



PLANNING BOARD MEETING CITY OF ST. PETE BEACH

155 Corey Avenue
St. Pete Beach, FL 33706

Monday, August 15, 2022
4:00 PM

Call to Order
Pledge of Allegiance
Roll Call

REGULAR MEETING

1. Changes to the Agenda -
2. Audience Comments - **Comments shall be limited to 3 minutes per person**
3. Approval of Minutes
 - a. **Minutes July 18, 2022**
4. Action Items
5. Discussion Items
 - a. **Residential Landscape Requirements**
Continued discussion of St. Pete Beach residential landscaping standards, including a comparison with other western Florida beach communities.
6. Adjournment

APPEAL: In accordance with 286.0105, Florida Statute (Notices of meetings and hearings must advise that a record is required to appeal), if a person decides to appeal any decision made by this committee, board, agency, or commission with respect to any matter considered at this meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

AMERICANS WITH DISABILITIES ACT (ADA): In accordance with the Americans with Disabilities

Act and Florida Statutes, if any person with a disability defined by the ADA needs special accommodation to participate in this proceeding, then not later than two business days prior to the proceeding, he or she should contact City Hall at (727) 367-2735.

The public is cordially invited to attend this meeting.
All agenda material is available for review at City Hall or www.stpetebeach.org.

DRAFT PLANNING BOARD MEETING MINUTES

July 18, 2022 4:00 PM

PRESENT: Tiffany Secka, Chair
Bev Jackson, Vice Chair
Rachel Ciliberti, Member
Tom DeYampert, Member

EXCUSED: Greg Premier, Member

STAFF PRESENT: Andrew Dickman, City Attorney
Jennifer McMahon, Chief Operating Officer
Ginny Bodkin, Deputy City Clerk
Kristin Coman, Senior Planner
Lynn Rosetti, Contract Planner

Chair Secka called the meeting to order at 4:00 PM, followed by the Pledge of Allegiance.

1. **Changes to the Agenda** – There were none.
2. **Audience Comments** - There were no audience comments.
3. **Approval of Minutes a. 5/16/2022**

Motion: Member DeYampert moved, and Vice Chair Jackson seconded the approval of the minutes from the May 16, 2022 meeting as presented; the motion carried unanimously.

4. **Action Items** – There were no action items.
5. **Discussion Items**

a. Residential Landscape Requirements

Ms. McMahon explained that City staff is in the process of reviewing City Code landscaping standards and requirements to consider better definition and specificity and would like this Board's input. Her presentation included a review of current requirements for new single and two-family dwellings, landscape buffers, and the Pass-A-Grille Overlay, as well as samples of more specific Code language from the City of Punta Gorda and Collier County. Her presentation is part of the minutes.

Topics discussed included implementing landscape requirements in the Overlay, landscape plans, increasing plant size requirements at time of planting, plantings to decrease height appearance, increasing the current maximum shrub height requirement, plantings in setbacks and City rights-of-way (should be recorded documents to run with the land), making Applicability in LDC Section 22.2 clearer for Staff to administer, better defining substantial redevelopment, and avoiding the imposition of financial hardships with requirements

Ms. McMahon asked members to be mindful of these standards and requirements in the coming weeks and send any notes or observations prior to next month's meeting. A representative of Morelli Landscaping could be brought in to advise and answer questions.

b. Differences Pass-A-Grille Zoning, Land Use, and Overlay vs. Rest of the City

Ms. McMahon reviewed a chart detailing the Pass-A-Grille Overlay and Underlying Zoning (4 Districts) requirements; the chart was included in the meeting packet.

Senior Planner Kristin Coman explained that building to the Overlay allows for some additional square footage on the ground floor due to decreased setback requirements and two additional feet in height. However, additional design requirements include landscape, building type height, landscape and architecture screening elevated buildings, private frontage and architecture. Contract Planner Lynn Rosetti added that when a request to build to the Overlay is made, Staff creates a report for design review by the Historic Preservation Board. The City has contracted an architect who will be reviewing plans and structures with regard to standards, particularly in the Overlay.

Discussion followed on the consideration of moving to a single zoning requirement for the City. Ms. Coman explained that Tara Salmieri, who had worked on the creation of that Code had a presentation on the Overlay and discussed ideas with the Historic Preservation Board at their last workshop. The video of that meeting is on the City's website. City Attorney Dickman added that the Overlay was initially created due to the volume of non-conformities in Pass-A-Grille and to keep the character.

The next Historic Preservation Board Workshop on August 4th will be a review of the Overlay ordinance and why those decisions were made; Ms. McMahon recommended that the Board members watch that live or recorded (and the July 7th Workshop as well).

Ms. McMahon concluded the meeting by asking members to send any items they would like discussed for the next agenda

Following the agenda items, Member DeYampert asked for clarification on 'apartment house' cited in Land Development Code Section 20.21(c) and owner occupation and sale. Ms. McMahon explained that there are currently 230 business tax receipts (BTRs) for homes that fit this criteria; if you live in part of a duplex and rent part, no BTR is required - if you do not live in the duplex, a BTR is required. No BTR is required for single family homes that are rented. The sale of a duplex for BTR requirement would not come to the City's attention unless a permit of some kind was requested.

6. Adjournment – Next meeting 8/15/2022

There being no further business, Chair Secka adjourned the meeting at 5:10 PM.

These minutes will be presented for approval at the August 15, 2022 Planning Board meeting.

Selected Sections from St. Pete Beach Land Development Code Division 22 - Landscaping and Tree Protection.

Note: Items addressing discussions at the July 2022 Planning Board meeting are highlighted below.

Sec. 22.4. Type, quality and size of plant material.

- (a) *Quality.* Plant materials used in conformance with the provisions of this article shall conform to the standard for Florida No. 1 or better, as given in Grades and Standards for Nursery Plants, part I, 1963, and part II, published by the Florida Department of Agriculture, or equal.
- (b) *Invasive exotic plant materials.* No plant listed by the Florida Exotic Pest Plants Council shall be counted towards the required landscaping.
- (c) *Trees.* Except as otherwise provided herein, all trees planted under the provisions of this Code shall be of a species having an average crown of greater than 15 feet at maturity and having a trunk which can be maintained in a clean condition, free of branches, from grade to five feet above grade. Trees having an average mature spread of crown less than 15 feet may be substituted by grouping the trees so as to create the equivalent of a 15-foot crown spread.

