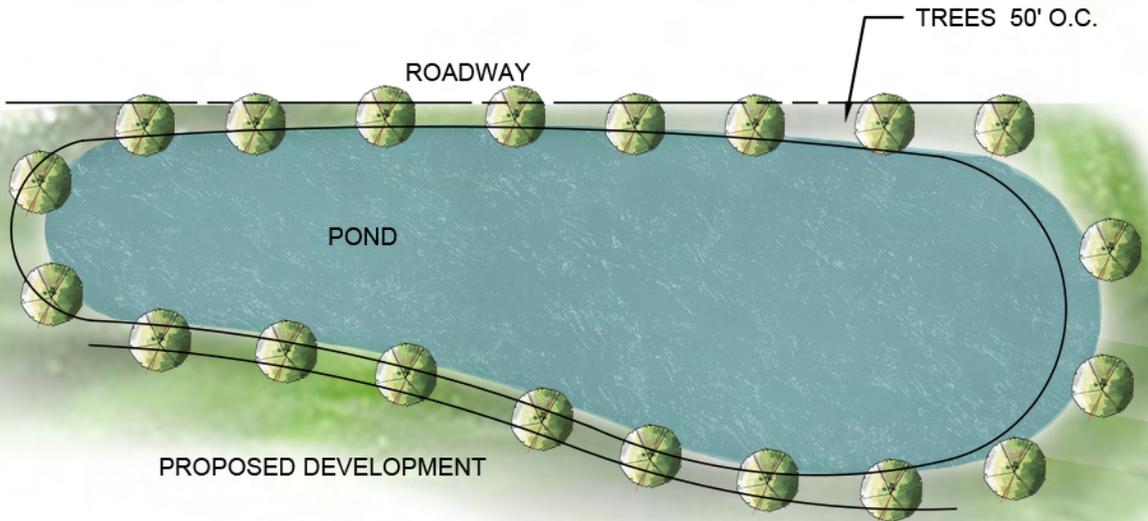


# BUFFERS IN DRAINAGE EASEMENTS

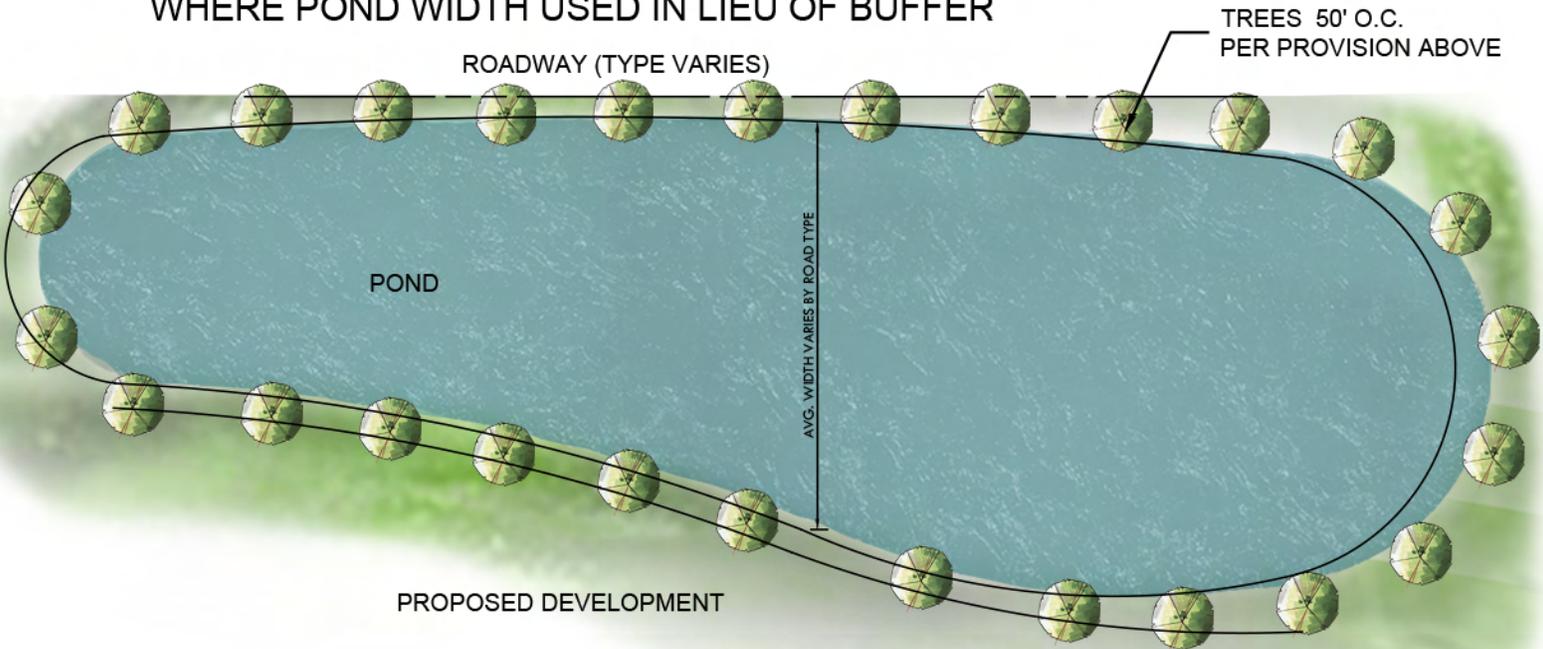


# WATER MANAGEMENT SYSTEMS

## WHERE RETENTION AREAS ARE VISIBLE FROM RIGHT OF WAY



## WHERE POND WIDTH USED IN LIEU OF BUFFER

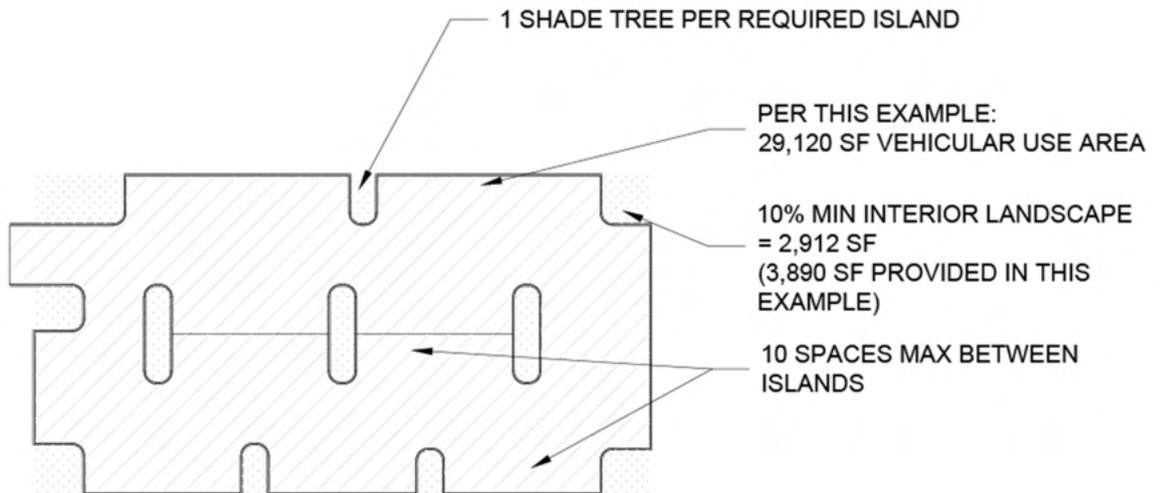
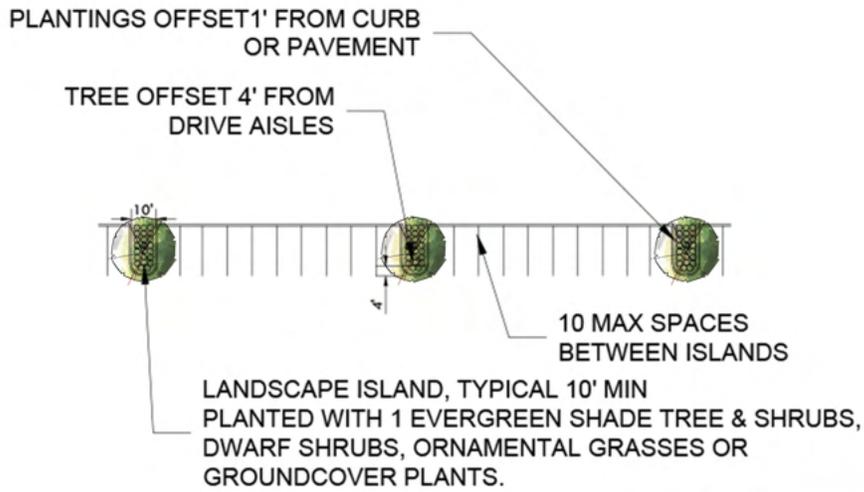


### NOTE:

WHERE AVERAGE POND WIDTH IS NOT MET, FULL BUFFER SHALL BE INSTALLED PER 905.2-E.

BUFFERS ADJACENT TO ARTERIAL ROADS SHALL INSTALL FULL BUFFER PER 905-2-E REGARDLESS OF PRESENCE OF POND OR POND WIDTH.

# OFF-STREET VEHICULAR USE AREA LANDSCAPE



REFER TO LDC 905.2.D.2 FOR SPECIFIC LANDSCAPE REQUIREMENTS.

