



# City of Seal Beach

## City Wide Street Tree Master Plan Landscape Guidelines & Maintenance Manual

March 21, 2011

**CITY OF SEAL BEACH, CALIFORNIA**

**CITY WIDE STREET TREE MASTERPLAN**

**LANDSCAPE DESIGN GUIDELINES**

**March 21, 2011**

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# **CITY OF SEAL BEACH**

## **CITY WIDE STREET TREE URBAN FORESTRY**

### **MISSION STATEMENT**

The City of Seal Beach is a charming beach community with over 5,100 trees in the City's street public right of way. Throughout the City there is a variety tree species types consisting of palms, evergreen, deciduous and showy flowering specimen trees arranged in an eclectic informal manner.

The trees are significant value to the community because of the connection they make with green space efforts to enhance nature, identity and character they give to individual neighborhoods, environmental benefits they supply to improve air quality, reduce erosion and storm water runoff, the provision of shade and the overall aesthetic value.

The primary goal is to improve, renew and protect the street tree canopy, create a beautiful clean and maintained landscape environment for the City's street public right of way. A tree planting program which fosters a sense of community pride, enhances an appreciation of trees, promotes proper tree care and encourages participation in the development of the City of Seal Beach urban forest.

### **OBJECTIVES**

1. Educate the public on the role trees play in the urban environment.
2. Encourage and promote stewardship of City public right-of-way street trees and private trees.
3. Increase tree canopy cover within street public right of way to enhance character of the City.
4. Retain and maintain existing mature trees throughout the City.
5. Replace trees which are in need of recovery with mature healthy trees suitable for the environmental conditions.
6. Develop a written City wide tree master plan and tree ordinance.
7. Hold an annual Arbor Day tree planting event.
8. Review and advise City Council and City staff on various tree-related issues.
9. Assessing trees for their potential to injure people or damage property.

# INTRODUCTION

The City of Seal Beach has an understated elegance that cannot be compared to any other city in Southern California. The quaint architecture styles, along with an eclectic mix of street tree planting species types of palms, evergreen, deciduous and showy flowering trees, give a harmonious balance of scale to the City. Therefore it is important to develop a comprehensive street tree master plan document with landscape design guidelines and specifications to protect this valuable asset to the City.

The Street Tree Master Plan has been defined by the following District areas of within the City of Seal Beach as:

- Old Town
- The Hill
- Seal Beach Boulevard
- College Park East
- College Park West
- Old Ranch Town Center



The primary goal of the Master Street Tree Plan is to build upon the existing tree palette that has been established by the City and expand the urban forest with new trees from the City approved recommended list in vacant sites throughout the City of Seal Beach, as of November 3, 2009.

Trees are an investment for the City that offers numerous social, communal, environmental, aesthetic and economic benefits. The Street Tree Master Plan will help support these benefits for the community of Seal Beach.

Other goals of this Master Plan are:

- Increase the City's existing tree canopy to provide shade
- Recognize the environmental benefits of trees
- Service as the basis for a tree maintenance program
- Provide the opportunity to identify and fill appropriate vacant sites
- Utilize trees which provide the best possible aesthetics
- Utilize trees which have the best possibility of survival
- Minimize maintenance
- Added tree benefits
- Foster community pride
- Minimize public exposure through risk avoidance

## **CITY STREET TREE POLICIES**

“Street trees” are those trees which grow in any City owned easement. Because a planted tree is considered real property (it is part of the land), it is owned by the owner of the street easement or fee title of the land. The City owns fee title to most streets and their easements; therefore the City is the owner of trees in the easement or parkway. A parkway is defined as the area between the property line and the curb. This area varies in width throughout town. In some areas the easement actually extends behind the sidewalk. In most cases, the planted parkway is considered the area between the sidewalk and the curb.

The City's annual financial commitments to continually repair and replace sidewalk, curb, and gutters due to the damage from street tree root systems and the potential liability exposure has highlighted interest regarding the street trees throughout the City. In response to these concerns, in 1996 the City formed the City Tree Advisory Board to provide assistance to the City Council in developing a street tree program that is consistent with our community values. The policies enumerated below are essentially those developed by this group. They have been updated to address current conditions.

### **(1) MANAGEMENT**

The Director of Public Works shall administer the City's street tree policy as provided for herein. The Public Works Supervisor and/or City Representative shall manage the maintenance and care of all street trees throughout the City. No person shall plant, remove, or alter any street tree without the permission of the Director of Public Works, Public Works Supervisor and / or the Tree Advisory Board

## (2) NEW PLANTING

Additional street tree planting shall be in accordance with the guidelines set forth in the adopted Street Tree Master Plan. All trees planted on public property, right of way, or easements as permitted by this policy shall be located and planted under the supervision of the Public Works Supervisor and/or City Representative. Subject to availability of funds, the City will purchase a 24” box tree for the planting of street trees in vacant locations. A residential property owner who desires a larger tree can achieve this by paying to the City the difference in cost for the larger tree of either a 36-inch or 48-inch box size. Priority for new plantings shall be determined by the Director of Public Works and/or City Representative as provided for under the funding section of this policy. The appropriate species and spacing shall be in accordance with the adopted Street Tree Master Plan.

### (a) New Development, Re-development and/ or Subdivision

No new development, re-development, subdivision and/or re-subdivision shall be approved unless it is found to include approved street trees as appropriate along the street frontage of the subject project. The appropriate tree species, size and spacing shall be in accordance with adopted Street Tree Master Plan.

### (b) Vacancies

In accordance with the adopted Street Tree Master Plan, the City will plant vacancies throughout the City as funding becomes available. The Public Works Department and the City Manager will establish budgets and priorities for such planting.

An encroachment permit from the City is required to plant all new approved street trees at vacant locations for a property which is subject to street frontage improvements, as a result of new development, redevelopment and/ or a major remodel.

By the City adopting this report it expresses that the City desires to plant trees within all available vacancies in the public right of way. If a residential property owner in the City desires not to have a tree planted in front of their property the City will not plant a tree. The residential property owner shall provide a written request to the City Director of Public Works stating not to plant a tree in the public right of way in front and/ or side of their property. The request will then be heard at the next available Tree Advisory Board meeting (typically within (60) sixty days). The City will then provide the residential property owner a written response within (10) ten business days after the Tree Advisory Board meeting.

### (3) MAINTENANCE

The City is responsible for trimming, spraying, root pruning, and all maintenance of street trees. Trees are trimmed on a regular schedule by the City's contact tree trimming firm. City and contract tree trimming crews will respond to call in requests if the Director of Public Works and/or City Representative determines that there is a hazard being created such as an overhanging branch, root protrusion or a diseased tree. All tree spraying, removal, and replacement is done by City staff and contract services as manpower and funding are available.

#### (a) Tree Watering & Irrigation

To establish healthy successful street trees, the City of Seal Beach Public Works Department will be responsible for the first three (3) years for watering trees in the public right of way. After the three (3) year period the residential property owner is responsible for watering the public right of way street tree in the front and/ or side of their property. Residents throughout the City are encouraged to water the trees by way of an automatic low flow drip irrigation system to conserve water.

#### (b) Tree Care & Trimming

Refer to Exhibit F Landscape Maintenance Guideline Manual within this report.

### (4) REMOVAL & REPLACEMENT OF EXISTING PUBLIC RIGHT OF WAY TREES

#### (a) Removal

No City tree shall be removed without the approval from the City's Public Works Director, Public Works Supervisor and Tree Advisory Board. The City is responsible for removal of street trees within the public right away. The City shall determine if a street tree needs to be removed because of potential danger to people and/ or damage to property. Requests to remove and replace trees is done on a first come first served basis, and subject to availability of funds for both removal and replacement, unless specific situations are creating an undue hazardous situation which warrants immediate attention. Trees are removed only if they are creating a hazardous situation such as potential for tripping, damage to sidewalks, driveways, streets, curbs and gutters, sewer and water lines or other utility lines, if they are unhealthy, or if they are the improper types for the area. Removal of the street tree shall be considered only after all efforts to save the tree have been considered and determined to be inappropriate, such as root pruning, trimming and chemical treatment. Trees which have received prior designation as being of historic or special significance will not be removed under this procedure. The Public Works Department will determine street tree planting priorities to efficiently manage available funding and achieve effective results.



(b) Replacement

All street trees removed shall be replaced unless the Director of Public Works and /or City Representative determines it is in the interest of safety or sound horticultural practices not to replace the tree. All replacement trees shall be consistent with the adopted Street Tree Master Plan. The size and type of tree must have final approval of the Director of Public Works and/or City Representative as well as the Tree Advisory Board. In cases where a replacement is mandated due to disease, tree damage, or invasive roots which is damaging adjacent infrastructure, City Staff will provide labor and materials to replace trees as staff and funding are available. Subject to availability of funds, the City will purchase a 24” box tree. A residential property owner who desires a larger tree can achieve this by paying to the City the difference in cost between a 24” box and the larger tree, such as a 36” or larger boxed tree. In cases where an adjacent property owner desires to remove a street tree that does not meet the above criteria and is otherwise healthy, the cost of the removal and replacement (only approved by the Director of Public Works and /or City Representative as well as the City Tree Advisory Board) shall be the responsibility of the residential property owner. This includes the removal and replacement of inappropriate species which are not diseased, damaged, or causing damage to infrastructure. Replacement trees shall be of appropriate size with a 24” box minimum, unless otherwise approved by the Director of Public Works and/or City Representative.

An encroachment permit from the City is required for the removal and/ or replacement of any street tree by a property owner. All costs for removing and/ or replacement shall be paid by the property owner and/ or any person damaging a City tree. Selection, spacing and size shall be in accordance with the adopted City Street Tree Master Plan.

If a residential property owner in the City desires to have a tree removed and/ or replaced in the public right of way in front and/ or side of their property a written request must be submitted to the City Director of Public Works. The request will then be heard at the next available Tree Advisory Board meeting (typically within (60) sixty days). The City will then provide the residential property owner a written response within (10) ten business days after the Tree Advisory Board meeting.

The City has provided an ‘Application for a removal of a City Street Tree’ request form and is available at the Department of Public Works counter in City Hall.

## (5) STREET TREE PLANTING GUIDELINES

The City of Seal Beach has several neighborhoods with unique characteristics. It is desirable for each residential property to have the opportunity to have a street tree. Therefore, it is appropriate to have guidelines which may be interpreted in ways to allow for the maximum tree planting opportunities. Recognizing that these guidelines are not achievable in all situations, they should be implemented to the highest degree possible. Public safety is to remain a top priority.

The general guidelines are:

- Plant 30' minimum from the back of curb return on the approach to an intersection and 10' from the end of curb return on the exit side
- Plant 10' minimum from the edge of driveway approach
- Plant 10' minimum from street light standards and utility poles
- Plant 10' minimum from fire hydrants
- Plant 5' from parkway carriage sidewalks and utility meters
- Center the tree in the parkway between the sidewalk and back of curb

## (6) FUNDING

The City will fund the City's Street Tree Program and plant new trees through grant funding programs, private contributions, and the City's General Fund as funds are available.

## (7) PUBLIC EDUCATION

It is in the City's interest to promote public education on the value of trees to the entire community. Specifically, education will promote the proper care of existing trees, procedures for planting, trimming, or removing trees, and how residents may contribute monetarily and/or through volunteer work to provide more trees in the community.

## (8) RISK MANAGEMENT

The purpose of this report is to focus on the prevention and correction of high-risk tree defects and avoid potential loss. By adopting the guidelines within this report the City can manage tree risks through the development of a tree management plan and can expect loss prevention in the following ways:

- a. Lower frequency and severity of accidents, damage and injury
- b. Fewer expenditures for claims and legal expenses
- c. Healthier longer-living trees
- d. Lower maintenance cost associated with tree removals

## (9) EUCALYPTUS ORDINANCE

Refer to the City of Seal Beach Municipal Code Title 9 Chapter 9.40 Trees (revised 12/2007).

## EXISTING TREE DATA COLLECTION

At the time of this study, there are 5,187 existing trees within the Public Right of Way throughout the City.

The base map information for the Street Tree Master Plan has been provided by the City's Public Works Street Improvement Plan Projects on file (September 2010). Field data collection has been with GPS mobile handheld computer devices to identify each street location, address, parkway width, tree species type, location, condition and other specific features.

The data inventory and analysis was conducted by in field onsite observations. Photographs are also provided to identify and record all existing trees along with vacant sites in a block by block street section in each District of the City of Seal Beach.

The collected mapped field data for the existing features within the public right of way identifies the following:

- Health Conditions: with recommendations for tree removal and/or relocation. An evaluation rating system from "*Excellent*" to "*Poor*" has been established based on the tree species: main trunk, branch structure, foliage, root systems, diseases / insect conditions.
- Height and Width: of tree canopy measured in units of feet
- Tree Trunk Caliper: measured units of inches diameter at standard height (DSH)
- Nearby Utilities: underground and /or Overhead Utility conflicts
- Landscape Parkway: width of street parkway in units of feet.
- Special conditions: (i.e.) uplifting of adjacent hardscape paving

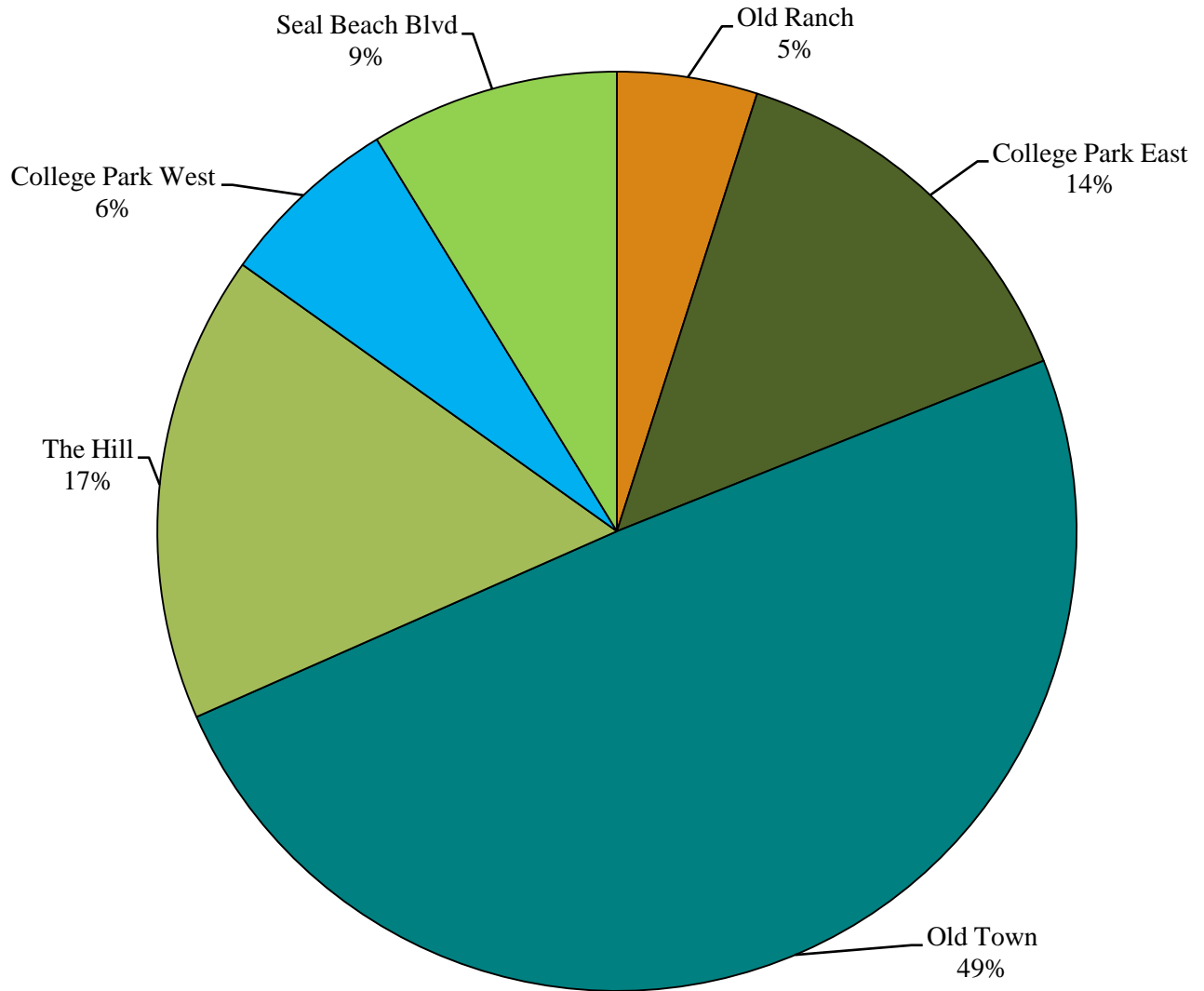
At the time of this study the general health of the existing City Trees are in good favorable condition with an evaluation of:

- 1% of the trees are in "*Excellent*" condition
- 90% of the trees are in "*Good*" condition
- 6% of the trees are in "*Fair*" condition
- 3% of the trees are in "*Poor*" condition

It is recommended that any existing tree that has been identified as in "Excellent" and / or "Good" condition have a continued monitoring and proper maintenance program. Trees indentified as in "*Fair*" and /or "*Poor*" condition be treated by measures outline in the provided Landscape Maintenance Manual and by the City's licensed certified arborist.

Sample street block by block maps in 11" x 17" sheet format have been provided within this report. For complete list of the City Wide Tree Species Data Inventory street maps refer to provided computer disc and/ or City Web Site.

# Existing Street Tree Quantities




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District	Count	Percent
Old Ranch	256	4.9%
College Park East	727	14.0%
Old Town	2,564	49.4%
The Hill	854	16.5%
College Park West	332	6.4%
Seal Beach Blvd	454	8.8%
<b>Totals</b>	<b>5,187</b>	<b>100.0%</b>

## VACANT SITES

Based on in field observations, vacant sites have been identified throughout the City. Highly visible vacant site locations have been determined in specific Districts. Landscape graphic drawings along with photographic illustrations of existing and proposed street tree plantings have been provided. These design tools are to assist the City Staff Representatives, Tree Advisory Members as well as Community Members to comprehend the long range goals and objectives of the City Wide Street Tree Master Plan.

The highly visible vacant site locations illustrated within the City are:

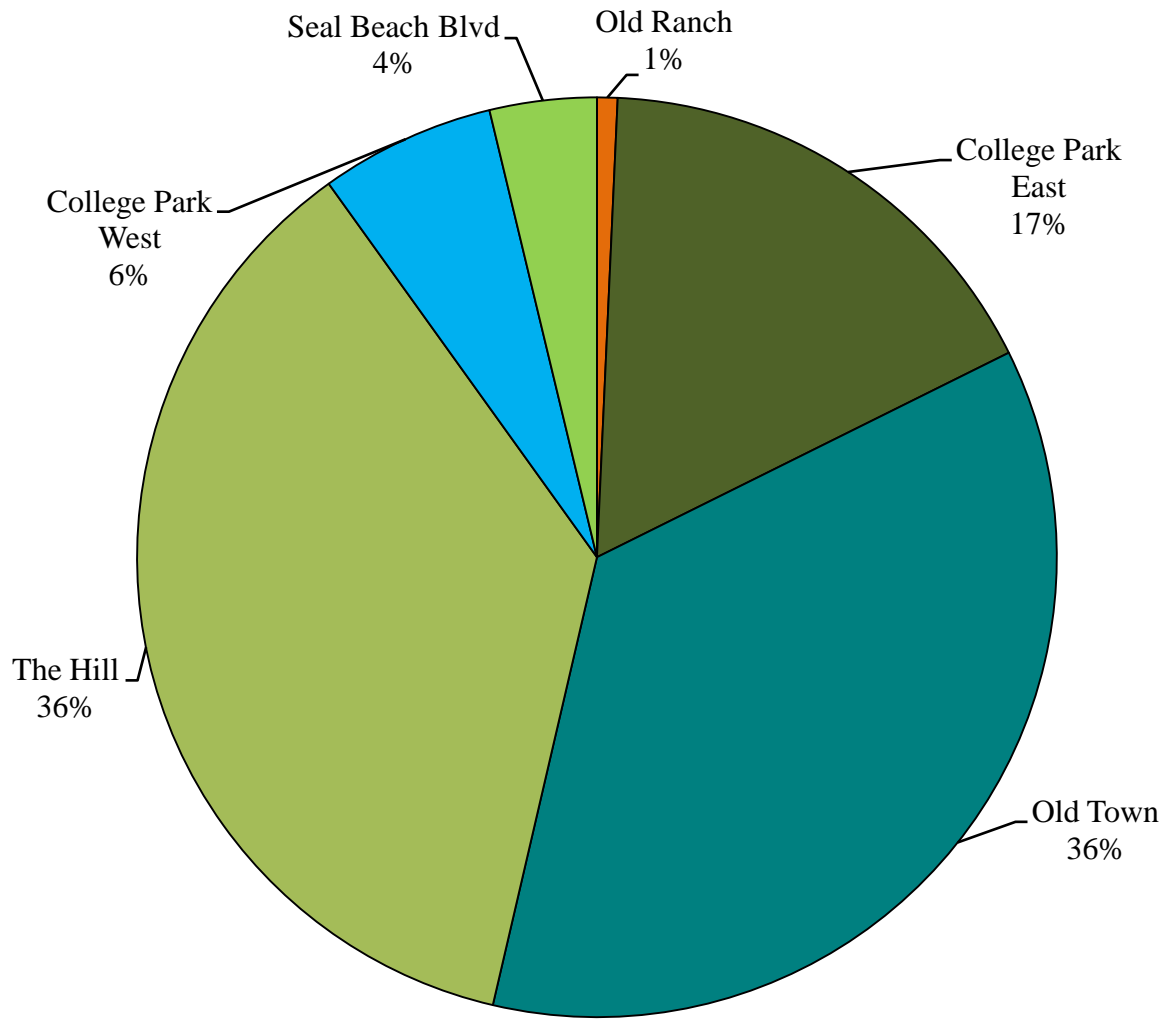
- Old Town District - Main Street and First Street
- Seal Beach Boulevard - Pacific Coast Highway to Bolsa Avenue
- College Park East District - Lampson Avenue
- College Park West District - College Park Drive

See Appendix (A) for landscape design illustrations of the above highly visible vacant sites within the City.

Existing smaller sized vacant sites also occur which are primarily in front of residential homes or commercial sites within each District throughout the City. Street names, addresses, landscape parkways ranging from 2'-6" to 5'-0" in width along with the City approved recommended tree species are identified in spread sheets as part of the Street Tree Master Plan. However, not all vacant sites shall have a new recommended tree planted due to conflicting factors, such as underground and/or overhead utilities. At the time of this study, there are 1,248 smaller sized vacant sites throughout the City.

See Appendix (B) for a complete list of City Wide Vacant Sites for each district.

# Vacant Sites



District	Count	Percent
Old Ranch	9	0.7%
College Park East	212	17.0%
Old Town	450	36.1%
The Hill	453	36.3%
College Park West	77	6.2%
Seal Beach Blvd	47	3.8%
<b>Totals</b>	<b>1,248</b>	<b>100.0%</b>

## **CITY APPROVED STREET TREE RECOMMENDATION LIST**

The City approved tree species palette dated November 03, 2009 shall be integrated for all tree species types to be planted when vacancies occur or when existing street trees are in decline from diseases, damaged or dead throughout the City.

The considerations for the approved recommended tree species palette are:

Planting area space requirements

- Soil & other environmental conditions
- Above & underground utility interference
- Reasonably free of diseases and insects

Each of the recommended tree species is identified with the Water Use Classification of Landscape Species (WUCOLS) developed by UC Cooperative Extension, San Mateo-San Francisco (L.R. Costello) and the California Department of Water Resources, 1992, which has had a significant effect on the design of landscapes for water use efficiency. WUCOLS is used to achieve “water averaging” where portions of high water use are offset by a proportional amount of low water use. The goal is the tree species selected have a net medium water use that will not excessively impact local water supply. Trees are designated as high, medium, or low in their water use requirements.

An existing primary tree species is identified when there is a greater quantity amount and / or is the tallest / widest tree species than others within each street. Although in some cases no existing primary tree species occur do to the eclectic mix of tree species types within a particular streetscape.

The City has approved three (3) recommended tree species types to be identified for each street in each District. The intent of the Street Tree Master Plan is to simplify the diverse street tree species palette and have one recommended primary tree species planted on each street in each District of the City that can be maintained in a healthy and safe condition.

Each recommended tree species common and botanical name with the WUCOLS have been identified in the Street Tree Master Plan document. Color photographs and general descriptions of each species chosen are provided.

See Appendix (C) for a complete list of City Wide recommended street tree species along with supporting photographs of each.

## **MASTER PLAN**

The purpose of the City Wide Street Tree Master Plan Draft is to incorporate the existing tree species, vacant site data collected in the field and the approved recommended tree species palettes into one overall colored computer generated plan.

Colored landscape maps identifying all the existing street tree species locations and names as well as vacant sites for each District have been provided on 24" x 36" sheet size format.

Individual Street maps within each District identifying all the existing street tree names, species characteristics, species value rating, characteristics along with dated colored photographs have been provided on 11" x 17" sheet size format.

These documents are to assist the City Staff Representatives, Tree Advisory Members as well as Community Members to easily understand on a large scale basis the overall existing conditions and to achieve the future goals of the City Wide Street Tree Master Plan.

See Appendix (D) for overall District maps along with supporting individual street plans.

## **MAIN STREET - AREA OF SPECIAL SIGNIFICANCE**

The 100 to 300 Blocks of Main Street from Ocean Avenue to Pacific Coast Highway and the intersecting streets of Ocean Avenue, Central Avenue, Electric Avenue, and Pacific Coast Highway are regarded as the downtown, which is the focal point of the City. In addition to the commercial businesses which enhance the area, the most visibly appealing aspect are the large mature Ficus trees which line both sides of Main Street.

An acknowledgement has been made that the large mature Ficus trees are a desirable asset to the City in the Main Street area and shall be preserved with regular tree and root pruning maintenance, which will be required to preserve the area aesthetics.

The Tree Advisory Board had made an important decision in 1996 to preserve the mature Ficus trees. The City performs continuing maintenance on the pruning of the Ficus tree canopies and roots. Colored concrete/ brick pavers have been installed on a sand sub-base surrounding the trees instead of concrete to accommodate the growing root structure of the tree. The City Staff inspects the pavers on Main Street every week. If the pavers become displaced by the tree roots, the city maintenance crew adjusts the pavers and prunes the tree roots to ensure pedestrian safety throughout the City's downtown area.

See Appendix (E) for Main Street Landscape Existing Conditions and New Landscape Recommendations.



## DESIGN ELEMENTS

Landscape design elements of the opportunities and constraints are provided below to assist the existing and future City Staff Representatives, as well as Tree Advisory Board to understand the proper tree species selections, function, form/ size, growth rate, site conditions, placement locations and special conditions as the Street Tree Master Plan develops into the future.

**Tree Selection** - The question most frequently asked is “Which kind of tree should be planted?” Before this question can be answered, a number of factors need to be considered. Consider the following questions:

- Why is the tree being planted? Is the tree to provide shade, fruit, or seasonal color, or act as a windbreak or screen? Maybe more than one reason?
- What is the size and location of the planting site area? Does the space lend itself to a large, medium, or small tree? Are there overhead or belowground wires or utilities in the vicinity? Consider clearance for sidewalks, driveways or other obstructions? Are there other trees in the area? Are there barriers to future root growth, such as sidewalks and building foundations?
- Which type of soil conditions exist? Is the soil deep, fertile, and well drained, or is it shallow, compacted, and infertile?
- How will maintenance be provided? Watering, fertilization, and pruning of newly planted trees until established are essential to the survival.

**Tree Function** - Trees make our surroundings more pleasant. Street trees also improve the overall appearance and quality of life in the City or neighborhood. A large shade tree provides relief from summer’s heat. An ornamental tree provides beautiful flowers, leaves, bark, or fruit and can attract birds. Evergreens with dense, persistent leaves can be used to provide a four season experience. Trees also decrease the glare from pavement, reduce runoff, filter out pollutants, and add oxygen to the air we breathe.

Palms are commonly considered to be trees, although botanically they are different. Their growth, appearance and care vary considerably from trees. Most palms have a single trunk though some species grow as clustering or clumping palms

**Tree Form** - A basic principle of modern architecture is “form follows function.” This is a good rule to remember when selecting a tree. Selecting the right form (shape) to complement the desired function (what you want the tree to do) can significantly reduce maintenance costs and increase the tree’s value in the landscape. When making a selection about form, also consider mature tree size. Trees grow in a variety of sizes and shapes, as shown in the following page. Select a form and size that will fit the planting space provided.

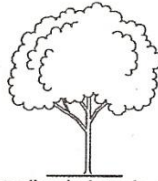
## TREE SHAPES



No trunk, or short one, branching to ground; height equal to width  
**Mound/Shrub form**  
(*Sambucus mexicana*)



Freestanding single trunk, round headed; height equal to spread  
**Dome**  
(*Prunus blirieana*)



Freestanding single trunk, round headed; width 2-3 times height  
**Broad Dome**  
(*Zelkova serrata*)



Freestanding long single trunk, rounded canopy  
**Tall Dome**  
(*Washingtonia robusta*)



Freestanding single trunk; height 3-10 times width  
**Columnar**  
(*Populus nigra* 'Italica')



Freestanding single trunk; height 2-5 times width  
**Cylindrical**  
(*Carpinus betulus* 'Fastigiata')



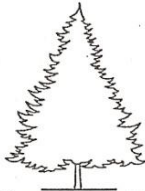
Short trunk, elliptical outline; height 2-5 times width  
**Ellipsoidal**  
(*Liquidambar styraciflua*)



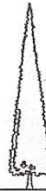
Short trunk, rounded base tapers to pointed tip; height 2-5 times width  
**Fastigate**  
(*Quercus robur* 'Fastigiata')



Short trunk, triangular outline; height 3-5 times width  
**Conical**  
(*Sequoia sempervirens*)



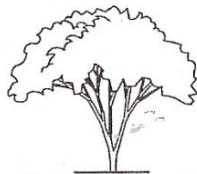
Freestanding short trunk; height 3-10 times width  
**Broad conical**  
(*Cedrus deodara*)



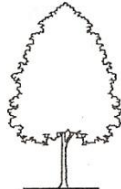
Freestanding short trunk; height 3-10 times width  
**Tall conical**  
(*Cupressus sempervirens* 'Stricta')



Short trunk, inverted triangular shape; height 2-5 times width  
**Obconical**  
(*Prunus serrulata* 'Kwanzan')



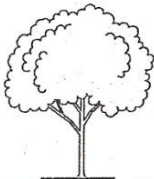
Round headed, branches arch upward and outward; width 1-3 times height  
**Arching Vase**  
(*Albizia julibrissin*)



Short trunk, round canopy widest at base; height 1-2 times width  
**Ovoid**  
(*Pyrus taiwanensis*)



Short trunk, inverted oval shape; height 1-2 times width  
**Obovoid**  
(*Ulmus americana*)



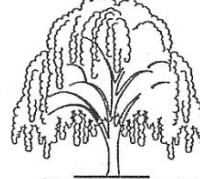
Freestanding single trunk, with lower branches trimmed away  
**Standard**  
(*Zelkova serrata*)



2 or more basal trunks, radiating vertically from common base  
**Multi-trunk**  
(*Arbutus unedo*)



Foliage canopy with many open voids  
**Open-headed**  
(*Eucalyptus cladocalyx*)



Branches arching, with weeping ends  
**Weeping**  
(*Salix babylonica*)



Foliage canopy with irregular rounded tufts, cloudlike  
**Billowy**  
(*Melaleuca linariifolia*)

**Tree Size** - Depending on the site restrictions, hundreds of combinations of form and size are available. Choose a small-spreading tree in a location with overhead utility lines. Select a narrow, columnar form for narrow streets or parkways. Choose a large, vase-shaped tree to create a canopy over a street or in park sites.

<u>Tree Height</u>	<u>Tree Canopy Width</u>
10-20' (small)	10-15' (small)
30-50' (medium)	30-35' (medium)
75-100' (tall)	50'+ (large)
100'+ (very tall)	

**Tree Growth Rate and Longevity** - Trees are sometimes chosen for their fast growth rate to achieve a full-sized tree more quickly. However, most slow-growing trees are longer-lived and may be worth the wait. Flowering accent trees are usually fast growing but have a shorter life span. Trees recognized for life spans of at least 100 years generally are used as street trees, which are more permanent fixtures of the landscape. For comparative purposes, the following examples are given.

<u>Growth Rate</u>	<u>Longevity</u>
Slow: less than 1' per year	0-75 Year: short-lived
Medium: 1-2' per year	100-200 years: long-lived
Fast: 2' or more per year	200-500 years: very long-lived

**Site Conditions** Selecting a tree that will thrive in a given set of site conditions is the key to long-term tree survival. The following is a list of the major site conditions to consider before selecting a tree for planting:

- Soil conditions
- Exposure (sun, wind and salt spray)
- Human activity
- Drainage
- Space constraints
- Hardiness zone
- Environmental Conditions

**Soil Conditions** - The amount and quality of soil present can limit planting success. In urban sites, the topsoil often has been disturbed and frequently is shallow, compacted, and subject to drought. Under these conditions, trees are continuously under stress. For species that are not able to handle these types of conditions, proper maintenance designed to reduce stress is necessary to ensure adequate growth and survival. Soil samples from the site location to test for fertility,

salinity, and pH (alkalinity or acidity) shall be taken prior to planting. The tests should be sent to a local soil and plant laboratory and returned with recommendations on ways to improve poor soil conditions with fertilizers or soil amendments to be applied.

**Exposure** - The amount of sunlight available will affect a tree species selection for a particular location. Most trees require full sunlight for proper growth and /or flower bloom. Some do well in light shade, but few tree species perform well in dense shade. Exposure to wind is also a consideration. Wind can dry out soils, causing drought conditions and damage to branches and leaves during storms, and can actually uproot newly planted trees that have not had an opportunity to establish root systems. Special maintenance, such as more frequent watering, may be needed to establish young trees in windy site areas.

**Human Activity** - This aspect of tree selection is often overlooked. The reality of the situation is that the top five causes of tree death are the result of things people do: soil compaction, under watering, overwatering, vandalism, and the number one cause—planting the wrong tree—account for more tree deaths than all insect and disease-related tree deaths combined.

**Drainage** - Tree roots require oxygen to develop and thrive. Poor drainage can remove the oxygen available to the roots from the soil and kill the tree. Before planting, dig a test hole 12 inches wide by 12 inches deep. Fill the hole with water and time how long it takes for the water to drain away. If it takes more than 6 hours, you may have a drainage problem. If so over excavate site planting pit and provide a gravel base for proper drainage.

**Space Constraints** - Many different factors can limit the planting space available to the tree: overhead or underground utilities, pavement, buildings, other trees, visibility. Make sure there is adequate room for the tree you select to grow to maturity, both above and below ground. A possible determination may be that the site just does not have enough space for a tree of any kind.

**Hardiness Zones** - Hardiness is the trees ability to survive in the temperatures of the particular geographic region in which the tree is being planted. Trees can be cold hardy, heat tolerant, or both.

The Western Sunset Garden book (printed edition 2001) identifies the City of Seal Beach as having two zones: Hardiness Zone 22 & Hardiness Zone 24.

***Hardiness Zone 22 - The Districts of College Park East, College Park West and Seal Beach Boulevard at Old Ranch Town Center***

**ZONE 22: Cold-winter portions of Southern California's coastal climate**

Areas falling in Zone 22 have a coastal climate (they are influenced by the ocean approximately 85 percent of the time). When temperatures drop in winter, these cold-air basins or hilltops above the air-drained slopes have lower winter temperatures than those in neighboring Zone 24. Actually, the winters are so mild here that lows seldom fall below freezing. Extreme winter lows (the coldest temperature you can expect in 20 years) average 28 to 25°F (-2 to -4°C). The lack of a pronounced chilling period during the winter limits the use of such deciduous woody plants as flowering cherry and lilac. Many herbaceous perennials from colder regions fail here because the winters are too warm for them to go dormant.



Lampson Avenue “College Park East” District  
Western Sunset Climatic Zone: 22

Planting species of *Eucalyptus cladocalyx* (Sugar Gum) and *Liquidambar styraciflua* (American Sweet Gum) Tree types are the primary planting species in the City of Seal Beach’s parkway area for this District.



College Park Drive “College Park West” District  
Western Sunset Climatic Zone: 22

Mature planting species of *Olea europaea* (Olive Trees) and *Liquidambar styraciflua* (American Sweet Gum) Trees along with other shade and palm tree planting species are located in the City of Seal Beach’s parkway area in this District.



Seal Beach Boulevard “Old Ranch” District  
Western Sunset Climatic Zone: 22

Mature planting species of *Eucalyptus camaldulensis* (Red gum) & *Eucalyptus cladocalyx* (Sugar Gum) Trees are the primary planting species in the City of Seal Beach’s parkway area within this District.

***Hardiness Zone 24 - The Districts of Old Town and Seal Beach Boulevard from Pacific Coast Highway to Apollo***

**ZONE 24: Marine influence along the Southern California Coast**

Stretched along Southern California's beaches, this climate zone is almost completely dominated by the ocean. Where the beach runs along high cliffs or palisades, Zone 24 extends only to that barrier. But where hills are low or nonexistent, it runs inland several miles.

This zone has a mild marine climate where the winters are mild, the summers cool, and the air seldom really dry. On many days in spring and early summer, the sun doesn't break through the high overcast until afternoon. Tender palms are safe from killing frosts. In this climate, gardens that include such plants as palms and Ficus trees are very successful.

Zone 24 is coldest at the mouths of canyons that channel cold air down from the mountains on clear winter nights. There is a broad range of winter lows in Zone 24. Winter lows average from 42°F (5°C) to 48°F (9°C). Extreme cold averages from 35° to 28°F (2 to -2°C), with all-time lows in the coldest stations at about 20°F (-6°C).

The all-time high temperatures aren't greatly significant in terms of plant growth. The average all-time high of weather stations in Zone 24 is 105°F (41°C). Record heat usually comes in early October, carried to the coast by Santa Ana winds. The wind's power and dryness usually causes more problems than the heat itself—but you can ameliorate scorching with frequent sprinkling.





Main Street "Old Town" District  
Western Sunset Climatic Zone: 24

A variety of planting species types of *Ficus microcarpa* (Indian Laurel Fig), *Eucalyptus cladocalyx* (Sugar Gum) and *Ulmus parvifolia* (Evergreen Elm) trees occur randomly throughout the City of Seal Beach's Main Street.

***Hardiness Zones 22 & 24 - The Districts of the Hill and Seal Beach Boulevard  
From Apollo to Lampson Avenue are in both hardiness zone.***



“The Hill” District  
Western Sunset Climatic Zone: 22 & 24

Mature planting species of *Pyrus kawakamii* (Evergreen Pear), *Robinia pseudoacacia* (Black locust) along other shade and palm trees plantings create a variety of plant species located in the City of Seal Beach’s parkway within this District.



Seal Beach Boulevard  
Western Sunset Climatic Zone: 22 & 24

Newly planted planting species types of *Washingtonia robusta* (Mexican Fan Palms), *Platanus acerifolia* (London Plane Trees) along with mature *Olea europaea* (Olive Trees) are the primary plant species at the City of Seal Beach's Northerly boundary.

**Environmental Conditions** - Listed below are some common Southern California environmental conditions that will relate to the City approved tree species palette dated November 03, 2009. All environmental conditions should be considered when selecting any new tree species.

Trees subject to “Oak Root Fungus” that is present in the soil

- Acer Palmatum
- Brachychiton Populneum
- Cercis Canadensis
- Eucalyptus camaldulensis
- Ginkgo Biloba
- Jacaranda Mimosifolia
- Magnolia Grandiflora
- Pyrus Calleryana
- Ulmus Parvifolia

Trees that are “drought tolerant”

- Albizia Julibrissen
- Arbutus unedo
- Eucalyptus (most species)
- Koelreutaria Paniculata
- Olea Europaea
- Pinus (many species)
- Robinia (most species)
- Schinus Molle
- Schinus Terebinthifolius
- Tristania Conferta

Trees that grow in “Wet Soils”

- Eucalyptus Citriodora
- Melaleuca Quinquenervia
- Platanus Racemosa & Acerifolia
- Liquidambar Styraciflua
- Magonolia Grandiflora

Heat-Resistant Trees for South and West Exposures

- Olea Europaea
- Prunus Caroliniana
- Pyrus Kawakami

## Shade-Tolerant Trees

- Arbutus Unedo
- Ficus (most varieties)
- Palms (many species)
- Podocarpus

## Seacoast Trees

- Arbutus Unedo
- Cupaniopsis Anacardioides
- Eucalyptus (Several)
- Ficus Rubiginosa
- Melaleuca Quinquenervia
- Metrosideros Excelsa
- Pinus (Several)
- Quercus Ilex

## Trees for “Autum Foliage Color”

- Ginkgo Biloba
- Gleditsia Triacanthos
- Koelreuteria Bipinnata
- Lagerstroemia Indica
- Liquidambar Styraciflua
- Liriodendron Tulipifera
- Prunus (deciduous species)

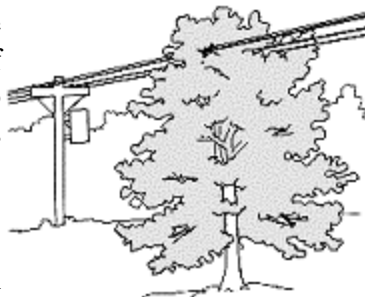
**Pest Problems** - Insect and disease organisms affect almost every tree species. Every plant has its particular pest problems, and the severity varies geographically. These pests may or may not be life threatening to a tree. If pest problems severely occur to a tree consult a Certified Arborist, tree consultant, or extension agent to provide more information relevant to problem species.