- (1) Canopy trees shall have a minimum height of 12 feet and a DBH dimension of three inches at the time of planting. A recommended list of canopy trees and palms to be used includes but is not limited to the following types:

Quercus virginiana (Live Oak)

Conocarpus erectus (Buttonwood)

Conocarpus erectus serviceus (Silver Buttonwood)*

Tabebuia Caraba (Silver Trumpet/Yellow Flower)*

Pinus elliottii (Slash Pine)

Tabebuia argentia (Gold Tree)

Swietenia mahogani (Mahogany)

Celtis laevigata (Sugarberry)

Platanus occidentalis (Sycamore)

Juniperus silicicola (Southern Red Cedar)

Bucida buceras (Black Olive)

- (2) One of the following palms is equivalent to one required canopy tree when planted at the required height of 12 feet of clear trunk:

Phoenix dactylifera (Medjool Date Palm)*

Phoenix canariensis (Canary Island Date Palm)

Roystonea elata (Royal Palm)*

Cocos nucifera (Coconut Palm)*

Or any single or multi-stemmed palm known to be of equivalent mature size.

- (3) Three of the following palms are equivalent to one required canopy tree when planted at the required height of eight feet of clear trunk:

Syragus romanzoffiana (Queen Palm)

Acoelorrhaphe wrightii (Paurotis Palm)

Sabal palmetto Cabbage Palm (Sabal Palm)*

Washingtonia robusta (Washingtonian Palm)

Or any single palm known to be of equivalent mature size.

(4) Required canopy trees may be replaced with under-story trees when the mature height of the canopy trees will conflict with overhead power lines, excluding service drops. Appropriate setbacks of trees from such power lines, as referenced by Florida Power and Light's "Plant the Right Tree in the Right Place" publication shall be required, a copy of which is on file at the office of the city clerk.

(5) Accent/under-story trees shall be a minimum of eight feet in overall height and a tree DBH dimension of two inches at the time of planting.

(6) The following is a recommended list of accent/under-story trees to be used:

Jatropha Hastata Compacta (Jatropha)*

Coccoloba Uvifera (Sea Grape)

Coccoloba diversifolia. (Pigeon Plum)

Tecoma stans (Yellow Elder)

Persea borbonia (Redbay)

Ilex vomitoria (Yaupon Holly)*

Callistemon viminalis (Weeping bottlebrush)

Eriobotrya japonica (Loquat)

Myrica cerifera (Wax Myrtle)

Lagerstroemia indica (Crepe Myrtle)

(d) *Credit for saving existing trees.* No credit shall be given to canopy trees identified by these regulations as nuisance trees. The following trees shall be considered nuisance trees: *Malalueca quinquenervia* (Punk Tree), *Schinus terebinthifolius* (Brazilian Pepper), *Casuarina* spp. (Australian Pine), *Cupaniopsis anacardioides* (Carrotwood), *Melia azedarack* (China Berry), and *Sapium sebiferum* (Chinese Tallow) or any tree listed by the Florida Pest Plant Council. Credit is given for existing canopy trees, in good health as provided below:

(1) Credit is given at the following ratios for existing canopy trees in good health to be preserved:

4"—10" DBH = 1 tree

10"—20" DBH = 2 trees

Over 20" DBH = 3 trees

(2) Credit is given at the ratio of three palms to one tree for existing native palms.

(3) A maximum ten percent required parking credit may be allowed for the purpose of preserving native trees.

(f) *Ground covers.* Vegetative ground covers in lieu of grass, in whole or in part, shall be planted in such a manner as to present a finished appearance and reasonably complete coverage. In no instance shall nonvegetative pervious material (for the purposes of this section, stone, shell, gravel, and artificial turf only) be utilized for more than 20 percent of the minimum required pervious area, nor shall such material

adversely affect abutting properties, waterways, or the right-of-way. The 20 percent maximum nonvegetative portion of the required pervious area may be increased administratively if the property owner installs an innovative landscape design that incorporates features that retain stormwater onsite, reduces the need for ground water irrigation, or increases the tree canopy as determined by professional best practices which include, but are not limited to, Florida-friendly landscaping, xeriscaping, and low-impact development. New construction that exceeds 10% of the zoning lot area, or the granting of an undue and unnecessary hardship variance or practical difficulty variance, shall require full compliance with this section. A recommended list of vegetative ground covers to be used includes, but is not limited to, the following:

Gallardia Pullchella (Gallardia)*

Helianthus Debilus (Beach Sunflower)*

Lantana Camara (Dwarf Yellow Lantana)*

Trachelospernum Jasmine Varigated (Varegated Confederate Jasmine)*

Trachelospernum Jasmine Minima Varegated (Varegated Dwarf Confederate Jasmine)*

Trachelospernum Jasminoides (Confederate Jasmine)*

Licania michauxii (Gopher Apple)

Scaevola plumieri (Inkberry)

Stachytarpheta jamaicensis (Prone Porterweed)*

Zamia pumila (Coontie)*

Muhlenbergia capillaris (Muhley Grass)*

- (g) *Lawn grass.* Grass areas shall be planted in species normally grown in permanent lawns in the city area. Grass areas may be sodded, plugged or sprigged, except that solid sod shall be used in swales or other areas subject to erosion. A recommended list of ground covers to be used includes but is not limited to, the following:

Stenotaphrum secundatum (St. Augustine)

Paspalum vaginatum (Seashore Paspalum)

(Ord. No. 2005-38, § 2, 11-8-05; Ord. No. 2017-30, § 2, 2-27-18; Ord. No. 2019-18, § 2, 12-10-19)

Sec. 22.5. Landscaping for single-family and two-family dwellings.

All new or substantially improved single-family and two-family dwellings shall be landscaped in accordance with this subsection prior to the issuance of a certificate of occupancy.

- (a) *Trees required.* All trees shall meet the standards of section 22.4. The number of trees required to be planted upon construction of a single-family and two-family dwelling shall be as follows:

Lot Size	Minimum Number of Trees
3,500 to 6,000 square feet	2 trees
6,001 to 7,500 square feet	3 trees
7,501 to 10,000 square feet	4 trees
10,001 to 16,000 square feet	6 trees
Over 16,000 square feet	8 trees

(b) *Credit for remaining trees.* If, on a zoning lot for a single-family or two-family dwelling, existing trees can be saved and will remain in good condition when construction is complete, credit shall be given pursuant to section 22.4(d).

(c) *Other materials.* The remainder of the required landscaped areas shall be adequately landscaped with shrubs, grass, ground cover or other landscape treatment as described in subsection 22.4.

(Ord. No. 2005-38, § 2, 11-8-05)

Sec. 22.9. Preservation standards.

(a) *Construction barriers.* During the development of the property, the owner of the property shall be responsible for the erection of any and all barriers or protective guards necessary to protect any existing or installed vegetation from damage during construction.