Land Development Code Requirements								Supplemental Information							
Common Name	Scientific Name	Florida Native	Drought Tolerance	Distance Between Paved Surfaces	Ground Utility- Min. Dist. from Trunk	Evergreen or Deciduous	Growth Form	Mature Spread	Mature Height	Growth Rate	Salt Tolerance	Wind Resistance	Hardiness Zone (*, # see notes)	Plant Family	pH
Red Maple	Acer rubrum	Yes	No	15'	4'	Deciduous	Decurrent	25-35 feet	60-75 feet	Fast	Low	Medium Low	4 to 9	Sapindaceae	less than 7
Florida Sugar Maple	Acer saccharum subsp. floridanum	Yes	No	15'	4'	Deciduous	Decurrent	25-40 feet	50-60 feet	Moderate	None	Medium	6B to 9	Sapindaceae	less than 7
American Hornbeam	Carpinus caroliniana	Yes	No	10'	4'	Deciduous	Decurrent	20-30 feet	20-30 feet	Slow	None	Medium High	3 to 9a#	Betulaceae	5.5-7.8
Water Hickory	Carya aquatica	Yes	No	20'	6'	Deciduous	Decurrent	30-40 feet	60-70 feet	Slow	None	Medium High	7 to 9	Juglandaceae	6 to 8
Pignut Hickory	Carya glabra	Yes	No	20'	6'	Deciduous	Decurrent	30-40 feet	50-65 feet	Moderate	None	Medium High	5 to 9	Juglandaceae	5.5-7.8
Pecan	Carya illinoensis	Yes	Yes	20'	6'	Deciduous	Decurrent	50-70 feet	70-100 feet	Moderate	Low	Lowest	5B to 9A	Juglandaceae	6.1-7.8
Common Persimmon	Diospyros virginiana	Yes	Yes	10'	4'	Deciduous	Decurrent	20-35 feet	40-60 feet	Moderate	Low	Medium High	4B to 9	Ebenaceae	6.1-7.8
White Ash	Fraxinus americana	Yes	No	15'	4'	Deciduous	Decurrent	10-15 feet	35-60 feet	Moderate	None	Low	3 to 9A#	Oleaceae	less than 7
Pop Ash	Fraxinus caroliniana	Yes	No	20'	6'	Deciduous	Decurrent	40-60 feet	50-80 feet	Fast	Medium	Low	7 to 10A	Oleaceae	6.1-7.8
Green Ash	Fraxinus pennsylvanica	Yes	Yes	10'	4'	Deciduous	Decurrent	25-30 feet	30-45 feet	Moderate	Medium	None	3 to 9A#	Oleaceae	5.5-7.8
Pumpkin Ash	Fraxinus tomentosa	Yes	Yes	20'	6'	Deciduous	Decurrent	45-50 feet	60-70 feet	Fast	Medium	Medium Low	5 to 9#	Oleaceae	6.1-7.8
Loblolly-Bay	Gordonia lasianthus	Yes	No	10'	4'	Evergreen	Decurrent	25-35 feet	50-75 feet	Moderate	Low	High	7 to 9	Theaceae	6.1-7.8
American Holly	Ilex opaca	Yes	No	10'	4'	Evergreen	Excurrent	15-25 feet	35-50 feet	Slow	Low	Highest	5b to 9	Aquifoliaceae	5.5-7.8
'East Palatka' Holly	Ilex x attenuata	Yes	Yes	6'	4'	Evergreen	Excurrent	10-15 feet	30-45 feet	Moderate	Medium	High	7 to 9	Aquifoliaceae	less than 7
Chinese Juniper	Juniperus chinensis	No	Yes	20'	6'	Evergreen	Excurrent	15-25 feet	40-50 feet	Moderate	Medium	Medium	4 to 9	Cupressaceae	6.1-7.8
Red Cedar	Juniperus virginiana	Yes	Yes	20'	6'	Evergreen	Excurrent	20-30 feet	30-45 feet	Fast	High	Lowest	2 to 9	Cupressaceae	6.1-7.8
Sweetgum	Liquidambar styraciflua	Yes	No	20'	6'	Deciduous	Decurrent	35-50 feet	60-75 feet	Moderate	Medium	Medium High	5B to 10A	Altingiaceae	5.5-7.8
Southern Magnolia	Magnolia grandiflora	Yes	No	20'	6'	Evergreen	Decurrent	30-40 feet	60-80 feet	Moderate	Medium	Highest	7 to 10A	Magnoliaceae	5.5-7.8
Sweetbay Magnolia	Magnolia virginiana	Yes	No	15'	4'	Evergreen	Decurrent	15-25 feet	40-50 feet	Moderate	None	Medium High	5 to 10A	Magnoliaceae	6.1-7.8
Water Tupelo	Nyssa aquatica	Yes	No	20'	10'	Deciduous	Excurrent	25-35 feet	75-100 feet	Slow	Low	Medium High	6 to 9	Cornaceae	5.5-7.8
Black Gum	Nyssa sylvatica	Yes	Yes	20'	10'	Deciduous	Excurrent	20-30 feet	30-50 feet	Moderate	Medium	High	4b to 9	Cornaceae	6.1-7.8
Swamp Tupelo	Nyssa sylvatica var. biflora	Yes	Yes	20'	10'	Deciduous	Excurrent	70 feet	100 feet	Medium	Medium	High	4B to 9	Cornaceae	6.1-7.8
American Hophornbeam	Ostrya virginiana	Yes	Yes	10'	4'	Deciduous	Decurrent	20-30 feet	25-40 feet	Slow	None	High	3 to 9a#	Betulaceae	5-7.8
Redbay	Persea borbonia	Yes	No	15'	6'	Evergreen	Decurrent	30-50 feet	30-50 feet	Moderate	Low	Medium Low	7B to 11	Lauraceae	6.1-7.8
Swamp Bay	Persea palustris	Yes	No	10'	6'	Evergreen	Decurrent	20-30 feet	30-40 feet	Moderate	Low	Medium	7 to 10A	Lauraceae	5.6-7.8
Sand Pine	Pinus clausa	Yes	Yes	4'	2'	Evergreen	Excurrent	15-25 feet	25-40 feet	Slow	High	Low	7 to 10	Pinaceae	6.1-7.8
Slash Pine	Pinus elliotii	Yes	Yes	4'	2'	Evergreen	Excurrent	35-50 feet	75-100 feet	Fast	Low	Low	7 to 11	Pinaceae	6.1-7.8
Spruce Pine	Pinus glabra	Yes	No	4'	2'	Evergreen	Excurrent	25-40 feet	30-50 feet	Slow	Low	Medium	8 to 9	Pinaceae	6.1-7.8