**Tree Planting Arrangement** - Trees may be stylized in symmetrical alignments to form geometrical patterns or randomly arranged within loose, informal groves. While a single species of street tree has often been used for a more uniform effect, use of mixed species has become more prevalent. Use of a single species throughout any formal landscape design is always subject to the loss of some trees, which disrupts the ordered appearance.

After determining a basic approach, formal or informal, the design process usually involves selection and layout of the dominant tree, followed by selection and layout of the plantings beneath. Trees planted in groves or distinguishable masses more effectively define a space. Depending on the intended use of the area and the intended effect, trees may be either randomly spaced for a more informal setting or placed in regimented rows or lines to accentuate a formalized setting.

**Avoiding Tree & Utility Conflicts** - Determining where to plant a tree is a decision that should not be taken lightly. Many factors should be considered prior to planting. When planning what type of tree to plant, remember to look up and look down to determine where the tree will be located in relation to overhead and underground utility lines.

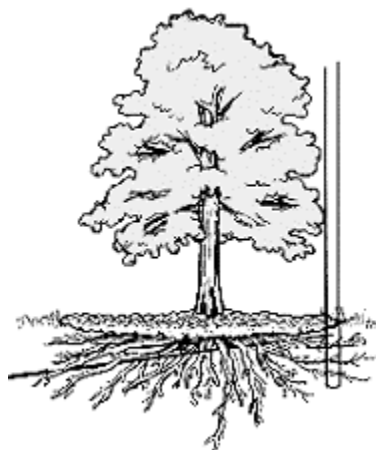
Often, we take utility services for granted because they have become a part of our daily lives. For us to enjoy the convenience of reliable, uninterrupted service, distribution systems are required to bring utilities into our homes. These services arrive at our homes through overhead or underground lines.



Overhead lines can be electric, telephone, or cable television. Underground lines include those three plus water, sewer, and natural gas.

The location of these lines should have a direct impact on your tree and planting site selection. The ultimate mature height of a tree to be planted must be within the available overhead growing space. Just as important, the soil area must be large enough to accommodate the particular rooting habits and ultimate trunk diameter of the tree. Proper tree and site selection provide trouble-free beauty and pleasure for years to come.

### **Overhead Lines**



Overhead utility lines are the easiest to see and probably the ones we take most for granted. Although these lines look harmless enough, they can be extremely dangerous. Planting tall-growing trees under and near these lines eventually requires your utility to prune them to maintain safe clearance from the wires. This pruning may result in the tree having an unnatural appearance. Periodic pruning can also lead to a shortened life span for the tree. Trees that must be pruned away from power lines are under greater stress and are more susceptible to insects and disease. Small, immature trees planted today can become problem trees in the future.

Tall-growing trees near overhead lines can cause service interruptions when trees contact wires. Children or adults climbing in these trees can be severely injured or even killed if they come in contact with the wires. Proper selection and placement of trees in and around overhead utilities can eliminate potential public safety hazards, reduce expenses for utilities and improve the appearance of landscapes.

**Underground Lines** - Trees are much more than just what you see overhead. Many times, the root area is larger than the branch spread above ground. Much of the utility service provided today runs below ground. Tree roots and underground lines often coexist without problems. However, trees planted near underground lines could have their roots damaged if the lines need to be dug up for repairs. The biggest danger to underground lines occurs during planting. Before you plant, make sure that you are aware of the location of any underground utilities. To be certain that you do not accidentally dig into any lines and risk serious injury or a costly service interruption, call your utility company or dig alert utility protection service first. Never assume that these utility lines are buried

**Irrigation** - Future landscape planting areas shall have an automatic irrigation system that complies with the City of Seal Beach's Green Building Ordinance and Water Conservation Ordinance.

- a. Irrigation design must achieve a minimum 30 percent water savings from the Maximum Applied Water Allowance (MAWA)
- b. Landscape areas less than 8' wide must be irrigated with a subsurface or a low volume irrigation system
- c. Trees shall be irrigated separately from turf or shrub zones
- d. Irrigation Controllers shall have "Smart" capabilities, which includes rain shut off sensors connected to the automatic controller governing the rate and frequency of water flow rates
- e. Seasonal Irrigation Application Schedules shall be developed for each valve

Refer to City of Seal Beach Landscape Maintenance Guideline Manual for additional details/specifications and irrigation product manufacturer specifications.

**General Tree Care and Maintenance** - It is recommended that the City of Seal Beach adopt the standards and practices from the American National Standards Institute (ANSI) Tree, Shrub and other Woody Plant Management Standard Practices.

For proper care and maintenance of all existing and newly planted tree species refer to the City of Seal Beach Landscape Maintenance Guideline Manual section ANSI (2008) Standards and Best Management Practices for:

- Tree Safety Standard
- Tree Planting
- Tree and Shrub Fertilization
- Pruning Standards ANSI A300 (Part 1)-2008
- Fertilization Standards ANSI A300 (Part 2)- 2004
- Support Systems Standard (part 3)
- Transplanting Standard (part 6)
- Utility Pruning of Trees
- Disease & Pest Management Practices

A landscape maintenance manual has been provided as part of the Citywide Street Tree Master plan to insure the proper installation and maintenance care for the City's forestry.

See Appendix (F) for landscape maintenance manual along with landscape details and American National Standard (ANSI) specifications.

## LANDSCAPE MATERIALS

**Alternative Paving Materials** - Throughout the City there are conditions where the existing concrete sidewalks have been uplifted and/or broken which are in need of repair due to existing tree species root systems. It is recommended to replace the existing concrete with new and/or install recycled rubberized surface materials that could be flexible as the tree root system expands.

In the Downtown Area where concrete is in need of repair/replacement it is recommended to be replaced with colored concrete pavers to match other existing areas.

Paving guidelines:

1. Install expansion joints in new concrete sidewalks near trees. This will limit possible sidewalk replacements to small sections rather than large areas.
2. Curve and narrow concrete sidewalk sections near trees to reduce uplifting.
3. Install concrete sidewalks on a bed of coarse road base gravel. Tree roots will not grow through porous gravel, they will grow deeper.
4. Where possible install removable, adjustable semi-permanent pavers and/ or rubberized surfacing paving products near trees which can serve as alternatives to poured in place concrete sidewalks. These flexible materials can be adjusted when required to compensate for tree root growth.

**Synthetic Grass** - With the high cost of maintenance, fertilization and short supply of irrigation water to the Southern California landscape, new high quality manmade grass products are being developed to be sustainable and environmentally viable alternative to natural grass. These new products are esthetically pleasing, conserve water, cost effective, soft to the touch, fully recyclable, lead free and LEED rated.

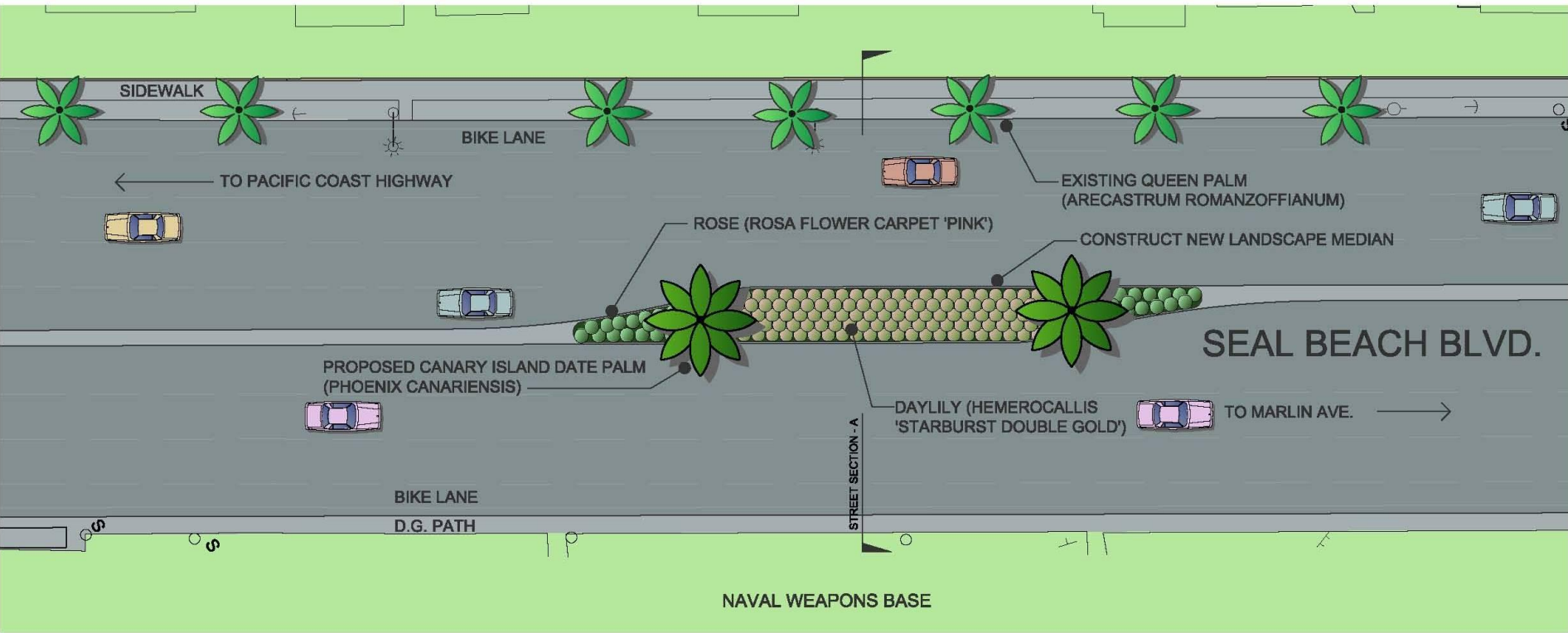
If a residential property owner in the City desires to have synthetic grass within the public right of way parkway, they shall submit a written request to the Public Works Department with a detailed description of the desired product. The City will provide the property owner a written response within (10) ten business days. All costs associated shall be paid by the property owner.

Refer to Exhibit F City of Seal Beach Landscape Maintenance Guideline Manual for alternative paving material manufactures and suppliers.



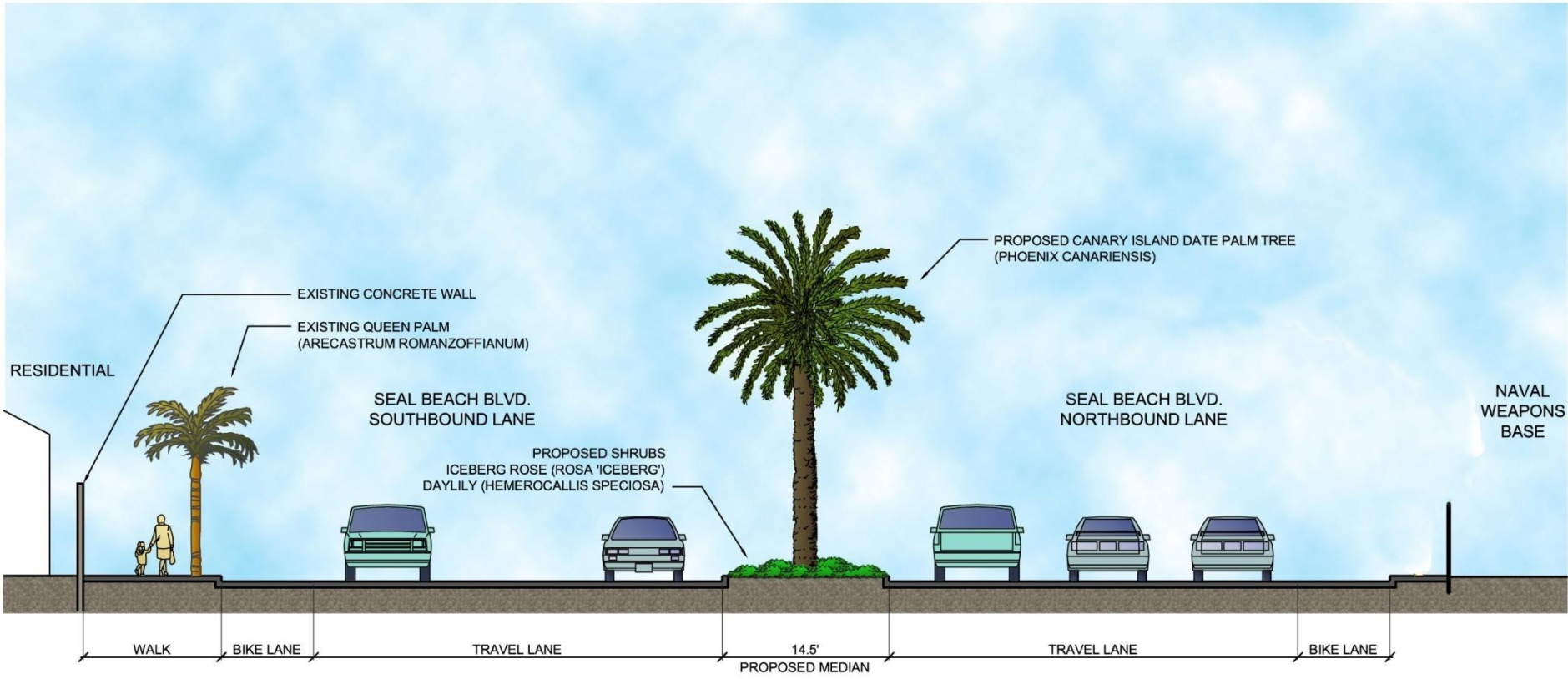
## References:

- Western Sunset Garden Book copyright 2001
  - [www.sunsetbooks.com](http://www.sunsetbooks.com)
- Trees of the California Landscape
  - Charles R. Hatch; Copyright 2007
- Landscape Plants for California Gardens
  - Bob Perry; First Edition, Copyright 2010
- American National Standards Institute (ANSI)
- *The Tree Care Industry Association*
- [TCIA@treecareindustry.org](mailto:TCIA@treecareindustry.org)
- [www.Treesaregood.com](http://www.Treesaregood.com)



**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
**(FROM PACIFIC COAST HWY TO MARLIN AVE.)**  
**LANDSCAPE CONCEPT PLAN**





**CITY OF SEAL BEACH**

**SEAL BEACH BOULEVARD**

PACIFIC COAST HIGHWAY TO MARLIN AVE.

**SECTION THRU A**





●  
—  
OPPORTUNITY FOR NEW  
LANDSCAPE MEDIAN  
WITH TREES

**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
**PACIFIC COAST HIGHWAY TO MARLIN AVE**  
**EXISTING SITE CONDITIONS**  
**(VIEW LOOKING NORTH)**

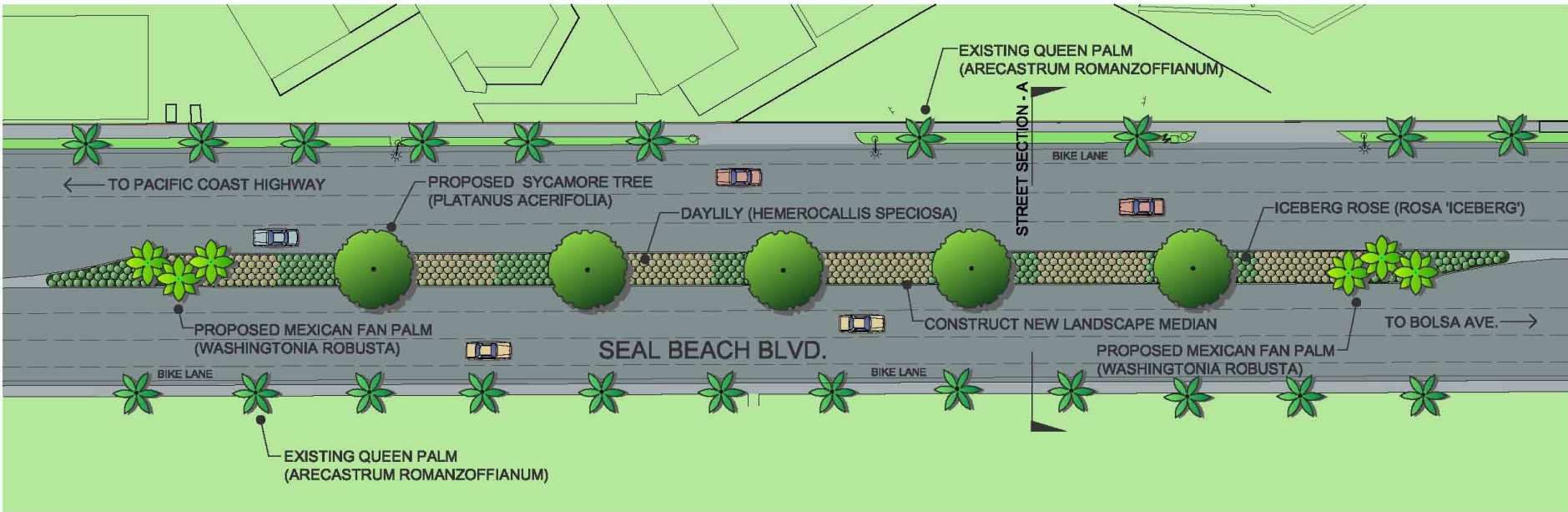




**CONSTRUCT  
LANDSCAPE MEDIAN &  
INSTALL PHOENIX  
CANARIENSIS  
PALM TREES**

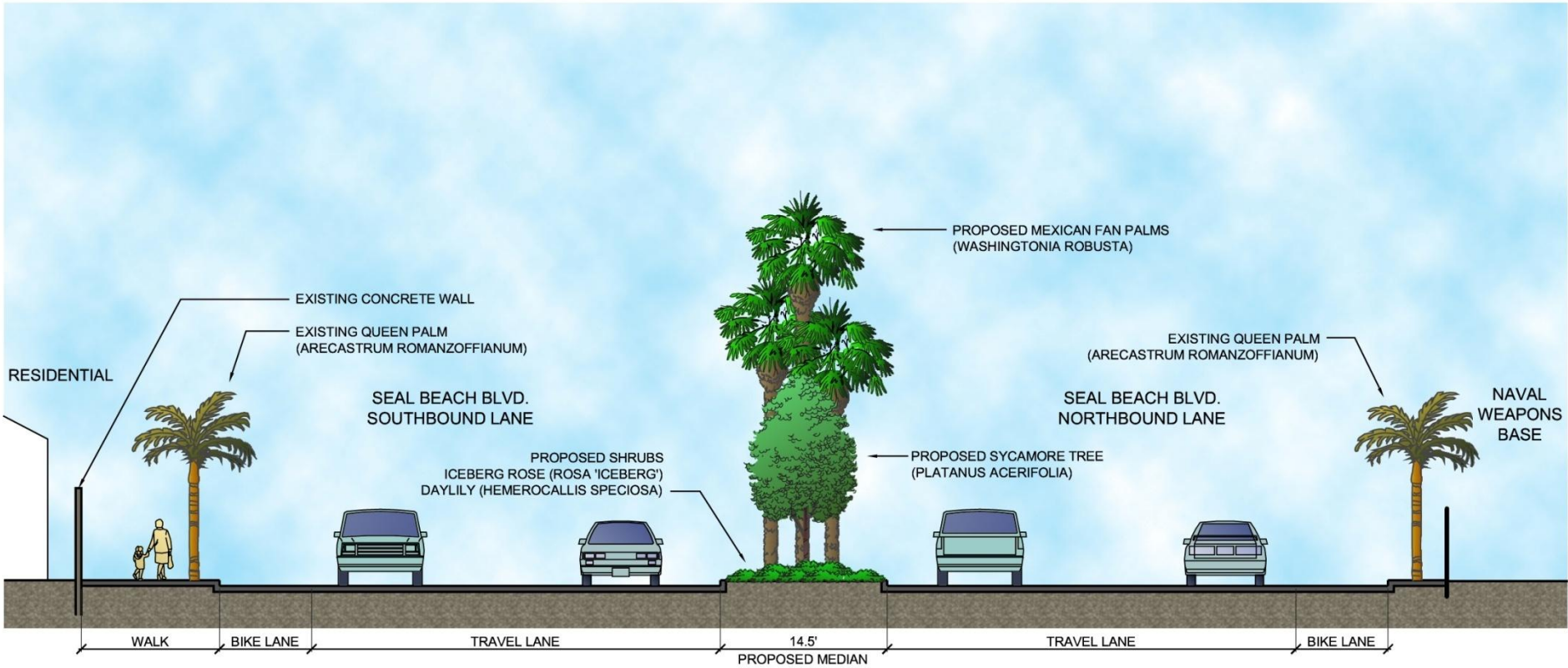
**CITY OF SEAL BEACH  
SEAL BEACH BOULEVARD  
PACIFIC COAST HIGHWAY TO MARLIN AVE  
PROPOSED LANDSCAPE CONCEPT  
(VIEW LOOKING NORTH)**





**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
 MARLIN AVE. TO BOLSA AVE.  
**PLAN**





**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
 MARLIN AVE. TO BOLSA AVE.  
**SECTION THRU A**





OPPORTUNITY FOR NEW  
LANDSCAPE MEDIAN  
WITH TREES



**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
MARLIN AVE. TO BOLSA AVE.  
**EXISTING SITE CONDITIONS**  
VIEW LOOKING NORTH





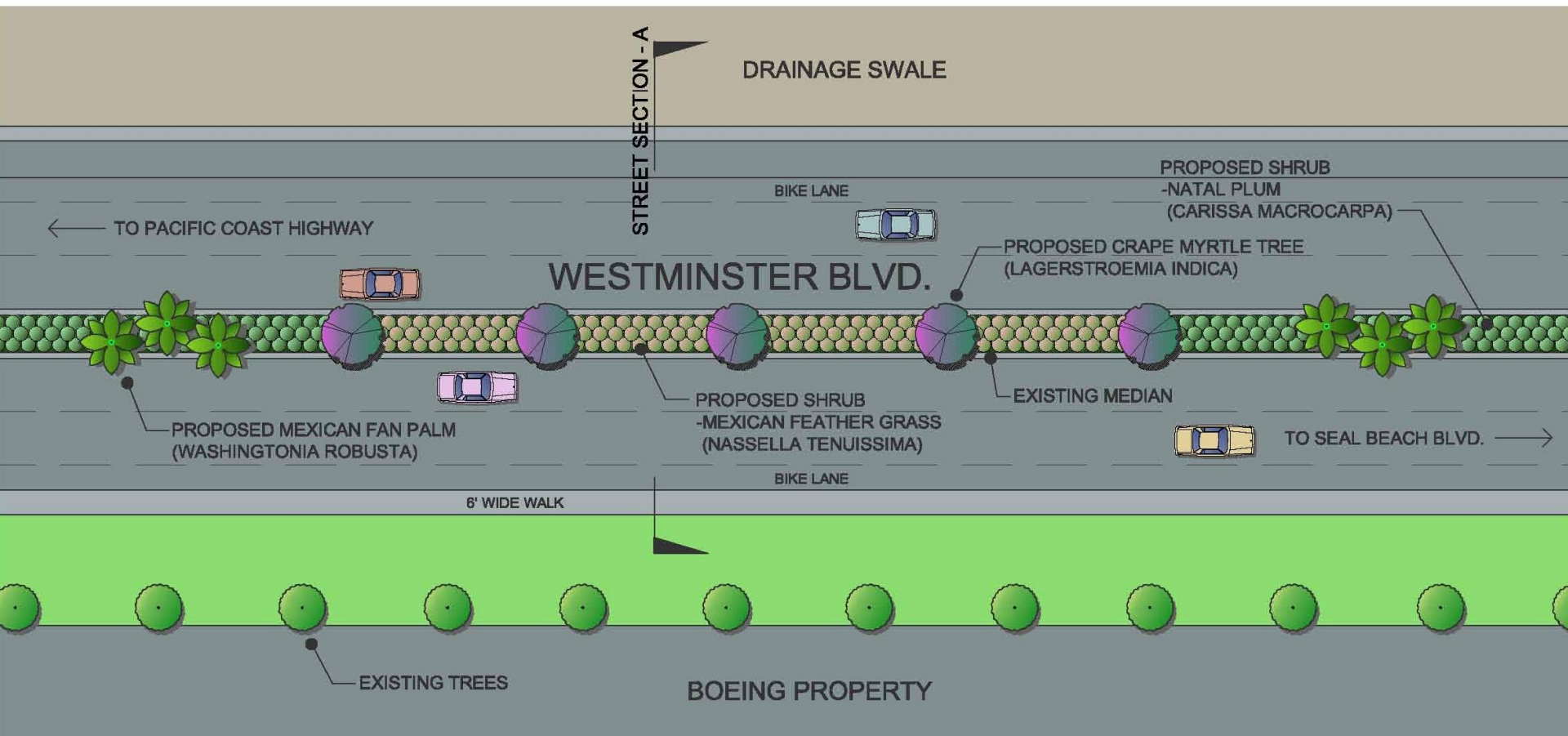


**INSTALL** ———  
**PLATANUS ACERIFOLIA**  
**TREES**

**CONSTRUCT** ———  
**LANDSCAPE MEDIAN &**  
**INSTALL WASHINGTONIA ROBUSTA**  
**TREES**

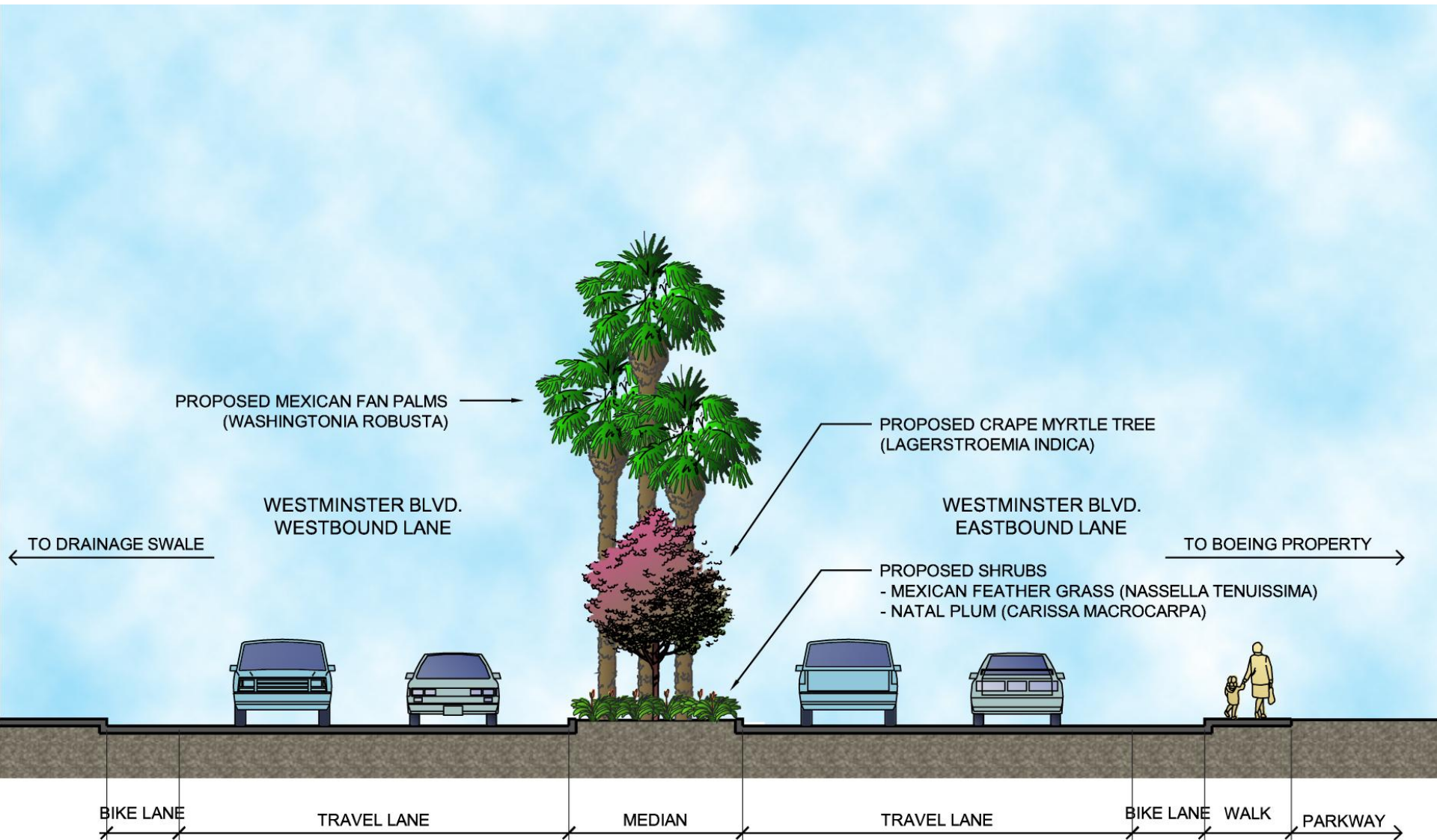
**CITY OF SEAL BEACH**  
**SEAL BEACH BOULEVARD**  
**MARLIN AVE. TO BOLSA AVE.**  
**PROPOSED LANDSCAPE CONCEPT**





**CITY OF SEAL BEACH  
 WESTMINSTER BOULEVARD  
 WEST OF SEAL BEACH BOULEVARD  
 PLAN**





**CITY OF SEAL BEACH  
WESTMINSTER BOULEVARD  
WEST OF SEAL BEACH BOULEVARD  
SECTION THRU A**

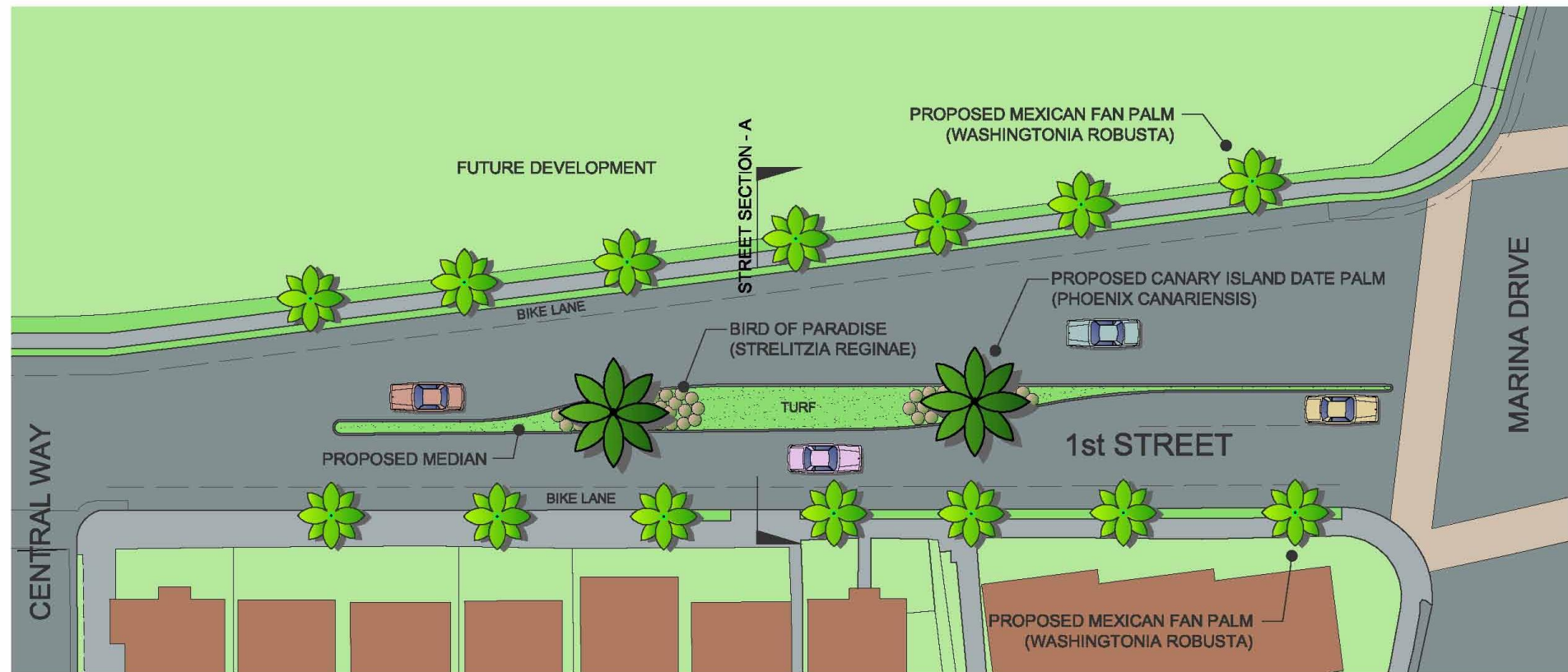




**CITY OF SEAL BEACH**  
**WESTMINSTER BOULEVARD**  
**WEST OF SEAL BEACH BOULEVARD**  
**EXISTING CONDITIONS**

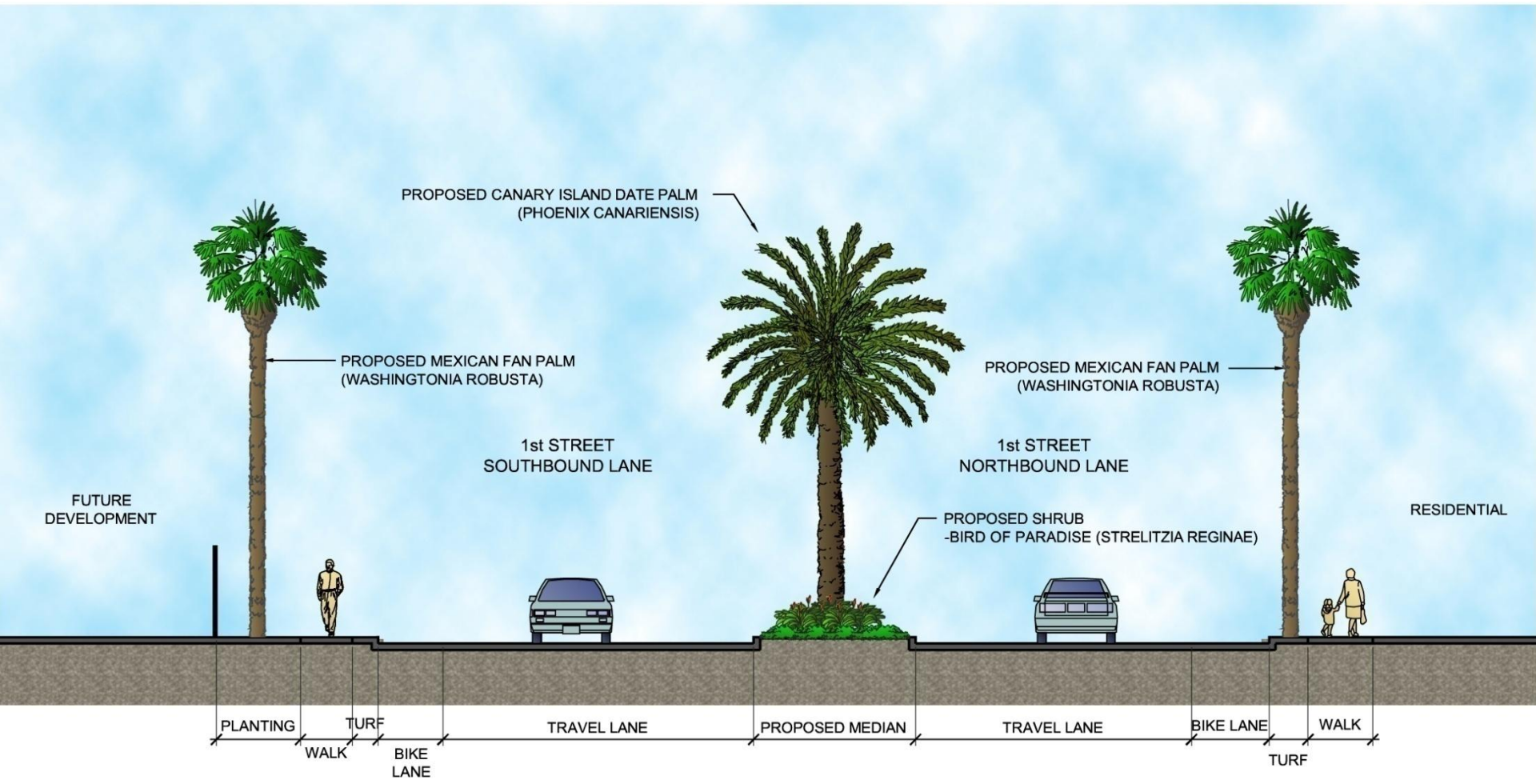


**CITY OF SEAL BEACH**  
**WESTMINSTER BOULEVARD**  
**WEST OF SEAL BEACH BOULEVARD**  
**PROPOSED LANDSCAPE CONCEPT**



**CITY OF SEAL BEACH**  
**1<sup>ST</sup> STREET**  
 CENTRAL WAY TO MARINA DRIVE  
**PLAN**





**CITY OF SEAL BEACH**  
**1<sup>ST</sup> STREET**  
 CENTRAL WAY TO MARINA DRIVE  
**SECTION THRU A**





**3' WIDE  
LANDSCAPE PARKWAY  
PLANT TREES**

**OPPORTUNITY FOR NEW  
LANDSCAPE MEDIAN  
WITH TREES**

**3' WIDE  
LANDSCAPE PARKWAY  
PLANT TREES**

**CITY OF SEAL BEACH  
1<sup>ST</sup> STREET  
CENTRAL WAY TO MARINA DRIVE  
EXISTING SITE CONDITIONS  
VIEW LOOKING NORTH**





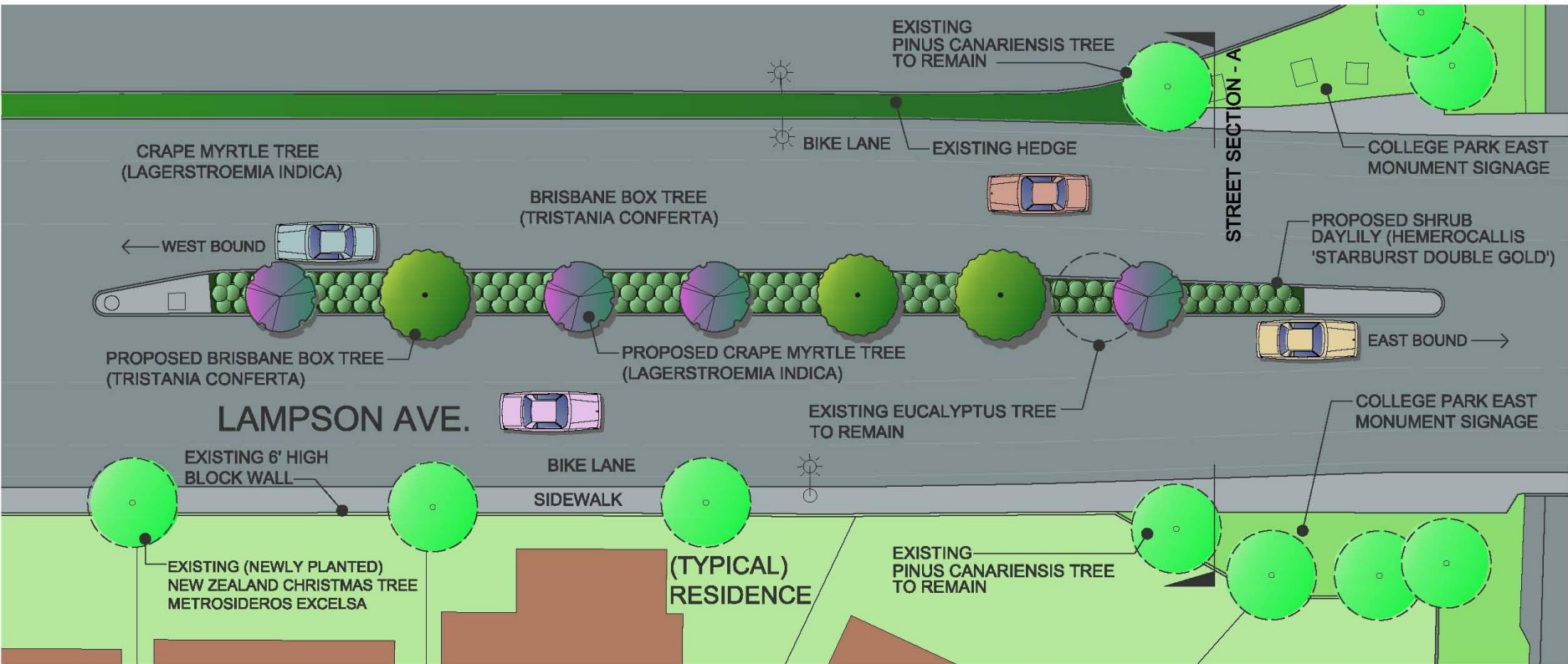


**CONSTRUCT  
LANDSCAPE MEDIAN &  
INSTALL PHOENIX  
CANARIENSIS  
PALM TREES**

**INSTALL  
WASHINGTONIA ROBUSTA  
TREES**

**CITY OF SEAL BEACH  
1<sup>ST</sup> STREET  
CENTRAL WAY TO MARINA DRIVE  
PROPOSED LANDSCAPE CONCEPT  
VIEW LOOKING NORTH**



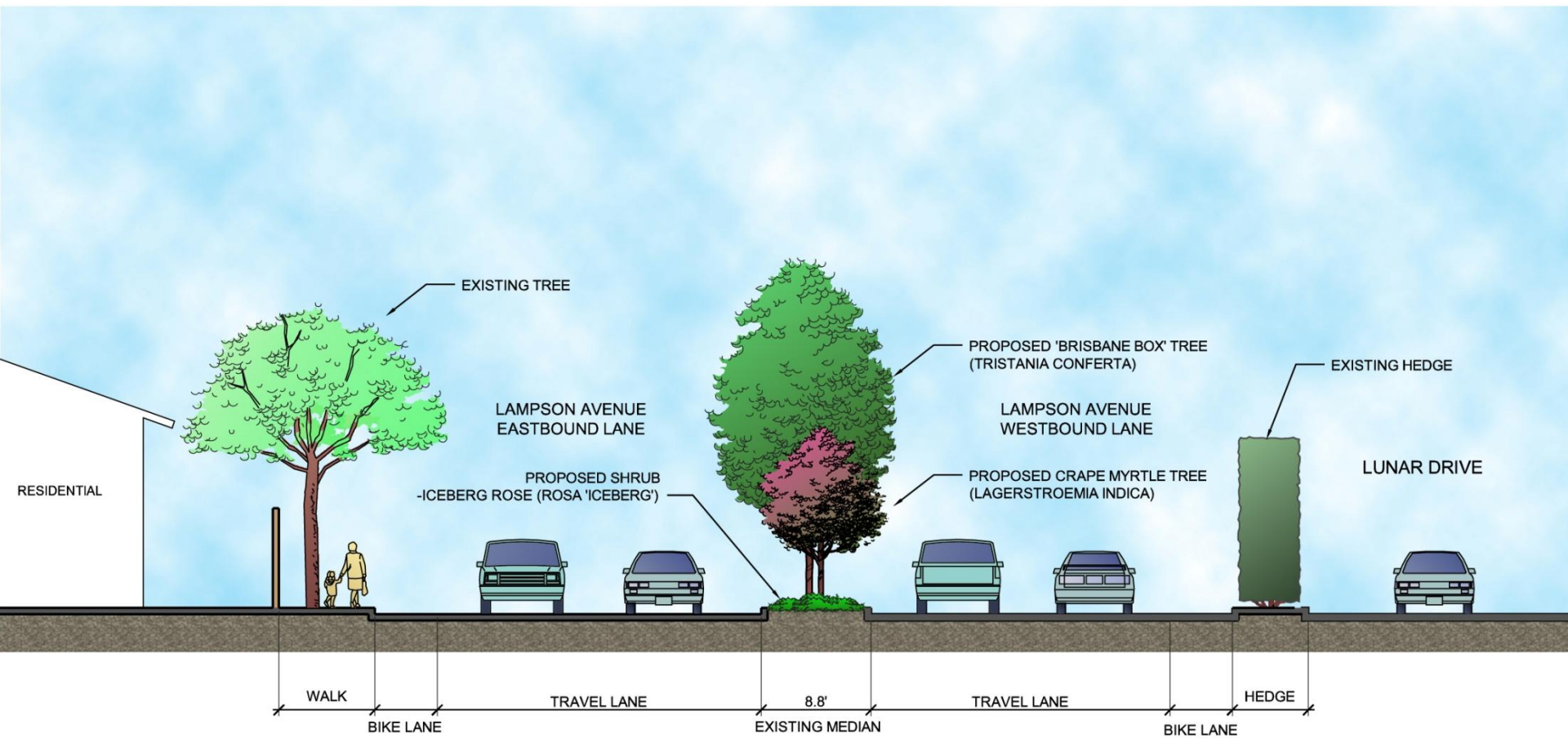


LANDSCAPE CONCEPT PLAN



CITY OF SEAL BEACH  
 LAMPSON AVENUE CENTER MEDIAN  
 TULIP STREET TO CITY BOUNDARY





**CITY OF SEAL BEACH**  
**LAMPSON AVENUE**  
 TULIP STREET TO CITY BOUNDARY  
**SECTION THRU A**





Opportunity to plant in center  
median and monument sign

Existing Site Conditions  
View looking West

**CITY OF SEAL BEACH**  
**Lampson Avenue**  
**Tulip Street to City Boundary**





Plant new Tristana conferta and  
Crape Myrtle Trees with flowering  
ground cover

Proposed Landscape Concept  
View looking West

**CITY OF SEAL BEACH**  
**Lampson Avenue**  
**Tulip Street to City Boundary**



**CITY OF SEAL BEACH**

**LAMPSON AVENUE**

**BETWEEN BASSWOOD AVE. & CANDLEBURY AVE.**

**EXISTING SITE CONDITONS**

**VIEW LOOKING EAST**



**CITY OF SEAL BEACH**

**LAMPSON AVENUE**

BETWEEN BASSWOOD AVE. & CANDLEBURY AVE.