(b) *Wall.* Wherever a change of grade is planned, the trees to be preserved shall be protected by a wall so as to preserve the existing grade for the tree's root system.

(c) *Topsoil.* Wherever a change of grade is planned, the topsoil stripped on site shall be preserved for the new landscaping to be installed.

(Ord. No. 2005-38, § 2, 11-8-05)

Sec. 22.10. Maintenance standards.

(a) *Landscaped areas.* All required landscaped areas must include an in-ground automatic irrigation system. The plantings in any landscaped area must be properly maintained in order for the landscaped area to fulfill the purposes for which it was established. Such maintenance shall include all actions necessary to keep the landscaped area free of litter and debris and to keep plantings healthy and orderly in appearance. Where reclaimed water is not used to irrigate, the developer is required to use drip or micro-spray irrigation systems.

(b) *Buffers.* The plantings, fences, walls, and berms that constitute a buffer must be properly maintained in order for the buffer to fulfill the purpose for which it is established. Such maintenance shall include all actions necessary to keep the buffer free of litter and debris, and to keep plantings, walls, fences, and berms in good repair and neat appearance. All buffer material shall be protected from damage by motor vehicles or pedestrians which could reduce the effectiveness of the buffer.

(c) *Damage.* In the event that any vegetation or physical element functioning to meet the standards of this division is severely damaged, it shall be replanted or replaced within 30 days. In the event that the damage is found to be caused by a catastrophic event, a grace period of 180 days shall be granted for replacement.

(d) *Pruning.* Trees shall be pruned in accordance with the pruning standards of the American National Standards Institute (ANSI publication A300); however, the topping of trees is prohibited. Topping shall be considered a violation of Section 22.11 of this division.

(Ord. No. 2005-38, § 2, 11-8-05)

Sec. 22.11. Tree protection.

It shall be unlawful for any person to remove or cause to be removed any tree having a DBH of three inches or more or any palm with a height of eight feet or more overall without first having obtained a tree removal permit

from the city in accordance with section 22.13. Diameter at breast height or DBH means the measurement of a single-stemmed or multi-stemmed tree at four and one-half feet above grade.

(Ord. No. 2005-38, § 2, 11-8-05)



City of St. Pete Beach

155 Corey Avenue, St. Pete Beach FL 33706
Phone (727) 363-9253 Fax (727)363-9222

PUBLIC RIGHT-OF-WAY PERMIT APPLICATION

JOB INFORMATION:

Owner: _____ Building Permit # _____

Owner Address: _____

Telephone: _____ Email: _____

Permit Location: _____

Construction Start Date: _____ Construction End Date (90 Days Max): _____

Work Being Performed (Check all that apply in the Right-of-Way)

☐ Irrigation

☐ Landscaping

☐ Other: _____

All work permitted is subject to the Conditions for Approval as included in this Right-of-Way Utilization Permit, City of St. Pete Beach Municipal Code of Ordinances and any other applicable laws, regulations or policies of the City, State, Federal government and/or other regulating authority.

Signing below implies acceptance to all requirements stated, in writing, as a condition of the issuance of this right-of-way utilization permit. Right-of-way utilization permit, conditions of approval, and any letters (from the permit grantor) referring to this right of way utilization permit are all to be considered as part of this right-of-way utilization permit agreement. See attached for additional conditions to this utility permit:

Signature

Date

Company (Contractor) Performing the Work in the Field

Name: _____ Address: _____

Telephone: _____ Cell: _____

Authorized By: _____ Date of Issuance: _____

***Two copies of Sketch plan showing work area and existing utilities and infrastructure required.**

CONDITIONS OF APPROVAL

1. This Right-of-Way Utilization Permit will be completed with the description and nature of the proposed work fully described in writing.
2. The Utility Notification Center – Sunshine One Call of Florida must be notified 48 hours in advance of any work. Their phone number is 1-800-432-4770.
3. The name of Facility Owner (Permittee), any contractor and/or subcontractor performing work relating to the work described and approved in this Right-of-Way Utilization Permit will be denoted along with contact information during and after work hours along with emergency contact information.
4. Along with a description of work and location of work, a geographical description, scaled drawing or survey may be requested. Information that may be required for inclusion in the survey is as follows.
 - a. Geographical description of work to be done
 - b. Right-of-Way lines
 - c. Sidewalks
 - d. Description of area of land, pavement, and/or curb disturbing activity.
 - e. The offset distance from the centerline of the proposed work shown with all distances and sizes clearly indicated.
 - f. Cross section denoting locations of other utilities in the area being disturbed/affected.
 - g. Location of all storm water drainage system components (pipes, outfalls, drop inlets, catch basins, retention ponds, detention ponds, seawalls, swales or other components of the storm water system.
 - h. A description of any storm water related Best Management Practice that will be used to mitigate against the sedimentation of the storm water system, erosion of affected/disturbed areas, deposition/release of nutrients or other pollutants to the neighboring properties, water bodies and/or wastewater system.
 - i. All of the above, if requested, shall be clearly marked with sizes, dimensions, and other pertinent information clearly marked.
5. Section corner monuments and other survey markers subject to displacement shall first be referenced and later reset by a Florida Registered Surveyor.
6. This Right-of-Way Utilization Permit is to be signed by the applicant or their legally empowered agent.
7. Contractor performing the work must be licensed/registered through the Pinellas County Construction Licensing Board (PCCLB) and must meet the insurance requirements required by the PCCLB.
8. The construction, operation, and maintenance of such utility shall not interfere with the property and rights of a prior occupant.
9. The construction, operation and maintenance of such utility shall not create obstructions which are/or become dangerous to the traveling public.
10. Maintenance of Traffic (MOT) and safety procedures will follow Florida Department of Transportation (FDOT) and the Manual on Uniform Traffic Control Devices (MUTCD) policies.
11. Digital photos may be required prior to the start of work by the Permittee.
12. Right-of-Way restoration will be inspected periodically for the period of 1 year after final restoration by the City of St. Pete Beach. Should any deficiencies be encountered, the Permittee will have 7 days to make such corrective actions, unless the conditions warrant immediate attention. One (1) year after final restoration, responsibility for the permitted area will revert back to the City.
13. To insure that hazards do not impact the owners, residents, property, or environment, the City of St. Pete Beach maintains the right to inspect all materials and equipment used on or in conjunction with the work outlined in this Right-of-Way Utilization Permit.
14. The Permittee shall and does hereby agree to indemnify, pay the cost of defense and save harmless the Permit Grantor from the and against the payment of all claims, suits, actions, costs, attorney's fees, expenses, damages, judgments or decrees by reason of any person/persons or property being damaged or injured by the Permittee, his employees, agents or subcontractors or in any way attributable to the performance, prosecution, construction, operation or maintenance