Longleaf Pine	Pinus palustris	Yes	Yes	4'	2'	Evergreen	Excurrent	30-40 feet	60-120 feet	Slow	High	Low	7-9B	Pinaceae	6.1-7.8
Sycamore	Platanus occidentalis	Yes	No	20'	6'	Deciduous	Decurrent	50-70 feet	75-90 feet	Fast	Low	Medium Low	4B to 9A	Platanaceae	6.1-7.8
Podocarpus	Podocarpus macrophyllus	No	Yes	10'	4'	Evergreen	Excurrent	20-25 feet	30-40 feet	Slow	Medium	Highest	8B to 11	Podocarpaceae	6.1-7.8
Broadleaf Podocarpus	Podocarpus nagi	No	Yes	10'	4'	Evergreen	Decurrent	15-25 feet	30-40 feet	Moderate	Medium	High	9 to 11	Podocarpaceae	5.6-7.8
Black Cherry	Prunus serotina	Yes	Yes	15'	6'	Deciduous	Decurrent	35-50 feet	60-90 feet	Fast	Low	Medium Low	3b to 9a#	Rosaceae	6.1-7.8
Bluff Oak	Quercus austrina	Yes	Yes	20'	6'	Deciduous	Decurrent	35-50 feet	to 60 feet	Moderate	Unknown	Medium	8 to 9B#	Fagaceae	less than 7
Sand Live Oak	Quercus geminata	Yes	Yes	20'	6'	Evergreen	Decurrent	45-60 feet	30-50 feet	Moderate	High	Highest	7B to 10B	Fagaceae	6.1-7.8
Bluejack Oak	Quercus incana	Yes	Yes	10'	6'	Deciduous	Decurrent	25-35 feet	25-50 feet	Moderate	Unknown	High	7 to 9#	Fagaceae	5.5-7.8
Turkey Oak	Quercus laevis	Yes	Yes	10'	6'	Deciduous	Decurrent	25-30 feet	30-40 feet	Moderate	None	Highest	6 to 9a#	Fagaceae	less than 7
Overcup Oak	Quercus lyrata	Yes	Yes	15'	6'	Deciduous	Decurrent	30-40 feet	30-40 feet	Moderate	Unknown	Medium	6A to 9A#	Fagaceae	6.1-7.8
Swamp Chestnut Oak	Quercus mi chauxii	Yes	Yes	15'	8'	Deciduous	Decurrent	30-50 feet	40-60 feet	Moderate	Unknown	Medium	7 to 10A	Fagaceae	5.6-7.8
Myrtle Oak	Quercus myrtifolia	Yes	Yes	10'	6'	Evergreen	Decurrent	35-40 feet	8 feet	Moderate	High	Highest	8 to 10	Fagaceae	6.1-7.8
Wright Acacia	Acacia wrightii	No	Yes	4'	2'	Semi-deciduous	Decurrent	20-30 ft	25-30 feet	Slow	High	Medium	7b to 10b	Fabaceae	6.1-7.8
Rainbow Cassia	Cassia Xnealiae, Cassia javonica	No	Yes	10'	4'	Semi-evergreen	Decurrent	35 feet	to 35 feet	Fast	Unknown	Low	10a*	Fabaceae	6.1-7.8
Eastern Redbud	Cercis canadensis	Yes	No	4'	2'	Deciduous	Decurrent	15-25 feet	20-30 feet	Fast	None	Medium High	4B to 9A	Fabaceae	6.1-7.8
Flowering Dogwood	Cornus florida	Yes	No	10'	4'	Deciduous	Decurrent	25-30 feet	20-30 feet	Moderate	None	Highest	5 to 9A#	Cornaceae	5.5-7.8
Olive	Olea europaea	No	Yes	10'	4'	Evergreen	Decurrent	35-50 feet	25-50 feet	Slow	High	Very High	8 to 11	Oleaceae	6.1-8.4
Chickasaw Plum	Prunus angustifolia	Yes	Yes	10'	4'	Deciduous	Decurrent	15-20 feet	12-20 feet	Moderate	Low	Medium High	6 to 9	Rosaceae	less than 7
Willow Oak	Quercus phellos	Yes	Yes	20'	6'	Deciduous	Decurrent	30-40 feet	50-80 feet	Moderate	Low	Medium High	6 to 9#	Fagaceae	less than 7
Shumard Oak	Quercus shumardii	Yes	Yes	15'	6'	Deciduous	Decurrent	40-60 feet	40-60 feet	Fast	None	High	6 to 9#	Fagaceae	6.6-7.8
Post Oak	Quercus stellata	Yes	Yes	20'	6'	Deciduous	Decurrent	45-50 feet	35-50 feet	Moderate	Medium	High	6a to 9a#	Fagaceae	6.1-7.8
Southern Live Oak	Quercus virginiana	Yes	Yes	30'	10'	Evergreen	Decurrent	60-120 feet	60-80 feet	Moderate	High	Highest	7B to 10B	Fagaceae	6.1-7.8
Coastal Plain Willow	Salix caroliniana	Yes	No	10'	4'	Deciduous	Decurrent	20-40 feet	35-60 feet	Fast	Low	Medium	8 to 10	Salicaceae	6.1-7.8
Pondcypress	Taxodium ascendens	Yes	No	20'	10'	Deciduous	Excurrent	10-15 feet	50-60 feet	Fast	None	Highest	5B to 9A	Cupressaceae	5.5-7.8
Baldcypress	Taxodium distichum	Yes	No	40'(wet) 20' (dry)	10'	Deciduous	Excurrent	25-35 feet	60-80 feet	Fast	None	Highest	5 to 10	Cupressaceae	5.5-7.8
Montezuma Baldcypress	Taxodium mucronatum	No	Yes	20'	10'	Deciduous	Excurrent	20-40 feet	70+ feet	Fast Early	Low	High	8 to 10	Cupressaceae	6.1-7.8
Winged Elm	Ulmus alata	Yes	No	10'	4'	Deciduous	Decurrent	30-40 feet	45-70 feet	Fast	None	Medium High	6 to 9	Ulmaceae	6.1-7.8
'Drake' Chinese Elm	Ulmus parvifolia 'Drake'	No	Yes	10'	4'	Deciduous	Decurrent	35-50 feet	40-50 feet	Fast	None	Medium	7B to 10	Ulmaceae	6.1-7.8
Bosque' Chinese Elm	Ulmus parvifolia 'UPMTF' pp11295 Bosque	No	Yes	10'	4'	Deciduous	Decurrent	35-50 feet	35-45 feet	Moderate	None	Lowest	5B to 10A	Ulmaceae	6.1-7.8
Sugarberry	Celtis laevigata	Yes	No	20'	6'	Deciduous	Decurrent	50-60 feet	50-70 feet	Fast	Low	Medium Low	5 to 10	Celtidaceae	6.1-7.8
Japanese Blueberry	Elaeocarpus decipiens	No	No	10'	4'	Evergreen	Decurrent	20-30 feet	60 feet	Slow	Medium	Unknown	9B to 11	Caprifoliaceae	6.1-7.8