**PROPOSED LANDSCAPE CONCEPT**

VIEW LOOKING EAST





Remove existing Olive tree  
& replace with new tree



City of Seal Beach  
Proposed landscape concept  
College Park Drive Main Entry





Install new Olive Tree,  
roses & flowers around monument sign

City of Seal Beach  
Proposed landscape concept  
College Park Drive Main Entry

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
1	1ST STREET	100	2'-6"	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
2	1ST STREET	111	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
3	1ST STREET	112	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
4	1ST STREET	113	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
5	1ST STREET	114	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
6	1ST STREET	115	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
7	1ST STREET	116	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
8	1ST STREET	117	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
9	1ST STREET	118	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
10	1ST STREET	119	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
11	1ST STREET	120	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
12	1ST STREET	121	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
13	1ST STREET	122	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
14	1ST STREET	123	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
15	1ST STREET	124	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
16	1ST STREET	125	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
17	1ST STREET	127	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
18	1ST STREET	129	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
19	1ST STREET	131	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
20	1ST STREET	134	3'	-	-	No Primary Tree Species	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
21	1ST STREET	200	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
22	1ST STREET	204	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
23	1ST STREET	205	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
24	1ST STREET	206	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
25	1ST STREET	207	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
26	1ST STREET	209	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
27	1ST STREET	211	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
28	1ST STREET	212	2'-6"	Utility Pole	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
29	1ST STREET	213	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
30	1ST STREET	214	2'-6"	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
31	1ST STREET	215	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
32	1ST STREET	217	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
33	1ST STREET	219	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
34	1ST STREET	220	2'-6"	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
35	1ST STREET	221	3'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
36	3RD STREET	121	2'-6"	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Spathodea campanulata	Ginkgo biloba
37	3RD STREET	205	2'-6"	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Spathodea campanulata	Ginkgo biloba
38	3RD STREET	212	2'-6"	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Spathodea campanulata	Ginkgo biloba
39	4TH STREET	211	2'-6"	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Lophostemon conferta	Brachychiton populneus
40	4TH STREET	212	2'-6"	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Lophostemon conferta	Brachychiton populneus

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
41	5TH STREET	116	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
42	5TH STREET	119	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
43	5TH STREET	300	2'-6"	-	Remove Stump	Eucalyptus citridora	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
44	6TH STREET	111	2'-6"	Utility Overhead	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
45	6TH STREET	128	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
46	6TH STREET	143	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
47	6TH STREET	146	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
48	6TH STREET	204	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
49	6TH STREET	205	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
50	6TH STREET	216	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
51	6TH STREET	229	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
52	6TH STREET	232	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
53	6TH STREET	253	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
54	6TH STREET	255	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
55	7TH STREET	101	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
56	7TH STREET	105	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
57	7TH STREET	109	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
58	7TH STREET	111	2'-6"	Utility Overhead	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
59	7TH STREET	113	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
60	7TH STREET	114	2'-6"	Utility Overhead	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
61	7TH STREET	116	2'-6"	Utility Overhead	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
62	7TH STREET	124	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
63	7TH STREET	130	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
64	7TH STREET	131	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
65	7TH STREET	133	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
66	7TH STREET	135	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
67	7TH STREET	138	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
68	7TH STREET	139	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
69	7TH STREET	143	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
70	7TH STREET	148	2'-6"	-	-	Cinnamomum camphora	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
71	7TH STREET	202	2'-6"	-	Remove Stump	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
72	7TH STREET	206	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
73	7TH STREET	208	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
74	7TH STREET	231	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
75	7TH STREET	232	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
76	7TH STREET	237	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
77	7TH STREET	238	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
78	7TH STREET	239	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
79	7TH STREET	241	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
80	7TH STREET	245	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
81	7TH STREET	246	2'-6"	-	-	Pyrus calleryana	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
82	7TH STREET	301	2'-6"	-	-	Syagrus romanzoffianum	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
83	7TH STREET	320	2'-6"	-	-	Syagrus romanzoffianum	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
84	8TH STREET	224	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
85	8TH STREET	227	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
86	8TH STREET	228	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
87	8TH STREET	232	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
88	8TH STREET	235	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
89	8TH STREET	239	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
90	8TH STREET	240	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
91	8TH STREET	301	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
92	8TH STREET	307	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
93	8TH STREET	315	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
94	8TH STREET	334	2'-6"	-	-	Metrosideros excelsus	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
95	10TH STREET	100	4'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
96	10TH STREET	121	3'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
97	10TH STREET	128	3'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
98	10TH STREET	133	3'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
99	10TH STREET	141	4'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
100	10TH STREET	143	4'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
101	10TH STREET	144	3'	-	-	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
102	10TH STREET	203	2'-6"	-	-	Eucalyptus torquata	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
103	10TH STREET	225	2'-6"	-	-	Eucalyptus torquata	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
104	10TH STREET	322	2'-6"	-	-	Eucalyptus torquata	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
105	10TH STREET	329	2'-6"	-	-	Eucalyptus torquata	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
106	10TH STREET	343	2'-6"	-	-	Pyrus calleryana	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
107	11TH STREET	112	3'	Utility Nearby	-	Washingtonia robusta	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
108	11TH STREET	145	2'-6"	-	-	Washingtonia robusta	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
109	11TH STREET	300	4'	-	-	Washingtonia robusta	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
110	11TH STREET	316	4'	-	-	Schinus terebinthifolius	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
111	11TH STREET	318	4'	-	-	Schinus terebinthifolius	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
112	11TH STREET	320	4'	-	-	Schinus terebinthifolius	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
113	11TH STREET	322	4'	-	-	Schinus terebinthifolius	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
114	12TH STREET	113	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
115	12TH STREET	120	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
116	12TH STREET	122	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
117	12TH STREET	143	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
118	12TH STREET	156	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
119	12TH STREET	205	3'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
120	12TH STREET	315	4'	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
121	12TH STREET	326	2'-6"	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
122	12TH STREET	334	2'-6"	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
123	12TH STREET	342	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
124	12TH STREET	344	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
125	12TH STREET	346	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
126	12TH STREET	348	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
127	12TH STREET	350	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
128	12TH STREET	352	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
129	12TH STREET	354	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
130	12TH STREET	358	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
131	12TH STREET	364	2'-6"	-	-	Platanus acerifolia	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
132	13TH STREET	137	2'-6"	Utility Overhead	-	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
133	13TH STREET	141	2'-6"	Utility Overhead	-	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
134	13TH STREET	143	2'-6"	Utility Overhead	-	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
135	13TH STREET	153	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
136	13TH STREET	211	2'-6"	-	-	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
137	13TH STREET	216	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
138	13TH STREET	218	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
139	13TH STREET	220	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
140	13TH STREET	221	2'-6"	Utility Overhead	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
141	13TH STREET	223	2'-6"	Utility Overhead	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
142	13TH STREET	224	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
143	13TH STREET	225	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
144	13TH STREET	228	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
145	13TH STREET	230	2'-6"	-	-	Cupaniopsis anacardioides	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
146	13TH STREET	302	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
147	13TH STREET	306	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
148	13TH STREET	308	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
149	13TH STREET	316	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
150	13TH STREET	318	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
151	13TH STREET	322	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
152	13TH STREET	324	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
153	13TH STREET	326	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
154	13TH STREET	328	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
155	13TH STREET	335	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
156	13TH STREET	341	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
157	13TH STREET	343	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
158	13TH STREET	345	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
159	13TH STREET	351	2'-6"	-	-	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
160	13TH STREET	355	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
161	13TH STREET	357	2'-6"	-	Hardscape	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
162	13TH STREET	361	2'-6"	-	-	No Primary Tree Species	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
163	14TH STREET	116	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
164	14TH STREET	125	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
165	14TH STREET	130	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
166	14TH STREET	131	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
167	14TH STREET	132	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
168	14TH STREET	134	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
169	14TH STREET	138	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
170	14TH STREET	143	2'-6"	-	-	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
171	14TH STREET	147	2'-6"	-	Hardscape	Metrosideros excelsus	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
172	14TH STREET	209	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
173	14TH STREET	211	2'-6"	-	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
174	14TH STREET	213	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
175	14TH STREET	214	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
176	14TH STREET	221	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
177	14TH STREET	223	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
178	14TH STREET	229	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
179	14TH STREET	230	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
180	14TH STREET	231	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
181	14TH STREET	233	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
182	14TH STREET	238	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
183	14TH STREET	302	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
184	14TH STREET	306	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
185	14TH STREET	307	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
186	14TH STREET	308	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
187	14TH STREET	312	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
188	14TH STREET	313	2'-6"	-	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
189	14TH STREET	314	2'-6"	-	-	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
190	14TH STREET	317	2'-6"	-	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
191	14TH STREET	320	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
192	14TH STREET	323	2'-6"	-	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
193	14TH STREET	328	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
194	14TH STREET	330	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
195	15TH STREET	200	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
196	15TH STREET	201	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
197	15TH STREET	202	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
198	15TH STREET	211	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
199	15TH STREET	212	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
200	15TH STREET	214	2'-6"	-	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
201	15TH STREET	216	2'-6"	-	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
202	15TH STREET	217	2'-6"	-	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
203	15TH STREET	232	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
204	15TH STREET	237	2'-6"	-	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
205	15TH STREET	239	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
206	15TH STREET	242	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera

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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
207	15TH STREET	244	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
208	15TH STREET	301	2'-6"	-	Hardscape	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
209	15TH STREET	305	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
210	15TH STREET	309	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
211	15TH STREET	315	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
212	15TH STREET	316	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
213	15TH STREET	317	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
214	15TH STREET	321	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
215	15TH STREET	322	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
216	15TH STREET	323	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
217	15TH STREET	324	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
218	15TH STREET	325	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
219	15TH STREET	326	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
220	15TH STREET	328	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
221	15TH STREET	330	2'-6"	-	-	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
222	16TH STREET	202	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
223	16TH STREET	205	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
224	16TH STREET	207	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
225	16TH STREET	211	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
226	16TH STREET	213	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
227	16TH STREET	219	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
228	16TH STREET	221	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
229	16TH STREET	224	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
230	16TH STREET	225	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
231	16TH STREET	226	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
232	16TH STREET	227	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
233	16TH STREET	228	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
234	16TH STREET	232	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
235	16TH STREET	238	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
236	16TH STREET	239	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
237	16TH STREET	243	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
238	16TH STREET	244	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
239	16TH STREET	246	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
240	16TH STREET	247	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
241	16TH STREET	249	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
242	16TH STREET	250	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
243	16TH STREET	302	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
244	16TH STREET	305	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
245	16TH STREET	306	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
246	16TH STREET	307	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
247	16TH STREET	309	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera

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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
248	16TH STREET	311	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
249	16TH STREET	313	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
250	16TH STREET	314	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
251	16TH STREET	315	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
252	16TH STREET	316	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
253	16TH STREET	320	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
254	16TH STREET	321	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
255	16TH STREET	323	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
256	16TH STREET	326	2'-6"	-	-	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
257	16TH STREET	331	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
258	16TH STREET	333	2'-6"	-	Hardscape	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
259	17TH STREET	201	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
260	17TH STREET	212	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
261	17TH STREET	213	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
262	17TH STREET	214	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
263	17TH STREET	216	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
264	17TH STREET	218	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
265	17TH STREET	220	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
266	17TH STREET	221	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
267	17TH STREET	222	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
268	17TH STREET	223	2'-6"	-	-	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
269	17TH STREET	224	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
270	17TH STREET	225	2'-6"	Utility Overhead	-	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
271	17TH STREET	226	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
272	17TH STREET	227	2'-6"	-	Hardscape	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
273	17TH STREET	229	2'-6"	-	Hardscape	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
274	17TH STREET	230	2'-6"	-	Hardscape	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
275	17TH STREET	231	2'-6"	-	Hardscape	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
276	17TH STREET	232	2'-6"	-	-	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
277	17TH STREET	235	2'-6"	-	-	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
278	17TH STREET	237	2'-6"	-	Hardscape	Ficus microcapra nitida	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
279	17TH STREET	241	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
280	17TH STREET	243	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
281	17TH STREET	245	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
282	17TH STREET	246	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
283	17TH STREET	247	2'-6"	-	-	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
284	17TH STREET	248	2'-6"	-	Hardscape	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
285	17TH STREET	250	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
286	17TH STREET	251	2'-6"	-	-	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
287	17TH STREET	252	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
288	17TH STREET	253	2'-6"	-	Hardscape	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta



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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
289	17TH STREET	254	2'-6"	-	-	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
290	17TH STREET	258	2'-6"	-	-	Pyrus calleryana	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
291	17TH STREET	303	2'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
292	17TH STREET	306	2'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
293	17TH STREET	307	2'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
294	17TH STREET	311	3'	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
295	17TH STREET	312	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
296	17TH STREET	313	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
297	17TH STREET	314	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
298	17TH STREET	315	2'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
299	17TH STREET	318	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
300	17TH STREET	319	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
301	17TH STREET	320	2'-6"	Utility Overhead	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
302	17TH STREET	321	2'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
303	17TH STREET	324	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
304	17TH STREET	325	2'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
305	17TH STREET	326	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
306	17TH STREET	328	2'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
307	CENTRAL AVENUE	100	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
308	CENTRAL AVENUE	108	2'-6"	Utility Overhead	Hardscape	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
309	CENTRAL AVENUE	110	2'-6"	Utility Overhead	Hardscape	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
310	CENTRAL AVENUE	112	2'-6"	Utility Overhead	Hardscape	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
311	CENTRAL AVENUE	204	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
312	CENTRAL AVENUE	212	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
313	CENTRAL AVENUE	214	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
314	CENTRAL AVENUE	215	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
315	CENTRAL AVENUE	216	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
316	CENTRAL AVENUE	218	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
317	CENTRAL AVENUE	219	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
318	CENTRAL AVENUE	220	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
319	CENTRAL AVENUE	221	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
320	CENTRAL AVENUE	301	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
321	CENTRAL AVENUE	302	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
322	CENTRAL AVENUE	304	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
323	CENTRAL AVENUE	305	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
324	CENTRAL AVENUE	317	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
325	CENTRAL AVENUE	313	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
326	CENTRAL AVENUE	318	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
327	CENTRAL AVENUE	402	2'-6"	Utility Overhead	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
328	CENTRAL AVENUE	431	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
329	CENTRAL AVENUE	441	2'-6"	-	-	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
330	CENTRAL AVENUE	1103	2'-6"	Utility Overhead	-	Eucalyptus torquata	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
331	CENTRAL AVENUE	1105	2'-6"	-	-	Eucalyptus torquata	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
332	DOLPHIN WAY	128	3'	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Lophostemon conferta	Ginkgo biloba
333	DOLPHIN WAY	131	3'	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Lophostemon conferta	Ginkgo biloba
334	DOLPHIN WAY	134	3'	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Lophostemon conferta	Ginkgo biloba
335	ELECTRIC AVENUE	380	8'	-	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Liriodendron tulipifera
336	ELECTRIC AVENUE	390	8'	-	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Liriodendron tulipifera
337	ELECTRIC AVENUE	450	8'	-	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Liriodendron tulipifera
338	ELECTRIC AVENUE	600	8'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
339	ELECTRIC AVENUE	601	8'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
340	ELECTRIC AVENUE	701	8'	-	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
341	ELECTRIC AVENUE	715	8'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
342	ELECTRIC AVENUE	800	3'	-	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
343	ELECTRIC AVENUE	1000	3'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
344	ELECTRIC AVENUE	1009	3'	-	Hardscape	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
345	ELECTRIC AVENUE	1013	3'	-	Hardscape	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
346	ELECTRIC AVENUE	1050	3'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
347	ELECTRIC AVENUE	1100	3'	Utility Overhead	-	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
348	ELECTRIC AVENUE	1105	3'	-	Hardscape	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
349	ELECTRIC AVENUE	1117	3'	-	Hardscape	Phoenix Canariensis	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
350	ELECTRIC AVENUE	1200	3'	Utility Overhead	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
351	ELECTRIC AVENUE	1201	3'	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
352	ELECTRIC AVENUE	1203	3'	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
353	ELECTRIC AVENUE	1213	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
354	ELECTRIC AVENUE	1219	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
355	ELECTRIC AVENUE	1307	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
356	ELECTRIC AVENUE	1311	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
357	ELECTRIC AVENUE	1315	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
358	ELECTRIC AVENUE	1403	3'-6"	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
359	ELECTRIC AVENUE	1405	3'-6"	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
360	ELECTRIC AVENUE	1409	3'-6"	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
361	ELECTRIC AVENUE	1413	3'-6"	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
362	ELECTRIC AVENUE	1415	3'-6"	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
363	ELECTRIC AVENUE	1500	3'	Utility Overhead	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
364	ELECTRIC AVENUE	1600	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
365	ELECTRIC AVENUE	1605	3'	-	-	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
366	ELECTRIC AVENUE	1615	3'	-	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
367	ELECTRIC AVENUE	1800	3'	Utility Overhead	Hardscape	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
368	LANDING AVENUE	1100	2'-6"	-	Hardscape	Platanus acerifolia	Platanus acerifolia	Brachychiton populneus	Liriodendron tulipifera
369	LANDING AVENUE	1102	2'-6"	-	Hardscape	Platanus acerifolia	Platanus acerifolia	Brachychiton populneus	Liriodendron tulipifera
370	LANDING AVENUE	1200	2'-6"	Utility Overhead	-	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
371	LANDING AVENUE	1201	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
372	LANDING AVENUE	1202	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
373	LANDING AVENUE	1203	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
374	LANDING AVENUE	1300	2'-6"	-	Hardscape	Liquidambar styraciflua	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
375	LANDING AVENUE	1301	2'-6"	Utility Overhead	Hardscape	Liquidambar styraciflua	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
376	LANDING AVENUE	1302	2'-6"	-	-	Liquidambar styraciflua	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
377	LANDING AVENUE	1400	2'-6"	-	Hardscape	Archontophoenix cunninghamiana	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
378	LANDING AVENUE	1401	2'-6"	Utility Overhead	Hardscape	Archontophoenix cunninghamiana	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
379	LANDING AVENUE	1403	2'-6"	Utility Overhead	-	Archontophoenix cunninghamiana	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
380	LANDING AVENUE	1500	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
381	LANDING AVENUE	1601	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa
382	LANDING AVENUE	1603	2'-6"	Utility Overhead	Hardscape	Syagrus romanzoffianum	Platanus acerifolia	Brachychiton populneus	Liriodendron tulipifera
383	LANDING AVENUE	1702	2'-6"	-	-	Syagrus romanzoffianum	Platanus acerifolia	Brachychiton populneus	Liriodendron tulipifera
384	LANDING AVENUE	1705	2'-6"	-	-	Syagrus romanzoffianum	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
385	MARINA WAY	1521	3'	-	-	Archontophoenix cunninghamiana	Brachychiton populneus	Lophostemon conferta	Ginkgo biloba
386	NEPTUNE WAY	100	3'	-	-	No Primary Tree Species	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum
387	NEPTUNE WAY	101	3'	Utility Overhead	-	No Primary Tree Species	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum
388	NEPTUNE WAY	102	3'	-	Hardscape	No Primary Tree Species	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum
389	NEPTUNE WAY	103	3'	Utility Overhead	Hardscape	No Primary Tree Species	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum
390	OCEAN AVENUE	101	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
391	OCEAN AVENUE	103	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
392	OCEAN AVENUE	105	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
393	OCEAN AVENUE	106	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
394	OCEAN AVENUE	107	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
395	OCEAN AVENUE	113	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
396	OCEAN AVENUE	115	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
397	OCEAN AVENUE	202	4'	Utility Pole	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
398	OCEAN AVENUE	207	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
399	OCEAN AVENUE	209	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
400	OCEAN AVENUE	211	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
401	OCEAN AVENUE	213	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
402	OCEAN AVENUE	240	4'	-	-	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
403	OCEAN AVENUE	311	4'	-	-	Ficus rubiginosa	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
404	OCEAN AVENUE	313	4'	-	-	Ficus rubiginosa	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
405	OCEAN AVENUE	408	4'	Utility Underground	-	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
406	OCEAN AVENUE	409	4'	-	-	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
407	OCEAN AVENUE	411	4'	-	-	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
408	OCEAN AVENUE	412	4'	Utility Underground	-	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
409	OCEAN AVENUE	417	4'	-	-	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
410	OCEAN AVENUE	501	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
411	OCEAN AVENUE	503	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
412	OCEAN AVENUE	509	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
413	OCEAN AVENUE	513	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
414	OCEAN AVENUE	515	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
415	OCEAN AVENUE	516	4'	-	Hardscape	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
416	OCEAN AVENUE	517	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
417	OCEAN AVENUE	519	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
418	OCEAN AVENUE	520	4'	Utility Underground	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
419	OCEAN AVENUE	540	4'	Utility Underground	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
420	OCEAN AVENUE	607	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
421	OCEAN AVENUE	609	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
422	OCEAN AVENUE	610	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
423	OCEAN AVENUE	611	4'	-	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
424	OCEAN AVENUE	620	4'	Utility Underground	-	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
425	OCEAN AVENUE	706	4'	-	-	Melaleuca nesophila	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
426	OCEAN AVENUE	901	4'	-	-	Metrosideros excelsus	Pittosporum undulatum	Metrosideros excelsus	Eucalyptus ficifolia
427	OCEAN AVENUE	913	4'	-	-	Metrosideros excelsus	Pittosporum undulatum	Metrosideros excelsus	Eucalyptus ficifolia
428	OCEAN AVENUE	919	4'	-	-	Metrosideros excelsus	Pittosporum undulatum	Metrosideros excelsus	Eucalyptus ficifolia
429	OCEAN AVENUE	1001	4'	-	-	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
430	OCEAN AVENUE	1017	4'	-	-	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
431	OCEAN AVENUE	1205	4'	-	-	Eucalyptus ficifolia	Eucalyptus ficifolia	Pittosporum undulatum	Stenocarpus sinuatus
432	OCEAN AVENUE	1209	4'	-	-	Eucalyptus ficifolia	Eucalyptus ficifolia	Pittosporum undulatum	Stenocarpus sinuatus
433	OCEAN AVENUE	1506	7'	-	-	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
434	OCEAN AVENUE	1602	7'	-	-	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
435	OCEAN AVENUE	1611	7'	-	Remove Stump	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
436	OCEAN AVENUE	1639	7'	-	-	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
437	OCEAN AVENUE BULB OUT	100	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
438	OCEAN AVENUE BULB OUT	114	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
439	OCEAN AVENUE BULB OUT	117	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
440	OCEAN AVENUE BULB OUT	200	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
441	OCEAN AVENUE BULB OUT	201	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
442	OCEAN AVENUE BULB OUT	233	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
443	OCEAN AVENUE BULB OUT	250	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
444	OCEAN AVENUE BULB OUT	300	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
445	OCEAN AVENUE BULB OUT	301	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
446	OCEAN AVENUE BULB OUT	317	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
447	OCEAN AVENUE BULB OUT	350	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
448	OCEAN AVENUE BULB OUT	400	5'	Utility Underground	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
449	OCEAN AVENUE BULB OUT	401	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii

**CITY OF SEAL BEACH**

**DISTRICT: OLD TOWN**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
450	OCEAN AVENUE BULB OUT	550	5'	-	Hardscape	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
451	OCEAN AVENUE BULB OUT	600	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
452	OCEAN AVENUE BULB OUT	601	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
453	OCEAN AVENUE BULB OUT	617	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
454	OCEAN AVENUE BULB OUT	701	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
455	OCEAN AVENUE BULB OUT	801	5'	-	-	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
456	PACIFIC COAST HIGHWAY	300	12'	-	-	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
457	PACIFIC COAST HIGHWAY	301	12'	-	-	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
458	PACIFIC COAST HIGHWAY	302	12'	-	-	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
459	PACIFIC COAST HIGHWAY	400	12'	-	-	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
460	PACIFIC COAST HIGHWAY	1700	2'-6"	-	-	Melaleuca quinquenervia	Phoenix canariensis	Washingtonia robusta	Melaleuca quinquenervia

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	<b>Street</b>	<b>Address</b>	<b>Parkway Width</b>	<b>Utility</b>	<b>Notes</b>	<b>Existing Primary Tree Species</b>	<b>Recommendation 1</b>	<b>Recommendation 2</b>	<b>Recommendation 3</b>
1	AGUA PLACE	505	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Prunus cerasifera	Albizia julibrissin	Jacaranda mimosifolia
2	AGUA PLACE	509	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Prunus cerasifera	Albizia julibrissin	Jacaranda mimosifolia
3	AGUA PLACE	512	4'	-	-	Pyrus calleryana 'Danicer'	Prunus cerasifera	Albizia julibrissin	Jacaranda mimosifolia
4	AVALON DRIVE	802	4'	-	-	Pyrus calleryana 'Danicer'	Bauhinia blakeana	Prunus cerasifera	Lagerstroemia indica
5	AVALON DRIVE	811	4'	-	-	Pyrus calleryana 'Danicer'	Bauhinia blakeana	Prunus cerasifera	Lagerstroemia indica
6	AVALON DRIVE	900	4'	-	-	Pyrus calleryana 'Danicer'	Bauhinia blakeana	Prunus cerasifera	Lagerstroemia indica
7	AVALON DRIVE	1025	4'	-	-	Pyrus calleryana 'Danicer'	Bauhinia blakeana	Prunus cerasifera	Lagerstroemia indica
8	BALBOA DRIVE	600	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
9	BALBOA DRIVE	604	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
10	BALBOA DRIVE	608	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
11	BALBOA DRIVE	616	4'	-	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
12	BALBOA DRIVE	628	4'	-	Hardscape	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
13	BALBOA DRIVE	636	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
14	BALBOA DRIVE	640	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
15	BALBOA DRIVE	700	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
16	BALBOA DRIVE	701	4'	-	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
17	BALBOA DRIVE	704	4'	-	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
18	BALBOA DRIVE	708	4'	-	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
19	BALBOA DRIVE	712	4'	-	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
20	BALBOA DRIVE	716	4'	Utility Overhead	-	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
21	BALBOA DRIVE	725	4'	-	Remove Stump	No Primary Tree Species	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
22	BAYOU WAY	1701	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
23	BAYOU WAY	1704	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
24	BAYOU WAY	1708	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
25	BAYOU WAY	1709	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
26	BAYOU WAY	1713	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
27	BAYOU WAY	1720	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
28	BAYOU WAY	1725	4'	Utility Overhead	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
29	BAYOU WAY	1729	4'	Utility Overhead	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
30	BAYOU WAY	1733	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
31	BAYOU WAY	1737	4'	-	-	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
32	BAYOU WAY	1756	4'	-	Hardscape	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
33	BAYSIDE DRIVE	600	4'	-	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
34	BAYSIDE DRIVE	617	4'	-	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
35	BAYSIDE DRIVE	621	4'	-	Hardscape	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
36	BAYSIDE DRIVE	625	4'	-	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
37	BAYSIDE DRIVE	632	4'	-	Hardscape	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
38	BAYSIDE DRIVE	637	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
39	BAYSIDE DRIVE	709	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
40	BAYSIDE DRIVE	713	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
41	BEACHCOMBER DRIVE	604	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
42	BEACHCOMBER DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
43	BEACHCOMBER DRIVE	609	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
44	BEACHCOMBER DRIVE	611	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
45	BEACHCOMBER DRIVE	621	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
46	BEACHCOMBER DRIVE	624	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
47	BEACHCOMBER DRIVE	628	4'	-	Hardscape	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
48	BEACHCOMBER DRIVE	632	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
49	BEACHCOMBER DRIVE	633	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
50	BEACHCOMBER DRIVE	636	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
51	BEACHCOMBER DRIVE	637	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
52	BEACHCOMBER DRIVE	640	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
53	BEACHCOMBER DRIVE	701	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
54	BEACHCOMBER DRIVE	704	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
55	BEACHCOMBER DRIVE	708	4'	-	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
56	BEACHCOMBER DRIVE	717	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
57	BEACHCOMBER DRIVE	721	4'	Utility Overhead	-	No Primary Tree Species	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
58	BERYL COVE WAY	400	3'-8"	Utility Overhead	-	Syagrus romanzoffianum	Albizia julibrissin	Lophostemon conferta	Koelreuteria paniculata
59	BERYL COVE WAY	429	3'-8"	Utility Overhead	-	Syagrus romanzoffianum	Albizia julibrissin	Lophostemon conferta	Koelreuteria paniculata
60	BOLSA AVENUE	500	3'	Utility Overhead	-	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetiginosa
61	BOLSA AVENUE	600	3'	Utility Overhead	-	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetiginosa
62	BOLSA AVENUE	700	3'	Utility Overhead	-	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetiginosa
63	BOLSA AVENUE	800	3'	Utility Overhead	-	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetiginosa
64	CARMEL AVENUE	700	3'-6"	-	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Stenocarpus sinuatus	Tabebuia impetiginosa
65	CARMEL AVENUE	715	3'-6"	-	-	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Stenocarpus sinuatus	Tabebuia impetiginosa
66	CATALINA AVENUE	705	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
67	CATALINA AVENUE	715	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
68	CATALINA AVENUE	720	5'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
69	CATALINA AVENUE	725	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
70	CATALINA AVENUE	735	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
71	CATALINA AVENUE	801	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
72	CATALINA AVENUE	830	5'	Fire Hydrant	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
73	CATALINA AVENUE	840	5'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
74	CATALINA AVENUE	850	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
75	CATALINA AVENUE	901	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
76	CATALINA AVENUE	905	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
77	CATALINA AVENUE	915	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
78	CATALINA AVENUE	930	5'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
79	CATALINA AVENUE	945	5'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
80	CATALINA AVENUE	950	5'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana

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**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	<b>Street</b>	<b>Address</b>	<b>Parkway Width</b>	<b>Utility</b>	<b>Notes</b>	<b>Existing Primary Tree Species</b>	<b>Recommendation 1</b>	<b>Recommendation 2</b>	<b>Recommendation 3</b>
81	CATALINA AVENUE	960	5'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
82	CATALINA AVENUE	970	5'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
83	CATALINA AVENUE	1015	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
84	CATALINA AVENUE	1030	5'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
85	CATALINA AVENUE	1035	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
86	CATALINA AVENUE	1070	5'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
87	CATALINA AVENUE	1101	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
88	CATALINA AVENUE	1135	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
89	CATALINA AVENUE	1145	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
90	CATALINA AVENUE	1200	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
91	CATALINA AVENUE	1201	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
92	CATALINA AVENUE	1205	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
93	CATALINA AVENUE	1210	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
94	CATALINA AVENUE	1220	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
95	CATALINA AVENUE	1225	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
96	CATALINA AVENUE	1230	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
97	CATALINA AVENUE	1300	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
98	CATALINA AVENUE	1310	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
99	CATALINA AVENUE	1315	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
100	CATALINA AVENUE	1325	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
101	CATALINA AVENUE	1405	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
102	CATALINA AVENUE	1420	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
103	CATALINA AVENUE	1425	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
104	CATALINA AVENUE	1430	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
105	CATALINA AVENUE	1435	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
106	CATALINA AVENUE	1440	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
107	CATALINA AVENUE	1500	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
108	CATALINA AVENUE	1509	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
109	CATALINA AVENUE	1515	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
110	CATALINA AVENUE	1520	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
111	CATALINA AVENUE	1525	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
112	CATALINA AVENUE	1535	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
113	CATALINA AVENUE	1600	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
114	CATALINA AVENUE	1601	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
115	CATALINA AVENUE	1605	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
116	CATALINA AVENUE	1615	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
117	CATALINA AVENUE	1620	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
118	CATALINA AVENUE	1650	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
119	CATALINA AVENUE	1653	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
120	CATALINA AVENUE	1655	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana



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**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
121	CATALINA AVENUE	1701	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
122	CATALINA AVENUE	1704	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
123	CATALINA AVENUE	1709	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
124	CATALINA AVENUE	1712	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
125	CATALINA AVENUE	1713	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
126	CATALINA AVENUE	1717	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
127	CATALINA AVENUE	1720	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
128	CATALINA AVENUE	1721	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
129	CATALINA AVENUE	1725	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
130	CATALINA AVENUE	1728	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
131	CATALINA AVENUE	1729	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
132	CATALINA AVENUE	1737	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
133	CATALINA AVENUE	1745	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
134	CATALINA AVENUE	1748	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
135	COASTLINE DRIVE	120	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
136	COASTLINE DRIVE	130	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
137	COASTLINE DRIVE	135	4'	-	Hardscape	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
138	COASTLINE DRIVE	140	4'	-	Hardscape	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
139	COASTLINE DRIVE	150	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
140	COASTLINE DRIVE	200	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
141	COASTLINE DRIVE	220	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
142	COASTLINE DRIVE	301	4'	-	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
143	COASTLINE DRIVE	303	4'	-	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
144	COASTLINE DRIVE	340	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
145	COASTLINE DRIVE	400	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
146	COASTLINE DRIVE	401	4'	-	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
147	COASTLINE DRIVE	430	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
148	COASTLINE DRIVE	500	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
149	COASTLINE DRIVE	503	4'	-	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
150	COASTLINE DRIVE	510	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
151	COASTLINE DRIVE	530	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
152	COASTLINE DRIVE	600	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
153	COASTLINE DRIVE	620	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
154	COASTLINE DRIVE	700	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
155	COASTLINE DRIVE	701	4'	Utility Overhead	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
156	COASTLINE DRIVE	705	4'	-	-	No Primary Tree Species	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
157	COASTLINE DRIVE	730	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
158	COASTLINE DRIVE	800	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
159	COASTLINE DRIVE	810	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
160	COASTLINE DRIVE	830	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
161	COASTLINE DRIVE	835	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
162	COASTLINE DRIVE	840	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
163	COASTLINE DRIVE	900	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
164	COASTLINE DRIVE	905	4'	-	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
165	COASTLINE DRIVE	910	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
166	COASTLINE DRIVE	915	4'	-	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
167	COASTLINE DRIVE	920	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
168	COASTLINE DRIVE	925	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
169	COASTLINE DRIVE	930	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
170	COASTLINE DRIVE	940	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
171	COASTLINE DRIVE	1010	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
172	COASTLINE DRIVE	1020	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
173	COASTLINE DRIVE	1030	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
174	COASTLINE DRIVE	1100	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
175	COASTLINE DRIVE	1110	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
176	COASTLINE DRIVE	1120	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
177	COASTLINE DRIVE	1140	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
178	CORAL PLACE	1700	5'	-	-	Lagerstroemia indica	Tabebuia impetiginosa	Stenocarpus sinuatus	Gleditsia tricanthos
179	CORAL PLACE	1701	5'	Utility Overhead	Hardscape	Lagerstroemia indica	Tabebuia impetiginosa	Stenocarpus sinuatus	Gleditsia tricanthos
180	CORAL PLACE	1705	5'	Utility Overhead	Hardscape	Lagerstroemia indica	Tabebuia impetiginosa	Stenocarpus sinuatus	Gleditsia tricanthos
181	CORAL PLACE	1708	5'	Utility Overhead	-	Lagerstroemia indica	Tabebuia impetiginosa	Stenocarpus sinuatus	Gleditsia tricanthos
182	CRESTVIEW AVENUE	1000	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
183	CRESTVIEW AVENUE	1005	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
184	CRESTVIEW AVENUE	1035	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
185	CRESTVIEW AVENUE	1100	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
186	CRESTVIEW AVENUE	1105	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
187	CRESTVIEW AVENUE	1130	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
188	CRESTVIEW AVENUE	1225	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
189	CRESTVIEW AVENUE	1235	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
190	CRESTVIEW AVENUE	1240	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
191	CRESTVIEW AVENUE	1245	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
192	CRESTVIEW AVENUE	1310	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
193	CRESTVIEW AVENUE	1315	4'	Utility Overhead	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
194	CRESTVIEW AVENUE	1335	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
195	CRESTVIEW AVENUE	1400	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
196	CRESTVIEW AVENUE	1405	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
197	CRESTVIEW AVENUE	1440	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
198	CRESTVIEW AVENUE	1435	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
199	CRESTVIEW AVENUE	1500	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
200	CRESTVIEW AVENUE	1505	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
201	CRESTVIEW AVENUE	1515	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
202	CRESTVIEW AVENUE	1520	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
203	CRESTVIEW AVENUE	1525	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
204	CRESTVIEW AVENUE	1530	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
205	CRESTVIEW AVENUE	1540	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
206	CRESTVIEW AVENUE	1545	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
207	CRESTVIEW AVENUE	1610	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
208	CRESTVIEW AVENUE	1620	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
209	CRESTVIEW AVENUE	1630	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
210	CRESTVIEW AVENUE	1645	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
211	CRESTVIEW AVENUE	1685	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
212	CRESTVIEW AVENUE	1712	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
213	CRESTVIEW AVENUE	1732	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
214	CRESTVIEW AVENUE	1737	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
215	CRESTVIEW AVENUE	1740	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
216	CRESTVIEW AVENUE	1753	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
217	CRESTVIEW AVENUE	1757	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
218	CRESTVIEW AVENUE	1772	4'	-	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
219	CRESTVIEW AVENUE	1776	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
220	CRESTVIEW AVENUE	1777	4'	Utility Overhead	-	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
221	CRESTVIEW AVENUE	1784	4'	-	Hardscape	No Primary Tree Species	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
222	CRYSTAL COVE WAY	401	3'-6"	-	Hardscape	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
223	CRYSTAL COVE WAY	1200	3'-6"	Utility Overhead	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
224	CRYSTAL COVE WAY	1210	3'-6"	Utility Overhead	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
225	CRYSTAL COVE WAY	1220	3'-6"	Utility Overhead	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
226	CRYSTAL COVE WAY	1310	3'-6"	Utility Overhead	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
227	CRYSTAL COVE WAY	1320	3'-6"	Utility Overhead	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
228	CRYSTAL COVE WAY	1330	3'-6"	-	-	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
229	CRYSTAL COVE WAY	1410	3'-6"	Utility Overhead	Hardscape	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
230	CRYSTAL COVE WAY	1420	3'-6"	Utility Overhead	Hardscape	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
231	CRYSTAL PLACE	405	4'-6"	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
232	CRYSTAL PLACE	408	4'-6"	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
233	CRYSTAL PLACE	413	4'-6"	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
234	CRYSTAL PLACE	416	4'-6"	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
235	CRYSTAL PLACE	417	4'-6"	-	Hardscape	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
236	DRIFTWOOD AVENUE	701	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
237	DRIFTWOOD AVENUE	710	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
238	DRIFTWOOD AVENUE	720	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
239	DRIFTWOOD AVENUE	730	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
240	DRIFTWOOD AVENUE	745	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus

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**DISTRICT: THE HILL**

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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
241	DRIFTWOOD AVENUE	801	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
242	DRIFTWOOD AVENUE	804	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
243	DRIFTWOOD AVENUE	830	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
244	DRIFTWOOD AVENUE	835	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
245	DRIFTWOOD AVENUE	845	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
246	DRIFTWOOD AVENUE	901	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
247	DRIFTWOOD AVENUE	905	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
248	DRIFTWOOD AVENUE	910	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
249	DRIFTWOOD AVENUE	940	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
250	DRIFTWOOD AVENUE	1001	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
251	DRIFTWOOD AVENUE	1035	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
252	DRIFTWOOD AVENUE	1045	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
253	DRIFTWOOD AVENUE	1060	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
254	DRIFTWOOD AVENUE	1100	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
255	DRIFTWOOD AVENUE	1101	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
256	DRIFTWOOD AVENUE	1105	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
257	DRIFTWOOD AVENUE	1110	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
258	DRIFTWOOD AVENUE	1120	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
259	EBB TIDE PLACE	615	4'	-	Hardscape	Callistemon citrinus	Brachychiton populneus	Stenocarpus sinuatus	Lophostemon confertus
260	EBB TIDE PLACE	616	4'	-	Hardscape	Callistemon citrinus	Brachychiton populneus	Stenocarpus sinuatus	Lophostemon confertus
261	EBB TIDE PLACE	619	4'	-	-	Callistemon citrinus	Brachychiton populneus	Stenocarpus sinuatus	Lophostemon confertus
262	EBB TIDE PLACE	715	4'	-	-	Callistemon citrinus	Brachychiton populneus	Stenocarpus sinuatus	Lophostemon confertus
263	EMERALD COVE WAY	400	4'	-	-	Pyrus calleryana 'Danicer'	Prunus cerasifera	Chitalpa tashkentensis	Lagerstroemia indica
264	EMERALD COVE WAY	1600	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Prunus cerasifera	Chitalpa tashkentensis	Lagerstroemia indica
265	EMERALD COVE WAY	1730	4'	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Prunus cerasifera	Chitalpa tashkentensis	Lagerstroemia indica
266	EMERALD PLACE	412	4'	-	Hardscape	Bauhinia blakeana	Bauhinia blakeana	Cercis canadensis	Liriodendron tulipifera
267	EMERALD PLACE	413	4'	-	-	Bauhinia blakeana	Bauhinia blakeana	Cercis canadensis	Liriodendron tulipifera
268	EMERALD PLACE	416	4'	Utility Overhead	-	Bauhinia blakeana	Bauhinia blakeana	Cercis canadensis	Liriodendron tulipifera
269	FATHOM AVENUE	901	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
270	FATHOM AVENUE	905	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
271	FATHOM AVENUE	915	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
272	FATHOM AVENUE	920	3'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
273	FATHOM AVENUE	925	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
274	FATHOM AVENUE	1000	3'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
275	FATHOM AVENUE	1001	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
276	FATHOM AVENUE	1005	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
277	FATHOM AVENUE	1010	3'-6"	-	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
278	FATHOM AVENUE	1020	3'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
279	FATHOM AVENUE	1025	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
280	FATHOM AVENUE	1105	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
281	FATHOM AVENUE	1110	3'-6"	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
282	FATHOM AVENUE	1115	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
283	FATHOM AVENUE	1120	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
284	FATHOM AVENUE	1125	3'-6"	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia

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	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
285	HARBOR WAY	1701	4'	-	Hardscape	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
286	HARBOR WAY	1705	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
287	HARBOR WAY	1708	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
288	HARBOR WAY	1709	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
289	HARBOR WAY	1712	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
290	HARBOR WAY	1713	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
291	HARBOR WAY	1716	3'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
292	HARBOR WAY	1721	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
293	HARBOR WAY	1724	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
294	HARBOR WAY	1728	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
295	HARBOR WAY	1729	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
296	HARBOR WAY	1736	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
297	HARBOR WAY	1737	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
298	HARBOR WAY	1740	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis
300	ISLAND VIEW DRIVE	600	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
301	ISLAND VIEW DRIVE	601	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
302	ISLAND VIEW DRIVE	604	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
303	ISLAND VIEW DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
304	ISLAND VIEW DRIVE	612	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
305	ISLAND VIEW DRIVE	613	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
306	ISLAND VIEW DRIVE	616	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
307	ISLAND VIEW DRIVE	617	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
308	ISLAND VIEW DRIVE	624	4'	-	Hardscape	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
309	ISLAND VIEW DRIVE	625	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
310	ISLAND VIEW DRIVE	628	4'	-	Hardscape	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
311	ISLAND VIEW DRIVE	629	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
312	ISLAND VIEW DRIVE	633	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
313	ISLAND VIEW DRIVE	636	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
314	ISLAND VIEW DRIVE	637	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
315	ISLAND VIEW DRIVE	640	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
316	ISLAND VIEW DRIVE	645	4'	-	Hardscape	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
317	ISLAND VIEW DRIVE	708	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
318	ISLAND VIEW DRIVE	709	4'	Utility Overhead	Hardscape	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
319	ISLAND VIEW DRIVE	712	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
320	ISLAND VIEW DRIVE	713	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
321	ISLAND VIEW DRIVE	716	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
322	ISLAND VIEW DRIVE	720	4'	Utility Overhead	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
323	ISLAND VIEW DRIVE	1601	4'	-	Hardscape	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
324	ISLAND VIEW DRIVE	1605	4'	-	-	No Primary Tree Species	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
325	JADE COVE WAY	400	3'-8"	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
326	JADE COVE WAY	409	3'-8"	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
327	JADE COVE WAY	416	3'-8"	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
328	JADE COVE WAY	424	3'-8"	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
329	JADE COVE WAY	428	3'-8"	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
330	JADE COVE WAY	433	3'-8"	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
331	LAGUNA PLACE	500	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Chitalpa tashkentensis	Lagerstroemia indica
332	LAGUNA PLACE	520	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Chitalpa tashkentensis	Lagerstroemia indica
333	LAGUNA PLACE	521	4'	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Chitalpa tashkentensis	Lagerstroemia indica
334	LAGUNA PLACE	528	4'	-	-	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Chitalpa tashkentensis	Lagerstroemia indica
335	MARBLE COVE WAY	400	4'	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
336	MARBLE COVE WAY	401	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
337	MARBLE COVE WAY	403	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
338	MARBLE COVE WAY	404	4'	-	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
339	MARBLE COVE WAY	413	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
340	MARBLE COVE WAY	417	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
341	MARBLE COVE WAY	424	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
342	MARLIN AVENUE	1200	5'	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
343	MARLIN AVENUE	1201	5'	-	Hardscape	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
344	MARLIN AVENUE	1210	5'	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
345	MARLIN AVENUE	1211	5'	-	-	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
346	MARLIN AVENUE	1220	5'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
347	MARLIN AVENUE	1231	5'	-	-	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
348	MARLIN AVENUE	1310	5'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
349	MARLIN AVENUE	1630	5'	-	-	Fraxinus uhdei	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
350	MARVISTA AVENUE	705	4'	Utility Overhead	-	Syagrus romanzoffianum	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
351	MARVISTA AVENUE	710	4'	-	-	Syagrus romanzoffianum	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
352	MARVISTA AVENUE	800	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
353	MARVISTA AVENUE	801	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
354	MARVISTA AVENUE	805	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
355	MARVISTA AVENUE	815	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
356	MARVISTA AVENUE	820	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
357	MARVISTA AVENUE	840	4'	-	Hardscape	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
358	MARVISTA AVENUE	845	4'	Utility Overhead	Hardscape	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
359	MARVISTA AVENUE	850	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
360	MARVISTA AVENUE	900	4'	-	Hardscape	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
361	MARVISTA AVENUE	920	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
362	MARVISTA AVENUE	930	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
363	MARVISTA AVENUE	935	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
364	MARVISTA AVENUE	940	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
365	MARVISTA AVENUE	1025	4'	-	Hardscape	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
366	MARVISTA AVENUE	1055	4'	-	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
367	MARVISTA AVENUE	1060	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
368	MARVISTA AVENUE	1070	4'	Utility Overhead	-	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
369	OPAL COVE WAY	412	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
370	OPAL COVE WAY	413	'	-	-	Pyrus calleryana 'Danicer'	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
371	OPAL COVE WAY	428	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
372	OPAL COVE WAY	432	4'	Utility Overhead	Hardscape	Pyrus calleryana 'Danicer'	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
373	RIVIERA DRIVE	513	4'	Utility Overhead	-	Syagrus romanzoffianum	Syagrus romanzoffianum	Chitalpa tashkentensis	Lagerstroemia indica
374	RIVIERA DRIVE	531	4'	-	Hardscape	Syagrus romanzoffianum	Syagrus romanzoffianum	Chitalpa tashkentensis	Lagerstroemia indica
375	SANDPIPER DRIVE	601	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
376	SANDPIPER DRIVE	604	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
377	SANDPIPER DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
378	SANDPIPER DRIVE	609	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
379	SANDPIPER DRIVE	612	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
380	SANDPIPER DRIVE	613	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
381	SANDPIPER DRIVE	617	4'	Utility Overhead	Hardscape	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
382	SANDPIPER DRIVE	621	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
383	SANDPIPER DRIVE	624	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
384	SANDPIPER DRIVE	625	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
385	SANDPIPER DRIVE	629	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
386	SANDPIPER DRIVE	632	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
387	SANDPIPER DRIVE	636	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
388	SANDPIPER DRIVE	640	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
389	SANDPIPER DRIVE	641	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
390	SANDPIPER DRIVE	645	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
391	SANDPIPER DRIVE	704	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
392	SANDPIPER DRIVE	705	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
393	SANDPIPER DRIVE	708	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
394	SANDPIPER DRIVE	709	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
395	SANDPIPER DRIVE	712	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
396	SANDPIPER DRIVE	716	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
397	SANDPIPER DRIVE	720	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
398	SEABREEZE DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
399	SEABREEZE DRIVE	608	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
400	SEABREEZE DRIVE	609	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
401	SEABREEZE DRIVE	612	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
402	SEABREEZE DRIVE	616	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
403	SEABREEZE DRIVE	617	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
404	SEABREEZE DRIVE	621	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
405	SEABREEZE DRIVE	629	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
406	SEABREEZE DRIVE	637	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
407	SEABREEZE DRIVE	645	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
408	SEABREEZE DRIVE	700	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
409	SEABREEZE DRIVE	701	4'	Utility Overhead	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis

**CITY OF SEAL BEACH**

**DISTRICT: THE HILL**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
410	SEABREEZE DRIVE	704	4'	-	Hardscape	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
411	SEABREEZE DRIVE	708	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
412	SEABREEZE DRIVE	710	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
413	SEABREEZE DRIVE	801	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
414	SEABREEZE DRIVE	803	4'	-	-	No Primary Tree Species	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
415	SILVER SHOALS AVENUE	603	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Lophostemon confertus	Cercis canadensis
416	SILVER SHOALS AVENUE	612	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Lophostemon confertus	Cercis canadensis
417	SILVER SHOALS AVENUE	615	4'	-	Hardscape	No Primary Tree Species	Liriodendron tulipifera	Lophostemon confertus	Cercis canadensis
418	SILVER SHOALS AVENUE	616	4'	-	-	No Primary Tree Species	Liriodendron tulipifera	Lophostemon confertus	Cercis canadensis
419	SILVER SHOALS AVENUE	635	4'	Utility Overhead	-	No Primary Tree Species	Liriodendron tulipifera	Lophostemon confertus	Cercis canadensis
420	SOUTHSHORE DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
421	SOUTHSHORE DRIVE	609	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
422	SOUTHSHORE DRIVE	620	4'	-	Hardscape	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
423	SOUTHSHORE DRIVE	624	4'	-	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
424	SOUTHSHORE DRIVE	628	4'	-	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
425	SOUTHSHORE DRIVE	629	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
426	SOUTHSHORE DRIVE	633	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
427	SOUTHSHORE DRIVE	637	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
428	SOUTHSHORE DRIVE	644	4'	-	Hardscape	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
429	SOUTHSHORE DRIVE	704	4'	-	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
430	SOUTHSHORE DRIVE	710	4'	-	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
431	SOUTHSHORE DRIVE	717	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
432	SOUTHSHORE DRIVE	721	4'	Utility Overhead	-	No Primary Tree Species	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
433	SURF PLACE	105	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Lophostemon confertus	Lagerstroemia indica
434	SURF PLACE	225	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Lophostemon confertus	Lagerstroemia indica
435	SURF PLACE	235	4'	Utility Overhead	-	Pyrus calleryana 'Danicer'	Pyrus calleryana	Lophostemon confertus	Lagerstroemia indica
436	SURF PLACE	245	4'	-	Hardscape	Pyrus calleryana 'Danicer'	Pyrus calleryana	Lophostemon confertus	Lagerstroemia indica
437	TAPER DRIVE	600	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
438	TAPER DRIVE	604	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
439	TAPER DRIVE	605	4'	Utility Overhead	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
440	TAPER DRIVE	612	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
441	TAPER DRIVE	614	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
442	TAPER DRIVE	630	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
443	TAPER DRIVE	633	4'	Utility Overhead	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
444	TAPER DRIVE	637	4'	Utility Overhead	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
445	TAPER DRIVE	644	4'	-	Hardscape	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
446	TAPER DRIVE	645	4'	Utility Overhead	Hardscape	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
447	TAPER DRIVE	700	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
448	TAPER DRIVE	701	4'	Utility Overhead	Hardscape	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
449	TAPER DRIVE	704	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
450	TAPER DRIVE	705	4'	Utility Overhead	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
451	TAPER DRIVE	708	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
452	TAPER DRIVE	713	4'	Utility Overhead	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
453	TAPER DRIVE	803	4'	-	-	No Primary Tree Species	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata



**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK EAST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
1	ASTER STREET	150	4'-6"	Utility Overhead	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
2	ASTER STREET	180	4'-6"	Utility Overhead	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
3	ASTER STREET	400	4'-6"	Utility Overhead	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
4	BASSWOOD STREET	200	4'-6"	-	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
5	BASSWOOD STREET	201	4'-6"	-	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
6	BASSWOOD STREET	211	4'-6"	-	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
7	BASSWOOD STREET	220	4'-6"	-	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
8	BASSWOOD STREET	221	4'-6"	-	-	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
9	ELDER STREET	4701	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
10	ELDER STREET	4709	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
11	ELDER STREET	4717	3'-6"	Utility Pole	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
12	ELDER STREET	4725	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
13	ELDER STREET	4733	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
14	ELDER STREET	4741	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
15	ELDER STREET	4757	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
16	ELDER STREET	4761	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
17	ELDER STREET	4773	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
18	ELDER STREET	4789	3'-6"	Utility Pole	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
19	ELDER STREET	4809	3'-6"	Utility Pole	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
20	ELDER STREET	4825	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
21	ELDER STREET	4833	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
22	ELDER STREET	4841	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
23	ELDER STREET	4849	3'-6"	-	Hardscape	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
24	ELDER STREET	4857	3'-6"	-	-	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
25	ELDER STREET	4873	3'-6"	-	Hardscape	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
26	FIR AVENUE	4648	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
27	FIR AVENUE	4656	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
28	FIR AVENUE	4664	3'-6"	Utility Pole	Hardscape	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
29	FIR AVENUE	4672	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
30	FIR AVENUE	4680	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
31	FIR AVENUE	4689	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
32	FIR AVENUE	4700	3'-6"	-	Hardscape	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
33	FIR AVENUE	4735	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
34	FIR AVENUE	4741	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
35	FIR AVENUE	4742	3'-6"	Utility Pole	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
36	FIR AVENUE	4756	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
37	FIR AVENUE	4772	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
38	FIR AVENUE	4788	3'-6"	Utility Pole	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
39	FIR AVENUE	4800	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
40	FIR AVENUE	4815	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis

**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK EAST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

DECEMBER 20, 2010

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
41	FIR AVENUE	4825	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
42	FIR AVENUE	4832	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
43	FIR AVENUE	4840	3'-6"	-	Hardscape	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
44	FIR AVENUE	4841	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
45	FIR AVENUE	4849	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
46	FIR AVENUE	4865	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
47	FIR AVENUE	4873	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
48	FIR AVENUE	4911	3'-6"	-	-	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
49	FIR CIRCLE	3831	3'-6"	-	-	Pinus canariensis	Bauhinia blakeana	Cercis canadensis	Chitalpa tashkentensis
50	FIR CIRCLE	3840	3'-6"	-	-	Pinus canariensis	Bauhinia blakeana	Cercis canadensis	Chitalpa tashkentensis
51	GUAVA AVENUE	4481	3'-6"	-	Hardscape	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
52	GUAVA AVENUE	4489	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
53	GUAVA AVENUE	4501	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
54	GUAVA AVENUE	4509	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
55	GUAVA AVENUE	4525	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
56	GUAVA AVENUE	4533	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
57	GUAVA AVENUE	4541	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
58	GUAVA AVENUE	4549	3'-6"	Utility Pole	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
59	GUAVA AVENUE	4557	3'-6"	Utility Pole	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
60	GUAVA AVENUE	4565	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
61	GUAVA AVENUE	4573	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
62	GUAVA AVENUE	4581	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
63	GUAVA AVENUE	4589	3'-6"	Utility Pole	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
64	GUAVA AVENUE	4597	3'-6"	-	Hardscape	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
65	GUAVA AVENUE	4601	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
66	GUAVA AVENUE	4625	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
67	GUAVA AVENUE	4649	3'-6"	Utility Pole	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
68	GUAVA AVENUE	4633	3'-6"	-	-	No Primary Tree Species	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
69	HAZELNUT AVENUE	4480	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
70	HAZELNUT AVENUE	4488	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
71	HAZELNUT AVENUE	4508	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
72	HAZELNUT AVENUE	4524	3'-6"	Fire Hydrant	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
73	HAZELNUT AVENUE	4525	3'-6"	-	Hardscape	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
74	HAZELNUT AVENUE	4532	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
75	HAZELNUT AVENUE	4533	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
76	HAZELNUT AVENUE	4541	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
77	HAZELNUT AVENUE	4549	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
78	HAZELNUT AVENUE	4556	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
79	HAZELNUT AVENUE	4557	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
80	HAZELNUT AVENUE	4564	3'-6"	-	Hardscape	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis

**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK EAST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
81	HAZELNUT AVENUE	4565	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
82	HAZELNUT AVENUE	4572	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
83	HAZELNUT AVENUE	4573	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
84	HAZELNUT AVENUE	4580	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
85	HAZELNUT AVENUE	4581	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
86	HAZELNUT AVENUE	4596	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
87	HAZELNUT AVENUE	4597	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
88	HAZELNUT AVENUE	4600	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
89	HAZELNUT AVENUE	4624	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
90	HAZELNUT AVENUE	4625	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
91	HAZELNUT AVENUE	4633	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
92	HAZELNUT AVENUE	4641	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
93	HAZELNUT AVENUE	4648	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
94	HAZELNUT AVENUE	4649	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
95	HAZELNUT AVENUE	4664	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
96	HAZELNUT AVENUE	4665	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
97	HAZELNUT AVENUE	4673	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
98	HAZELNUT AVENUE	4681	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
99	HAZELNUT AVENUE	4688	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
100	HAZELNUT AVENUE	4689	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
101	HAZELNUT AVENUE	4690	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
102	HAZELNUT AVENUE	4756	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
103	HAZELNUT AVENUE	4764	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
104	HAZELNUT AVENUE	4772	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
105	HAZELNUT AVENUE	4773	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
106	HAZELNUT AVENUE	4781	3'-6"	Utility Pole	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
107	HAZELNUT AVENUE	4788	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
108	HAZELNUT AVENUE	4801	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
109	HAZELNUT AVENUE	4809	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
110	HAZELNUT AVENUE	4816	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
111	HAZELNUT AVENUE	4817	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
112	HAZELNUT AVENUE	4825	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
113	HAZELNUT AVENUE	4832	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
114	HAZELNUT AVENUE	4833	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
115	HAZELNUT AVENUE	4848	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
116	HAZELNUT AVENUE	4857	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
117	HAZELNUT AVENUE	4864	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
118	HAZELNUT AVENUE	4872	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
119	HAZELNUT AVENUE	4880	3'-6"	-	Hardscape	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
120	HAZELNUT AVENUE	4881	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
121	HAZELNUT AVENUE	4888	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
122	HAZELNUT AVENUE	4889	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
123	HAZELNUT AVENUE	4901	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
124	HAZELNUT AVENUE	4908	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
125	HAZELNUT AVENUE	4909	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
126	HAZELNUT AVENUE	4918	3'-6"	-	-	Lagerstroemia indica	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis

**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK EAST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
127	IRONWOOD STREET	4516	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
128	IRONWOOD STREET	4517	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
129	IRONWOOD STREET	4532	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
130	IRONWOOD STREET	4533	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
131	IRONWOOD STREET	4540	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
132	IRONWOOD STREET	4541	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
133	IRONWOOD STREET	4564	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
134	IRONWOOD STREET	4565	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
135	IRONWOOD STREET	4573	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
136	IRONWOOD STREET	4588	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
137	IRONWOOD STREET	4589	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
138	IRONWOOD STREET	4601	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
139	IRONWOOD STREET	4608	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
140	IRONWOOD STREET	4609	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
141	IRONWOOD STREET	4616	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
142	IRONWOOD STREET	4617	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
143	IRONWOOD STREET	4624	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
144	IRONWOOD STREET	4640	3'-6"	Utility Pole	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
145	IRONWOOD STREET	4641	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
146	IRONWOOD STREET	4648	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
147	IRONWOOD STREET	4649	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
148	IRONWOOD STREET	4672	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
149	IRONWOOD STREET	4681	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
150	IRONWOOD STREET	4688	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
151	IRONWOOD STREET	4689	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
152	IRONWOOD STREET	4697	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
153	IRONWOOD STREET	4741	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
154	IRONWOOD STREET	4762	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
155	IRONWOOD STREET	4773	3'-6"	Utility Pole	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
156	IRONWOOD STREET	4780	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
157	IRONWOOD STREET	4781	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
158	IRONWOOD STREET	4788	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
159	IRONWOOD STREET	4789	3'-6"	-	Hardscape	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
160	IRONWOOD STREET	4800	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
161	IRONWOOD STREET	4801	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
162	IRONWOOD STREET	4808	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
163	IRONWOOD STREET	4873	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
164	IRONWOOD STREET	4880	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
165	IRONWOOD STREET	4881	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
166	IRONWOOD STREET	4900	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
167	IRONWOOD STREET	4908	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
168	IRONWOOD STREET	4917	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
169	IRONWOOD STREET	4924	3'-6"	-	-	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
170	IRONWOOD STREET	4941	3'-6"	-	Hardscape	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
171	IRONWOOD STREET	4949	3'-6"	-	Hardscape	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana

**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK EAST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
173	PANSY STREET	3820	3'-6"	-	-	No Primary Tree Species	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
174	PANSY STREET	3830	3'-6"	-	-	No Primary Tree Species	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
175	PANSY STREET	3840	3'-6"	-	-	No Primary Tree Species	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
176	PANSY STREET	3850	3'-6"	-	-	No Primary Tree Species	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
177	ROSE STREET	3840	3'-6"	Utility Pole	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
178	ROSE STREET	3850	3'-6"	Utility Pole	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
179	ROSE STREET	3851	3'-6"	Fire Hydrant	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
180	ROSE STREET	3867	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
181	ROSE STREET	3871	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
182	ROSE STREET	3881	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
183	ROSE STREET	3900	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
184	ROSE STREET	3910	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
185	ROSE STREET	3920	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
186	ROSE STREET	3940	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
187	ROSE STREET	3950	3'-6"	-	-	Lophostemon conferta	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
188	SUNFLOWER STREET	3831	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
189	SUNFLOWER STREET	3841	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
190	SUNFLOWER STREET	3861	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
191	SUNFLOWER STREET	3871	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
192	SUNFLOWER STREET	3881	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
193	SUNFLOWER STREET	3900	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
194	SUNFLOWER STREET	3901	3'-6"	Utility Pole	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
195	SUNFLOWER STREET	3911	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
196	SUNFLOWER STREET	3921	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
197	SUNFLOWER STREET	3930	3'-6"	-	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
198	SUNFLOWER STREET	3931	3'-6"	Utility Pole	-	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
199	TULIP STREET	100	3'-6"	-	-	Eucalyptus sideroxylon	Prunus cerasifera	Pyrus calleryana	Chitalpa tashkentensis
200	TULIP STREET	102	3'-6"	-	-	Eucalyptus sideroxylon	Prunus cerasifera	Pyrus calleryana	Chitalpa tashkentensis
201	VIOLET STREET	3811	3'-6"	-	-	Eucalyptus rudis	Brachychiton populneus	Liriodendron tulipifera	Lagerstroemia indica
202	WISTERIA STREET	3820	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
203	WISTERIA STREET	3830	3'-6"	Utility Pole	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
204	WISTERIA STREET	3831	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
205	WISTERIA STREET	3840	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
206	WISTERIA STREET	3841	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
207	WISTERIA STREET	3850	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
208	WISTERIA STREET	3860	3'-6"	Utility Pole	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
209	WISTERIA STREET	3861	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
210	WISTERIA STREET	3870	3'-6"	-	Hardscape	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
211	WISTERIA STREET	3880	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
212	WISTERIA STREET	3931	3'-6"	-	-	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus

CITY OF SEAL BEACH									
DISTRICT: COLLEGE PARK EAST									
VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)									
DECEMBER 20, 2010									
	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
	Street	Quantity	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
213	LAMPSON AVENUE								
214	CANDLEBERRY ST TO HEATHER ST	10	3' X 5'	-	-	Eucalyptus camaldulensis	Cinnamomum camphora	Lophostemon confertus	Lagerstroemia indica
215	HEATHER ST TO ROSE ST	3	3' X 5'	-	-	Schinus terebinthifolius	Cinnamomum camphora	Lophostemon confertus	Lagerstroemia indica
216	ROSE ST TO TULIP ST	7	3' X 5'	-	-	Schinus terebinthifolius	Cinnamomum camphora	Lophostemon confertus	Lagerstroemia indica
217	TULIP ST TO CITY BOUNDARY	8	3' X 5'	-	-	Pinus canariensis	Cinnamomum camphora	Lophostemon confertus	Lagerstroemia indica

**CITY OF SEAL BEACH**

**DISTRICT: COLLEGE PARK WEST**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
1	COLLEGE PARK DRIVE	120	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
2	COLLEGE PARK DRIVE	123	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
3	COLLEGE PARK DRIVE	134	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
4	COLLEGE PARK DRIVE	145	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
5	COLLEGE PARK DRIVE	151	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
6	COLLEGE PARK DRIVE	160	4'	Utility Overhead	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
7	COLLEGE PARK DRIVE	164	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
8	COLLEGE PARK DRIVE	187	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
9	COLLEGE PARK DRIVE	229	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
10	COLLEGE PARK DRIVE	240	4'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
11	COLLEGE PARK DRIVE	248	5'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
12	COLLEGE PARK DRIVE	252	5'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
13	COLLEGE PARK DRIVE	260	5'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
14	COLLEGE PARK DRIVE	280	5'	-	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
15	COLLEGE PARK DRIVE	287	5'	Fire Hydrant	-	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
16	COLLEGE PARK DRIVE	300	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
17	COLLEGE PARK DRIVE	301	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
18	COLLEGE PARK DRIVE	304	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
19	COLLEGE PARK DRIVE	308	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
20	COLLEGE PARK DRIVE	309	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
21	COLLEGE PARK DRIVE	312	5'	-	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
22	COLLEGE PARK DRIVE	313	5'	Fire Hydrant	-	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
23	HARVARD LANE DRIVE	100	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
24	HARVARD LANE DRIVE	101	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
25	HARVARD LANE DRIVE	113	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
26	HARVARD LANE DRIVE	132	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
27	HARVARD LANE DRIVE	133	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
28	HARVARD LANE DRIVE	137	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
29	HARVARD LANE DRIVE	148	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
30	HARVARD LANE DRIVE	152	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
31	HARVARD LANE DRIVE	153	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
32	HARVARD LANE DRIVE	155	5'-6"	Fire Hydrant	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
33	HARVARD LANE DRIVE	156	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
34	HARVARD LANE DRIVE	161	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
35	HARVARD LANE DRIVE	165	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
36	HARVARD LANE DRIVE	173	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
37	HARVARD LANE DRIVE	177	5'-6"	Utility Overhead	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
38	HARVARD LANE DRIVE	185	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
39	HARVARD LANE DRIVE	205	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
40	HARVARD LANE DRIVE	212	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta

**CITY OF SEAL BEACH**  
**DISTRICT: COLLEGE PARK WEST**  
**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**  
**DECEMBER 20, 2010**

	Street	Address	Parkway Width	Utility	Notes	Existing Primary Tree Species	Recommendation 1	Recommendation 2	Recommendation 3
41	HARVARD LANE DRIVE	236	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
42	HARVARD LANE DRIVE	240	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
43	HARVARD LANE DRIVE	242	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
44	HARVARD LANE DRIVE	253	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
45	HARVARD LANE DRIVE	254	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
46	HARVARD LANE DRIVE	261	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
47	HARVARD LANE DRIVE	273	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
48	HARVARD LANE DRIVE	278	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
49	HARVARD LANE DRIVE	281	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
50	HARVARD LANE DRIVE	285	5'-6"	Utility Overhead	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
51	HARVARD LANE DRIVE	290	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
52	HARVARD LANE DRIVE	293	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
53	HARVARD LANE DRIVE	308	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
54	HARVARD LANE DRIVE	322	5'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
55	OCCIDENTAL DRIVE	102	5'	-	-	Syagrus romanzoffianum	Syagrus romanzoffianum	Syagrus romanzoffianum	Syagrus romanzoffianum
56	STANFORD LANE	125	5'	-	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
57	STANFORD LANE	137	5'	-	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
58	STANFORD LANE	164	5'	Utility Overhead	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
59	STANFORD LANE	181	5'	-	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
60	STANFORD LANE	204	5'	-	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
61	STANFORD LANE	233	5'	Fire Hydrant	-	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
62	YALE CIRCLE	300	3'-6"	-	-	No Primary Tree Species	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
63	YALE CIRCLE	301	3'-6"	-	-	Vacant site	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
64	YALE CIRCLE	304	3'-6"	-	-	No Primary Tree Species	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
65	YALE CIRCLE	305	3'-6"	-	-	No Primary Tree Species	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
66	YALE CIRCLE	308	3'-6"	-	-	No Primary Tree Species	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
67	YALE CIRCLE	309	3'-6"	-	-	No Primary Tree Species	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
68	YALE LANE	109	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
69	YALE LANE	117	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
70	YALE LANE	133	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
71	YALE LANE	136	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
72	YALE LANE	140	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
73	YALE LANE	142	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
74	YALE LANE	145	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
75	YALE LANE	155	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
76	YALE LANE	185	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
77	YALE LANE	189	4'-6"	-	-	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta



**CITY OF SEAL BEACH**

**DISTRICT: SEAL BEACH BLVD**

**VACANT SITES & APPROVED RECOMMENDED STREET TREE SPECIES (11-3-09)**

**DECEMBER 20, 2010**

	<b>Street</b>	<b>Quantity</b>	<b>Parkway Width</b>	<b>Utility</b>	<b>Notes</b>	<b>Existing Primary Tree Species</b>	<b>Recommendation 1</b>	<b>Recommendation 2</b>	<b>Recommendation 3</b>
1	PCH TO BOLSA AVE	37	8'	-	Center Median	No primary tree species	Syagrus romanzoffianum	Washingtonia robusta	Eucalyptus ficifolia
2	BOLSA AVE TO HERON	1	8'	-	Center Median	Liquidambar styraciflua	Liquidambar styraciflua	Washingtonia robusta	Eucalyptus ficifolia
3	HERON TO ADOLFO LOPEZ	0	8'	-	Center Median	Liquidambar styraciflua	Liquidambar styraciflua	Liquidambar styraciflua	Liquidambar styraciflua
4	ADOLFO LOPEZ TO APOLLO	0	8'	-	West Parkway	Melaleuca quinquenervia	Melaleuca quinquenervia	Melaleuca quinquenervia	Melaleuca quinquenervia
5	APOLLO TO WESTMINSTER	0	8'	-	Center Median	Platanus acerifolia	Platanus acerifolia	Platanus acerifolia	Platanus acerifolia
6	WESTMINSTER TO 405 FWY	4	8'	-	Center Median	Platanus acerifolia	Platanus acerifolia	Platanus acerifolia	Platanus acerifolia
7	405 FWY TO LAMPSON	3	8'	-	Center Median	Syagrus romanzoffianum	Syagrus romanzoffianum	Syagrus romanzoffianum	Syagrus romanzoffianum
8	405 FWY TO BRADBURY	5	8'	-	Center Median	Cinnamomum camphora	Cinnamomum camphora	Cinnamomum camphora	Cinnamomum camphora

## Trees for Seal Beach

### Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
1	1ST ST	100	140	3	No	None	Washingtonia robusta	Washingtonia robusta	Washingtonia robusta
2	1ST ST	208	210	3	No	Archontophoenix cunninghamiana	Washingtonia robusta	Eucalyptus ficifolia	Pittosporum undulatum
3	1ST ST	300	400	4	No	Metrosideros excelsus	Washingtonia robusta	Brachychiton populneus	Cinnamomum camphora
4	1ST ST	300	400	14	No	Eucalyptus citriodora	Cinnamomum camphora	Pittosporum undulatum	Brachychiton populneus
5	1ST ST	400	400	99	No	Brachychiton populneus	Cinnamomum camphora	Pittosporum undulatum	Brachychiton populneus
6	2ND ST	100	216	3	No	Chitalpa tashkentensis 'Pink Dawn'	Liriodendron tulipifera	Lophostemon conferta	Brachychiton populneus
7	3RD ST	100	213	3	No	Archontophoenix cunninghamiana	Brachychiton populneus	Spathodea campanulata	Ginkgo biloba
8	4TH ST	100	236	3	No	Syagrus romanzoffianum	Liriodendron tulipifera	Lophostemon conferta	Brachychiton populneus
9	5TH ST	100	255	3	No	Syagrus romanzoffianum	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
10	5TH ST	252	257	5	No	Syagrus romanzoffianum	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
11	5TH ST	301	401	99	No	Eucalyptus citriodora	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
12	5TH ST	475	475	4	No	Pyrus calleryana	Ginkgo biloba	Brachychiton acerifolius	Podocarpus henkelii
13	6TH ST	100	254	3	No	Washingtonia robusta	Washingtonia robusta	Stenocarpus sinuatus	Brachychiton populneus
14	7TH ST	116	324	3	No	Stenocarpus sinuatus	Cinnamomum camphora	Stenocarpus sinuatus	Spathodea campanulata
15	8TH ST	100	332	3	No	Washingtonia robusta	Washingtonia robusta	Liriodendron tulipifera	Podocarpus henkelii
16	10TH ST	100	148	4	No	Phoenix canariensis	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
17	10TH ST	101	349	3	No	Syagrus romanzoffianum	Spathodea campanulata	Brachychiton populneus	Cercis canadensis
18	11TH ST	100	318	3	No	Washingtonia robusta	Stenocarpus sinuatus	Lophostemon conferta	Ginkgo biloba
19	12TH ST	100	101	7	No	Lophostemon confertus	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
20	12TH ST	100	371	3	No	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
21	12TH ST	315	315	4	No	Syagrus romanzoffianum	Liriodendron tulipifera	Brachychiton populneus	Ginkgo biloba
22	13TH ST	100	363	3	No	Washingtonia robusta	Washingtonia robusta	Brachychiton populneus	Lophostemon conferta
23	14TH ST	101	329	3	No	Syagrus romanzoffianum	Ginkgo biloba	Liriodendron tulipifera	Brachychiton populneus
24	15TH ST	209	328	3	No	Syagrus romanzoffianum	Brachychiton populneus	Lophostemon conferta	Liriodendron tulipifera
25	16TH ST	213	330	3	No	Syagrus romanzoffianum	Lophostemon conferta	Stenocarpus sinuatus	Prunus cerasifera
26	17TH ST	200	330	3	No	Syagrus romanzoffianum	Liriodendron tulipifera	Ginkgo biloba	Lophostemon conferta
27	AGUA PL	500	512	4	No	Pyrus calleryana 'Danicer'	Prunus cerasifera	Albizia julibrissin	Jacaranda mimosifolia
28	ALMOND AV	Park Area		99	No	Pinus canariensis	Pinus canariensis	Magnolia grandiflora	Jacaranda mimosifolia
29	ASTER ST	3601	3701	4	Yes	Pyrus kawakamii	Albizia julibrissin	Bauhinia blakeana	Gleditsia tricanthos
30	AVALON DR	795	820	4	No	Pyrus calleryana 'Danicer'	Bauhinia blakeana	Prunus cerasifera	Lagerstroemia indica
31	AYER HOTEL COMPLEX	2	2	8	No	Eucalyptus sideroxyylon	Magnolia grandiflora	Lophostemon conferta	Podocarpus gracilior
32	AYER HOTEL COMPLEX	2	2	99	No	Brachychiton populneus	Magnolia grandiflora	Lophostemon conferta	Podocarpus gracilior

## Trees for Seal Beach

### Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
33	BALBOA DR	400	500	4	Yes	Washingtonia robusta	Albizia julibrissin	Bauhinia blakeana	Stenocarpus sinuatus
34	BALBOA DR	401	735	4	No	Washingtonia robusta	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
35	BALBOA DR	601	601	5	No	Washingtonia robusta	Podocarpus gracilior	Quercus ilex	Ginkgo biloba
36	BANYAN AV			/	No	No Parkway	Magnolia grand Russet	Lagerstroemia indica	Chitalpa tashkentensis
37	BASSWOOD ST	401	401	4	No	Pyrus kawakamii	Tabebuia impetignosa	Albizia julibrissin	Koelreuteria paniculata
38	BAYOU WY	1700	1733	4	No	Magnolia grandiflora	Metrosideros excelsus	Albizia julibrissin	Lagerstroemia indica
39	BAYSIDE DR	601	750	4	No	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Lophostemon conferta	Stenocarpus sinuatus
40	BEACHCOMBER DR	600	1511	4	No	Pyrus calleryana	Lophostemon conferta	Liriodendron tulipifera	Cercis canadensis
41	BIRCHWOOD AV		/		No	No Parkway	Magnolia grand Russet	Lagerstroemia indica	Chitalpa tashkentensis
42	BLUEBELL ST		/		No	No Parkway	Lagerstroemia indica	Cercis canadensis	Magnolia grand Russet
43	BERYL COVE WY	401	432	4	No	Syagrus romanzoffianum	Albizia julibrissin	Lophostemon conferta	Koelreuteria paniculata
44	BOLSA AV	1000	1600	4	Yes	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetignosa
45	BOLSA AV	1001	1705	4	No	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetignosa
46	BOLSA AV	1200	1200	5	Yes	Syagrus romanzoffianum	Bauhinia variegata	Albizia julibrissin	Tabebuia impetignosa
47	CAMELIA ST			/	No	No Parkway	Lagerstroemia indica	Magnolia grand Russet	Chitalpa tashkentensis
48	CANDLEBERRY AV	4100	4100	4	Yes	Pyrus kawakamii	Koelreuteria paniculata	Tabebuia impetignosa	Jacaranda mimosifolia
49	CARMEL AV	700	760	4	No	Pyrus calleryana 'Danicer'	Liriodendron tulipifera	Stenocarpus sinuatus	Tabebuia impetignosa
50	CARNATION CIR			/	No	No Parkway	Magnolia grand Russet	Lagerstroemia indica	Cercis canadensis
51	CATALINA AV	700	1748	4	No	Robinia pseudoacacia	Magnolia grandiflora	Bauhinia variegata	Quercus virginiana
52	CENTRAL AV	200	1191	3	Yes	Lagerstroemia indica	Cercis canadensis	Tabebuia impetiginosa	Chitalpa tashkentensis
53	CENTRAL AV	801	825	4	Yes	Lophostemon confertus	Cercis canadensis	<i>Liriodendron tulipifera</i>	Tabebuia impetiginosa
54	CENTRAL AV	810	1000	6	Yes	Ficus microcarpa 'Nitida'	Podocarpus henkelii	Bauhinia blakeana	Koelreuteria paniculata
55	CENTRAL WY	100	410	3	No	Archontophoenix cunninghamiana	Liriodendron tulipifera	Bauhinia blakeana	Ginkgo biloba
56	CLIPPER WY	389	389	99	No	Liquidambar styraciflua	Robinia pseudoacacia	Quercus ilex	Quercus virginiana
57	CLOVER CIR			/	No	No Parkway	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
58	COASTLINE DR	100	1145	4	No	Cupaniopsis anacardioides	Chitalpa tashkentensis	Brachychiton populneus	Jacaranda mimosifolia
59	COASTLINE DR	105	1140	4	Yes	Pyrus kawakamii	Prunus cerasifera	Lagerstroemia indica	Albizia julibrissin
60	COLLEGE PARK DR	10	10	99	Yes	Eucalyptus cladocalyx	Koelreuteria paniculata	Jacaranda mimosifolia	Gleditsia tricanthos
61	COLLEGE PARK DR	10	50	99	No	Olea europaea	Platanus acerifolia	Jacaranda mimosifolia	Gleditsia tricanthos
62	COLLEGE PARK DR	50	100	14	No	Liquidambar styraciflua	Koelreuteria paniculata	Jacaranda mimosifolia	Gleditsia tricanthos
63	COLLEGE PARK DR	120	304	5	No	Cupaniopsis anacardioides	Quercus virginiana	Platanus acerifolia	Gleditsia tricanthos
64	COLLEGE PARK DR	301	309	3	No	Cinnamomum camphora	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
65	COLUMBINE ST			/	No	No Parkway	Magnolia grand Russet	Cercis canadensis	Lagerstroemia indica
66	CORAL PL	1704	1713	4	No	Lagerstroemia indica	Tabebuia impetignosa	Stenocarpus sinuatus	Gleditsia tricanthos