- of the work herein permitted by the Permittee and resulting from the negligent act/acts or omission/omissions of said Permittee in connection with the work herein permitted.
15. The Permittee shall repair and or restore any damage or injury to the right-of-way or to any other City property and shall repair the same promptly (within 7 days of notification to the Permittee), restoring it to a condition at least equal to that which existed immediately prior to the infliction of such damage or injury. Restoration work will, at a minimum, meet City Standards as described in attached standards and any standards that are denoted in the Conditions of Approval of this Right-of-Way Utilization Permit.
 16. All repairs and restoration must conform to the City Standards (see attached details) or any standards that are denoted in the Condition of Approval of this Right-of-Way Utilization Permit.
 17. All portions of the right-of-way other than paved areas disturbed by the construction of this utility shall be grassed, mulched, and/or sodded as required.
 18. The Permittee shall televise and record all sanitary sewer mains, sanitary sewer laterals, any other sanitary sewer component, and/or any storm drainage system components that are within the area of work described in this Right-of-Way Permit. These tapes and/or recorded discs are to be delivered to the City for review and permanent filing.
 19. Any work that may affect storm water quantity or quality shall require the installation of proper storm water Best Management Practices (BMPs). Devices or actions to be implemented may include hay bales, silt fences, geotextiles, proper dewatering procedures, analytic sampling, and/or techniques listed in the Florida Department of Environmental Protection's Storm water, Erosion, and Sedimentation Control Inspector's Handbook. All work done shall conform to the City of St. Pete Beach's Illicit Discharge Ordinance.
 20. All overhead installations shall conform to clearance standards of the Florida Department of Transportation (FDOT) and all underground crossing installations shall be laid at a minimum dept of thirty inches (30") below the pavement or at such greater depth as the Permit Grantor may require.
 21. In the event of widening, repair, or reconstruction of said Right-of-Way, the Permittee shall move or remove said utility installation(s) at no cost to the Permit Grantor (City).
 22. The License creates and should be considered as granting a permissive use only and the placing of facilities upon the City property pursuant hereto shall not operate to create or to vest any property rights in said Permittee and is granted in perpetuity subject to termination by the Permit grantor upon the giving of thirty (30) days notice in writing to the Permittee.
 23. Emergency Work – In the event of an emergency, the facility owner will be allowed to affect the necessary repairs in advance of receiving a permit. However, the application must be submitted and received in the Public Services Department's office before the end of the following business day.
 24. THE CONDITIONS OUTLINED ARE ACCEPTED BY THE APPLICANT AND CONTRACTOR – The permit is not transferable and is VOID after 60 days from the date of approval unless work has been started. The applicant agrees, upon completion of any work, to satisfactorily complete all the work authorized by the permit within a period of ____ calendar days.
 25. Work within the right-of-way under construction shall be within the times allowable for work, as denoted in the City of St. Pete Beach Code of City Ordinances, except where the work must proceed in order to protect the public interest.
 26. Other Conditions of Approval

Completed Right-of-Way Utilization Permits may be sent to the following Address:

**City of St. Pete Beach
Community Development Department
155 Corey Avenue
St. Pete Beach, FL 33706
Email: bberry@stpetebeach.org**

Blank Right-of-Way Utilization Permits may be obtained through the forms page of the

Community Development Department's web page located at <http://www.stpetebeach.org/city-department/community-development/planning-zoning.html>. You may also obtain a permit from the Community Development Department at 155 Corey Ave, St. Pete Beach, FL 33706.

Selected sections from Fort Myers Beach Code of Ordinances Appendix A – Land Development Code, Chapter 10 – Development Orders and Engineering Standards, Article III. – Engineering and Environmental Design Standards, Division 6. – Open Space, Buffering and Landscaping

Note: Items addressing discussions at the July 2022 Planning Board meeting are highlighted below.

Sec. 10-416. - Landscaping standards.

- (a) *Tree planting required.* Except in the Downtown and Santini zoning districts, landscaping for all developments, must include, at a minimum, one tree per 3,000 square feet of development area (not including existing waterbodies) in addition to the landscaping required for parking and vehicle use areas and perimeter buffers. General tree requirements may be reduced through the utilization of larger trees as specified in § 10-420(c)(2) of this chapter, or through use of an alternative landscape betterment plan (see § 10-419 of this chapter).

[...]

Sec. 10-417. - Irrigation standards.

- (a) To improve the survivability of required landscaping, cultivated landscaped areas must be provided with an automatic irrigation system, except as provided in subsection (c) of this section. All required irrigation systems must be designed to eliminate the application of water to impervious areas, including roads, drives, and other vehicle areas. Required irrigation must also be designed to avoid impacts on indigenous plant communities.
- (b) All new developments that have required landscaping must be irrigated by the use of an automatic irrigation system with controller set to conserve water. Moisture detection devices must be installed in all automatic sprinkler systems to override the sprinkler activation mechanism during periods of increased rainfall. Where existing irrigation systems are modified requiring the acquisition of a permit, automatic activation systems and overriding moisture detection devices must be installed.
- (c) The requirement to provide an automatic irrigation system does not apply to trees planted in accordance with § 10-416(a) of this LDC, nor does it apply to cultivated landscaped areas that are planted entirely with native Florida plant species. A temporary irrigation system is strongly encouraged to improve survivability after initial planting; all plants that do not survive must be replanted in the same manner as for all other required vegetation (see § 10-421 of this LDC).

Sec. 10-419. - Alternate landscape betterment plan.

Applications pursuant to this division are entitled to demonstrate that the intent of this division can be more effectively accomplished through an alternate landscape betterment plan. The following conditions must be met:

- (1) The plan must be labeled as an alternate landscape betterment plan, and delineate, identify and locate all changes to the requirements of this division.
- (2) No less than 75 percent of the trees installed must be native Florida species.
- (3) If larger trees are substituted to reduce the minimum number of general trees required, all substituted tree must be no less than three inches in diameter at 12 inches above the ground, or less than 12 feet in height at the time of planting. In no case may general trees be reduced in number by more than 50 percent of the requirement. The actual ratio of the number of general trees reduced from the requirement will be dependent on:
 - a. The proposed size and number of substituted trees;

- b. Similarity to native vegetation on-site or in the immediate vicinity;
 - c. Appropriate plant grouping for water needs; and
 - d. The amount of immediate increase in site canopy.
- (4) The plan must designate the botanical name (genus and species) and location of all plant material to be installed.
- (5) The proposed alternate landscape betterment plan may be approved if the director determines that the intent of the minimum requirements of these provisions are being exceeded.