Shade Trees\*

Notes

\* Only varieties and cultivars of species meeting the definition of shade tree outlined in section 905.2.C.a of the Land Development Code qualify as shade trees; any cultivar or variety under the size requirements shall be ornamental use only.

^ Plants marked with (^) in the "hardiness zone" column are only for the warmer zip codes listed in the "Hardiness zone by zip code" section of the DRM.

# Plants marked with (#) in the "hardiness zone" column are only for the colder zip codes listed in the "Hardiness zone by zip code" section of the DRM.

Plants with no notation in the "hardiness zone" column are suitable for all zip codes in the "Hardiness zone by zip code" section of the DRM.

Land Development Code Requirements (continued)								Supplemental Information									
	Common Name	Scientific Name	Florida Native	Drought Tolerance	Distance Between Paved Surfaces	Ground Utility- Min. Dist. from Trunk	Evergreen or Deciduous	Growth Form	Mature Spread	Mature Height	Growth Rate	Salt Tolerance	Wind Resistance	Hardiness Zone (*, # see notes)	Plant Family	pH	
Ornamental Trees	Blackhaw, Walter's Viburnum	Viburnum obovatum	Yes	Yes	4'	2'	Evergreen	Decurrent	6-10 feet	8-25 feet	Moderate	Unknown	Unknown	5B to 9	Adoxaceae	6.1-7.8	
	Upright Bottlebrush	Callistemon rigidus	No	Yes	4'	2'	Evergreen	Decurrent	10 feet	10-15 feet	Moderate	Medium	Medium Low	9	Myrtaceae	6.1-7.3	
	Pink Shower Tree	Cassia bakeriana	No	Yes	10'	4'	Semi-evergreen	Decurrent	20-30 feet	20-30 feet	Fast	Unknown	Low	9B to 11^	Fabaceae	6.1-7.8	
	Sweet Acacia	Acacia farnesiana	Yes	Yes	4'	2'	Semi-deciduous	Decurrent	15-25 feet	15-25 feet	Fast	Medium	Medium	9 to 11	Fabaceae	6.1-7.8	
	Red Buckeye	Aesculus pavia	Yes	No	4'	4'	Deciduous	Decurrent	15-25 feet	15-20 feet	Moderate	Low	Medium	6 to 9A#	Sapindaceae	less than 7	
	Dwarf Poinciana	Caesalpinia pulcherrima	No	Yes	4'	2'	Evergreen	Decurrent	10-20 feet	10-20 feet	Fast	Medium	Low	9 to 11	Fabaceae	6.1-7.8	
	Powderpuff	Calliandra haematocephala	No	Yes	4'	2'	Evergreen	Decurrent	10-15 feet	12-15 feet	Fast	Low	Medium	9B to 11^	Fabaceae	6.1-7.8	
	Lemon Bottlebrush	Callistemon citrinus	No	No	4'	2'	Evergreen	Decurrent	10 feet	25 feet	Moderate	Medium	Medium Low	9 to 11	Myrtaceae	6.1-7.8	
	Scrambled Eggs Cassia	Cassia surratensis	No	Yes	10'	4'	Semi-evergreen	Decurrent	15-20 feet	15-20 feet	Fast	Unknown	Low	9B to 11^	Fabaceae	5.6-7.3	
	Chinese Fringetree	Chionanthus rufus	No	No	4'	2'	Deciduous	Decurrent	15 feet	20 feet	Slow	None	Medium High	5B to 9#	Oleaceae	6.1-7.8	
	Fringetree	Chionanthus virginicus	Yes	No	4'	2'	Deciduous	Decurrent	10-15 feet	12-20 feet	Slow	None	Medium High	3 to 9#	Oleaceae	less than 7	
	White Geiger Tree	Cordia boissieri	No	Yes	4'	2'	Evergreen	Decurrent	10-25 feet	10-25 feet	Slow	Medium	High	9A +	Boraginaceae	6.1-7.8	
	Nellie R. Stevens' Holly	Ilex x 'Nellie R. Stevens'	Yes	Yes	6'	4'	Evergreen	Excurrent	8-12 feet	15-25 feet	Moderate	Medium	High	7 to 9	Aquifoliaceae	5.6-7.3	
	Florida Privet	Forestiera segregata	Yes	Yes	4'	2'	Evergreen	Decurrent	5-10 feet	10-15 feet	Moderate	Low	N/A	8b to 11	Oleaceae	6.1-7.8	
	Witch-Hazel	Hamamelis virginiana	Yes	No	4'	2'	Deciduous	Decurrent	15-25 feet	20-30 feet	Slow	Low	Medium High	4 to 9#	Hamamelidaceae	5.5-7.8	
	Dahoon Holly	Ilex cassine	Yes	No	4'	4'	Evergreen	Excurrent	8-12 feet	20-30 feet	Moderate	Low	Highest	7 to 11	Aquifoliaceae	6.1-7.8	
	Burford Holly	Ilex cornuta 'Burfordii'	No	Yes	4'	4'	Evergreen	Decurrent	15-25 feet	15-25 feet	Moderate	Low	High	7 to 9	Aquifoliaceae	6.1-7.8	
	Poosumhaw	Ilex decidua	Yes	Yes	4'	4'	Deciduous	Decurrent	10-15 feet	10-15 feet	Slow	Low	N/A	5 to 9A#	Aquifoliaceae	6.1-7.8	
	Yaupon Holly	Ilex vomitoria	Yes	Yes	4'	2'	Evergreen	Decurrent	15-20 feet	15-20 feet	Moderate	High	Highest	7 to 9	Aquifoliaceae	6.1-7.8	
	Black Ironwood	Krugiodendron Ferreum	Yes	Yes	10'	4'	Evergreen	Decurrent	10-15 feet	15-25 feet	Slow	High	High	9a to 11	Rhamnaceae	6.1-8.4	
	Crapemyrtle	Lagerstroemia indica	No	Yes	4'	2'	Deciduous	Decurrent	15-25 feet	10-30 feet	Moderate	Medium	Highest	7 to 10A	Lythraceae	6.1-7.8	
	Ligustrum	Ligustrum japonicum	No	Yes	4'	2'	Evergreen	Decurrent	20 feet	20 feet	Fast	Medium	N/A	8A to 11	Oleaceae	6.1-7.8	
	Southern Waxmyrtle	Myrica cerifera	Yes	Yes	10'	4'	Evergreen	Decurrent	20-25 feet	15-25 feet	Fast	High	Medium Low	7B to 11	Myricaceae	6.1-7.8	