## Trees for Seal Beach

### Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
67	CORSAIR WY	201	445	99	No	Olea europaea	Quercus virginiana	Metrosideros excelsus	Eucalyptus ficifolia
68	CREST DR	800	815	4	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Chitalpa tashkentensis	Lagerstroemia indica
69	CRESTVIEW AV	1000	1780	4	No	Robinia pseudoacacia	Prunus cerasifera	Cercis canadensis	Chitalpa tashkentensis
70	CRYSTAL COVE WY	1220	1410	4	No	Liquidambar styraciflua	Lagerstroemia indica	Stenocarpus sinuatus	Koelreuteria paniculata
71	CRYSTAL PL	400	412	4	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Prunus cerasifera	Cercis canadensis
72	DAFFODIL CIR			/	No	No Parkway	Magnolia grand Russet	Cercis canadensis	Chitalpa tashkentensis
73	DAHLIA CIR			/	No	No Parkway	Lagerstroemia indica	Magnolia grand Russet	Cercis canadensis
74	DAISY CIR			/	No	No Parkway	Chitalpa tashkentensis	Cercis canadensis	Magnolia grand Russet
75	DAISY ST			/	No	No Parkway	Lagerstroemia indica	Magnolia grand Russet	Chitalpa tashkentensis
76	DOGWOOD AV			/	No	No Parkway	Pyrus calleryana	Lagerstroemia indica	Cercis canadensis
77	DOLPHIN AV	100	141	3	No	Archontophoenix cunninghamiana	Brachychiton populneus	Lophostemon conferta	Ginkgo biloba
78	DRIFTWOOD AV	700	1140	4	No	Liquidambar styraciflua	Liriodendron tulipifera	Brachychiton populneus	Lophostemon confertus
79	EBBTIDE PL	600	601	4	No	Callistemon citrinus	Brachychiton populneus	Stenocarpus sinuatus	Lophostemon confertus
80	ELDER AV	4701	4857	3	No	Magnolia grandiflora	Lophostemon conferta	Bauhinia blakeana	Chitalpa tashkentensis
81	ELECTRIC AV	340	440	7	No	Ficus rubiginosa	Podocarpus gracilior	Quercus virginiana	Liriodendron tulipifera
82	ELECTRIC AV	507	507	99	No	Phoenix canariensis	Phoenix canariensis	Quercus virginiana	Magnolia grandiflora
83	ELECTRIC AV	600	1800	4	No	Pyrus kawakamii	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
84	ELECTRIC AV	651	1510	4	Yes	Pyrus kawakamii	Cercis canadensis	Bauhinia blakeana	Koelreuteria paniculata
85	ELECTRIC AV	805	805	15	Yes	Eucalyptus citriodora	Cercis canadensis	Bauhinia blakeana	Jacaranda mimosifolia
86	ELECTRIC AV	901	901	25	No	Pinus canariensis	Quercus virginiana	Podocarpus Gracilior	Magnolia grandiflora
87	ELECTRIC AV	901	919	15	No	Ulmus parvifolia	Quercus virginiana	Podocarpus Gracilior	Magnolia grandiflora
88	ELECTRIC AV	1215	1340	3	No	Ficus microcarpa 'Nitida'	Podocarpus gracilior	Quercus virginiana	Magnolia grandiflora
89	EMERALD COVE WY	1500	1715	4	No	Pyrus calleryana 'Danicer'	Prunus cerasifera	Chitalpa tashkentensis	Lagerstroemia indica
90	EMERALD PL	400	413	4	No	Bauhinia blakeana	Bauhinia blakeana	Cercis canadensis	Liriodendron tulipifera
91	FATHOM AV	840	1140	4	No	Eucalyptus sideroxyylon	Liriodendron tulipifera	Bauhinia blakeana	Jacaranda mimosifolia
92	FERN CIR			/	No	No Parkway	Chitalpa tashkentensis	Magnolia grand Russet	Lagerstroemia indica
93	FIR AV	4656	4915	3	No	Lagerstroemia indica	Lagerstroemia indica	Chitalpa tashkentensis	Cercis canadensis
94	FIR CIR	3830	3851	3	No	Pinus canariensis	Bauhinia blakeana	Cercis canadensis	Chitalpa tashkentensis
95	FUCHSIA CIR			/	No	No Parkway	Pyrus calleryana	Lagerstroemia indica	Magnolia grand Russet
96	FUCHSIA ST			/	No	No Parkway	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
97	GALLEON WY	435	525	99	No	Olea europaea	Podocarpus gracilior	Magnolia grandiflora	Metrosideros excelsus
98	GALLEON WY	450	450	4	No	Cupressocyparis leylandii	Bauhinia blakeana	Stenocarpus sinuatus	Koelreuteria paniculata
99	GOLDENROD CIR			/	No	No Parkway	Chitalpa tashkentensis	Magnolia grand Russet	Magnolia grand Russet
100	GOLDENROD ST			/	No	No Parkway	Pyrus calleryana	Lagerstroemia indica	Pyrus calleryana
101	GUAVA AV			3	No	Lophostemon conferta	Magnolia grand Russet	Chitalpa tashkentensis	Cercis canadensis
102	GUAVA WY			/	No	No Parkway	Magnolia grand Russet	Pyrus calleryana	Lagerstroemia indica
103	HARBOR WY	1700	1748	4	No	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Lagerstroemia indica	Chitalpa tashkentensis

## Trees for Seal Beach

Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
104	HARVARD LN	104	317	5	No	Liquidambar styraciflua	Quercus virginiana	Brachychiton populneus	Lophostemon conferta
105	HARVARD LN	350	350	3	No	Cupaniopsis anacardioides	Quercus virginiana	Chitalpa tashkentensis	Stenocarpus sinuatus
106	HAZELNUT AV	4488	4930	3	No	Cupaniopsis anacardioides	Prunus cerasifera	Stenocarpus sinuatus	Chitalpa tashkentensis
107	HEATHER CIR			/	No	No Parkway	Lagerstroemia indica	Chitalpa tashkentensis	Magnolia grand Russet
108	HEATHER ST			3	No	Pyrus kawakamii	Lagerstroemia indica	Magnolia grand Russet	Pyrus calleryana
109	IRONWOOD AV	4524	4933	3	No	Lophostemon conferta	Chitalpa tashkentensis	Lagerstroemia indica	Bauhinia blakeana
110	ISLAND VIEW DR	600	1611	4	No	Magnolia grandiflora	Lagerstroemia indica	Chitalpa tashkentensis	Bauhinia blakeana
111	IRIS CIR			/	No	No Parkway	Chitalpa tashkentensis	Pyrus calleryana	Magnolia grand Russet
112	JADE COVE WY	400	429	4	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Cercis canadensis	Lophostemon conferta
113	JASMINE CIR			/	No	No Parkway	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
114	LAGUNA PL	501	528	4	No	Pyrus calleryana 'Danicer'	Stenocarpus sinuatus	Chitalpa tashkentensis	Lagerstroemia indica
115	LAMPSON AV	3800	3800	12	No	Cinnamomum camphora	Cinnamomum camphora	Quercus virginiana	Liquidamber styraiflua
116	LAMPSON AV	3801	4900	99	No	Pinus canariensis	Cinnamomum camphora	Quercus virginiana	Liquidamber styraiflua
117	LAMPSON AV	3850	4700	10	No	Schinus terebinthifolius	Quercus virginiana	Lophostemon confertus	Koelreuteria paniculata
118	LAMPSON AV	4000	4100	14	No	Liquidambar styraciflua	Quercus virginiana	Lophostemon confertus	Koelreuteria paniculata
119	LAMPSON AV	4000	4900	7	No	Eucalyptus rudis	Quercus virginiana	Lophostemon confertus	Koelreuteria paniculata
120	LAMPSON AV	4001	4901	99	Yes	Olea europaea	Cinnamomum camphora	Quercus virginiana	Lophostemon confertus
121	LAMPSON AV	4100	4700	3	No	Vacant site	Stenocarpus sinuatus	Chitalpa tashkentensis	Lophostemon confertus
122	LAMPSON AV	4600	4900	4	No	Vacant site	Stenocarpus sinuatus	Lagerstroemia indica	Lophostemon confertus
123	LANDING AV	1100	1704	3	No	Platanus acerifolia	Platanus acerifolia	Brachychiton populneus	Liriodendron tulipifera
124	MAIN ST	100	100	8	No	Metrosideros excelsus	Ficus microcarpa 'Nitida'	Magnolia grandiflora	Podocarpus gracilior
125	MAIN ST	101	329	6	No	Ficus microcarpa 'Nitida'	Ficus microcarpa 'Nitida'	Magnolia grandiflora	Podocarpus gracilior
126	MAIN ST	101	350	4	No	Ficus microcarpa 'Nitida'	Ficus microcarpa 'Nitida'	Magnolia grandiflora	Podocarpus gracilior
127	MAIN ST INTERSECTION	100	400		No	Eucalyptus citriodora	Phoenix canariensis	Phoenix dactylifera multi	Chamaerops humilis
128	MARBLE COVE WY	400	428	4	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Brachychiton populneus	Lagerstroemia indica
129	MARIGOLD ST			/	No	No Parkway	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
130	MARINA DR	50	50	6	No	Lophostemon confertus	Platanus acerifolia	Ginkgo biloba	Lophostemon confertus
131	MARINA DR	50	50	10	No	Lophostemon confertus	Robinia pseudoacacia	Quercus virginiana	Platanus acerifolia
132	MARINA DR	50	301	99	No	Cinnamomum camphora	Robinia pseudoacacia	Quercus virginiana	Podocarpus gracilior
133	MARINA DR	400	400	2	No	Lagerstroemia indica	Bauhinia blakeana	Magnolia grand 'Russet'	Liriodendron tulipifera
134	MARINA DR	406	408	3	No	Spathodea campanulata	Spathodea campanulata	Magnolia grand 'Russet'	Ginkgo biloba
135	MARINA DR	412	412	4	No	Spathodea campanulata	Spathodea campanulata	Ginkgo biloba	Cinnamomum camphora
136	MARINE AV	1500	1535	3	No	Archontophoenix cunninghamiana	Brachychiton acerifolius	Magnolia grand 'Russet'	Liriodendron tulipifera

## Trees for Seal Beach

Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
137	MARLIN AV	1210	1670	4	No	Pyrus calleryana 'Danicer'	Lophostemon conferta	Pyrus calleryana	Chitalpa tashkentensis
138	MARVISTA AV	601	1140	4	No	Liquidambar styraciflua	Magnolia grand 'Russet'	Stenocarpus sinuatus	Brachychiton acerifolius
139	OCCIDENTAL LN	200	210	3	No	Syagrus romanzoffianum	Brachychiton acerifolius	Tabebuia impetiginosa	Koelreuteria paniculata
140	OCEAN AV	100	114	3	No	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
141	OCEAN AV	200	250	3	No	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
142	OCEAN AV	300	350	3	No	Ficus rubiginosa	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
143	OCEAN AV	400	430	3	No	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
144	OCEAN AV	500	550	3	No	Syagrus romanzoffianum	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
145	OCEAN AV	600	620	3	No	Archontophoenix cunninghamiana	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
146	OCEAN AV	700	717	3	No	Melaleuca nesophila	Washingtonia robusta	Pittosporum undulatum	Metrosideros excelsus
147	OCEAN AV	800	829	3	Yes	Metrosideros excelsus	Pittosporum undulatum	Metrosideros excelsus	Eucalyptus ficifolia
148	OCEAN AV	900	919	3	Yes	Metrosideros excelsus	Pittosporum undulatum	Metrosideros excelsus	Eucalyptus ficifolia
149	OCEAN AV	1000	1019	3	No	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
150	OCEAN AV	1100	1119	3	No	Spathodea campanulata	Spathodea campanulata	Pittosporum undulatum	Stenocarpus sinuatus
151	OCEAN AV	1200	1223	3	No	Eucalyptus ficifolia	Eucalyptus ficifolia	Pittosporum undulatum	Stenocarpus sinuatus
152	OCEAN AV	1300	1320	3	No	Spathodea campanulata	Spathodea campanulata	Stenocarpus sinuatus	Pittosporum undulatum
153	OCEAN AV	1400	1430	3	No	Spathodea campanulata	Stenocarpus sinuatus	Pittosporum undulatum	Eucalyptus ficifolia
154	OCEAN AV	1500	1524	3	No	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
155	OCEAN AV	1600	1632	3	No	Ficus rubiginosa	Ficus rubiginosa	Pittosporum undulatum	Stenocarpus sinuatus
156	OCEAN AV BULB-OUT	100	900	0	No	Vacant site	Chamaerops humilis	Trachycarpus fortunei	Phoenix roebelenii
157	OCEAN AV BULB-OUT	1000	1600	0	No	Howea forsteriana	Howea forsteriana	Chamaerops humilis	Trachycarpus fortunei
158	OLEANDER ST			/	No	No Parkway	Chitalpa tashkentensis	Chitalpa tashkentensis	Lagerstroemia indica
159	OPAL COVE WY	400	425	4	No	Pyrus calleryana 'Danicer'	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
160	OPAL COVE WY	424	424	4	Yes	Lagerstroemia indica	Tabebuia impetiginosa	Pyrus calleryana	Stenocarpus sinuatus
161	PACIFIC COAST HWY	100	200	99	No	Ficus rubiginosa	Ficus rubiginosa	Phoenix canariensis	Washingtonia robusta
162	PACIFIC COAST HWY	100	1700	3	No	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
163	PACIFIC COAST HWY	100	1800	14	No	Pyrus calleryana	Bauhinia blakeana	Jacaranda mimosifolia	Tabebuia chrysotricha
164	PACIFIC COAST HWY	1201	1201	5	Yes	Melaleuca nesophila	Melaleuca nesophila	Jacaranda mimosifolia	Tabebuia chrysotricha
165	PACIFIC COAST HWY	1600	1700	4	No	Syagrus romanzoffianum	Koelreuteria paniculata	Brachychiton populneus	Tabebuia chrysotricha
166	PACIFIC COAST HWY	1700	1700	7	No	Melaleuca quinquenervia	Phoenix canariensis	Washingtonia robusta	Melaleuca quinquenervia
167	PANSY CIR			/	No	No Parkway	Pyrus calleryana	Chitalpa tashkentensis	Magnolia grand Russet
168	PANSY ST			/	No	No Parkway	Lagerstroemia indica	Pyrus calleryana	Magnolia grand Russet
169	PRIMROSE CIR			/	No	No Parkway	Chitalpa tashkentensis	Magnolia grand Russet	Lagerstroemia indica
170	PRIMROSE ST			/	No	No Parkway	Pyrus calleryana	Magnolia grand Russet	Chitalpa tashkentensis
171	RIVIERA DR	501	527	4	No	Syagrus romanzoffianum	Syagrus romanzoffianum	Chitalpa tashkentensis	Lagerstroemia indica

## Trees for Seal Beach

Street Tree Planting Recommendations

November 03, 2009

	STREET	FROM	TO	PKWY	UT	PRIMARY SPECIES	RECOMMENDATION 1	RECOMMENDATION 2	RECOMMENDATION 3
172	ROSE CIR			/	No	No Parkway	Chitalpa tashkentensis	Magnolia grand Russet	Stenocarpus sinuatus
173	ROSE ST	3830	3955	3	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Tabebuia impetiginosa	Lagerstroemia indica
174	SANDPIPER DR	600	1401	4	No	Cupaniopsis anacardioides	Magnolia grandiflora	Platanus acerifolia	Lagerstroemia indica
175	SCHOONER WY	440	441	99	No	Olea europaea	Pittosporum undulatum	Podocarpus gracilior	Lophostemon conferta
176	SEA BREEZE DR	600	750	4	No	Robinia pseudoacacia	Magnolia grandiflora	Lophostemon confertus	Cercis canadensis
177	SEAL BEACH BL	200	200	2	No	Washingtonia robusta	Washingtonia robusta	Washingtonia robusta	Eucalyptus ficifolia
178	SEAL BEACH BL	200	12800	3	No	Washingtonia robusta	Washingtonia robusta	Washingtonia robusta	Eucalyptus ficifolia
179	SEAL BEACH BL	201	323	10	Yes	Washingtonia robusta	Washingtonia robusta	Pittosporum undulatum	Jacaranda mimosifolia
180	SEAL BEACH BL	202	13001	99	No	Eucalyptus camaldulensis	Quercus virginiana	Pittosporum undulatum	Podocarpus Gracilior
181	SEAL BEACH BL	223	2455	4	No	Melaleuca quinquenervia	Melaleuca quinquenervia	Eucalyptus ficifolia	Washingtonia robusta
182	SEAL BEACH BL	300	300	15	No	Phoenix canariensis	Phoenix canariensis	Washingtonia robusta	Robinia pseudoacacia
183	SEAL BEACH BL	401	501	4	Yes	Syagrus romanzoffianum	Pistacia chinensis	Lagerstroemia indica	Prunus cerasifera
184	SEAL BEACH BL	501	501	3	Yes	Syagrus romanzoffianum	Pistacia chinensis	Lagerstroemia indica	Pyrus calleryana
185	SEAL BEACH BL	600	12400	14	No	Liquidambar styraciflua	Liquidambar styraciflua	Lophostemon confertus	Podocarpus Gracilior
186	SEAL BEACH BL	601	12800	5	No	<i>Platanus acerifolia 'Bloodgood'</i>	<i>Platanus acerifolia</i>	<i>Liriodendron tulipifera</i>	Lophostemon confertus
187	SEAL BEACH BL	2400	2400	20	No	Melaleuca quinquenervia	Melaleuca quinquenervia	Pittosporum undulatum	Robinia pseudoacacia
188	SEAL BEACH BL	2400	13600	10	No	Brachychiton populneus	Brachychiton populneus	Podocarpus Gracilior	Robinia pseudoacacia
189	SEAL BEACH BL	12500	12500	12	No	Eucalyptus citriodora	Podocarpus Gracilior	Eucalyptus ficifolia	Pittosporum undulatum
190	SEAL BEACH BL	12800	12800	7	No	Syagrus romanzoffianum	Podocarpus Gracilior	Eucalyptus ficifolia	Pittosporum undulatum
191	SEAL BEACH BL	13001	13001	99	Yes	Shrubs/hedge planting	Pistacia chinensis	Podocarpus Gracilior	Eucalyptus ficifolia
192	SEAL BEACH BL	13100	13900	6	No	Washingtonia robusta	Washingtonia robusta	Koelreuteria bipinnata	Platanus acerifolia
193	SEAL WY WALKWAY	200	1600	99	No	Washingtonia robusta	Brachychiton populneus	Eucalyptus ficifolia	Ginkgo biloba
194	SILVER SHOALS AV	501	635	4	No	Washingtonia robusta	<i>Liriodendron tulipifera</i>	Lophostemon confertus	Cercis canadensis
195	SOUTHSHORE DR	600	733	4	No	Syagrus romanzoffianum	Pyrus calleryana	Liriodendron tulipifera	Prunus cerasifera
196	STANFORD LN	100	230	5	No	Magnolia grandiflora	Brachychiton populneus	Liquidambar styraciflua	Koelreuteria bipinnata
197	SUNFLOWER CIR			/	No	No Parkway	Pyrus calleryana	Chitalpa tashkentensis	Prunus cerasifera
198	SUNFLOWER ST	3825	3931	3	No	Lagerstroemia indica	Lophostemon confertus	Liriodendron tulipifera	Eucalyptus ficifolia
199	SURF PL	100	240	4	No	Pyrus calleryana 'Danicer'	Pyrus calleryana	Lophostemon confertus	Lagerstroemia indica
200	TEABERRY CIR			/	No	No Parkway	Pyrus calleryana	Lagerstroemia indica	Cercis canadensis
201	TAPER DR	600	755	4	No	Cupaniopsis anacardioides	Ginkgo biloba	Liriodendron tulipifera	Koelreuteria bipinnata
202	TULIP ST	3655	3655	3	No	Eucalyptus sideroxylon	Prunus cerasifera	Pyrus calleryana	Chitalpa tashkentensis
203	VIOLET ST	3801	3815	3	No	Eucalyptus rudis	Brachychiton populneus	<i>Liriodendron tulipifera</i>	Lagerstroemia indica
204	WESTMINSTER AV	1801	1801	99	Yes	Melaleuca quinquenervia	Quercus ilex	Quercus virginiana	Magnolia grandiflora
205	WESTMINSTER AV	2800	2910	4	Yes	Melaleuca quinquenervia	Quercus ilex	Quercus virginiana	Magnolia grandiflora
206	WESTMINSTER AV	2929	2999	14	No	Melaleuca quinquenervia	Quercus ilex	Quercus virginiana	Magnolia grandiflora
207	WESTMINSTER AV	2950	2950	99	No	Washingtonia robusta	Quercus ilex	Quercus virginiana	Magnolia grandiflora
208	WISTERIA ST	3840	3940	3	No	Cupaniopsis anacardioides	Lagerstroemia indica	Lophostemon confertus	Brachychiton populneus
209	YALE CIR	301	301	3	No	Vacant site	Lophostemon confertus	Pyrus calleryana	Chitalpa tashkentensis
210	YALE LN	100	196	5	No	Syagrus romanzoffianum	Koelreuteria bipinnata	Prunus cerasifera	Jacaranda mimosifolia

**Albizia julibrissin Standard**



**NOMENCLATURE**

Botanical Name: *Albizia julibrissin* Standard  
Common Name: Silk Tree Standard

**DESCRIPTION**

This fast-growing tree has a canopy of ferny feathery pale yellowish green foliage. Pincushion-like fluffy pink flowers bloom in summer. The unique flat-topped canopy makes a good patio tree but is best in its natural multistemmed tree form.

**CULTURAL INFORMATION**

Light Exposure: Sun or Partial Shade  
Water Requirements: Regular  
Sunset Zone: 4-23  
USDA Zone: -10 to -5 F( Z6a)

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Growth Rate: Fast  
Height (at Maturity): 20-40 ft.  
Width (at Maturity): 40-80 ft.

**FLOWER CHARACTERISTICS**

Color: Pink  
Season: Summer  
Shape: Fluffy

**LEAF CHARACTERISTICS**

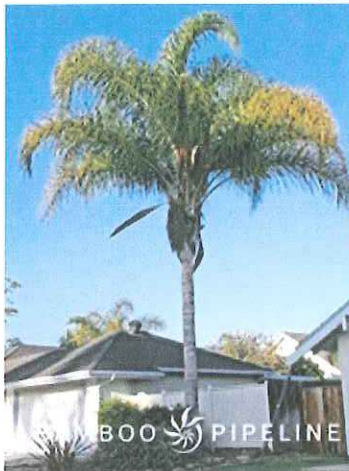
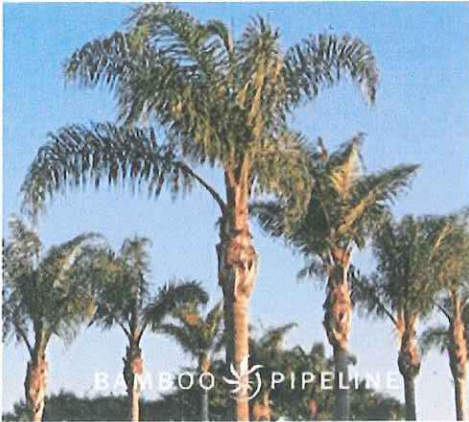
Color: Pale yellowish-green  
Texture: Ferny, feathery  
Length: 12-18"

**SPECIAL NOTES**

Can be cut back to make a 10-20 foot tall umbrella.



**Arecastrum romanzoffianum (Syagrus r.)(Cocos plumosa)**



**NOMENCLATURE**

Botanical Name: *Arecastrum romanzoffianum* (Syagrus r.)(*Cocos plumosa*)  
Common Name: Queen Palm

**DESCRIPTION**

This medium sized palm has a strong, sturdy, straight grey trunk supporting bright glossy green leaves to 20 feet long and gracefully arching over. Great vertical effect for large gardens.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Regular  
Sunset Zone: 12, 13, 15-17, 19-24  
USDA Zone: 30 to 35 F ( Z10a)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Upright  
Growth Rate: Fast  
Height (at Maturity): 50 ft.  
Width (at Maturity): 15-25 ft.

**FLOWER CHARACTERISTICS**

Notes: Inconspicuous.

**LEAF CHARACTERISTICS**

Color: Bright green  
Shape: Arching  
Texture: Glossy  
Length: 10-15'

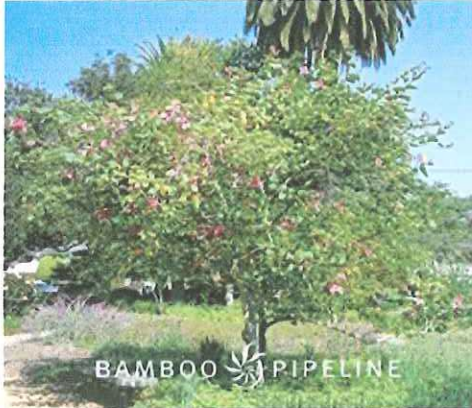
**BARK CHARACTERISTICS**

Color: Grey  
Texture: Smooth

**FRUIT CHARACTERISTICS**

Color: Orange  
Type: Dates Dates  
Edible: Yes

**Bauhinia x blakeana Standard**



**NOMENCLATURE**

Botanical Name: *Bauhinia x blakeana* Standard  
Common Name: Hong Kong Orchid Standard

**DESCRIPTION**

This small tree has very large, fragrant, rich rose-purple, orchid-like flowers with pink stamens and a long bloom season from late fall to spring. Semi-deciduous for a short period, this plant sheds some of the grey-green leaves around bloom time.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 13, 19, 21, 23, 24  
USDA Zone: 20 to 25 F (Z9a)

**PLANT ANATOMY**

Plant Habit: Sprawling  
Height (at Maturity): 12-20 ft.  
Width (at Maturity): 15-20 ft.

**FLOWER CHARACTERISTICS**

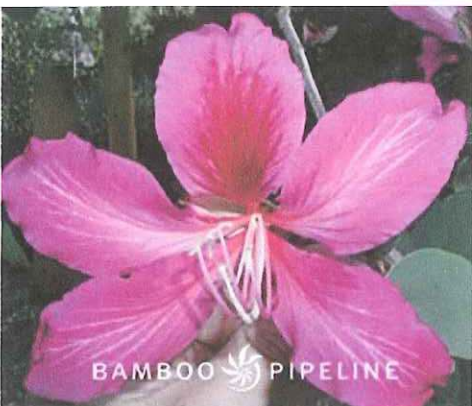
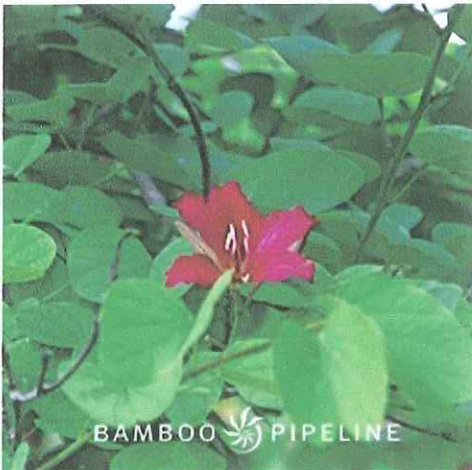
Color: Magenta  
Season: Fall-Spring  
Shape: 5 large lanceolate petals  
Width: 5-6"

**LEAF CHARACTERISTICS**

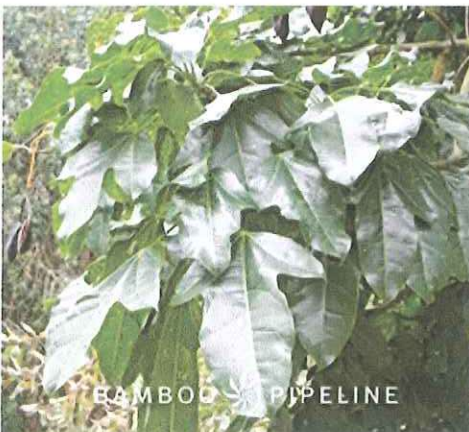
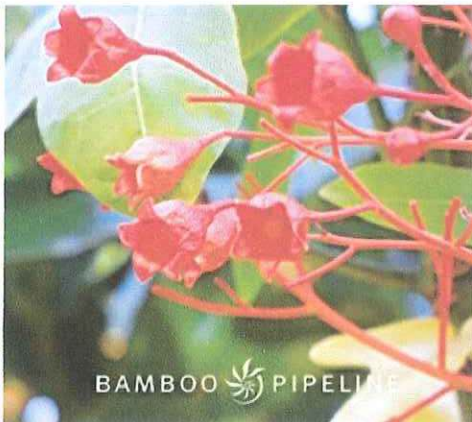
Color: Pale grey-green  
Shape: Round with deeply cleft tip  
Texture: Slightly hairy under leaf  
Width: 3-1/2 -5"

**BARK CHARACTERISTICS**

Color: Grey-green  
Texture: Smooth  
Pattern: Numerous horizontal lenticels



**Brachychiton acerifolius Standard (Sterculia acerifolia)**



**NOMENCLATURE**

**Botanical Name:** Brachychiton acerifolius Standard (Sterculia acerifolia)  
**Common Name:** Flame Tree Standard

**DESCRIPTION**

At its best, this is one of the world's most spectacular flowering trees with profuse showy sprays of bright scarlet-red blooms in late spring and summer. The glossy leathery leaves drop right before flowering, adding to the dramatic show.

**CULTURAL INFORMATION**

**Light Exposure:** Sun  
**Water Requirements:** Rarely to Moderate  
**Sunset Zone:** 15-24  
**USDA Zone:** 20 to 25 F( Z9a)  
**Soil Requirements:** Well-drained

**PLANT ANATOMY**

**Foliage Growth Cycle:** Deciduous  
**Height (at Maturity):** 60 ft.  
**Width (at Maturity):** 30 ft.

**FLOWER CHARACTERISTICS**

**Color:** Red  
**Season:** Late Spring-Summer

**LEAF CHARACTERISTICS**

**Color:** Bright green  
**Texture:** Glossy  
**Width:** 10"

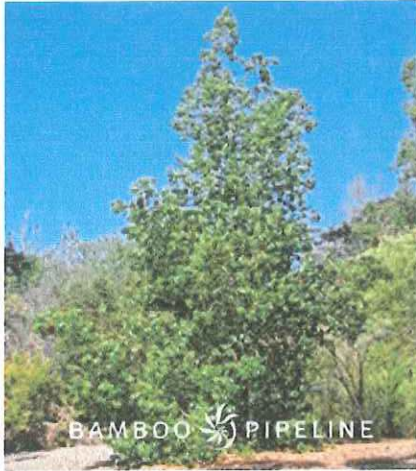
**BARK CHARACTERISTICS**

**Texture:** Smooth

**SPECIAL NOTES**

Minimal pruning required.

**Brachychiton populneus Standard (Sterculia diversifolia)**



**NOMENCLATURE**

**Botanical Name:** Brachychiton populneus Standard (Sterculia diversifolia)

**Common Name:** Bottle Tree Standard

**DESCRIPTION**

Bottle Tree has a heavy trunk that is broad at the base, tapering towards the top. Fresh green foliage shimmers in the breeze year-round on this evergreen. Springtime clusters of small, bell-shaped white flowers often go unnoticed. Regularly used as a shade tree, screen, or high windbreak.

**CULTURAL INFORMATION**

**Light Exposure:** Sun

**Water Requirements:** Rarely to Moderate

**Sunset Zone:** 12-24

**USDA Zone:** 20 to 25 F( Z9a)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen

**Growth Rate:** Moderate

**Height (at Maturity):** 30-50 ft.

**Width (at Maturity):** 30 ft.

**FLOWER CHARACTERISTICS**

**Color:** White

**Season:** Spring

**Shape:** Bell-shaped

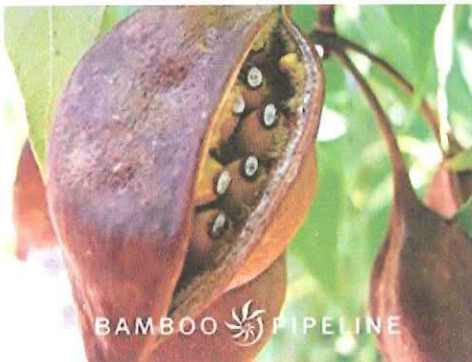
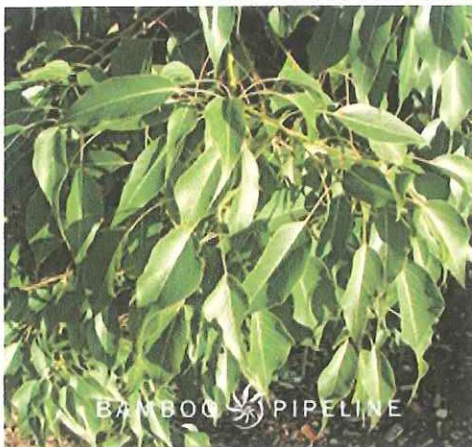
**LEAF CHARACTERISTICS**

**Color:** Green

**Shape:** Ovate

**Texture:** Lustrous

**Length:** 1 1/2- 5"



**Cercis canadensis 'Forest Pansy' Standard**



**NOMENCLATURE**

**Botanical Name:** *Cercis canadensis* 'Forest Pansy' Standard  
**Common Name:** Eastern Redbud 'Forest Pansy' Standard

**DESCRIPTION**

'Forest Pansy' is an attractive deciduous, low branching or standard tree with graceful heart-shaped foliage that emerges deep purple maturing to bronze-green and finally yellow. Showy rose-pink blossoms cover the bare branches bridging the gap from winter to spring. Needs some shade in hot climates.

**CULTURAL INFORMATION**

**Light Exposure:** Sun or Partial Shade  
**Water Requirements:** Moderate to Regular  
**Sunset Zone:** 1-24  
**USDA Zone:** -20 to -15 F (Z5a)

**PLANT ANATOMY**

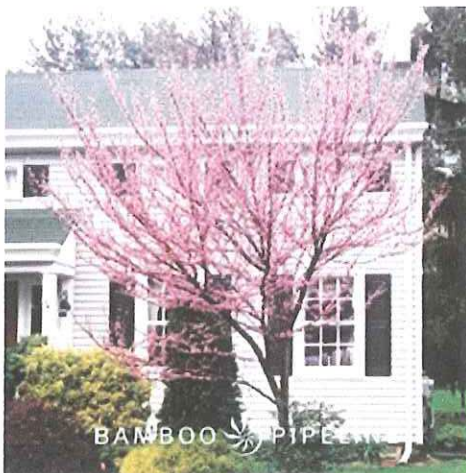
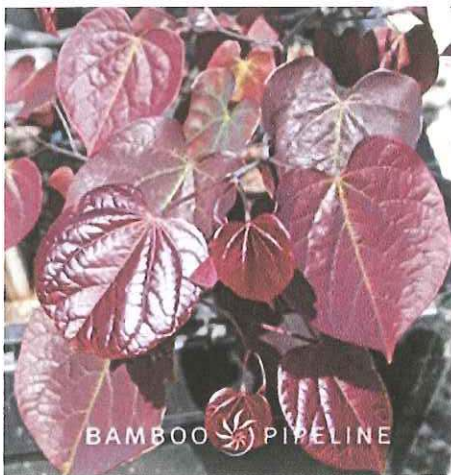
**Foliage Growth Cycle:** Deciduous  
**Plant Habit:** Round  
**Growth Rate:** Moderate  
**Height (at Maturity):** 20-30 ft.  
**Width (at Maturity):** 15-25 ft.

**FLOWER CHARACTERISTICS**

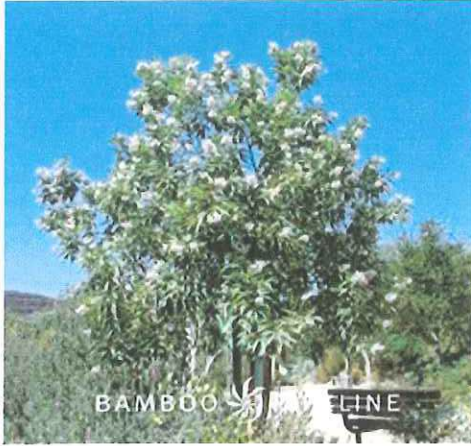
**Color:** Rose-pink  
**Season:** Early Spring

**LEAF CHARACTERISTICS**

**Color:** Purple aging to bronze-green and then yellow  
**Shape:** Heart-shaped



**Chitalpa tashkentensis Standard**



**NOMENCLATURE**

Botanical Name: *Chitalpa tashkentensis Standard*  
Common Name: *Chitalpa*

**DESCRIPTION**

A cross between *Catalpa* and *Chilopsis*, this deciduous shrub or tree has large clusters of ruffled, trumpet-shaped flowers in pink, white, or lavender appear from late spring to fall. Plant in full sun.

**CULTURAL INFORMATION**

Light Exposure: *Sun*  
Water Requirements: *Rarely to Moderate*  
Sunset Zone: *3-24*  
USDA Zone: *-5 to 0 F (Z6b)*

**PLANT ANATOMY**

Foliage Growth Cycle: *Deciduous*  
Plant Habit: *Upright*  
Growth Rate: *Fast*  
Height (at Maturity): *20-30 ft.*  
Width (at Maturity): *20-30 ft.*

**FLOWER CHARACTERISTICS**

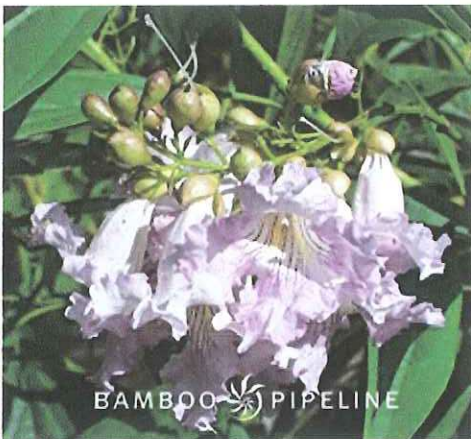
Color: *Shades of pink, white, or lavender*  
Season: *Late Spring-Fall*  
Shape: *Trumpet-shaped*

**LEAF CHARACTERISTICS**

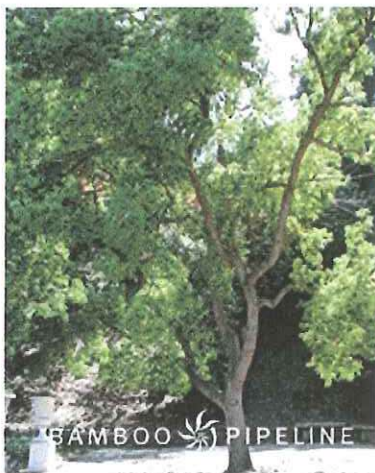
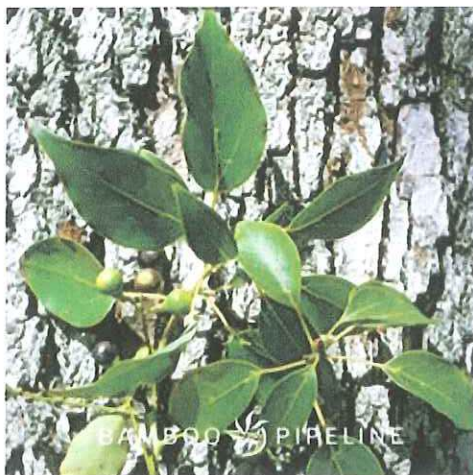
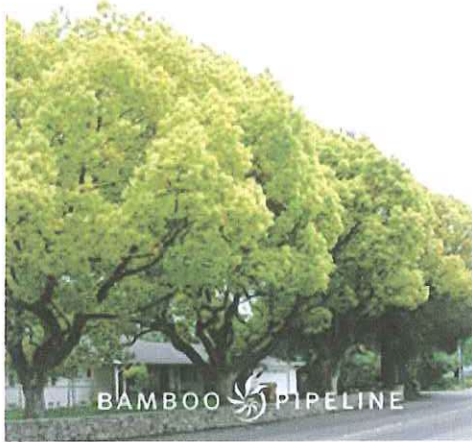
Color: *Green*  
Shape: *Lance-shaped*  
Width: *1"*  
Length: *4-5"*

**FRUIT CHARACTERISTICS**

Notes: *A sterile tree - will not reproduce seeds.*



**Cinnamomum camphora Standard**



**NOMENCLATURE**

Botanical Name: *Cinnamomum camphora* Standard  
Common Name: Camphor Tree Standard

**DESCRIPTION**

This large evergreen shade tree has a strong heavy trunk holding upright spreading limbs clothed in aromatic glossy foliage. New leaves emerges pink, red, or bronze in early spring and mature to shiny yellow green. Small fragrant yellow flowers bloom profusely in late spring followed by blackish fruits.