Sec. 10-420. - Plant material standards.

- (a) *Quality of plant materials.* Plant materials used to meet the requirements of this division must meet the standards for Florida No. 1 or better, as set out in Grades and Standards for Nursery Plants, Parts I and II, Florida Department of Agriculture and Consumer Services. Root ball sizes on all transplanted plant materials must also meet state standards.
- (b) *Use of native varieties.* At least 75 percent of the trees and 50 percent of the shrubs used to fulfill these requirements must be native Florida species.
- (c) *Trees and palms.*
- (1) For code-required trees, at least 50 percent of the trees at the time of installation must be a minimum of ten feet in height, two inches in diameter at 12 inches above the ground, and have a four-foot spread. The remaining code-required trees, at the time of installation, must be a minimum of six feet in height, one inch in diameter at 12 inches above the ground, and have a three-foot spread.
 - a. Palms must have a minimum of ten feet of clear trunk at planting.
 - b. Coconut palms must be varieties that are resistant to lethal yellowing.
 - c. Trees having an average mature spread or crown less than 20 feet may be substituted by grouping the same so as to create the equivalent of 20-foot crown spread.
 - d. Trees adjacent to walkways, bike paths, and rights-of-way must be maintained with eight feet of clear trunk.
 - (2) Larger trees substituted to reduce the minimum number of general trees, without the use of an alternative landscape betterment plan, must be no less than four inches in diameter at 12 inches above the ground and no less than 16 feet in height at the time of planting. The general trees requirement cannot be reduced in number by more than 50 percent.

[...]

- (h) *Credits for tree preservation.* Except for prohibited species as listed above, every consideration must be given to retaining as much of the existing plant material as possible.
- (1) Each existing native tree preserved in place which has a trunk diameter of four inches or greater measured at 4½ feet above the ground will receive a credit of five trees against the tree planting requirements of § 10-416(a) of this chapter.
 - (2) Native palms preserved in place which are eight feet or greater from ground level to base of fronds will receive a credit of three trees.
 - (3) Existing sabal palms, identified on the development order plans and relocated on-site, will be given a two-tree credit.
 - (4) Credits for existing trees may not be used to reduce the required parking canopy trees in parking or vehicle use areas.

- (5) Existing native trees in buffers may be used for the same credits applied to the perimeter buffer requirements instead of to the tree planting landscape requirements of § 10-416(a) of this chapter, provided they occur within the same segment (100 feet or less) of a required buffer.
- (6) Credits will apply only when the trees are labeled as protected-credit trees. If the protected-credit trees die within three years from the development order certificate of compliance, they must be replaced by the number of credit trees taken.
- (7) Credits will apply where the preserved tree is in a barricaded area at least two-thirds the radius of the crown spread of the tree measured from the trunk center. In no case may this area radius be less than 2½ feet.

[...]

Sec. 10-421. - Plant installation and maintenance standards.

- (a) *General design criteria for plantings.* Plant materials must be installed in soil conditions that are conducive to their proper growth.
 - (1) Limerock located within planting areas must be removed and replaced with native or growing quality soil before planting.
 - (2) Plants' growth habits must be considered in advance of conflicts that might be created (e.g., views, signage, overhead power lines, lighting, circulation, sidewalks, buildings, etc.).
 - (3) Trees may not be placed where they interfere with site drainage, subsurface utilities, or overhead utility lines, or where they will require frequent pruning in order to avoid interference with overhead power lines.
- (b) *Installation of plant materials.* All landscape materials must be installed in a recognized horticulturally correct manner. At a minimum, the following installation requirements must be met:

[...]

- (5) Utility or drainage easements may overlap required buffers; however, no buffer trees or shrubs may be located in any utility, drainage, or street easement or right-of-way. To avoid conflicts with overhead utility lines, only trees reaching less than 20 feet in height at maturity may be used directly adjacent to an overhead line. Variances and deviations from the requirements of this subsection are prohibited, except when included in an approved alternate landscape betterment plan.
- (6) Safe sight distances at intersections. Minimum safe sight distances must be maintained in accordance with the visibility requirements set forth in § 34-3131 of this LDC.
- (c) *Maintenance of landscaping.* The owner is responsible for maintaining the required landscaping in a healthy, vigorous condition at all times. Tree and palm staking must be removed within 12 months after installation. All landscaping must be kept free of refuse, debris, disease, pests, and weeds. Ongoing maintenance to prohibit the establishment of prohibited invasive exotic species is required.
- (d) *Pruning.* Vegetation required by this code may only be pruned to promote healthy, uniform, natural growth of the vegetation (except where necessary to promote public health, safety or welfare). Pruning must be in accordance with "Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices (Pruning) (ANSI A300, Part 1)" by the American National Standards Institute and "Best Management Practices: Tree Pruning" by the International Society of Arboriculture (ISA). Trees must not be severely pruned to permanently maintain growth at a reduced height or spread. Pruning must not interfere with the design intent of the original installation. Severely pruned trees must be replaced by the property owner; replacement trees must meet the tree size requirements in § 10-420 above. A plant's growth habit must be considered in advance of conflicts which might arise (i.e., views, signage, overhead power lines, lighting, circulation, sidewalks, buildings, and similar conflicts).

Selected sections from Marco Island Code of Ordinances Chapter 30 - Land Development Code, Article IV – Landscaping

Note: Items addressing discussions at the July 2022 Planning Board meeting are highlighted below.

Sec. 30-435. Plant material and installation standards.

- (a) *Quality.* Plant materials used to meet the requirements of this section shall meet the standards for Florida No. 1 or better, as set out in Grades and Standards for Nursery Plants, part I and part II, Department of Agriculture, State of Florida (as amended). Root ball sizes on all transplanted plant materials shall also meet state standards.

(1) At least 50 percent of the trees and 50 percent of the shrubs used to fulfill these requirements shall be native or naturalized Southern Floridian species, as determined by accepted valid scientific reference. The "Recommended Trees and Shrubs for the City of Marco Island List" is available for reference at city hall.

(2) In addition, for all sites, at least 50 percent of the trees and shrubs used to fulfill these requirements shall be drought-tolerant species as listed in the South Florida Water Management District's Plants for Your Florida-Friendly Landscape. Reference to be used in the native determination may include, but not be limited to:

Long, R.W., and O. Lakela, 1976. A Flora of Tropical Florida. Small, J.K., 1933. A Manual of the Southeastern Flora. Wunderlin, R.P., 1982. Guide to the Vascular Plants of Central Florida.