	Devilwood	Osmanthus americanus	Yes	No	10'	2'	Evergreen	Decurrent	10-15 feet	15-25 feet	Moderate	None	N/A	5B to 9#	Oleaceae	less than 7	
	Sweet Osmanthus	Osmanthus fragrans	No	No	4'	2'	Evergreen	Decurrent	6-8 feet	20 feet	Fast	Medium	Medium	7 to 10A	Oleaceae	5.5-8.4	
	Flatwoods Plum	Prunus umbellata	Yes	No	10'	4'	Deciduous	Decurrent	12-20 feet	12-20 feet	Moderate	None	N/A	8 to 9#	Rosaceae	5.5-7.8	
	American Elderberry	Sambucus nigra subsp. canadensis	Yes	No	4'	2'	Deciduous	Decurrent	6-10 feet	8-12 feet	Moderate	None	Medium	9+	Adoxaceae	6.1-7.8	
	Dessert Cassia	Senna polyphylla	No	No	4'	2'	Semi-evergreen	Decurrent	10 to 10 feet	10 to 10 feet	Fast	Unknown	None	9B to 11^	Fabaceae	6.1-7.8	
Chaste Tree	Vitex agnus-castus	No	No	4'	2'	Deciduous	Decurrent	15-25 feet	15-25 feet	Fast	Medium	Medium	7b to 11	Lamiaceae	6.1-7.8		
Palm Trees	Bungalow/pi cabean/king Palm	Archontophoenix cunninghamiana or purpurea	No	No	4'	4'	Evergreen	Columnar	10-15 feet	to 70 feet	Fast	Low	Medium	9B+^	Arecaceae	5.5-8.4	
	Pindo Palm	Butia capitata	No	Yes	10'	4'	Evergreen	Columnar	10-15 feet	15-25 feet	Slow	Medium	Highest	8B to 11^	Arecaceae	5.5-7.8	
	Old Man Palm	Coccothrinax crinata	No	No	4'	2'	Evergreen	Columnar	5 feet	15 feet	Slow	Low	High	9B to 11^	Arecaceae	6.1-7.8	
	Caranday Palm	Copernicia alba	No	Yes	4'	2'	Evergreen	Columnar	10-15 feet	40 feet	Slow	Medium	High	9B to 11^	Arecaceae	6.1-7.8	
	Triangle Palm	Dypsis decaryi	No	Yes	10'	4'	Evergreen	Columnar	12-15 feet	20 feet	Moderate	Low	High	9B to 11^	Arecaceae	6.1-7.8	
	Ribbon Palm	Livistona decora	No	Yes	4'	2'	Evergreen	Columnar	15 feet	20-40 feet	Fast	None	High	9 to 11	Arecaceae	6.1-7.8	
	Nitida Fan Palm	Livistona nitida	No	No	4'	2'	Evergreen	Columnar	to 10 feet	to 100 feet	Fast	Low	Unknown	8A to 11	Arecaceae	6.1-7.8	
	Cabbage Palm	Sabal palmetto	Yes	Yes	4'	2'	Evergreen	Columnar	10-15 feet	40-50 feet	Slow	High	Highest	8B to 11	Arecaceae	6.1-7.8	
	Florida Thatch Palm	Thrinax radiata	No	Yes	4'	2'	Evergreen	Columnar	5 feet	10-20 feet	Slow	High	High	9B to 11^	Arecaceae	7-8.4	
	Chinese Windmill Palm	Trachycarpus fortunei	No	No	4'	2'	Evergreen	Columnar	6-10 feet	10-20 feet	Slow	Medium	Highest	8 to 11	Arecaceae	6.1-7.8	
	Foxtail Palm	Woodyetia bifurcata	No	Yes	4'	2'	Evergreen	Columnar	10-15 feet	25-50 feet	Fast	Medium	High	9B to 11^	Arecaceae	6.1-7.8	
	Shade Palms	Paurotis Palm	Acoelorrhaphe wrightii	Yes	Yes	10'	4'	Evergreen	Clumping	12 feet	30 feet	Moderate	Medium	High	9A +	Arecaceae	5.5-7.8
High Plateau Coconut Palm		Beccariophoenix alfredii	No	No	4'	4'	Evergreen	Columnar	10-15 feet	30-40 feet	Moderate	Low	High	9B to 11	Arecaceae	less than 7	
Bismarkia		Bismarkia nobilis	No	No	10'	4'	Evergreen	Columnar	15 feet	30-60 feet	Fast	Medium	Medium	9 to 11	Arecaceae	6.1-7.8	
Canary Island Date Palm		Phoenix canariensis	No	Yes	10'	4'	Evergreen	Columnar	20-25 feet	40-60 feet	Slow	High	Highest	9 to 11	Arecaceae	6.1-7.8	
Date Palm		Phoenix dactylifera	No	Yes	10'	4'	Evergreen	Columnar	12-15 feet	50-80 feet	Slow	Medium	Highest	9 to 11	Arecaceae	6.1-7.8	
Senegal Date Palm		Phoenix reclinata	No	No	10'	6'	Evergreen	Clumping	50 feet	35 feet	Slow	Medium	High	9 to 11	Arecaceae	5.5-7.8	
Wild Date Palm		Phoenix sylvestris	No	Yes	10'	4'	Evergreen	Columnar	40 feet	60 feet	Fast	Medium	High	9 to 11	Arecaceae	6.1-7.8	
Puerto Rican Hat Palm		Sabal causiarum	No	Yes	4'	2'	Evergreen	Columnar	16 feet	50 feet	Slow	Medium	High	9 to 11#	Arecaceae	6.1-7.8	
Mule Palm	x butyragrus nabonnandii	No	No	4'	2'	Evergreen	Columnar	10-15 feet	40 feet	Fast	Low	Medium High	9 to 11+^	Arecaceae	6.1-7.8		
Notes	*	Only varieties and cultivars of species meeting the definition of shade tree outlined in section 905.2.C.a of the Land Development Code qualify as shade trees; any cultivar or variety under the size requirements shall be ornamental use only.						^	Plants marked with (^) in the "hardiness zone" column are only for the warmer zip codes listed in the "Hardiness zone by zip code" section of the DRM.								
								#	Plants marked with (#) in the "hardiness zone" column are only for the colder zip codes listed in the "Hardiness zone by zip code" section of the DRM.								
									Plants with no notation in the "hardiness zone" column are suitable for all zip codes in the "Hardiness zone by zip code" section of the DRM.								