**CULTURAL INFORMATION**

Light Exposure: Sun or Partial Shade  
Water Requirements: Rarely to Regular  
Sunset Zone: 8, 9, 12-24  
USDA Zone: 10 to 15 F (Z8a)  
Soil Requirements: Well drained

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Erect to spreading  
Growth Rate: Slow  
Height (at Maturity): 50+ ft.  
Width (at Maturity): 60 ft.

**FLOWER CHARACTERISTICS**

Color: Yellow  
Season: Late Spring  
Shape: Bowl-shaped  
Fragrance: Yes  
Notes: Inconspicuous.

**LEAF CHARACTERISTICS**

Color: Yellow green  
Shape: Narrowly ovate  
Texture: Shiny, glossy  
Length: 2 1/2- 5"  
Fragrance: Yes - Camphor  
Notes: New foliage emerges pink, red, or bronze in early spring.

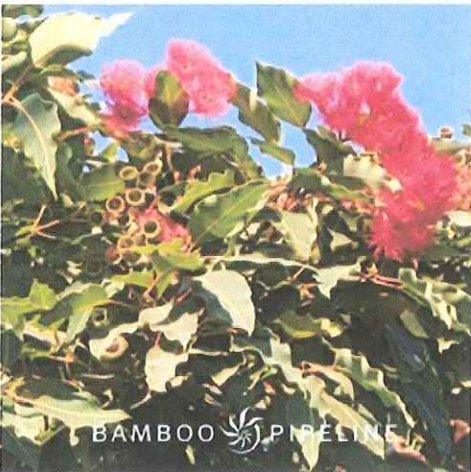
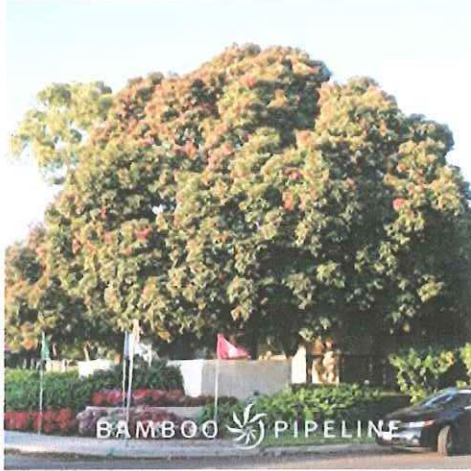
**BARK CHARACTERISTICS**

Color: Grey  
Texture: Scaly

**FRUIT CHARACTERISTICS**

Color: Blackish  
Type: Berries

**Eucalyptus ficifolia (Corymbia f.)**



**NOMENCLATURE**

**Botanical Name:** Eucalyptus ficifolia (Corymbia f.)  
**Common Name:** Red-Flowering Gum

**DESCRIPTION**

This evergreen tree has a broad dense crown and rough, dark greyish brown bark. Large showy terminal clusters of bright red, pink, or orange flowers appear in late spring or summer followed by large, woody, urn-shaped fruit. The broadly lance-shaped foliage is a dull or slightly glossy dark green with pale green undersides and a distinguishing yellow or reddish midrib.

**CULTURAL INFORMATION**

**Light Exposure:** Sun  
**Water Requirements:** Rarely  
**Sunset Zone:** 5, 6, 8-24  
**USDA Zone:** 25 to 30 F( Z9b)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen  
**Plant Habit:** Broad dense crown  
**Height (at Maturity):** 18-45 ft.  
**Width (at Maturity):** 15-60 ft.

**FLOWER CHARACTERISTICS**

**Color:** Bright red, pink, or orange  
**Season:** Late Spring-Summer

**LEAF CHARACTERISTICS**

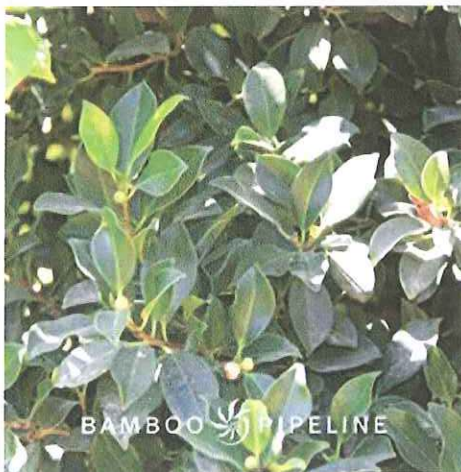
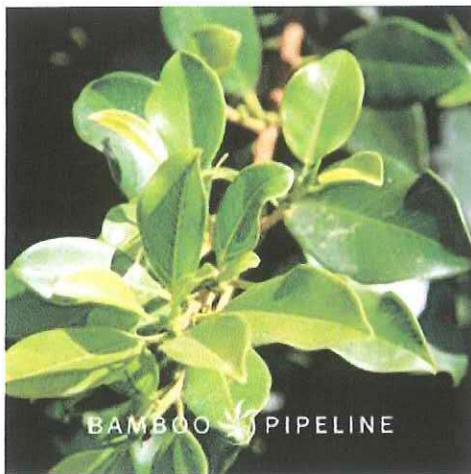
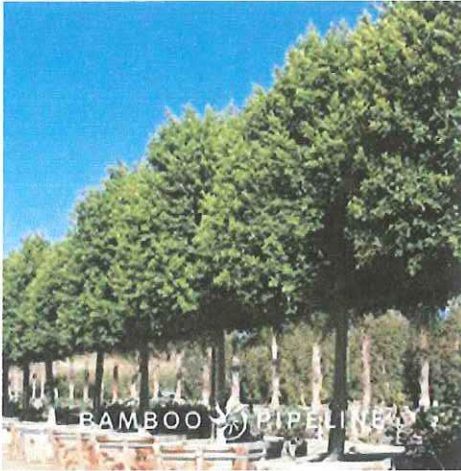
**Color:** Dark green with pale green undersides  
**Shape:** Broadly lance-shaped  
**Texture:** Dull or slightly glossy  
**Length:** 3-7"  
**Notes:** Distinguishing yellowish central vein.

**SPECIAL NOTES**

Part of the "bloodwoods" group of eucalyptus comprised mostly of soft, crumbly or corky bark with showy terminal flower clusters. Eucalyptus is valued for its often aromatic foliage and attractive bark. The showy, apetalous flowers consist of many stamens.



**Ficus microcarpa nitida 'Green Gem' Standard (F. retusa)**



**NOMENCLATURE**

**Botanical Name:** Ficus microcarpa nitida 'Green Gem' Standard (F. retusa)

**Common Name:** Indian Laurel Fig 'Green Gem' Standard

**DESCRIPTION**

This is a beautiful tree with glossy, thick slightly undulating, green leaves that densely clothe the stems. This fig may become a tree, or it can be kept as a low, dense hedge or even grown as a tall screen. This variety is especially resistant to thrips, and it tends to grow more densely than the species.

**CULTURAL INFORMATION**

**Light Exposure:** Sun

**Water Requirements:** Regular

**Sunset Zone:** 9, 13, 16-24

**USDA Zone:** 30 to 35 F( Z10a)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen

**Plant Habit:** Upright, dense

**Growth Rate:** Moderate

**Height (at Maturity):** 25-30 ft.

**Width (at Maturity):** 25-30 ft.

**FLOWER CHARACTERISTICS**

**Notes:** Inconspicuous

**LEAF CHARACTERISTICS**

**Color:** Green

**Shape:** Elliptic

**Texture:** Leathery, glossy

**Length:** 2-4"

**BARK CHARACTERISTICS**

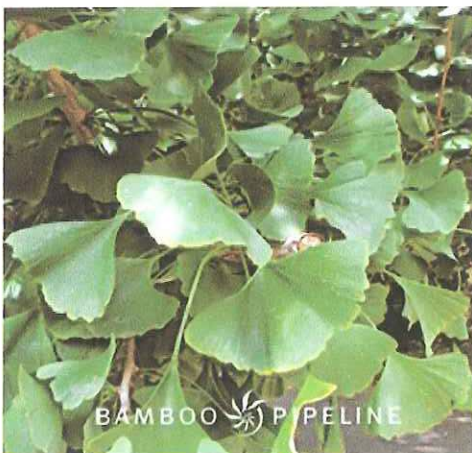
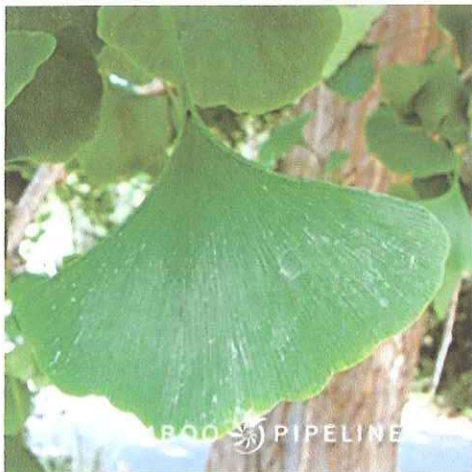
**Color:** Light grey

**FRUIT CHARACTERISTICS**

**Color:** Black

**Length:** 1/2"

## Ginkgo biloba



### **NOMENCLATURE**

Botanical Name: *Ginkgo biloba*  
Common Name: Maidenhair Tree

### **DESCRIPTION**

Ginkgos are a primitive and ancient species of trees. This upright deciduous tree grows columnar becoming wide-spreading. The unique, flat, broad fan-shaped foliage is green changing to golden yellow in fall. The male plants have pendulous, 3-inch long cylindrical yellow catkin-like flower clusters. The female plants bear round, solitary flowers followed by smelly, yellowish green plum-like fruits.

### **CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 1-10, 12, 14-24  
USDA Zone: -40 to -35 F ( Z3a)

### **PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Plant Habit: Narrow to spreading  
Height (at Maturity): 35-80 ft.  
Width (at Maturity): 20-50 ft.

### **FLOWER CHARACTERISTICS**

Notes: Flower types differ on male and female trees.

### **LEAF CHARACTERISTICS**

Color: Green  
Shape: Fan-shaped  
Width: 1-4"  
Notes: Leaves change to golden-yellow color in fall.

### **FRUIT CHARACTERISTICS**

Color: Yellowish green  
Length: 1 1/4"  
Notes: The fruit appears only on female trees and generally not until the plant is at least 20 years old.

**Howea forsteriana Standard**



**NOMENCLATURE**

Botanical Name: *Howea forsteriana* Standard  
Common Name: Kentia Palm Standard

**DESCRIPTION**

These feather palms are often planted outdoors under other trees and they are ideal as indoor potted plants as well. The smooth slender green trunk is ringed with leaf scars. The graceful feather-like leaves are composed of numerous long and drooping leaflets.

**CULTURAL INFORMATION**

Light Exposure: *Partial Shade*  
Water Requirements: *Regular*  
Sunset Zone: *17, 21-24*  
USDA Zone: *30 to 35 F (Z10a)*

**PLANT ANATOMY**

Foliage Growth Cycle: *n/a*  
Plant Habit: *Arching*  
Growth Rate: *Slow*  
Height (at Maturity): *60 ft.*  
Width (at Maturity): *20 ft.*

**FLOWER CHARACTERISTICS**

Color: *Green female and pale brown male*  
Shape: *Star-shaped*

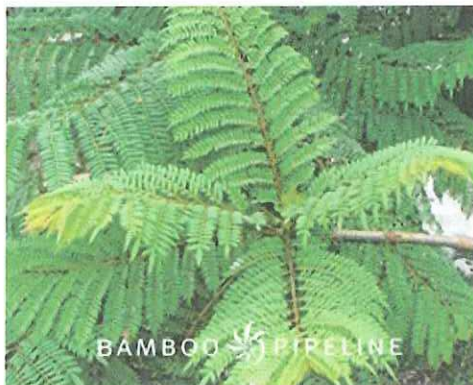
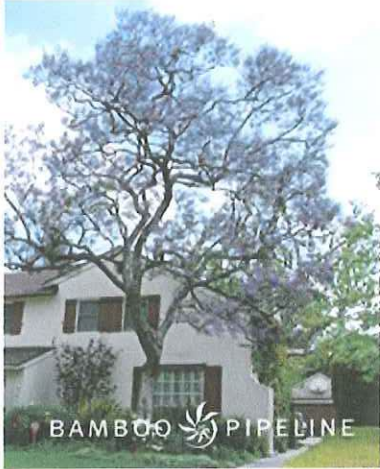
**LEAF CHARACTERISTICS**

Color: *Mid-dark green*  
Length: *6-10'*  
Notes: *Leaves are composed of numerous lance-shaped leaflets.*

**FRUIT CHARACTERISTICS**

Color: *Orange-red*

**Jacaranda mimosifolia Standard (J. acutifolia)**



**NOMENCLATURE**

Botanical Name: *Jacaranda mimosifolia* Standard (*J. acutifolia*)  
Common Name: Jacaranda Standard

**DESCRIPTION**

This fast growing deciduous tree has a broad irregular open habit of vivid green tropical looking pendulous fern-like foliage. Leaves usually drop in late winter and an abundance of lavender blue flower clusters bloom on leafless, or nearly leafless, branches creating a spectacular show from spring to summer. Makes a striking landscape accent.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate  
Sunset Zone: 12, 13, 15-24  
USDA Zone: 20 to 25 F (Z9a)

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Plant Habit: Open, irregular, oval-headed  
Growth Rate: Fast  
Height (at Maturity): 25-40 ft.  
Width (at Maturity): 15-30 ft.

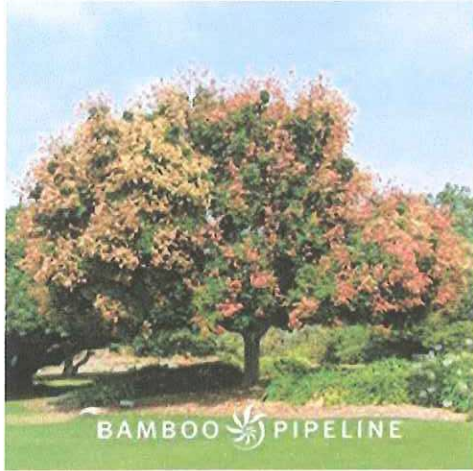
**FLOWER CHARACTERISTICS**

Color: Lavender blue  
Season: Spring-Summer  
Shape: Tubular  
Length: 2"  
Notes: Flowers bloom in profuse 8" long clusters.

**LEAF CHARACTERISTICS**

Color: Vivid green  
Shape: Elliptic  
Texture: Finely cut, fern-like  
Length: 10-18"

**Koelreuteria bipinnata Standard (K. integrifoliola)**



**NOMENCLATURE**

Botanical Name: *Koelreuteria bipinnata* Standard (*K. integrifoliola*)  
Common Name: Chinese Flame Tree Standard

**DESCRIPTION**

A beautiful tree with divided leaves and neat, mid green foliage that turns shades of yellow in fall. Yellow flowers arrive in summer, and they are followed by showy seed pods in shades of salmon, red and brown that can persist into the fall. This tree has a symmetrical form and it makes an excellent specimen tree.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 8-24

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Plant Habit: Tree  
Growth Rate: Moderate  
Height (at Maturity): 20-40 ft.  
Width (at Maturity): 20-40 ft.

**FLOWER CHARACTERISTICS**

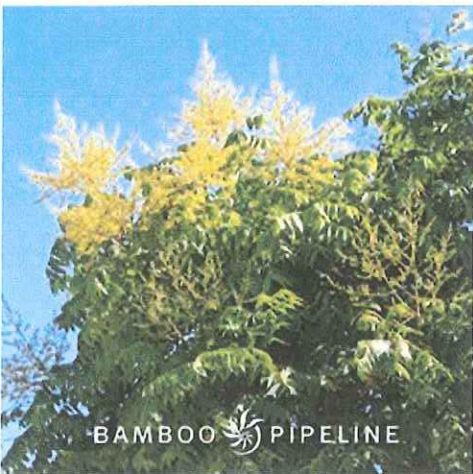
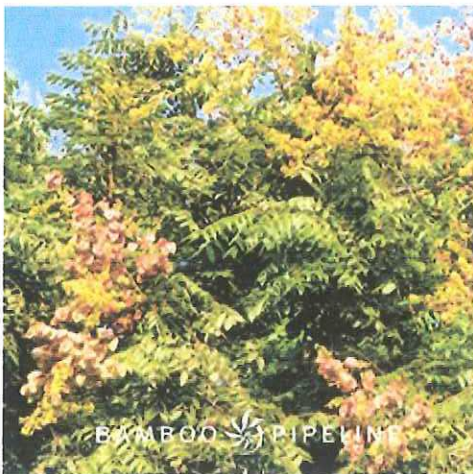
Color: Yellow  
Season: Summer  
Length: 12"

**LEAF CHARACTERISTICS**

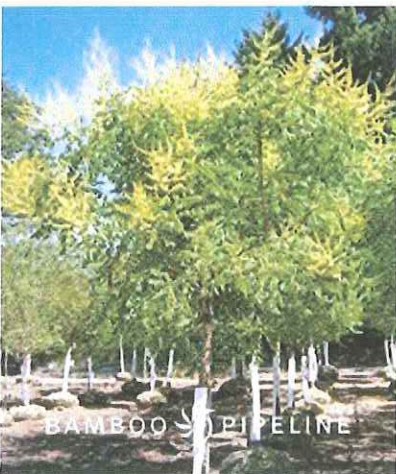
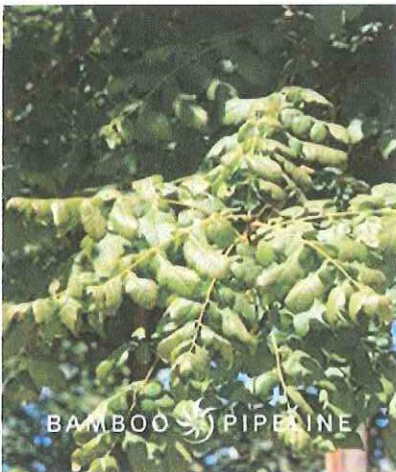
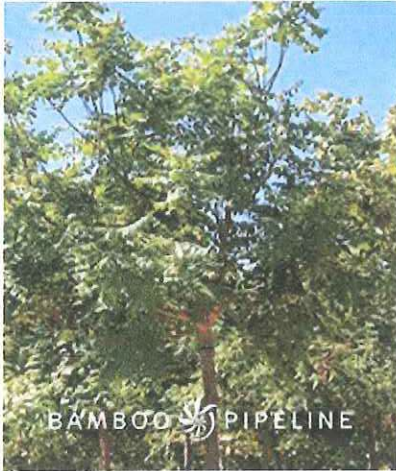
Color: Mid green  
Shape: Oval

**FRUIT CHARACTERISTICS**

Color: Shades of red, orange, brown  
Season: Late Summer-Fall  
Length: 2"



**Koelreuteria paniculata Standard**



**NOMENCLATURE**

Botanical Name: *Koelreuteria paniculata* Standard  
 Common Name: Goldenrain Tree Standard

**DESCRIPTION**

This is an upright tree that is spreading with age. It has beautiful, dark green foliage that turns gold in autumn and provides a beautiful foil for the interesting fall fruits that resemble diminutive Chinese lanterns. Use this tough specimen in any position where a tree that is tolerant of wind, heat, drought, and cold is advantageous.

**CULTURAL INFORMATION**

Light Exposure: Sun  
 Water Requirements: Moderate to Regular  
 Sunset Zone: 2-24  
 USDA Zone: -30 to -25 F (Z4a)

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
 Plant Habit: Upright, spreading  
 Growth Rate: Moderate  
 Height (at Maturity): 20-35 ft.  
 Width (at Maturity): 25-40 ft.

**FLOWER CHARACTERISTICS**

Color: Yellow  
 Season: Summer  
 Shape: Bowl-shaped

**LEAF CHARACTERISTICS**

Color: Green  
 Shape: Oval with toothed or lobed margins  
 Length: 18"

**FRUIT CHARACTERISTICS**

Color: Red to brown  
 Season: Late Summer-Fall  
 Length: 2"

**SPECIAL NOTES**

The leaflets are toothed or lobed unlike *K. bipinnata*.

**Lagerstroemia indica 'Catawba' Standard**



**NOMENCLATURE**

Botanical Name: Lagerstroemia indica 'Catawba' Standard  
Common Name: Crape Myrtle Dark Purple Standard

**DESCRIPTION**

'Catawba' is a slow growing crape myrtle cultivar with lavender-purple flowers and glossy, dark green leaves that hold up well in hot climates, and that turn orange-red in fall. In addition to its beauty, toughness, and ease of growth, this crape myrtle has beautiful bark that becomes increasingly showy with age.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate  
Sunset Zone: 7-10, 12-14, 18-21  
USDA Zone: -10 to -5 F (Z6a)

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Plant Habit: Upright  
Growth Rate: Moderate  
Height (at Maturity): 8-15 ft.  
Width (at Maturity): 6-10 ft.

**FLOWER CHARACTERISTICS**

Color: Lavender-purple  
Season: Summer  
Width: 3/4-1"

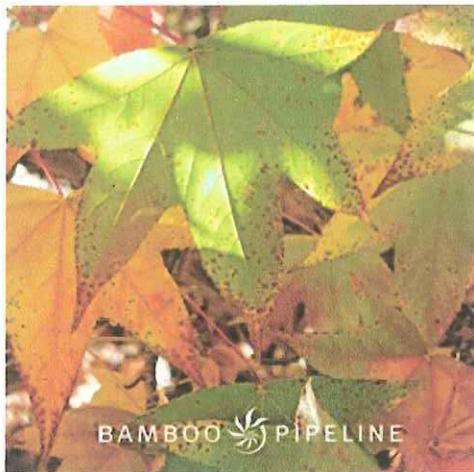
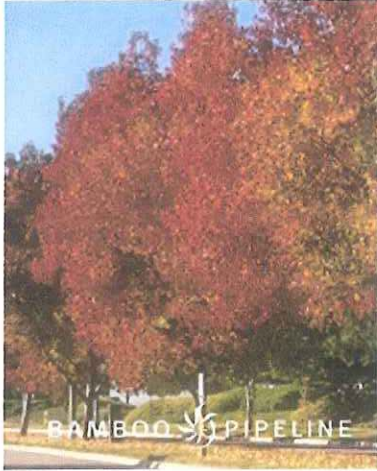
**LEAF CHARACTERISTICS**

Color: Green  
Shape: Oblong  
Texture: Glossy  
Length: 3"

**BARK CHARACTERISTICS**

Color: Dark cinnamon brown  
Texture: Smooth  
Habit: Peeling

**Liquidambar styraciflua**



**NOMENCLATURE**

Botanical Name: *Liquidambar styraciflua*  
Common Name: Sweet Gum

**DESCRIPTION**

These deciduous trees are valued for form, foliage, fall color, and easy culture. Young and middle-aged tree form is generally quite narrow and pyramidal, but with age specimens develop a more spreading crown. Deep green maple-like leaves provide reliable fall color, turning purple, orange, yellow, or red, even in warm winter regions. Spiky ball-like seedpods ornament the tree in winter.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 3-9, 14-24  
USDA Zone: -10 to -5 F( Z6a)  
Soil Requirements: Neutral or slightly acidic

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Growth Rate: Moderate  
Height (at Maturity): 60+ ft.  
Width (at Maturity): 20-25 ft.

**FLOWER CHARACTERISTICS**

Color: Yellow  
Season: Spring  
Notes: Inconspicuous.

**LEAF CHARACTERISTICS**

Color: Deep green  
Shape: Maple-like, 5-7 lobed  
Texture: Glossy  
Width: 3-7"  
Notes: Purple, yellow, or red fall color.

**BARK CHARACTERISTICS**

Texture: Furrowed

**FRUIT CHARACTERISTICS**

Season: Winter  
Type: Seedpods



**Melaleuca nesophila Standard**



**NOMENCLATURE**

Botanical Name: *Melaleuca nesophila* Standard

Common Name: Pink Melaleuca Standard

**DESCRIPTION**

A tall evergreen shrub or small tree with a dense crown. Fluffy spheres of stamens of mauve-pink that fade to white appear in late spring to summer. The greyish beige colored bark is thick and spongy.

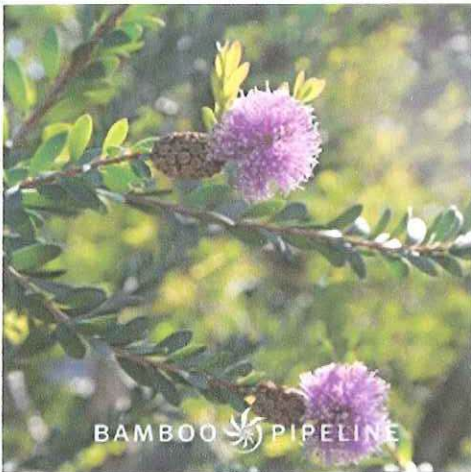
**CULTURAL INFORMATION**

Light Exposure: Sun

Water Requirements: Rarely

Sunset Zone: 13, 16-24

USDA Zone: 20 to 25 F (Z9a)



**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen

Growth Rate: Fast

Height (at Maturity): 15-20 ft.

Width (at Maturity): 15-20 ft.

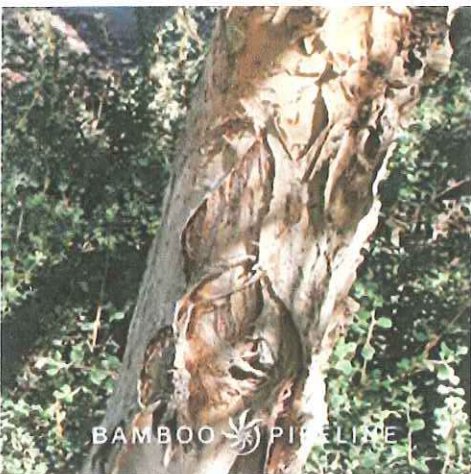
**FLOWER CHARACTERISTICS**

Color: Mauve-pink fading to white

Season: Late Spring-Summer

Shape: Fluffy spheres of stamens

Width: 1- 1-1/4"



**LEAF CHARACTERISTICS**

Color: Grey-green

Shape: Elliptical to oblong

Texture: Leathery

Width: 1/4-1/2"

Length: 1/2- 1-2/3"

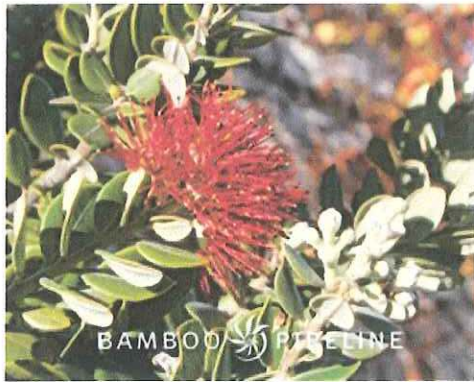
Notes: Densely covered with transparent oil glands.

**BARK CHARACTERISTICS**

Color: Greyish-cream to pale brown

Texture: Thick, spongy

**Metrosideros excelsus Standard**



**NOMENCLATURE**

**Botanical Name:** *Metrosideros excelsus* Standard  
**Common Name:** New Zealand Christmas Tree Standard

**DESCRIPTION**

This narrow upright evergreen is useful as a street or lawn tree as long as roots have ample space. Glossy dark green leaves are white-felted on the undersides. Big clusters of dark red flowers appear spring through summer. Prune lower branches to get a nice tree form. Does best near the coast where it can tolerate wind and salt spray.

**CULTURAL INFORMATION**

**Light Exposure:** Sun or Partial Shade  
**Water Requirements:** Moderate  
**Sunset Zone:** 16, 17, 23, 24  
**USDA Zone:** 30 to 35 F( Z10a)  
**Soil Requirements:** Well-drained

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen  
**Plant Habit:** Upright  
**Height (at Maturity):** 30 ft.  
**Width (at Maturity):** 30 ft.

**FLOWER CHARACTERISTICS**

**Color:** Dark red  
**Season:** Late Spring-Summer  
**Shape:** Clusters

**LEAF CHARACTERISTICS**

**Color:** Dark green above; densely white-felted beneath  
**Shape:** Oblong  
**Texture:** Glossy, leathery  
**Length:** 2-4"

**Phoenix canariensis**



**NOMENCLATURE**

Botanical Name: *Phoenix canariensis*  
Common Name: Canary Island Date Palm

**DESCRIPTION**

This feather palm is a heavy-trunked evergreen with a gracefully drooping habit. The bright green to mid green arching fronds form a crown up to 50 ft. wide. Pendulous clusters of cream to yellow bowl-shaped flowers are borne in summer followed by acorn-like fruits. Need to be planted in large spaces where they have room to show off their dramatic symmetrical shape. Leaf canopy is typically trimmed up from the bottom to form a pineapple shape.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Regular  
Sunset Zone: 9, 12-24  
USDA Zone: 20 to 25 F( Z9a)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Arching  
Growth Rate: Slow  
Height (at Maturity): 60 ft.  
Width (at Maturity): 50 ft.

**FLOWER CHARACTERISTICS**

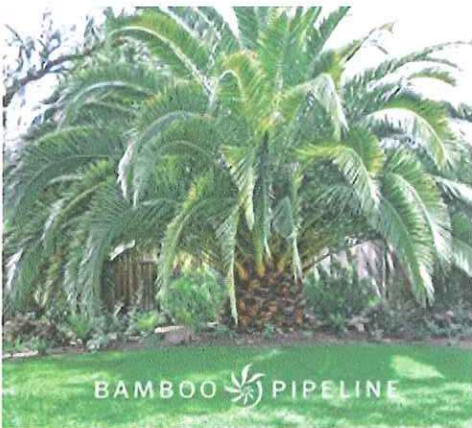
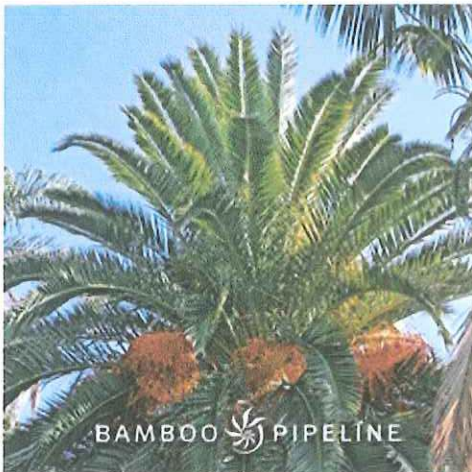
Color: Cream to yellow  
Season: Summer  
Shape: Bowl-shaped

**LEAF CHARACTERISTICS**

Color: Bright-deep green  
Length: 12-20'

**FRUIT CHARACTERISTICS**

Color: Red-flushed yellow  
Length: 3/4"  
Edible: Yes



**Phoenix dactylifera**



**NOMENCLATURE**

Botanical Name: *Phoenix dactylifera*  
Common Name: *Date Palm*

**DESCRIPTION**

This is the classic palm of desert oases. The slender trunk is scarred with old leaf bases and holds a spherical crown of stiff waxy grey-green leaves. Long clusters of cream-colored flowers appear in spring or summer followed by edible sweet fleshy fruit. Does well seaside as well as in the desert.

**CULTURAL INFORMATION**

Light Exposure: *Sun*  
Water Requirements: *Regular*  
Sunset Zone: *8, 9, 11-24*  
USDA Zone: *30 to 35 F( Z10a)*

**PLANT ANATOMY**

Foliage Growth Cycle: *n/a*  
Plant Habit: *Stiff*  
Height (at Maturity): *80 ft.*  
Width (at Maturity): *20-40 ft*

**FLOWER CHARACTERISTICS**

Color: *Yellow*  
Shape: *Bowl-shaped*

**LEAF CHARACTERISTICS**

Color: *Grey-green*  
Texture: *Waxy*  
Notes: *Leaves composed of stiff sharp-pointed leaflets.*

**FRUIT CHARACTERISTICS**

Color: *Yellow to reddish-brown*  
Type: *Dates*  
Length: *1-3"*  
Edible: *Yes*  
Notes: *Sweet.*

**Pinus canariensis**



**NOMENCLATURE**

Botanical Name: *Pinus canariensis*  
Common Name: Canary Island Pine

**DESCRIPTION**

Long needles in bundles of three give a graceful weeping appearance to this evergreen conifer. When young, this tree has a slender pyramidal crown which later widens becoming rounded, irregular, and dense.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Rarely  
Sunset Zone: 8, 9, 12-24  
USDA Zone: 20 to 25 F (Z9a)  
Soil Requirements: Well-drained

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Pyramidal; Rounded with age  
Growth Rate: Fast  
Height (at Maturity): 50-80 ft.  
Width (at Maturity): 20-35 ft.

**FLOWER CHARACTERISTICS**

Color: Insignificant

**LEAF CHARACTERISTICS**

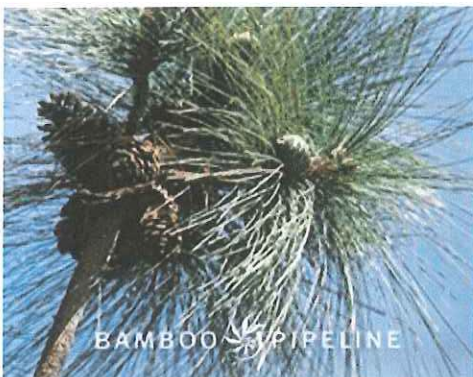
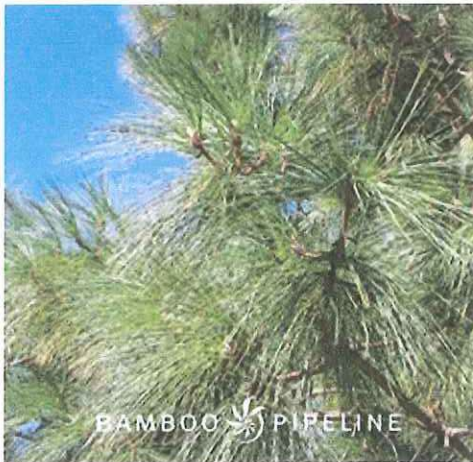
Color: Bright green  
Shape: Needle  
Length: 9-12"  
Notes: New leaves are bluish-green in color.

**BARK CHARACTERISTICS**

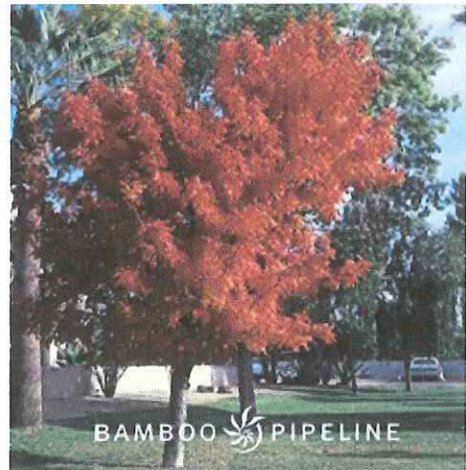
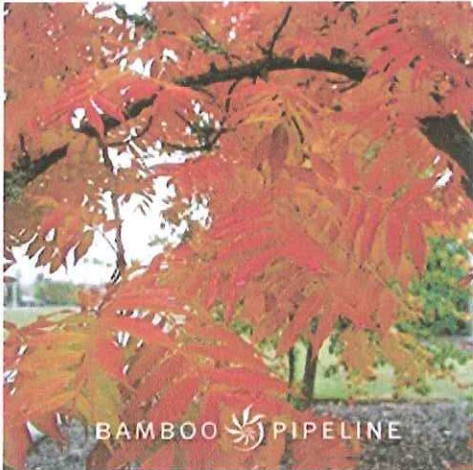
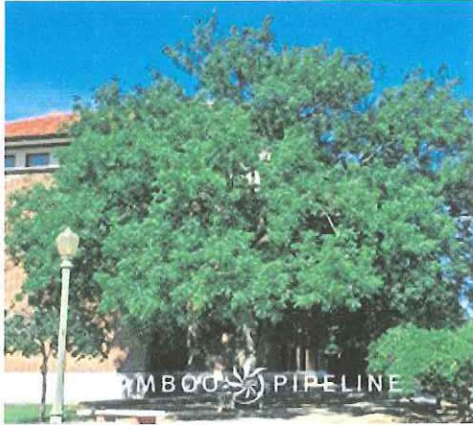
Color: Reddish-brown  
Texture: Thick, scaly, fissured

**FRUIT CHARACTERISTICS**

Color: Brown  
Type: Cone  
Length: 4-9"



**Pistacia chinensis Standard**



**NOMENCLATURE**

Botanical Name: *Pistacia chinensis* Standard  
Common Name: Chinese Pistache Standard

**DESCRIPTION**

A small deciduous single- or multi-trunked tree with glossy green compound leaves consisting of 10-16 leaflets. The inconspicuous reddish-yellow flowers are followed by small red spherical fruits that turn blue in fall and attract birds. Attractive fall color of yellow shades to luminous orange or blazing red.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate  
Sunset Zone: 4-16, 18-23  
USDA Zone: -20 to -15 F (Z5a)

**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Growth Rate: Slow-Moderate  
Height (at Maturity): 30-60 ft.  
Width (at Maturity): 20-40 ft.

**FLOWER CHARACTERISTICS**

Color: Reddish-yellow  
Season: Spring-Summer  
Notes: Dioecious

**LEAF CHARACTERISTICS**

Color: Green  
Shape: Pinnately compound  
Length: 10-12"  
Notes: Leaf consists of 10-16 lance-shaped, narrow leaflets, 2-4" long. Fall color even in mild climates of luminous orange to blazing scarlet.

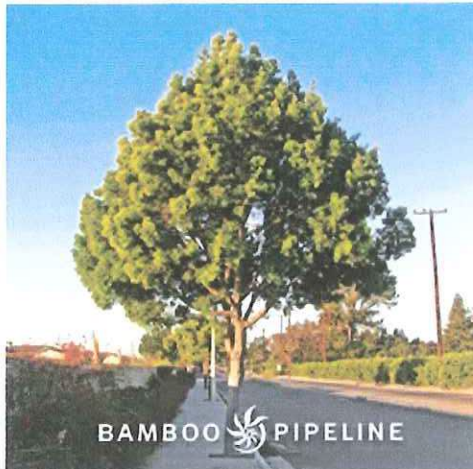
**BARK CHARACTERISTICS**

Color: Greyish-brown  
Pattern: Rectangular flakes  
Habit: Peeling

**FRUIT CHARACTERISTICS**

Color: Red, ripens to blue-black

**Podocarpus gracilior Standard (Afrocarpus elongatus) (Nageia falcatus)**



**NOMENCLATURE**

**Botanical Name:** Podocarpus gracilior Standard (Afrocarpus elongatus) (Nageia falcatus)  
**Common Name:** Fern Pine Standard

**DESCRIPTION**

This beautiful evergreen is amongst the cleanest, most pest-free trees, columns or espaliers for street, lawn, patio or garden. It has a rounded crown and the dense branches create a soft, graceful effect. Gray-green leaves are closely spaced on branches and have a fern-like appearance.

**CULTURAL INFORMATION**

**Light Exposure:** Sun or Partial Shade  
**Water Requirements:** Regular  
**Sunset Zone:** 8, 9, 14-24  
**USDA Zone:** 30 to 35 F (Z10a)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen  
**Growth Rate:** Moderate  
**Height (at Maturity):** 20-60 ft.  
**Width (at Maturity):** 10-20 ft.

**FLOWER CHARACTERISTICS**

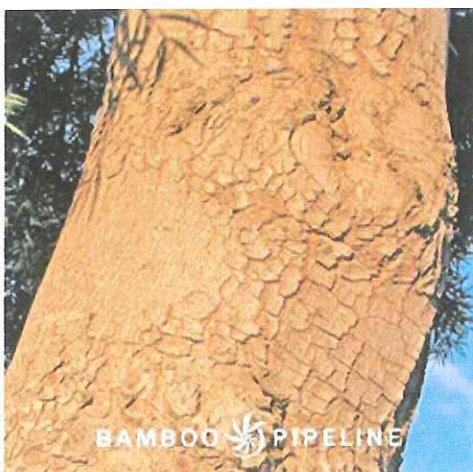
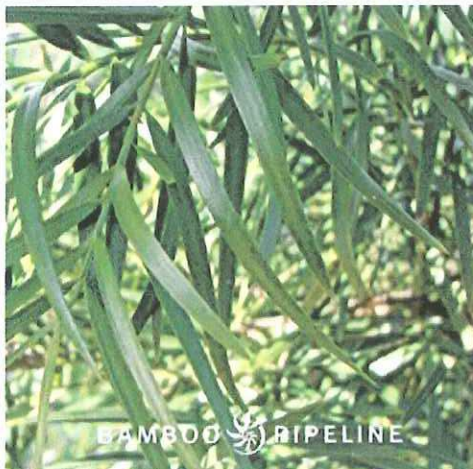
**Color:** Yellow  
**Notes:** Flowers are inconspicuous.