(3) Where Florida-friendly plants are to be utilized, use the South Florida Water Management District Plants for Your Florida-Friendly Landscape (as amended) as a reference.

- (b) *Trees and palms.* All required new individual trees shall be species having an average mature spread or crown of greater than 20 feet and having trunk(s), which can be maintained in a clean condition with over ten feet of clear wood. Trees adjacent to walkways, bike paths and rights-of-way shall be maintained in a clean condition with over ten feet of clear wood. Trees having an average mature spread or crown less than 20 feet may be substituted by grouping the same so as to create the equivalent of a 20-foot crown spread. For code-required trees, at least 50 percent of the trees shall be canopy type trees and 50 percent may be palms. The minimum size of the trees at the time of installation shall be as follows:

Single-family single story structures.

Canopy trees:

(50 percent) Ten feet, four-foot spread, 1.75 inch caliper (at 12 inches above the ground).

(50 percent) Eight feet, three-foot spread, 1.50 inch caliper (at 12 inches above the ground).

[...]

A grouping of three palm trees will be equivalent to one canopy tree. Exceptions will be made for Roystonea spp. (Florida Royal Palm) and Phoenix spp. (Canary Island Date Palm not including Roebelenii) which shall count one palm tree for one canopy tree. Also, exceptions will be made for Cocos spp. (Coconut Palm) and Arecastrum spp. (Queen Palm) which shall count two palm trees for one canopy tree. In side and rear yard locations, palms can only be substituted for 50 percent of the canopy tree requirement. Front yards may have 75 percent palms, and are encouraged within commercial zoning districts.

- (c) *Tree species mix.* When trees are required to be planted to meet the requirements of this code, a mix of species shall be provided. The number of species to be planted shall vary according to the overall number of trees required to be planted. The minimum numbers of species to be planted are indicated below.

Required Species Mix

Required Number of Trees	Minimum Number of Species
2—10	2
11—20	3
21—30	4
31+	5

[...]

(h) **Regulations.** Public and private trees and landscaping shall not be planted or replaced in the right-of-way until a permit has been issued by the city manager or designee in accordance with section 42-76. In addition to the standard for issuance contained in subsection 42-76(f), the following standards shall apply. In the event of a conflict, the more restrictive standard shall govern.

- (1) No permit is required to perform grass maintenance in public rights-of-way.
- (2) All permitted trees and plant material placed in public rights-of-way do not create or vest any property right in association with a permit, except in the city. Permittees shall be responsible for the maintenance of such trees and plant material, as provided herein, unless otherwise removed or specified as a condition of the permit issued pursuant to section 42-76.
- (3) A property owner desiring to privately landscape the public right-of-way shall submit a landscape and irrigation plan to the city manager or designee. The application shall include three sets of detailed plans indicating existing rights-of-way facilities, type and location of proposed plantings, and location of electrical and irrigation systems.
- (4) After review and acceptance of the landscape and irrigation plans, a landscape agreement shall be signed by the permittee to insure that the permittee or his or her successor or assignee shall be responsible to maintain such material and irrigation systems until removed or otherwise specified. The agreement shall be recorded in the official records of Collier County.
- (5) Tree planting distance from the edge of the sidewalk on private property shall be no closer than 36" from the trunk of tree. Under no circumstances shall trees be planted within the flow line of a swale regardless of the setback from the edge of the sidewalk.
- (6) Tree plantings must not interfere with line-of-sight triangles at anytime or with ingress or egress to the property.
- (7) Trees planted in the public right-of-way in close proximity (less than ten feet) to underground utilities shall be reviewed and approved by the city manager or designee.
- (8) Trees planted in the public right-of-way under power supply lines shall be of the type that do not grow taller than 15 feet. The owner shall be responsible to maintain trees under or adjacent to the power supply to prevent power failure.
- (9) Existing private trees located in the public right-of-way may be adversely impacted by various underground construction activities undertaken by the city. The city shall not be responsible for any adverse impact on existing private trees in the public right-of-way from underground activities undertaken by the city.

[...]

Sec. 30-436. Existing plant material.

- (a) All new and or redevelopment shall retain existing native and mature vegetation to the maximum extent possible. Existing native vegetation shall be retained unless stormwater management design, necessary grade changes, required infrastructure or approved construction footprints necessitate its removal. The need

to remove existing vegetation shall be demonstrated by the applicant as part of the building permit or site development plan review process. Areas of retained vegetation shall be preserved in their entirety with all trees, under story, and ground covers left intact and undisturbed provided that prohibited exotic plant materials as defined herein are to be removed.

[...]

Sec. 30-437. Tree preservation credits.

Existing native trees may be credited towards meeting the minimum tree planting requirements according to the formula in Table 1. Fractional measurements shall be attributed to the next lowest category.

Table 1. Calculation of Tree Preservation Credits

Existing Crown Spread of Preserved Trees	or	Diameter of Tree at 4.5 Feet Above Natural Grade	=	Number of Tree Credits
50 feet or greater	or	26 inches or greater	=	3
40 to 49 feet	or	20 to 25 inches	=	2
30 to 39 feet	or	13 to 19 inches	=	2
20 to 29 feet	or	8 to 12 inches	=	1
10 to 19 feet	or	2 to 7 inches	=	1
Less than 10 feet	or	1½ to 2 inches	=	1*

*Credited against equivalent required tree only.

(Ord. No. 02-22, § 7, 7-15-2002)

Sec. 30-440. Minimum landscaping requirements.

- (a) Landscaping for all new development, including single-family, two-family, mobile home, multifamily, commercial, and institutional uses shall include as a minimum, the number of trees set forth below. Areas dedicated as preserves and conservation areas shall not be counted to meet the requirements of this section. When calculating minimum tree requirements, a fractional unit of 0.50 or greater shall require an additional tree.

- (1) *Single-family, two-family, and mobile home developments.* One canopy tree per 2,500 square feet of lot area, or two canopy trees per lot, whichever is greater, with the maximum number required: 15 trees per lot. One or more canopy trees, palms, or grouping of palms meeting the code requirements shall be located within ten feet of the front property line.

[...]

PERMIT TO PERFORM WORK AND/OR MAINTENANCE IN PUBLIC RIGHT-OF-WAY

Revised 7/20/2015

IN THE CITY OF MARCO ISLAND, FLORIDA

NOTE: NO PAVERS IN SIDEWALK AREA PER STANDARD DETAIL SHEET No. 3

Date Received _____

PERMIT NO. _____MI

Folio# _____

FEE PAID _____

Approval is hereby requested by _____

for the purpose of _____

at/on _____

Tract/Lot No. _____ Block _____ Unit _____

Subdivision _____ Sec. _____; Twp. _____ S.; Rge. _____ E.