### 905.2.C.1.D – Diversity Requirements

<b>Drought Tolerant Plantings</b>		Percent Required	Percent Achieved														
50% of the planting material other than trees must be drought tolerant.	There are a total of @@ shrubs and groundcovers on the site, of which @@ are drought tolerant.	50%	@@														
<b>Native Plantings</b>		Percent Required	Percent Achieved														
30% of the shrubs and groundcover plantings are required to be a native species.	There are a total of @@ shrubs and groundcovers of the site, of which @@ are native plantings.	30%	@@														
<b>Required Number of Trees Species</b>		Species Required	Species Provided														
<table border="1" style="display: inline-table; vertical-align: middle;"> <thead> <tr> <th>Required Number of Trees</th> <th>Required Species</th> </tr> </thead> <tbody> <tr><td>1-5</td><td>1</td></tr> <tr><td>6-10</td><td>2</td></tr> <tr><td>11-15</td><td>3</td></tr> <tr><td>16-20</td><td>4</td></tr> <tr><td>21-25</td><td>5</td></tr> <tr><td>26 or more</td><td>6</td></tr> </tbody> </table>	Required Number of Trees	Required Species	1-5	1	6-10	2	11-15	3	16-20	4	21-25	5	26 or more	6	Per Table 905.2-B, there are @@ trees required on the site.	@@	@@
Required Number of Trees	Required Species																
1-5	1																
6-10	2																
11-15	3																
16-20	4																
21-25	5																
26 or more	6																
<b>Diversity of Plantings</b>		Percent Allowed	Percent Provided														
No one plant or ground cover species may constitute more than 25% of the number of plantings.	There are a total of @@ shrubs and ground cover plantings on the site. The most common planting is @@ totaling @@.	25%	@@														

### 905.2.D.4 – Off-street Vehicle Use Area (VUA)

<b>VUA Plantings</b>		Square Footage Required	Square Footage Provided
10% of the VUA must be devoted to interior landscape areas.	The total VUA of this project is @@ square feet.	@@	@@
<b>Shade Trees in the VUA</b>		Shade Trees Required	Shade Trees Provided
There shall be one shade tree planted for every 200 square feet of required interior landscape area.	The square footage of the area devoted to interior landscaping is @@.	@@	@@

### **905.2.D.5 – Building Perimeter Plantings**

<b>Building Number/Name: @@</b>			
<b>Building Planting Area</b>		Square Footage Required	Square Footage Provided
Plantings are required around the building making up at least 10% of the buildings ground-level floor area.	This building's ground-level floor area is @@ square feet.	@@	@@
<b>Building Perimeter Plantings</b>		Linear Feet Required	Linear Feet Provided
50% of this building's perimeter is required to be planted.	This buildings perimeter is @@ linear feet.	@@	@@
<b>Building Perimeter Trees</b>		Trees Required	Trees Provided
One tree or palm is required per fifty (50) linear feet of the building perimeter.	This building's linear footage is @@.	@@	@@