**LEAF CHARACTERISTICS**

**Color:** Grey-green  
**Shape:** Lance-shaped  
**Texture:** Glossy  
**Length:** 1-2"

**BARK CHARACTERISTICS**

**Color:** Reddish-brown, aging to light grey



**Prunus cerasifera 'Thundercloud' Standard**



**NOMENCLATURE**

**Botanical Name:** Prunus cerasifera 'Thundercloud' Standard  
**Common Name:** Flowering Plum 'Thundercloud' Standard

**DESCRIPTION**

This terrific variety has dark coppery-purple foliage that holds its color throughout the season. Fragrant pale pink to white bowl-shaped flowers bloom in spring. Sometimes sets a good crop of 1-inch red fruit. Useful in all areas of the landscape.

**CULTURAL INFORMATION**

**Light Exposure:** Sun  
**Water Requirements:** Moderate to Regular  
**Sunset Zone:** 3-22  
**USDA Zone:** -20 to -15 F( Z5a)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Semi-deciduous  
**Plant Habit:** Rounded  
**Growth Rate:** Moderate  
**Height (at Maturity):** 20 ft.  
**Width (at Maturity):** 20 ft.

**FLOWER CHARACTERISTICS**

**Color:** Pale pink to white  
**Season:** Spring  
**Shape:** Bowl-shaped  
**Fragrance:** Yes

**LEAF CHARACTERISTICS**

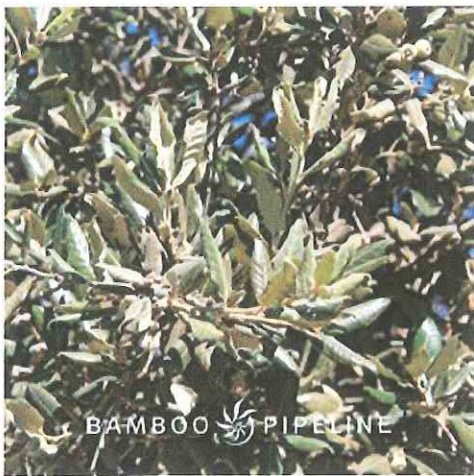
**Color:** Coppery-purple  
**Shape:** Ovate

**FRUIT CHARACTERISTICS**

**Color:** Red  
**Width:** 1"



**Quercus ilex Standard**



**NOMENCLATURE**

Botanical Name: *Quercus ilex* Standard

Common Name: Holly Oak Standard

**DESCRIPTION**

This is a beautiful oak with dark green, evergreen foliage that is tolerant of both inland and coastal conditions. It makes a wonderful specimen or street tree that will grow quickly to provide shade and structure.

**CULTURAL INFORMATION**

Light Exposure: Sun

Water Requirements: Rarely

Sunset Zone: 4-24

USDA Zone: 0 to 5 F (Z7a)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen

Plant Habit: Upright, rounded

Growth Rate: Fast

Height (at Maturity): 30-60 ft.

Width (at Maturity): 30-60 ft.

**LEAF CHARACTERISTICS**

Color: Dark green

Shape: Oval to lance-shaped

Texture: Smooth

Length: 1-3"

**BARK CHARACTERISTICS**

Color: Dark grey

Texture: Smooth

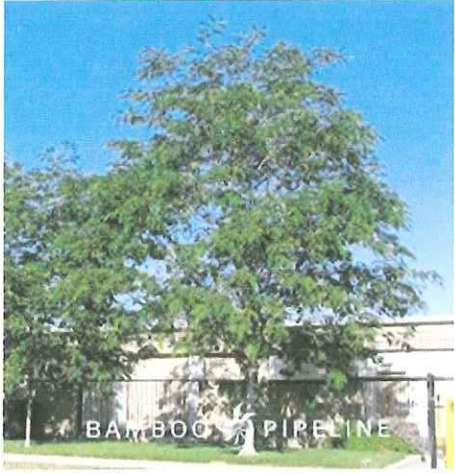
**FRUIT CHARACTERISTICS**

Color: Grey-brown

Type: Acorn

Length: 1- 1 1/2"

**Robinia pseudoacacia 'Purple Robe' Standard**



**NOMENCLATURE**

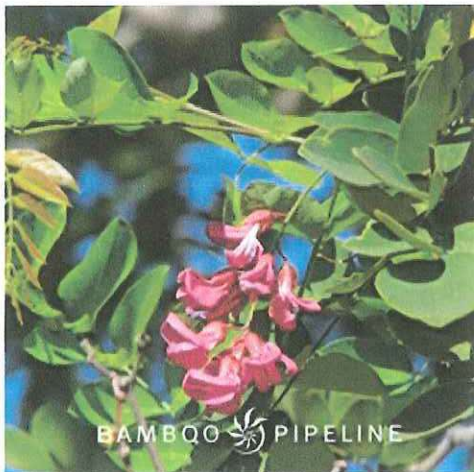
Botanical Name: *Robinia pseudoacacia* 'Purple Robe' Standard  
Common Name: Purple Robe Locust Standard

**DESCRIPTION**

A deciduous tree with long pendulous clusters of extremely fragrant, rosy-pink flowers appearing mid-spring to early summer followed by beanlike pods. The dull bluish-green leaves are pinnate with roundish leaflets. New growth is reddish bronze. Plant in full sun. Requires very little irrigation. Heat, drought, and cold tolerant once established.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Rarely to Moderate  
Sunset Zone: 1-24  
USDA Zone: -30 to -25 F( Z4a)

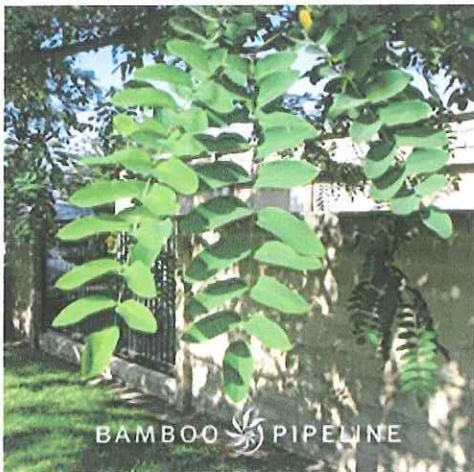


**PLANT ANATOMY**

Foliage Growth Cycle: Deciduous  
Plant Habit: Upright, rounded  
Growth Rate: Fast  
Height (at Maturity): 30-50 ft.  
Width (at Maturity): 20-35 ft.

**FLOWER CHARACTERISTICS**

Color: Rosy-pink  
Season: Spring-Early Summer  
Shape: Sweet pea like  
Fragrance: Yes  
Notes: Clusters are 4-8" long.



**LEAF CHARACTERISTICS**

Color: Dull green  
Shape: Feather-like  
Length: 6-14"  
Notes: Pinnate leaves with 17-21 rounded leaflets.

**FRUIT CHARACTERISTICS**

Color: Red to black  
Type: Pod  
Length: 4"

**Spathodea campanulata**



**NOMENCLATURE**

Botanical Name: *Spathodea campanulata*  
Common Name: African Tulip Tree

**DESCRIPTION**

This is a frost-tender evergreen tree with showy clusters of orange-red tulip shaped flowers in fall.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate  
Sunset Zone: 21-24  
USDA Zone: 25 to 30 F ( Z9b)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Rounded crown  
Growth Rate: Fast  
Height (at Maturity): 40-75 ft  
Width (at Maturity): 20-25 ft.

**FLOWER CHARACTERISTICS**

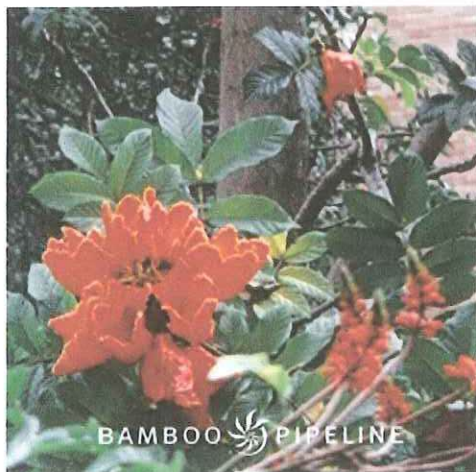
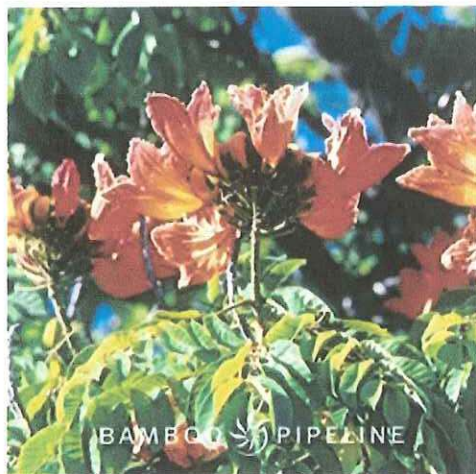
Color: Red-orange  
Season: Fall  
Shape: Tulip shape  
Width: 2-3"  
Length: 4"

**LEAF CHARACTERISTICS**

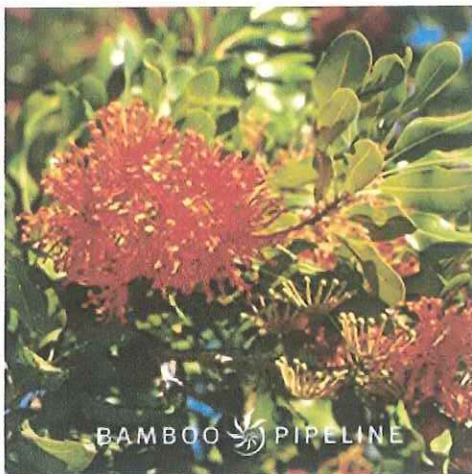
Color: Dark green  
Shape: Pinnately compound with terminal leaflet  
Texture: Glabrous  
Notes: Main leaf axis has rusty colored hairs.

**BARK CHARACTERISTICS**

Color: Grey  
Texture: Smooth



**Stenocarpus sinuatus**



**NOMENCLATURE**

Botanical Name: *Stenocarpus sinuatus*  
Common Name: Firewheel Tree

**DESCRIPTION**

This evergreen tree is notable in or out of flower for its dark green leathery leaves, which often are pinnately lobed on young trees. The showy red wagon-wheel shaped flowers can appear any time of the year and sometimes come straight out of the trunk. Plant in full sun and give it occasional deep watering. Can be a finicky tree.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 16, 17, 20-24  
USDA Zone: 25 to 30 F (Z9b)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Irregular, narrow, dense  
Growth Rate: Slow  
Height (at Maturity): 20-30 ft.  
Width (at Maturity): ~15 ft.

**FLOWER CHARACTERISTICS**

Color: Scarlet and yellow  
Season: Fall-Winter  
Shape: Wagon-wheel

**LEAF CHARACTERISTICS**

Color: Dark green  
Texture: Leathery  
Length: <12"

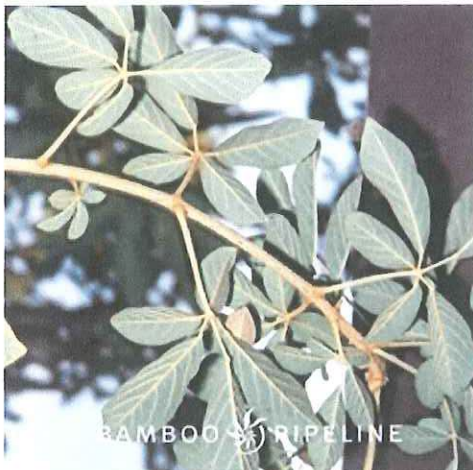
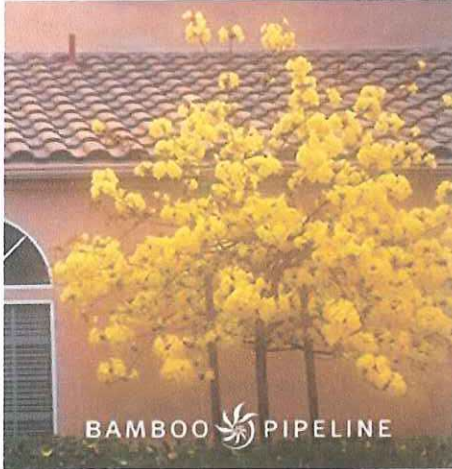
**BARK CHARACTERISTICS**

Color: Greyish-brown  
Texture: Shallow, vertical furrows

**FRUIT CHARACTERISTICS**

Color: Greyish-brown  
Type: Sausage-shaped follicle  
Length: 2-4"

**Tabebuia chrysotricha Standard**



**NOMENCLATURE**

Botanical Name: *Tabebuia chrysotricha* Standard  
 Common Name: Golden Trumpet Tree Standard

**DESCRIPTION**

Showy trumpet-shaped, golden yellow flowers with maroon stripes on throat bloom heavily in spring, when tree briefly sheds leaves. Sporadic blooms may appear throughout the year. Young twigs and the undersides of leaves are covered with a brownish-orange colored fuzz.

**CULTURAL INFORMATION**

Light Exposure: Sun  
 Water Requirements: Moderate to Regular  
 Sunset Zone: 13, 15, 16, 20-24  
 USDA Zone: 25 to 30 F ( Z9b)

**PLANT ANATOMY**

Foliage Growth Cycle: Semi-deciduous  
 Growth Rate: Fast  
 Height (at Maturity): >25 ft.  
 Width (at Maturity): 10-20 ft.

**FLOWER CHARACTERISTICS**

Color: Golden yellow  
 Season: Spring  
 Shape: Trumpet-shaped  
 Width: 1-1/2- 2-1/4"  
 Length: 3-4"

**LEAF CHARACTERISTICS**

Color: Dark green  
 Shape: Palmately compound  
 Texture: Undersides with rusty-gold pubescence

**BARK CHARACTERISTICS**

Color: Greyish-brown  
 Texture: Shallowly fissured

**FRUIT CHARACTERISTICS**

Color: Rusty brown  
 Type: Linear, cylindrical capsule  
 Length: 1/4- 3/4"

**Tabebuia impetiginosa Standard (T. ipe)**

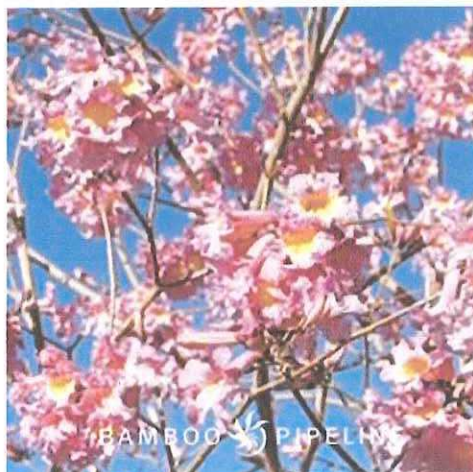
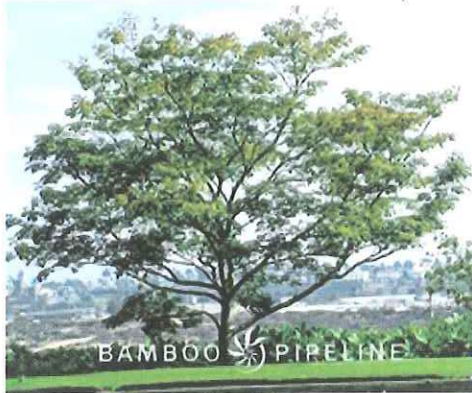


Photo courtesy of San Marcos Growers

**NOMENCLATURE**

Botanical Name: *Tabebuia impetiginosa* Standard (T. ipe)  
Common Name: Lavender Trumpet Tree Standard

**DESCRIPTION**

Showy pink trumpet flowers with yellow stripes on white throats bloom in large clusters in the spring just as new foliage emerges. As a young tree, it may not bloom. Full sun, regular watering.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Moderate to Regular  
Sunset Zone: 15, 16, 20-24  
USDA Zone: 25 to 30 F (Z9b)

**PLANT ANATOMY**

Foliage Growth Cycle: Semi-deciduous  
Growth Rate: Slow  
Height (at Maturity): 20-30 ft.  
Width (at Maturity): 10-20 ft.

**FLOWER CHARACTERISTICS**

Color: Pink to lavender  
Season: Late Winter-Spring  
Shape: Trumpet-shaped  
Width: 1/2 -2"  
Length: 1-1/2 -3"

**LEAF CHARACTERISTICS**

Color: Green  
Shape: Palmately compound with 5-7 leaflets  
Notes: Oval leaflets with serrated margins.

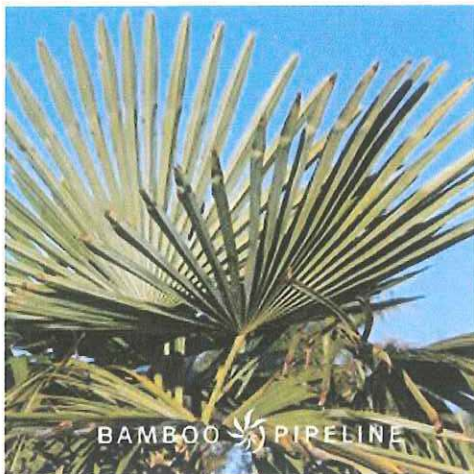
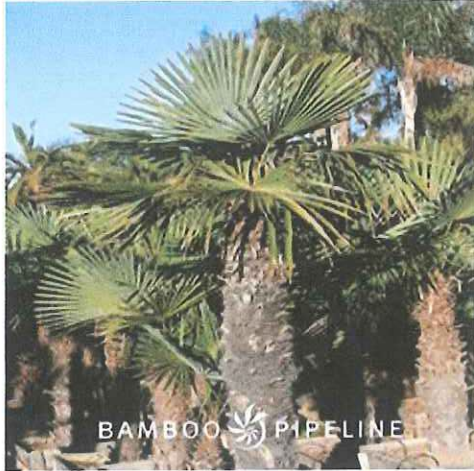
**BARK CHARACTERISTICS**

Color: Tannish grey  
Texture: Smooth

**FRUIT CHARACTERISTICS**

Type: Linear, narrow capsule  
Length: 5-20"

**Trachycarpus fortunei (Chamaerops excelsa)**



**NOMENCLATURE**

Botanical Name: *Trachycarpus fortunei* (*Chamaerops excelsa*)  
Common Name: Windmill Palm

**DESCRIPTION**

This is a beautiful, single-stemmed palm species that will tolerate more cold than many other palms. It has beautifully divided fan-shaped leaves on a tree that is strong growing and tough. In addition to this, its relatively small footprint allows it to be used in courtyards or as a specimen tree in smaller spaces.

**CULTURAL INFORMATION**

Light Exposure: Sun or Partial Shade  
Water Requirements: Regular  
Sunset Zone: 4-24  
USDA Zone: 10 to 15 F( Z8a)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Upright, single trunk  
Growth Rate: Moderate-Fast  
Height (at Maturity): 30 ft.  
Width (at Maturity): 10 ft.

**FLOWER CHARACTERISTICS**

Color: Yellow  
Season: Early Summer  
Length: 24"

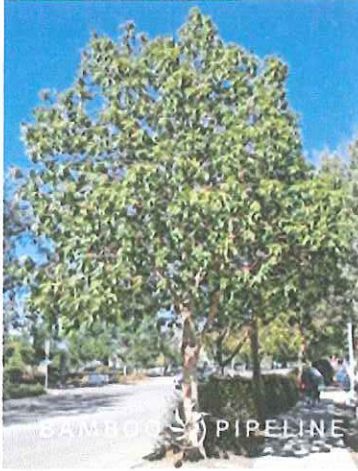
**LEAF CHARACTERISTICS**

Color: Dark green  
Shape: Fan-shaped  
Length: 18-30"

**FRUIT CHARACTERISTICS**

Color: Blue-black  
Width: 1/2"

**Tristania conferta Standard (Lophostemon confertus)**



**NOMENCLATURE**

**Botanical Name:** *Tristania conferta* Standard (*Lophostemon confertus*)

**Common Name:** Brisbane Box Standard

**DESCRIPTION**

An evergreen tree with erect form. Reddish-brown bark flakes off to reveal smooth, lighter-colored bark beneath. Dense crown of oval leathery bright green glossy foliage. Creamy white flowers bloom in summer followed by woody capsules. Good street or lawn tree.

**CULTURAL INFORMATION**

**Light Exposure:** Sun

**Water Requirements:** Rarely to Regular

**Sunset Zone:** 15, 17, 19-24

**USDA Zone:** 30 to 35 F ( Z10a)

**PLANT ANATOMY**

**Foliage Growth Cycle:** Evergreen

**Plant Habit:** Erect

**Growth Rate:** Moderate-Fast

**Height (at Maturity):** 30-45 ft.

**Width (at Maturity):** 25 ft.

**FLOWER CHARACTERISTICS**

**Color:** Creamy white

**Season:** Summer

**LEAF CHARACTERISTICS**

**Color:** Bright green

**Shape:** Oval

**Texture:** Leathery

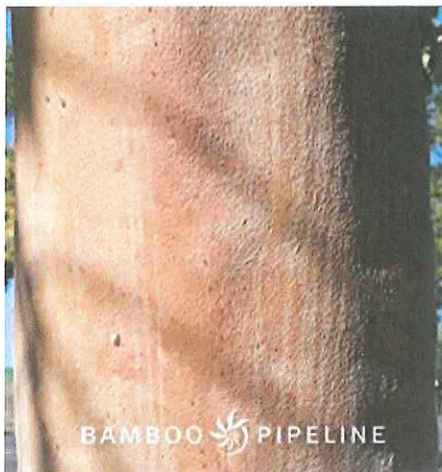
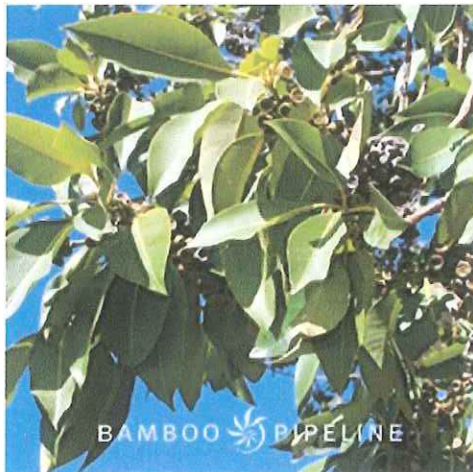
**Length:** 4-6"

**BARK CHARACTERISTICS**

**Color:** Reddish-brown

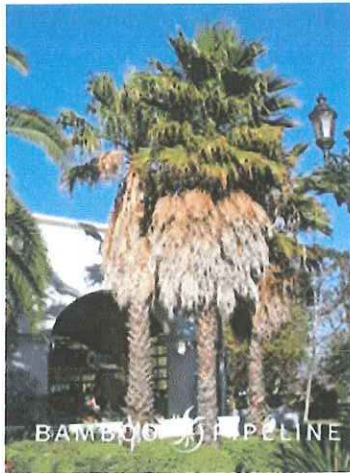
**FRUIT CHARACTERISTICS**

**Type:** Capsules





**Washingtonia robusta**



**NOMENCLATURE**

Botanical Name: *Washingtonia robusta*  
Common Name: Mexican Fan Palm

**DESCRIPTION**

This fast-growing evergreen fan palm adds a tropical look best suited for coastal gardens, large properties, avenues or parkways. The slender trunk gradually tapers from the ground and is topped with a crown of bright green fan-shaped fronds. Large clusters of creamy pink flowers are usually borne in summer.

**CULTURAL INFORMATION**

Light Exposure: Sun  
Water Requirements: Rarely to Regular  
Sunset Zone: 8-24  
USDA Zone: 30 to 35 F( Z10a)

**PLANT ANATOMY**

Foliage Growth Cycle: Evergreen  
Plant Habit: Erect  
Growth Rate: Fast  
Height (at Maturity): 100 ft.  
Width (at Maturity): 10 ft.

**FLOWER CHARACTERISTICS**

Color: Creamy pink  
Season: Summer  
Shape: Tubular

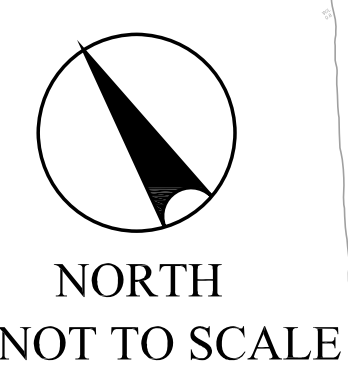
**LEAF CHARACTERISTICS**

Color: Bright green  
Shape: Fan-shaped  
Length: 36"

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	Acer saccharum	Sugar Maple	27
	Albizia julibrissin	Silk Tree	3
	Alnus rhombifolia	White Alder	2
	Araucaria heterophylla	Norfolk Island Pine	1
	Araucaria spp	Araucaria	1
	Arbutus unedo 'Marina'	Marina Arbutus	3
	Arbutus unedo	Strawberry Tree	1
	Archontophoenix cunninghamiana	King Palm	109
	Bauhinia blakeana	Hong Kong Orchid Tree	1
	Betula pendula	European White Birch	1
	Brachychiton populneus	Bottle Tree	12
	Callistemon citrinus	Lemon Bottlebrush	11
	Callistemon viminalis	Weeping Bottlebrush	2
	Chitalpa tashkentensis 'Pink Dawn'	Pink Dawn Chitalpa	28
	Cinnamomum camphora	Camphor Tree	48
	Cupaniopsis anacardioides	Carrotwood	16
	Cycas Revoluta	Sago Palm	1
	Dracaena spp	Dragon Tree	1
	Eriobotrya deflexa	Bronze Loquat	2
	Erythrina caffra	Kaffirboom Coral Tree	7
	Erythrina coralloides	Naked Coral Tree	24

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	Eucalyptus camaldulensis	Red Gum	11
	Eucalyptus citriodora	Lemon-Scented Gum	134
	Eucalyptus ficifolia	Red Flowering Gum	26
	Eucalyptus spp	Eucalyptus	48
	Eucalyptus torquata	Coral Gum	16
	Ficus benjamina	Weeping Fig	3
	Ficus macrophylla	Moreton Bay Fig	7
	Ficus microcarpa 'Nilida'	Indian Laurel Fig	97
	Ficus rubiginosa	Rusty Leaf Fig	56
	Fraxinus uhdei	Shamel Ash	6
	Howea forsterana	Paradise Palm	24
	Lagerstroemia indica	Crape Myrtle	92
	Leptospermum laevigatum	Australian Tea Tree	2
	Liquidambar styraciflua	American Sweetgum	32
	Magnolia grandiflora 'Little Gem'	Little Gem Magnolia	1
	Magnolia grandiflora	Southern Magnolia	24
	Melaleuca nesophila	Queen Palm	18
	Melaleuca quinquenervia	Cajuput Tree	39
	Metrosideros excelsus	New Zealand Christmas Tree	65
	Nerium Oleander	Oleander	18
	Olea Europaea	Olive	50
	Phoenix canariensis	Canary Island Date Palm	76
	Phoenix roebelenii	Pygmy Date Palm	6
	Pinus canariensis	Canary Island Pine	30
	Pinus halepensis	Aleppo Pine	11
	Platanus acerifolia	London Plane	22
	Platanus racemosa 'Bloodgood'	London Plane Bloodgood	36
	Podocarpus gracilior	Fern Pine	5

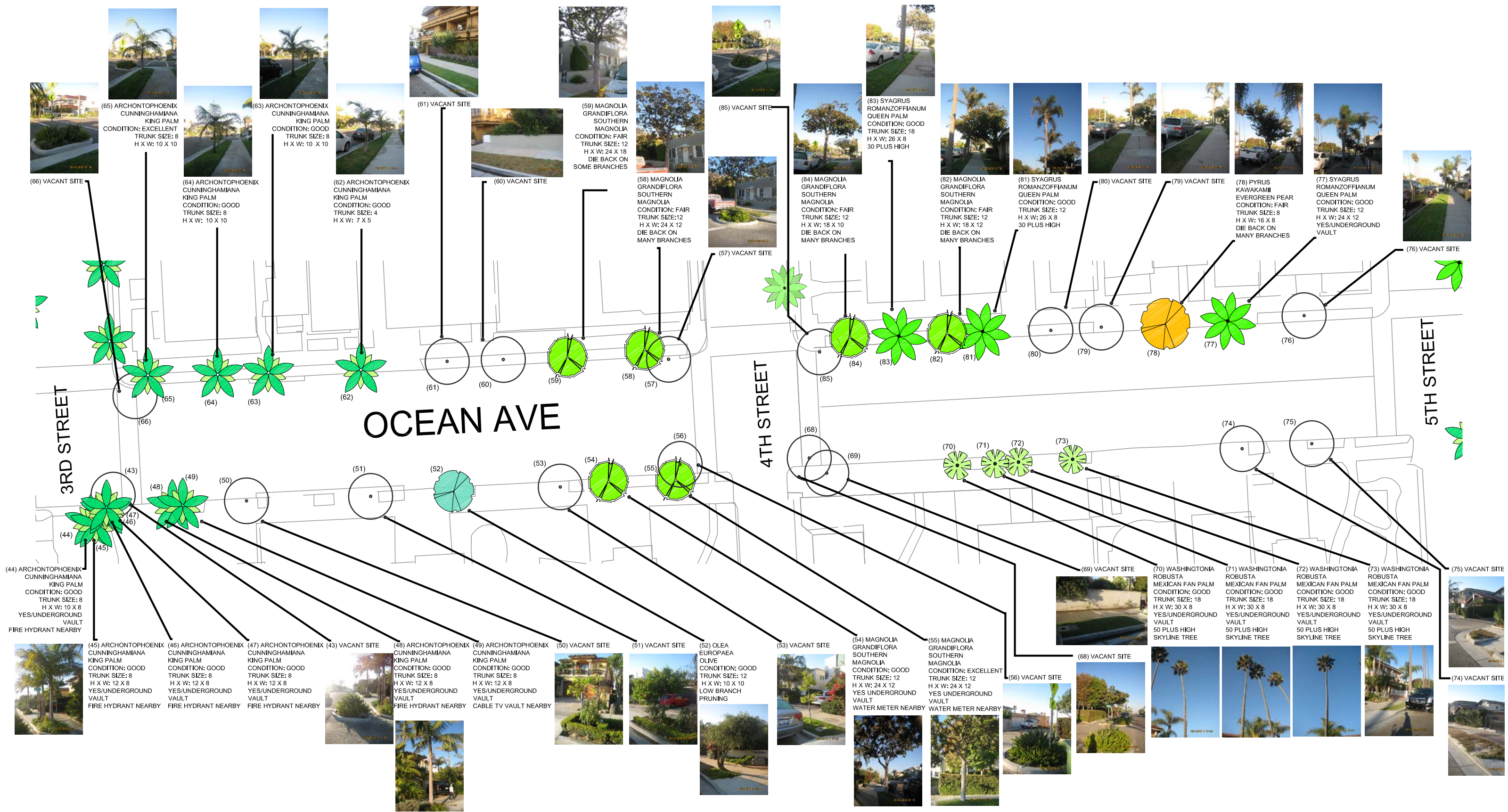
SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	Prunus armeniaca	Apricot	1
	Prunus caroliniana	Carolina Laurel Cherry	12
	Prunus cerasifera 'Atropurpurea'	Purple-Leaf Flowering Plum	3
	Prunus persica	Ornamental Pear	2
	Pyrus calleryana 'Bradford'	Bradford Pear	33
	Pyrus calleryana 'Danicer'	Danicer Pear	20
	Pyrus calleryana	English Laurel	1
	Pyrus kawakamii	Evergreen Pear	142
	Quercus ilex	Holly Oak	1
	Raphiolepis 'Majestic Beauty'	Indian Hawthorne	26
	Robinia pseudoacacia 'Purple Robe'	Purple Robe Locust	5
	Robinia pseudoacacia	Black Locust	1
	Schinus terebinthifolius	Brazilian Pepper	17
	Spathodea campanulata	African Tulip Tree	65
	Stenocarpus sinuatus	Firewheel Tree	50
	Strelitzia reginae	Giant Bird of Paradise	3
	Syagrus romanzoffianum	Queen Palm	438
	Tabebuia ipe	Pink Trumpet Tree	22
	Ulmus parviflora	Chinese Elm	41
	Ulmus pumila	Siberian Elm	1
	Washingtonia robusta	Mexican Fan Palm	411
	Chamaerops humilis	Mediterranean Fan Palm	14
	Vacant sites: (See approved recommended tree species list dated: November 3, 2009 for new tree species to be planted)		523



REFER TO ENLARGED LANDSCAPE PLANS FOR EXISTING TREE SPECIES, ADDRESS LOCATION, PLANT CHARACTERISTICS & PHOTOGRAPH.



**CITY OF SEAL BEACH  
 OLD TOWN DISTRICT  
 OCEAN AVE  
 (1st St. - 3rd St.)**



(65) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: EXCELLENT  
TRUNK SIZE: 8  
H X W: 10 X 10

(63) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 10 X 10

(61) VACANT SITE

(59) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 24 X 18  
DIE BACK ON SOME BRANCHES

(85) VACANT SITE

(83) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 26 X 8  
30 PLUS HIGH

(82) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 18 X 12  
DIE BACK ON MANY BRANCHES

(81) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 26 X 8  
30 PLUS HIGH

(80) VACANT SITE

(77) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 24 X 12  
YES/UNDERGROUND VAULT

(66) VACANT SITE

(64) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 10 X 10

(62) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 4  
H X W: 7 X 5

(60) VACANT SITE

(58) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 24 X 12  
DIE BACK ON MANY BRANCHES

(84) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 18 X 10  
DIE BACK ON MANY BRANCHES

(82) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 18 X 12  
DIE BACK ON MANY BRANCHES

(80) VACANT SITE

(78) PYRUS KAWAKAMI EVERGREEN PEAR  
CONDITION: FAIR  
TRUNK SIZE: 8  
H X W: 16 X 8  
DIE BACK ON MANY BRANCHES

(76) VACANT SITE

(44) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 10 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(48) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(49) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(51) VACANT SITE

(52) OLEA EUROPAEA OLIVE  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 10 X 10  
LOW BRANCH PRUNING

(53) VACANT SITE

(54) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 24 X 12  
YES UNDERGROUND VAULT  
WATER METER NEARBY

(55) MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA  
CONDITION: EXCELLENT  
TRUNK SIZE: 12  
H X W: 24 X 12  
YES UNDERGROUND VAULT  
WATER METER NEARBY

(70) WASHINGTONIA ROBUSTA MEXICAN FAN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 30 X 8  
YES/UNDERGROUND VAULT  
50 PLUS HIGH SKYLINE TREE

(71) WASHINGTONIA ROBUSTA MEXICAN FAN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 30 X 8  
YES/UNDERGROUND VAULT  
50 PLUS HIGH SKYLINE TREE

(45) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(46) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(47) ARCHONTOPHOENIX CUNNINGHAMIANA KING PALM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 8  
YES/UNDERGROUND VAULT  
FIRE HYDRANT NEARBY

(43) VACANT SITE

(50) VACANT SITE

(56) VACANT SITE

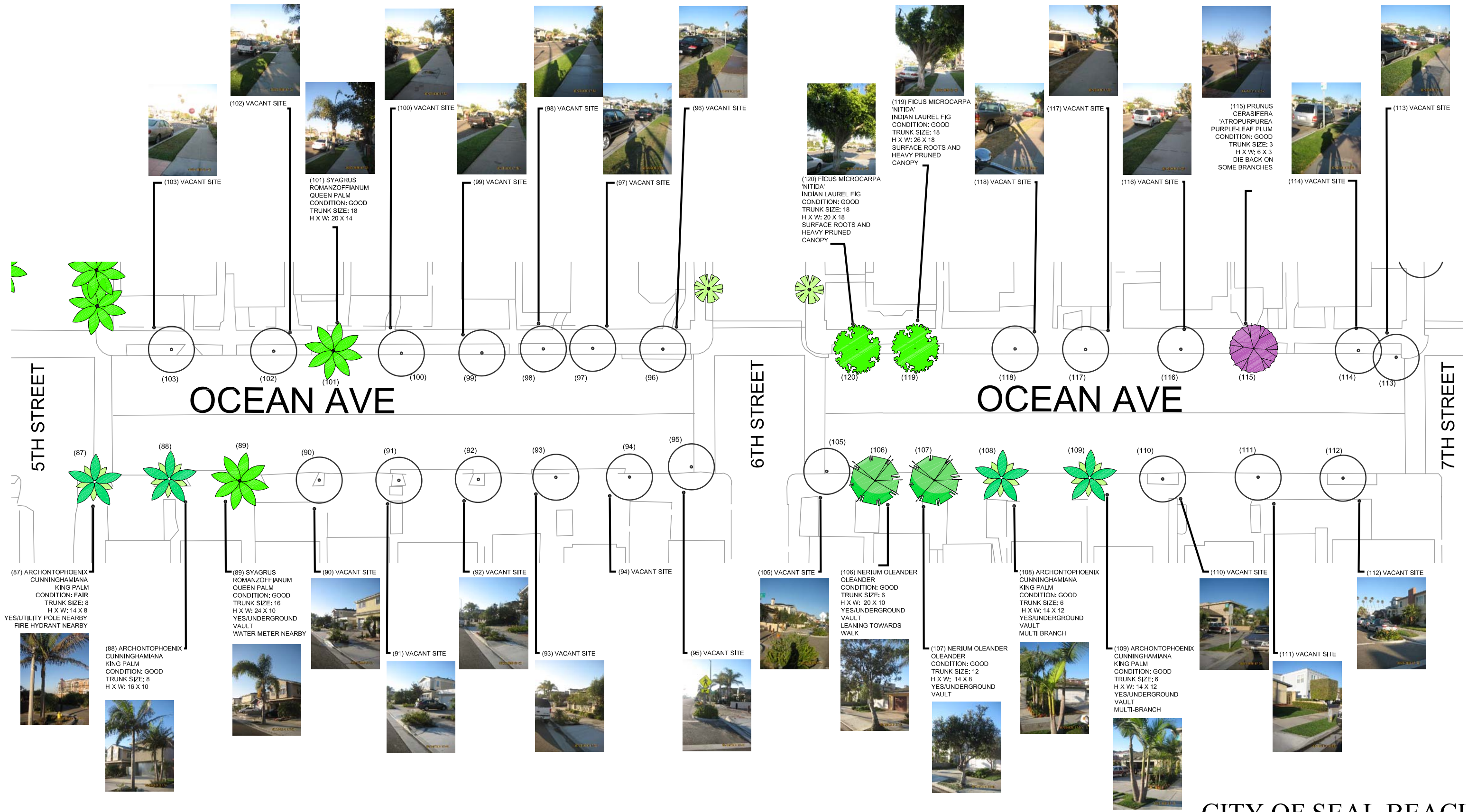
(56) VACANT SITE

(69) VACANT SITE

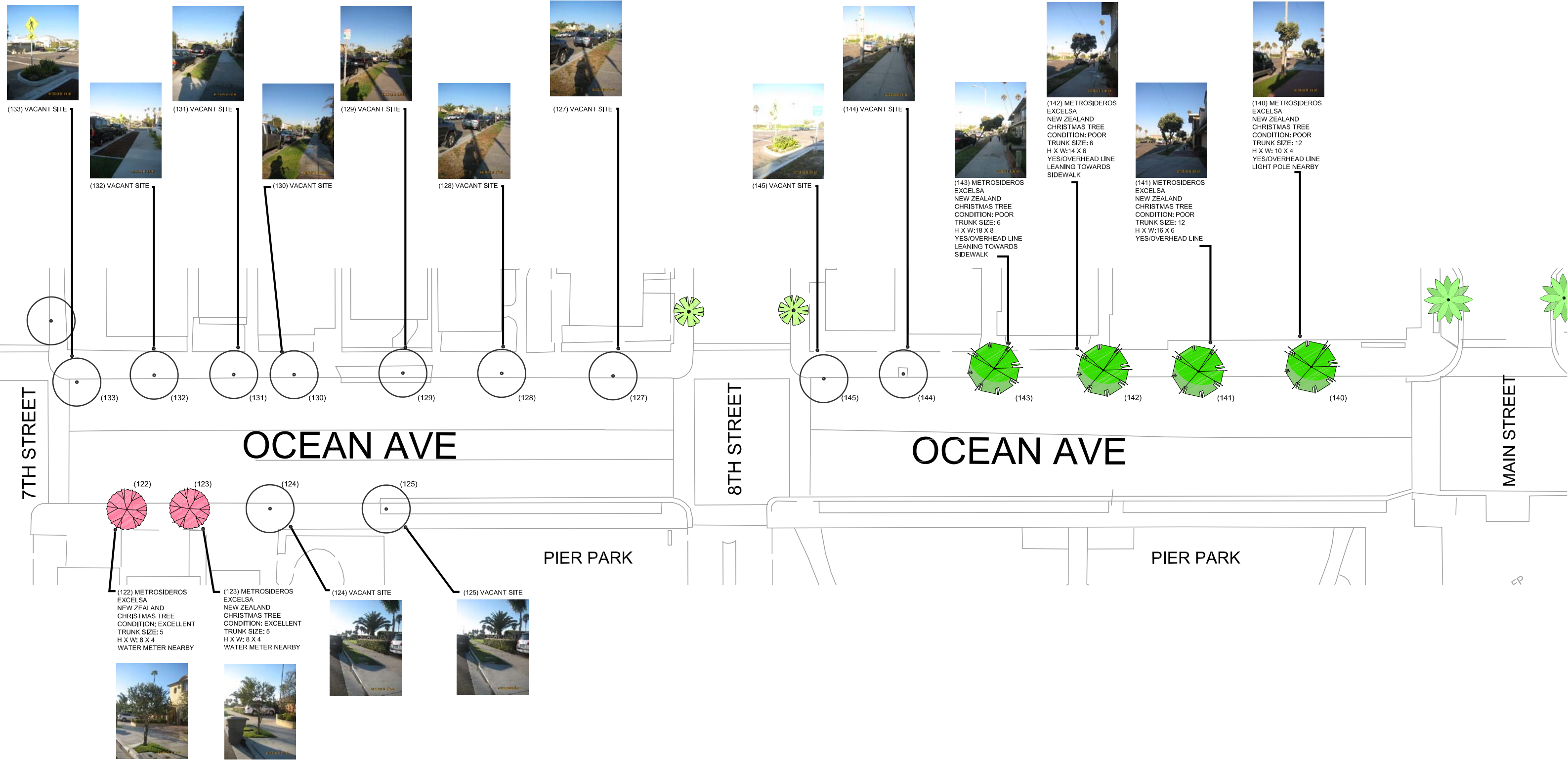
(72) WASHINGTONIA ROBUSTA MEXICAN FAN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 30 X 8  
YES/UNDERGROUND VAULT  
50 PLUS HIGH SKYLINE TREE

(73) WASHINGTONIA ROBUSTA MEXICAN FAN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 30 X 8  
YES/UNDERGROUND VAULT  
50 PLUS HIGH SKYLINE TREE

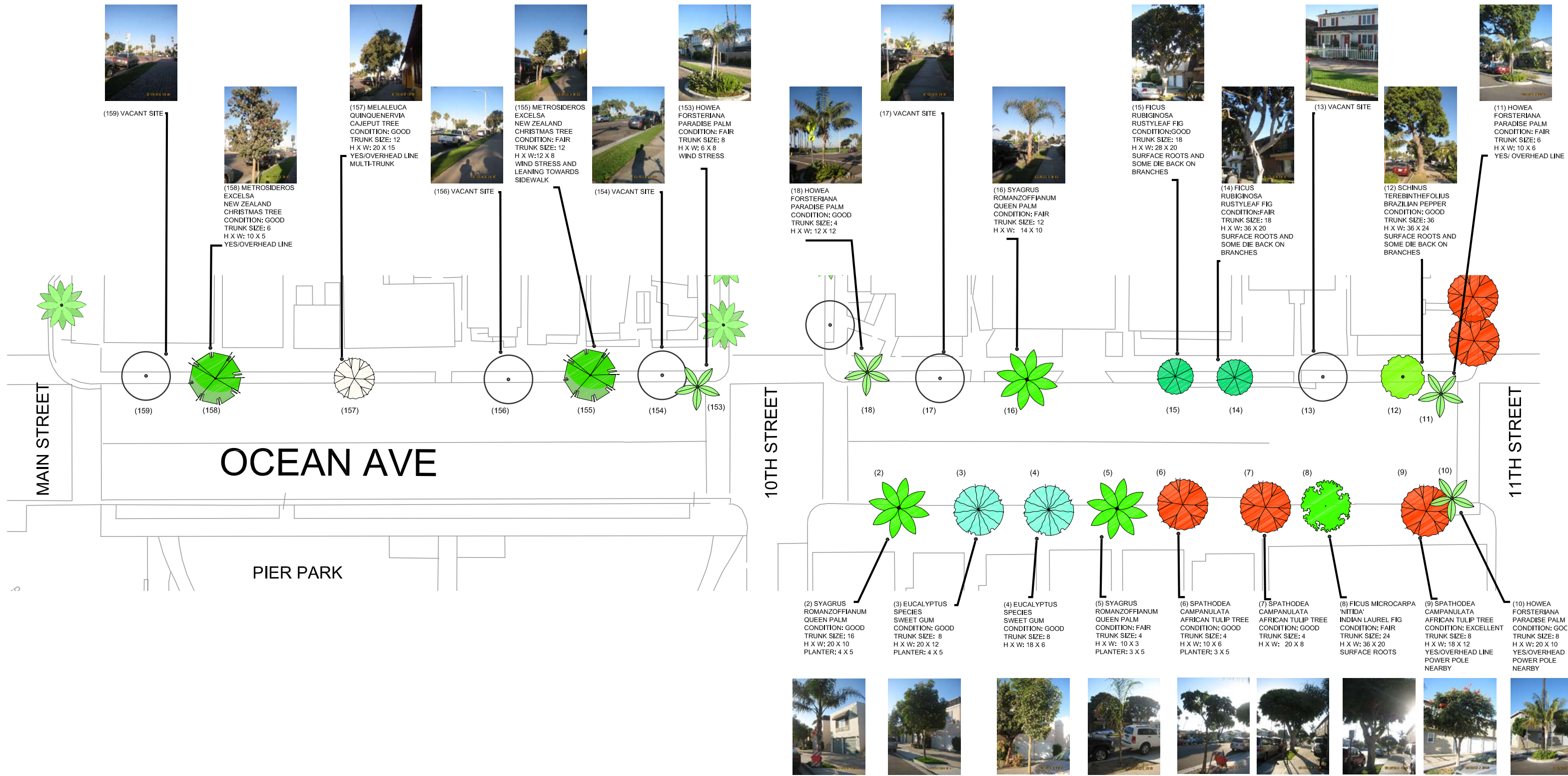
CITY OF SEAL BEACH  
OLD TOWN DISTRICT  
OCEAN AVE  
(3rd St. - 5th St.)