The work herein described and permitted is to be commenced on or about _____

and completed approximately _____ Expiration Date _____

NOTES:

1. Work shall be performed in accordance with approved plan, Conditions of Permit. Stipulations specified as part of this permit and in accordance with "City of Marco Island Construction Standards Handbook for Work Within the Public Right of Way", latest edition, or as may be superceded by the City.
2. Applicant declares that prior to filing this application he has ascertained the location of all existing utilities, both aerial and underground, as applicable.
3. This permit is contingent upon Permittee obtaining necessary rights of entry for construction and maintenance where required right-of-way for public use has not been dedicated and accepted by the City of Marco Island.
4. If the application is made by any person or firm other than the owner of the property involved, a written consent from the property owner shall be required prior to processing of the application.
5. "Public Works Department approval does not exempt the permittee from gaining approval from any State, Federal or Local Agencies having jurisdiction over the proposed work."

Primary Contact: _____

Phone: _____

Email: _____

Secondary Contact: _____

Phone: _____

Email: _____

I agree to conduct all work in accordance with all applicable City, County and State Codes and Laws.

AUTHORIZED SIGNATURE FOR PERMITTEE

APPROVED BY PUBLIC WORKS DEPARTMENT

Mike Daniel, Manager Infrastructure Construction & Maintenance

Herb Burkart, Right-of-Way Inspector

Tom O'Connor, Street & Drainage Coordinator

Date: _____

REMARKS: _____

NOTIFY PUBLIC WORKS DEPARTMENT FOR FINAL INSPECTION: (239) 389-3931

THIS PERMIT MUST BE KEPT ON THE WORK SITE

CONDITIONS OF PERMIT

1. Permits are required for all work performed in any rights-of-way or easements provided for public use in the municipal boundaries of the City of Marco Island and maintained by the City of Marco Island.
2. When permitted facilities are placed within a public right-of-way or easement, the installation is for permissive use only and placing of facilities shall not operate to create or vest any property right in the associated right-of-way or easement in the permittee. Furthermore, the permittee shall be responsible for maintenance of such facilities until they are removed, unless otherwise specified in the particular instance.
3. All materials and equipment shall be subject to inspection by the Public Works Department's assignee.
4. Requests for inspection shall be made 72 hours prior to commencing work requiring inspection.
5. During the construction, the Contractor/Permittee shall comply with the "State of Florida Manual of Traffic Control and Safe Practices for Street and Highway Construction, Maintenance, and Utility Operations" and with the "Manual on Uniform Traffic Control Devices" and with all other governing safety regulations.
6. The City of Marco Island shall be relieved of all responsibility from damage or liability of damage of any nature arising from work authorized under this permit.
7. All crossings of existing pavement shall be by jacking and boring at a minimum depth of twenty-four inches (24") unless otherwise authorized by the Public Works Department's assignee.
8. All overhead installations shall conform to clearance standards of the City, and all underground crossing installations shall be placed at a minimum depth of twenty-four inches (24") below the pavement and/or a minimum depth of twenty-four inches (24") below the roadside ditch or swale invert. Primary cable (voltage exceeding 500 volts) will have a minimum thirty-six inch (36") cover. Secondary cable (voltages less than 500 volts) will have a minimum thirty inch (30") cover. Exceptions may be made by authority of the Public Works Department.
9. Two prints of the proposed work covering details of this installation shall be made a part of this permit. If additional plans are required, they shall become a part of this permit.
10. Sod or other approved organic material shall be required for any disturbed rights-of-way following completion of all permitted work.
11. All property disturbed by authorization of this permit shall be restored better than or equal to its original condition and to the satisfaction of the Public Works Department's assignee.
12. Whenever necessary for the construction, repair, maintenance, improvement, alteration or relocation of said right-of-way or easement as determined by the City, any or all poles, wires, pipes, culverts, cables, sod, landscaping, driveways, sprinklers, or other facilities and appurtenances authorized shall be removed from said right-of-way or easement, or reset or relocated thereon as required and so notified by the City, and at the expense of the permittee, his successor or assigns.
13. Where the permittee, or his successor or assigns, is notified of a need for construction, repair, maintenance, improvement, alteration of or relocation within the right-of-way or easement and no action is taken by the responsible party within the time frame specified by the City, the City shall cause the permitted work to be altered, relocated, or removed, with the total expense being borne by the permittee or the responsible party.
14. Permits shall generally be in a form approved by the City of Marco Island and shall include the time of commencement, the number of days the job is expected to take, and the approximate date of completion. The permit will expire ninety (90) days after the designated completion date, unless authorized in the specific instance for a longer or shorter period. If the work has not been completed by the expiration date, there will be a renewal fee payable upon extending the expiration date for an additional ninety (90) days.
15. All correspondence regarding construction procedures will be handled directly with the permittee, his authorized agent or his consultant, and not through a contractor or subcontractor.
16. Upon completion of authorized work and prior to acceptance by the City, the Public Works Department shall be notified by mailing or delivering a completion notification to the Public Works Department, 50 Bald Eagle Drive, Marco Island, Florida 34145.



City of Marco Island

SPRINKLER HEAD LOCATED IN RIGHT OF WAY

Date: _____

Attn: Tim Pinter, Director of Public Works
City of Marco Island
50 Bald Eagle Drive
Marco Island, FL 34145

Re: Sprinkler heads located in right-of-way

Job Address: _____

Permit#: _____

This letter will serve as notification that all sprinkler heads installed in the right-of-way by owners or contractors will be no closer than twelve inches (12") and no farther than twenty-four inches (24") from the front edge of the sidewalk toward the street. Also, City of Marco Island will assume no responsibility for damaged heads and damaged lines in right-of-way during maintenance and routine cleaning of swale.

Thank you for your cooperation and assistance in this matter.

Owner Name: _____

Owner Signature: _____

State of _____, County of _____

Sworn to and subscribed before me this ____ day of _____, 20 ____,

by _____, who is personally known to me, or who has produced _____ as identification.

Signature of Notary

(seal)

Printed or Typed Notary Name

Selected Sections from Madeira Beach Code of Ordinances Chapter 106 – Vegetation, Article II. – Landscaping & Article III – Trees

Note: Items addressing discussions at the July 2022 Planning Board meeting are highlighted below.

Sec. 106-32. General landscape requirements.