### **905.2.D.6 – Perimeter Landscape Buffering and Screening**

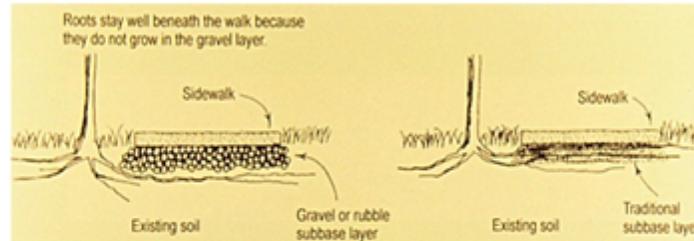
	North Buffer	East Buffer	South Buffer	West Buffer
<b>Buffer Type Required</b>	Type @@	Type @@	Type @@	Type @@
<b>Buffer Type Proposed</b>	Type @@	Type @@	Type @@	Type @@
<b>Width Required</b>	@@ feet wide	@@ feet wide	@@ feet wide	@@ feet wide
<b>Width Proposed</b>	@@ feet wide	@@ feet wide	@@ feet wide	@@ feet wide
<b>Shade Trees Required</b>	@@ per linear feet			
<b>Shade Trees Proposed</b>	@@ per linear feet			
<b>Shrubs Required</b>				
<b>Shrubs Proposed</b>				
<b>Additional Plantings Required</b>	@@ per linear feet			
<b>Additional Plantings Proposed</b>	@@ per linear feet			
<b>Visual Screening Required</b>				
<b>Visual Screening Proposed</b>				

### 905.2.D.7 – Water Management Systems

<b>Pond Number/Name: @@</b>			
<b>Retention/detention Ponds Between ROW and Development</b>		Average Pond Width Required	Average Pond Width Provided
The proposed pond is between a Type 1 Subdivision Road and the development.	Ponds between a Type 1 Subdivision Road and the proposed development require a width of 125 feet along the frontage.	125 feet	@@
The proposed pond is between a Collector Road and the development.	Ponds between a Collector Road and the proposed development require a width of 175 feet along the frontage.	175 feet	@@
<b>Retention/detention Ponds located in a Required Buffer</b>		Encroachment Allowed	Encroachment Proposed
Ponds may encroach up to 70% into a proposed buffer, assuming a 5-foot-wide level planting area is maintained between the development and the ROW.	The Buffer is required to be @@ feet wide. The pond is encroaching @@ feet into the buffer	@@%	@@%

## SUGGESTED PREVENTATIVE MEASURES

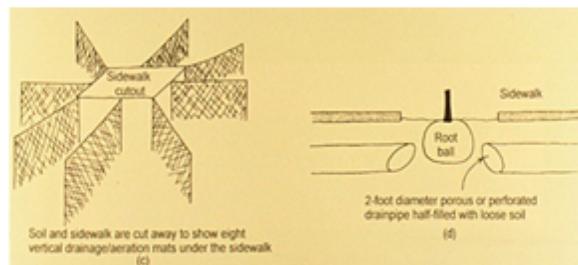
### Install alternate sub-base material



- Layer of washed gravel installed as sub-base material - roots remained under the gravel (left)
- Roots did not grow directly under the slab as they often do when a sand, limestone, or no sub-base is used (right)
- Gravel installation helped prolong the life of sidewalks

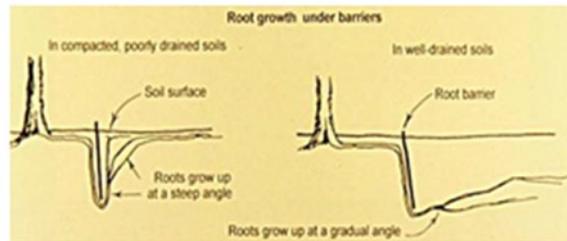
### Channeling roots under pavement

Tree roots can be directed to grow in channels provided for by good design



- (LEFT) One-inch thick aeration or drainage pads installed to increase the effective root zone beyond the small planting pit
- (RIGHT) Using pipes about 2 feet in diameter half filled with loose top soil and slow release fertilizer

## Root barriers can deflect roots



- Roots are deflected horizontally and down by most of the barriers on the market
- In compacted soils and soils with a high water table, roots grow under the barrier and up the other side
- In well drained soil, roots may remain at deeper depths longer

## Outside Resources Links

### Florida-Friendly Landscaping in State Statute:

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&URL=0300-0399/0373/Sections/0373.185.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0373/Sections/0373.185.html)

### Florida Friendly Landscaping Principles:

<https://ffl.ifas.ufl.edu/>

**Summary:** “Florida-friendly landscaping” means quality landscapes that conserve water, protect the environment, are adaptable to local conditions, and are drought tolerant. The principles of such landscaping include planting the right plant in the right place, efficient watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste, reduction of stormwater runoff, and waterfront protection. Additional components include practices such as landscape planning and design, soil analysis, the appropriate use of solid waste compost, minimizing the use of irrigation, and proper maintenance.

### “Assessment of Non-Native Plants in Florida’s Natural Areas” page of University of Florida/Institute of Food and Agricultural Sciences (US/IFAS):

<https://assessment.ifas.ufl.edu/>

**Summary:** The UF/IFAS Assessment of Non-native Plants in Florida’s Natural Areas uses literature-based assessment tools to evaluate the invasion risk of non-native species that occur in the state, new species proposed for introduction, and novel agricultural and horticultural selections, hybrids, and cultivars. Our overarching goal is to reduce non-native plant invasions in Florida and throughout the Southeast US for protection of natural and agricultural areas.

### Florida Chapter of the International Society of Arboriculture:

<https://www.floridaisa.org/>

**Summary:** The International Society of Arboriculture (ISA) is a professional organization dedicated to continuing education for arborists, to tree care research, and to serving tree care consumers around the world. The Florida chapter of the ISA shares this same dedication, with a further commitment to serving the needs particular to Florida’s professional arborists and tree care consumers.

### Florida Nursery, Growers, and Landscape Association:

<https://www.fn gla.org/>

**Summary:** FNGLA works to better the industry, raising the bar on professionalism by spearheading marketing programs, providing promotional and educational venues for members, taking a leadership role in protecting and promoting our members' business interests, communicating the latest industry issues and providing professional accreditation to interested individuals.