- (a) Minimum requirements for landscaping must consist of a combination of grass or ground cover and shrubs, vines, hedges, trees or palms. Other material such as rocks, pebbles, sand or decorating fence may be used to satisfy the landscaping requirements west of Gulf Boulevard. Concrete, asphalt paving or pebbles placed on an impervious surface will not satisfy landscaping requirements in any location.
- (b) When trees are required to meet the landscape requirements, a minimum of 50 percent of the trees shall be native species or hybrids or cultivars of native species.
- (c) Hedges shall be planted and maintained so as to form a continuous, unbroken, solid visual screen. Spacing of plants shall be no more than 30 inches on center, depending on the species.

(Code 1983, § 20-507(B))

Sec. 106-33. Residential single-family, duplex and triplex.

- (a) All new single-family, duplex and triplex residential developments shall include a minimum of 25 percent landscape area which will include native and/or nonnative "introduced" trees and vegetation. The minimum number of trees will be as prescribed in subsection 106-72(a).
- (b) No residential lot, excluding the area covered by the principal structure, will be covered by more than 40 percent impervious surface.

(Code 1983, § 20-507(C)(1))

Sec. 106-36. Xeriscape requirements.

The xeriscape design principle of plant selection and placement based upon function, water requirements and suitable environmental exposure of plant materials shall be used in all vehicular-use areas. In addition, the following xeriscape techniques shall be required:

- (1) Fifty percent of the plants used in all vehicular-use area landscape designs shall be drought tolerant and located in groupings according to water requirements.
- (2) Seventy-five percent of the plants used in all vehicular-use area landscape designs shall be a combination of native and drought tolerant.
- (3) All plantings shall be grouped in zones according to water requirements and shall be irrigated in zones separating high water use lawn area from drought tolerant zones.
- (4) All irrigation systems shall be automatic with cycling capacity and shall be designed to avoid irrigation of unplanted surfaces.

(Code 1983, § 20-507(C)(2)(d))

Sec. 106-41. Existing plant material.

In the instances where healthy plant material exists on a site prior to its development, in part or in whole, for purposes of vehicular-use areas, the city manager or designee may adjust the application of the requirements of this article to allow credit for such plant material (excluding sick or damaged trees, or any trees included in the

prohibited species tree list), provided that the city manager or designee finds such adjustment is in keeping with and will preserve the intent of this article.

(Code 1983, § 20-507(G); Ord. No. 1050, § 6, 8-9-05)

Sec. 106-62. Native and Florida-friendly species.

Species native to the Madeira Beach area include, but are not limited to:

- (1) Native pines—*Pinus* spp.;
- (2) Native oaks—*Quercus* spp.;
- (3) Hickories and pecans—*Carya* spp.;
- (4) Bald and pond cypresses—*Taxodium* spp.;
- (5) Southern red cedar—*Juniperus silicicola*;
- (6) Hollies—*Ilex* spp.;
- (7) Sweetbay—*Magnolia virginiana*;
- (8) Southern magnolia—*Magnolia grandiflora*;
- (9) Sweetgum—*Liquidambar styraciflua*;
- (10) Red maple—*Acer rubrum*;
- (11) Black Cherry—*Prunus serotina*;
- (12) Carolina cherry laurel—*Prunus caroliniana*;
- (13) Persimmon—*Diospyros virginiana*;
- (14) Black gum—*Nyssa sylvatica*;
- (15) Loblolly bay—*Gordonia lasianthus*;
- (16) Wax myrtle (bayberry)—*Myrica cerifera*;
- (17) Willows—*Salix* spp.;
- (18) Elderberry—*Sambucus simpsonii*;
- (19) Slatbrush—*Baccharis* spp.;
- (20) Cabbage (sabal) palm—*Sabal palmetto*.
- (21) All species of palm trees;
- (22) In addition to the 21 named species, any other species that are listed as "Florida Native" or "Okay" on the University of Florida IFAS Extension "Florida Friendly Plant List," as updated from time to time.

(Code 1983, § 20-508(B)(1); Ord. No. 1144, § 1, 1-13-09)

Editor's note(s)—Ord. No. 1144, § 1, adopted January 13, 2009, changed the title of section 106-62 from "Native species" to "Native and Florida-friendly species"

Sec. 106-63. Nonnative "introduced" species.

Nonnative "introduced" species included, but not limited to:

- (1) Camphor—*Cinnamomum camphora*;
- (2) Citrus—*Citrus* spp.;
- (3) Eucalyptus—*Eucalyptus* spp.;
- (4) Silk oak—*Grevillea robusta*;
- (5) Jacaranda—*Jacaranda acutifolia*;
- (6) Jerusalem thorn—*Parkinsonia aculeata*;
- (7) Ear tree—*Enterolobium cyclocarpum*;
- (8) Fig tree—*Ficus* spp.

(Code 1983, § 20-508(B)(2))



Where Are My Trees' Roots?

One of the most frequently asked questions of community arborists is, "Will it hurt my tree if I cut the roots?" Indeed, tree roots are mostly ignored until they cause a problem by "popping up" in the yard, cracking a driveway, or tilting a sidewalk. Many people think removing a few of the tree's encroaching roots will cause little long term harm and that large trees can easily recover from minor root loss, but that is seldom the case.

How much damage a tree's root system can bear is a function of how much soil surface the roots occupy. The term "drip line," which is often used to describe the limits of root length, is a poor indicator of roots' true extent. Different species also have different types of root systems. However, most trees fall in line with the formulas below, which can be used to calculate the average length of a tree's roots. But first a couple of definitions:

Total root zone area: Area within the soil profile where roots exist; typically the root zone of trees extends beyond the drip line.

Critical root zone: Soil area around a tree containing the roots, which provide stability and a significant uptake of moisture. In clay soils most of these roots lie in the top 12-14" of the soil. Damaging roots in this area can cause significant tree dieback or death.

Total tree root zone radius = diameter of tree measured at 4.5' above the ground (dbh) x 1.5 feet.
 12" dbh tree = 12" X 1.5' or 18' root zone **radius** around the tree.

Critical root zone radius = diameter of tree measured at 4.5' above the ground (dbh) x 1.3 feet
 12" dbh tree = 12" X 1.3' or 15.6' critical root zone **radius** around the tree.

When calculating your tree root zones, remember that foundations, driveways, sidewalks, and walls can limit the effective areas that roots can occupy. Utility line replacement also frequently results in roots being cut or disturbed. Cutting or damaging more than 30% of the critical root zone area can cause dieback or death and may destabilize the tree. If you are unsure about the damage you may cause, contact a certified arborist for advice.