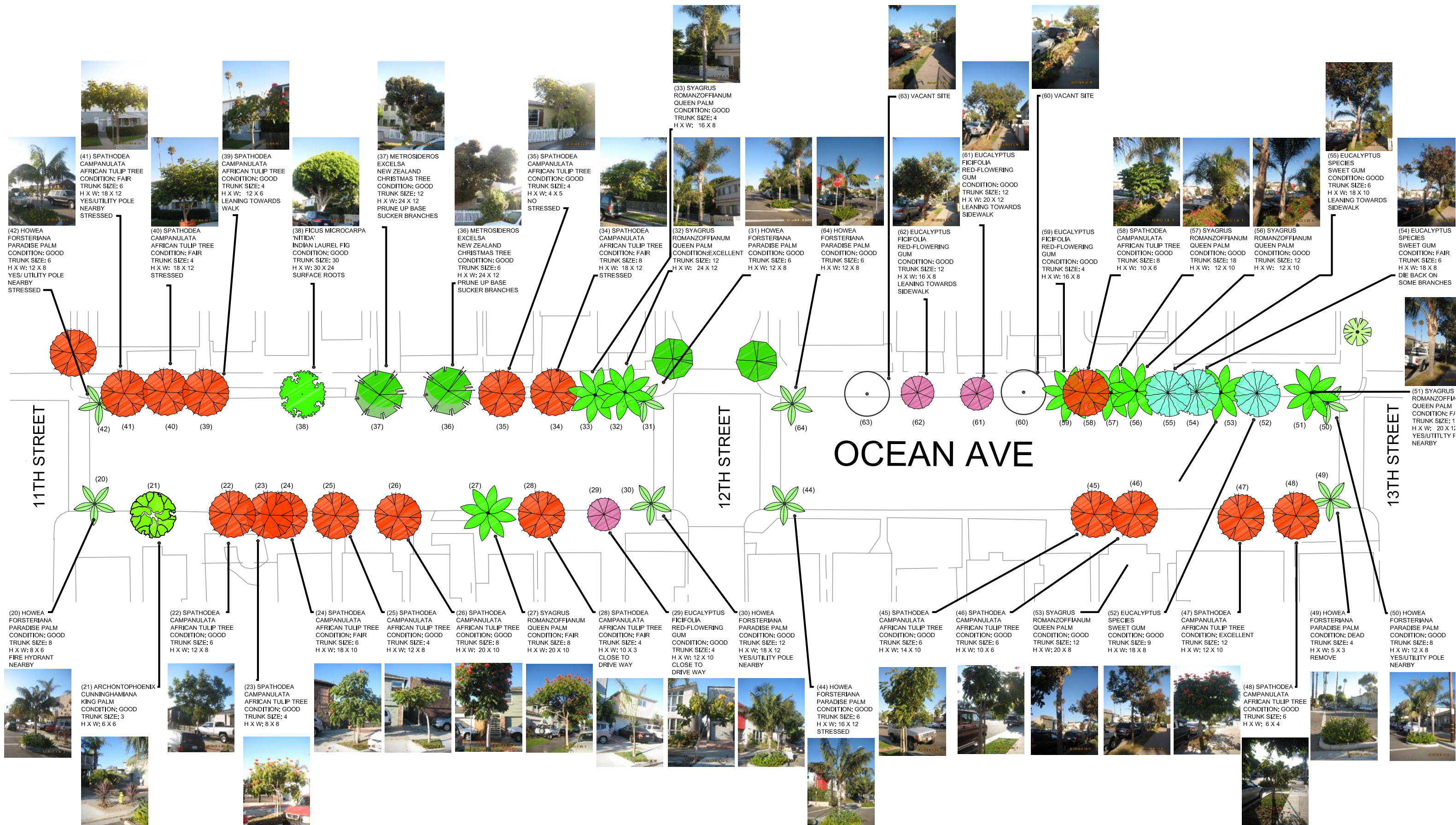
**CITY OF SEAL BEACH  
OLD TOWN DISTRICT  
OCEAN AVE  
(5th St. - 7th St.)**



**CITY OF SEAL BEACH  
OLD TOWN DISTRICT  
OCEAN AVENUE  
(7th St.- Main St.)**

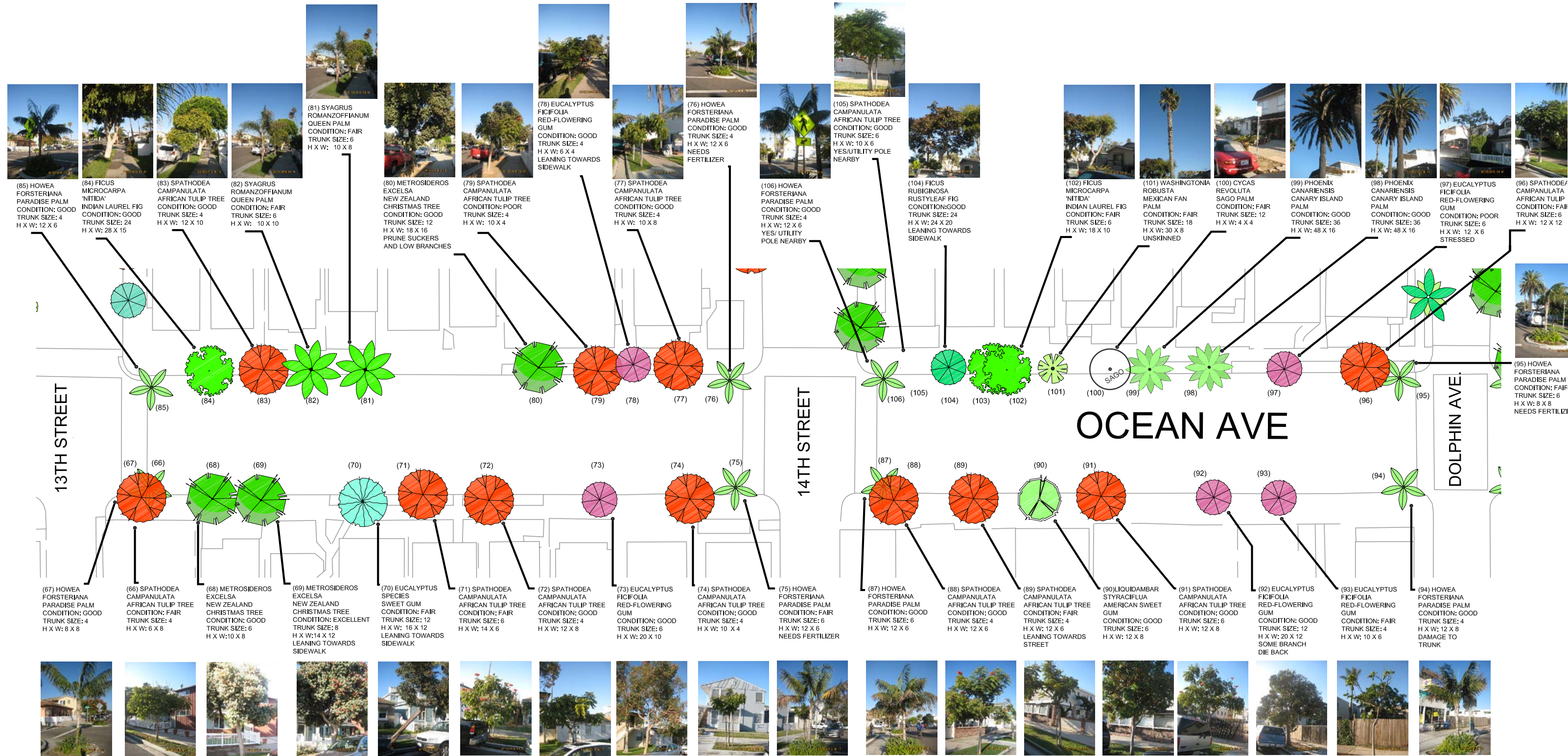


**CITY OF SEAL BEACH  
OLD TOWN DISTRICT  
OCEAN AVE.  
(Main St. - 11th St.)**

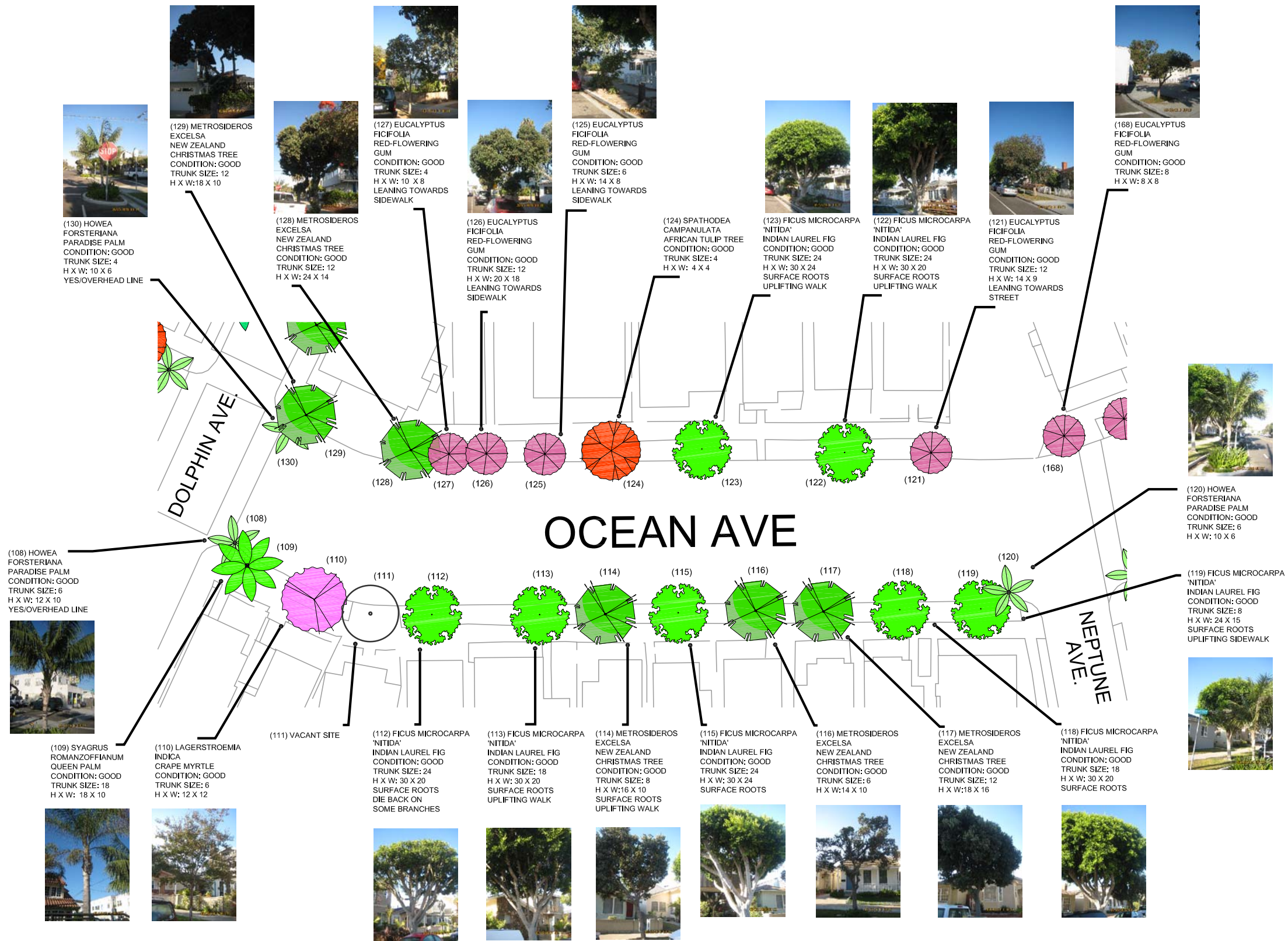


**CITY OF SEAL BEACH  
 OLD TOWN DISTRICT  
 OCEAN AVENUE  
 (11th St. - 13th St.)**

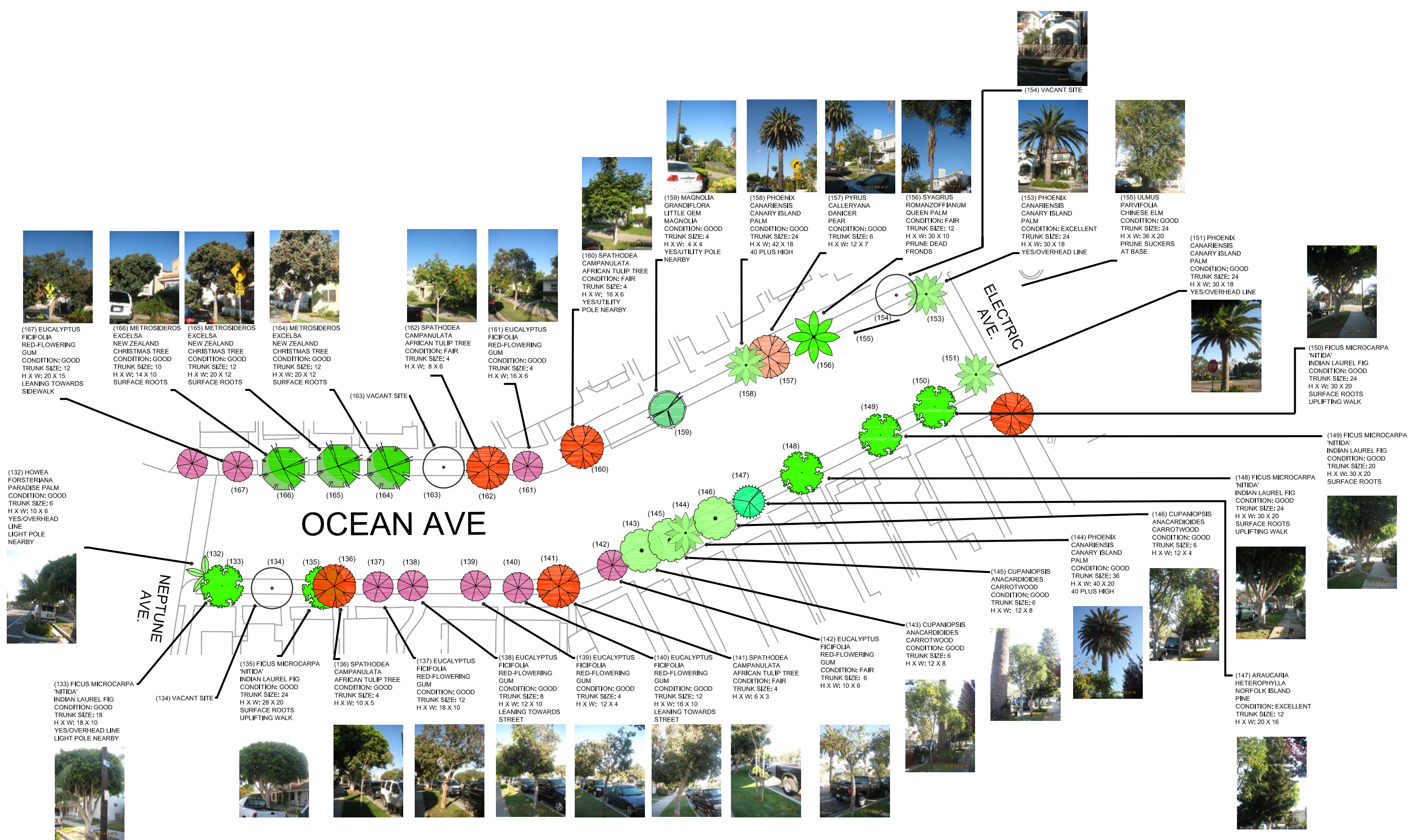




CITY OF SEAL BEACH  
 OLD TOWN DISTRICT  
 OCEAN AVENUE  
 (13th St. - Dolphin Ave.)



CITY OF SEAL BEACH  
 OLD TOWN DISTRICT  
 OCEAN AVE  
 (Dolphin Ave. - Neptune Ave.)



CITY OF SEAL BEACH  
 OLD TOWN DISTRICT  
 OCEAN AVE  
 (Neptune Ave. - Electric Ave.)

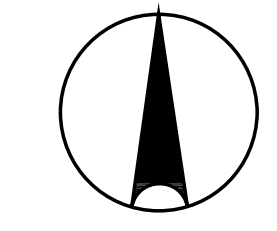


**TREE LEGEND**

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	<i>Acer saccharum</i>	Sugar Maple	6
	<i>Agonis flexuosa</i>	Peppermint Tree	1
	<i>Albizia julibrissin</i>	Silk Tree	2
	<i>Archontophoenix cunninghamiana</i>	King Palm	36
	<i>Bauhinia blakeana</i>	Hong Kong Orchid Tree	7
	<i>Betula pendula</i>	European White Birch	4
	<i>Brahea armata</i>	Mexican Blue Palm	1
	<i>Butia capitata</i>	Pindo Palm	1
	<i>Callistemon citrinus</i>	Lemon Bottlebrush	3
	<i>Callistemon viminalis</i>	Weeping Bottlebrush	12
	<i>Cassia leptophylla</i>	Gold Medallion Tree	3
	<i>Cercis canadensis</i>	Eastern Redbud	2
	<i>Chionanthus retusus</i>	Chinese Fringe Tree	1
	<i>Chitalpa tashkentensis</i>	Chitalpa	1
	<i>Cinamon camphora</i>	Pink Dawn Chitalpa	7
	<i>Citrus spp</i>	Citrus	4
	<i>Cupaniopsis anacardioides</i>	Carrotwood	28
	<i>Cycas revoluta</i>	Sago Palm	1
	<i>Dyopsis decaryi</i>	Triangle Palm	3
	<i>Eriobotrya deflexa</i>	Bronze Loquat	1
	<i>Eucalyptus camaldulensis</i>	Red Gum	1
	<i>Eucalyptus ficifolia</i>	Red Flowering Gum	4
	<i>Ficus microcarpa 'Nitida'</i>	Moreton Bay Fig	7
	<i>Ficus rubiginosa</i>	Rusty Leaf Fig	6
	<i>Fraxinus uhdei</i>	Shamel Ash	5
	<i>Ginkgo biloba</i>	Maidenhair Tree	4
	<i>Gleditsia triacanthos</i>	Honey Locust	2
	<i>Hibiscus</i>	Hibiscus	1
	<i>Howea forsterana</i>	Paradise Palm	3
	<i>Hypophorbe lagenicaulis</i>	Bottle Palm	6
	<i>Jacaranda mimosifolia</i>	Jacaranda	8
	<i>Lagerstroemia indica</i>	Crape Myrtle	52
	<i>Liquidambar styraciflua</i>	American Sweetgum	29
	<i>Macadamia integrifolia</i>	Smooth-Shell Macadamia	3
	<i>Magnolia grandiflora 'Little Gem'</i>	Little Gem Magnolia	3
	<i>Magnolia grandiflora</i>	Southern Magnolia	53
	<i>Melaleuca quinquenervia</i>	Camphor Tree	1
	<i>Nerium Oleander</i>	Oleander	3
	<i>Olea Europaea</i>	Olive	1
	<i>Phoenix roebelenii</i>	Pygmy Date Palm	18
	<i>Pinus canariensis</i>	Canary Island Pine	4
	<i>Pinus halepensis</i>	Allepo Pine	1
	<i>Platanus acerifolia</i>	London Plane	1
	<i>Platanus racemosa 'Bloodgood'</i>	London Plane Bloodgood	2

**TREE LEGEND**

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	<i>Podocarpus gracilior</i>	Fern Pine	1
	<i>Prunus caroliniana</i>	Carolina Laurel Cherry	4
	<i>Prunus cerasifera 'Atropurpurea'</i>	Purple-Leaf Flowering Plum	5
	<i>Prunus persica</i>	Ornamental Pear	5
	<i>Pyrus calleryana 'Bradford'</i>	Bradford Pear	31
	<i>Pyrus calleryana 'Danicer'</i>	Danicer Pear	94
	<i>Pyrus kawakamii</i>	Evergreen Pear	10
	<i>Raphiolepis 'Majestic Beauty'</i>	Indian Hawthorne	1
	<i>Robinia pseudoacacia 'Purple Robe'</i>	Purple Robe Locust	28
	<i>Salix matsudana</i>	Chinese Willow	1
	<i>Schinus terebinthifolius</i>	Brazilian Pepper	22
	<i>Spathodea campanulata</i>	African Tulip Tree	4
	<i>Stenocarpus sinuatus</i>	Firewheel Tree	29
	<i>Syagrus romanzoffianum</i>	Queen Palm	224
	<i>Tipuana tipu</i>	Tipu	1
	<i>Trachycarpus fortunei</i>	Windmill Palm	1
	<i>Tristania conferta</i>	Brisbane Box	2
	<i>Ulmus parviflora</i>	Chinese Elm	9
	<i>Washingtonia robusta</i>	Mexican Fan Palm	51
	<i>Wodyetia bifurcata</i>	Foxtail Palm	3
	Vacant sites: (See approved recommended tree species list dated: November 3, 2009) for new tree species to be planted		460

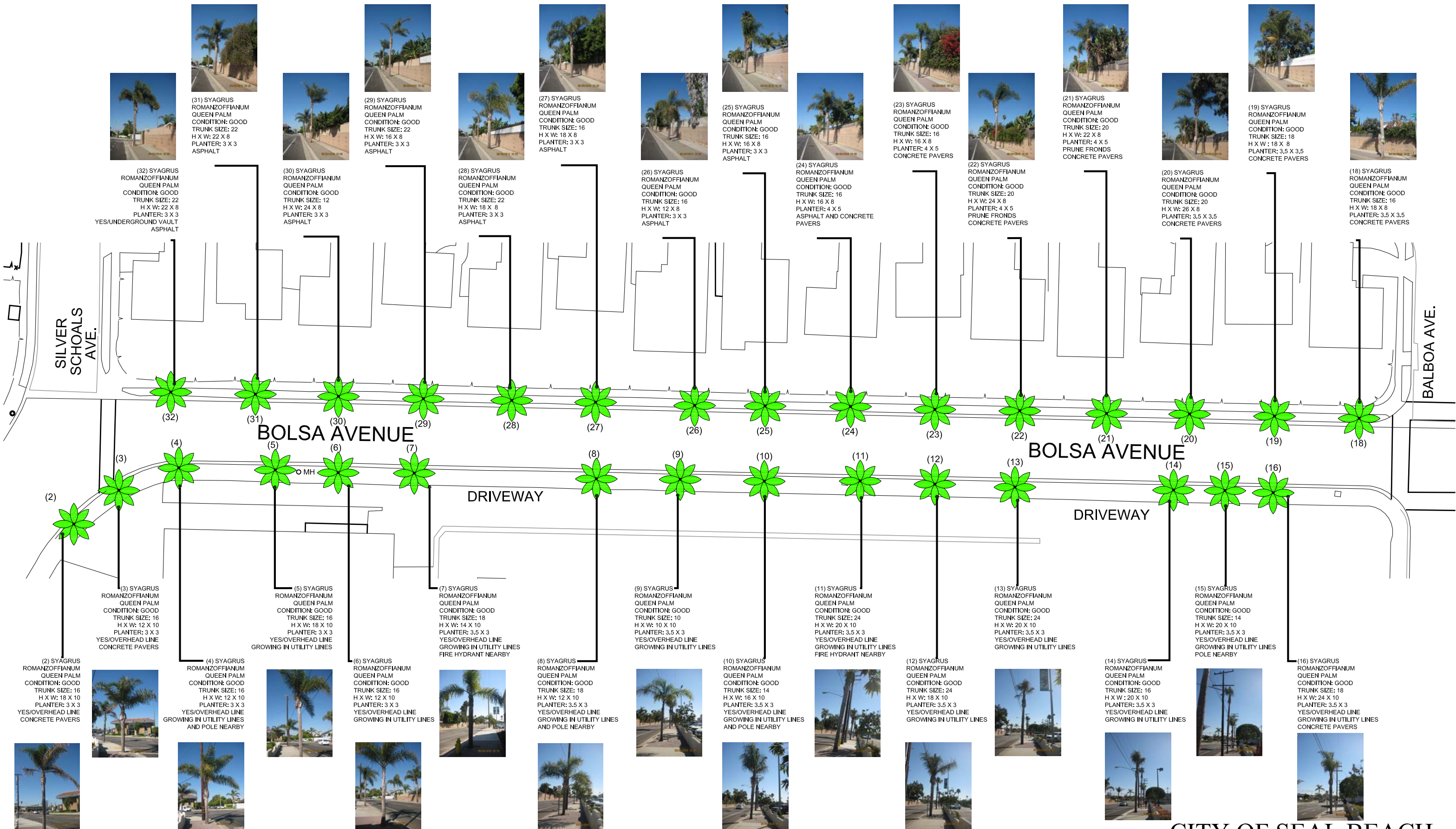


NORTH  
NOT TO SCALE

REFER TO ENLARGED LANDSCAPE PLANS FOR EXISTING TREE SPECIES, ADDRESS LOCATION, PLANT CHARACTERISTICS & PHOTOGRAPH.

CITY OF SEAL BEACH  
THE HILL DISTRICT  
EXISTING STREET TREE SPECIES PLAN

JANUARY 6, 2011



(31) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 22  
H X W: 22 X 8  
PLANTER: 3 X 3  
ASPHALT

(29) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 22  
H X W: 16 X 8  
PLANTER: 3 X 3  
ASPHALT

(27) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 8  
PLANTER: 3 X 3  
ASPHALT

(25) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 16 X 8  
PLANTER: 3 X 3  
ASPHALT

(23) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 16 X 8  
PLANTER: 4 X 5  
CONCRETE PAVERS

(21) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 20  
H X W: 22 X 8  
PLANTER: 4 X 5  
PRUNE FRONDS  
CONCRETE PAVERS

(19) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 18 X 8  
PLANTER: 3.5 X 3.5  
CONCRETE PAVERS

(18) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 8  
PLANTER: 3.5 X 3.5  
CONCRETE PAVERS

(32) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 22  
H X W: 22 X 8  
PLANTER: 3 X 3  
YES/UNDERGROUND VAULT  
ASPHALT

(30) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 24 X 8  
PLANTER: 3 X 3  
ASPHALT

(28) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 22  
H X W: 18 X 8  
PLANTER: 3 X 3  
ASPHALT

(26) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 12 X 8  
PLANTER: 3 X 3  
ASPHALT

(24) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 16 X 8  
PLANTER: 4 X 5  
ASPHALT AND CONCRETE  
PAVERS

(22) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 20  
H X W: 24 X 8  
PLANTER: 4 X 5  
PRUNE FRONDS  
CONCRETE PAVERS

(20) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 20  
H X W: 26 X 8  
PLANTER: 3.5 X 3.5  
CONCRETE PAVERS

(18) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 8  
PLANTER: 3.5 X 3.5  
CONCRETE PAVERS

(32)

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(18)

**BOLSA AVENUE**

**BOLSA AVENUE**

DRIVEWAY

DRIVEWAY

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(3) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 12 X 10  
PLANTER: 3 X 3  
YES/OVERHEAD LINE  
CONCRETE PAVERS

(5) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 10  
PLANTER: 3 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(7) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 14 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
FIRE HYDRANT NEARBY

(9) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 10  
H X W: 10 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(11) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 24  
H X W: 20 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
FIRE HYDRANT NEARBY

(13) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 24  
H X W: 20 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(15) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 14  
H X W: 20 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
POLE NEARBY

(2) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 10  
PLANTER: 3 X 3  
YES/OVERHEAD LINE  
CONCRETE PAVERS

(4) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 12 X 10  
PLANTER: 3 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
AND POLE NEARBY

(6) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 12 X 10  
PLANTER: 3 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(8) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 12 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
AND POLE NEARBY

(10) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 14  
H X W: 16 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
AND POLE NEARBY

(12) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 24  
H X W: 18 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(14) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 16  
H X W: 18 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES

(16) SYAGRUS ROMANZOFFIANUM QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 24 X 10  
PLANTER: 3.5 X 3  
YES/OVERHEAD LINE  
GROWING IN UTILITY LINES  
CONCRETE PAVERS

**CITY OF SEAL BEACH**  
**THE HILL DISTRICT**  
**BOLSA AVE**  
**(Silver Schools Ave. - Balboa Ave.)**



(50) CUPANIOSIS ANACARDIODES  
CARROTWOOD  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 10  
UP-LIFTING CONCRETE WALK



(49) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 7  
YES/OVERHEAD LINE GROWING INTO UTILITY LINE



(48) ACER SACCHARUM  
SUGAR MAPLE  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 26 X 12  
YES/OVERHEAD LINE GROWING INTO UTILITY LINE



(47) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 24 X 6  
YES/OVERHEAD LINE



(46) VACANT SITE



(45) VACANT SITE



(44) VACANT SITE



(43) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 22 X 10  
YES/OVERHEAD LINE GROWING INTO UTILITY LINE



(42) LIQUIDAMBAR STRACIFLUA  
AMERICAN SWEETGUM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 14 X 8  
YES/OVERHEAD LINE



(41) VACANT SITE

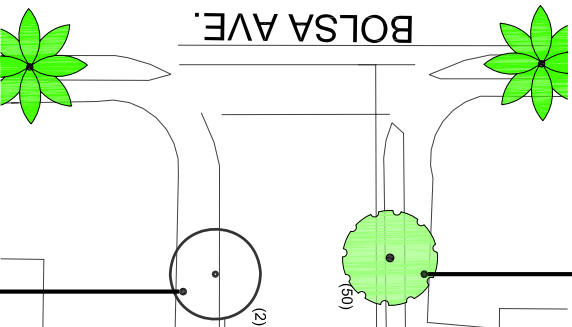


(40) MAGNOLIA GRANDIFLORA  
MAGNOLIA  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 14 X 8  
YES/OVERHEAD LINE



(39) LIQUIDAMBAR STRACIFLUA  
AMERICAN SWEETGUM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 26 X 12  
YES/OVERHEAD LINE GROWING INTO UTILITY LINE AND UP-LIFTING WALK

BOLSA AVE.



(2) VACANT SITE



(3) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 7  
YES/OVERHEAD LINE



(4) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 7



(5) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 7



(6) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 16 X 7



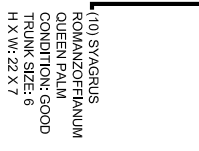
(7) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 3  
H X W: 12 X 7



(8) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 3  
H X W: 12 X 7



(9) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 20 X 7



(10) SYAGRUS ROMANZOFFIANUM  
QUEEN PALM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 22 X 7



(11) VACANT SITE



(12) ROBINIA PSUEDOACACIA  
PURPLE ROBE LOCUST  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 22 X 8

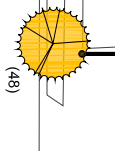
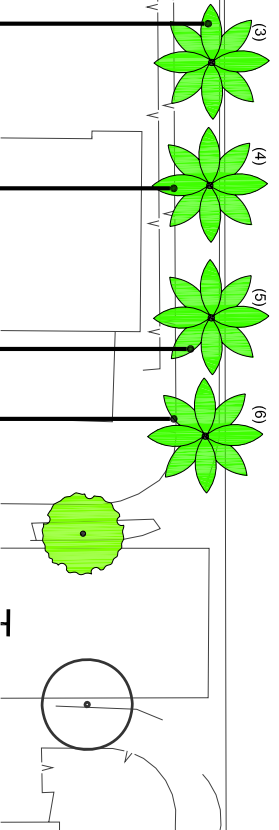


(13) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 3  
H X W: 18 X 8

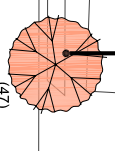


(14) PYRUS CALLERYANA  
DANGER  
CONDITION: GOOD  
TRUNK SIZE: 3  
H X W: 12 X 6

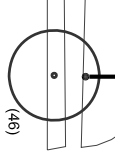
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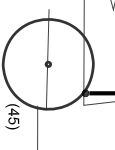
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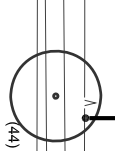
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(46)



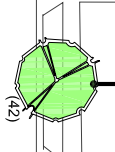
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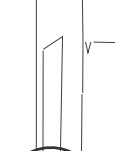
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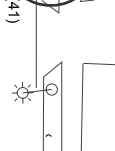
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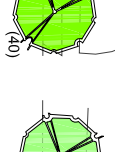
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(41)



(40)



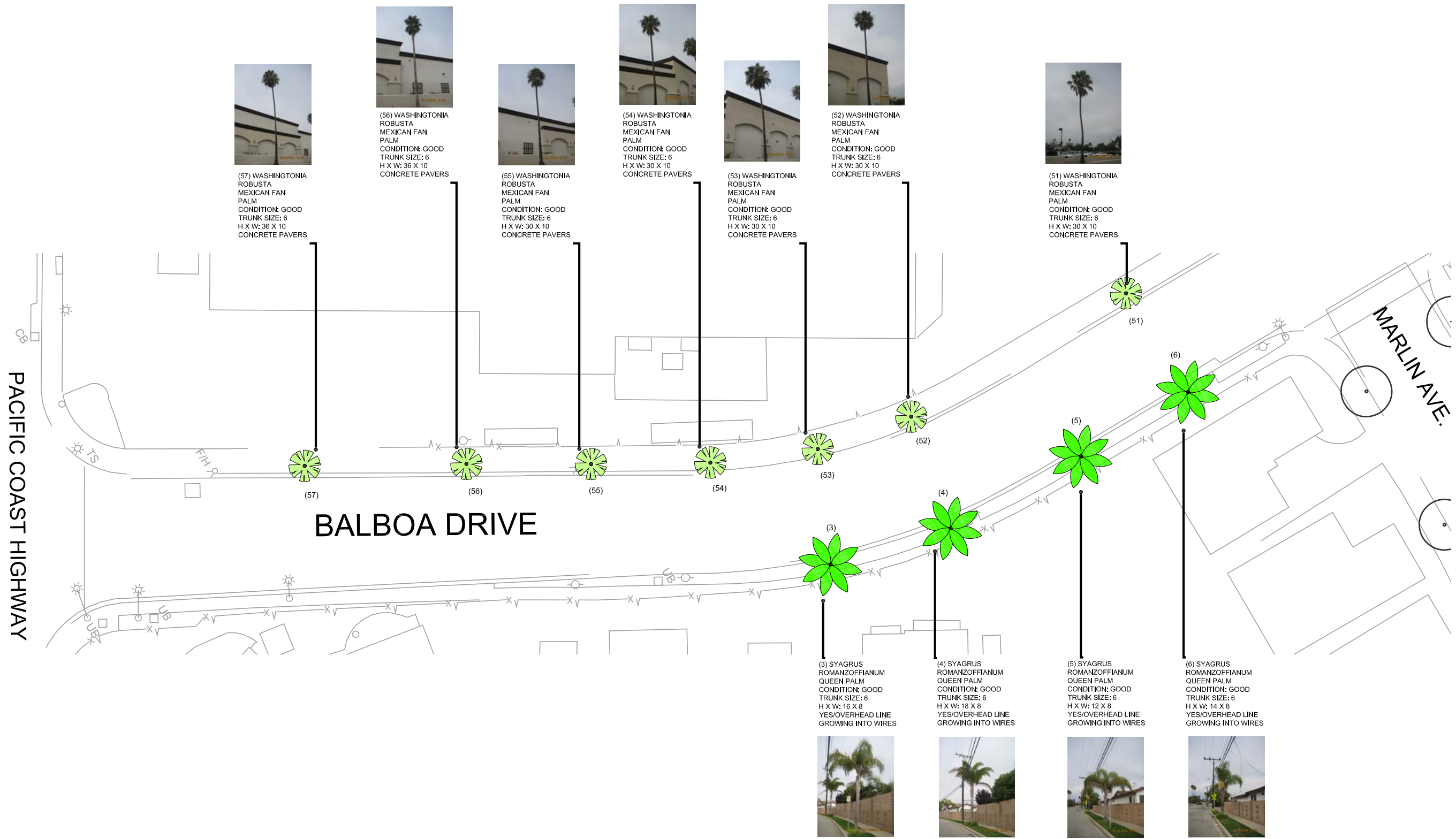
(39)

CORAL PLACE



CITY OF SEAL BEACH  
THE HILL DISTRICT

BAYSIDE DR  
(Bolsa Ave. - Coral Pl.)



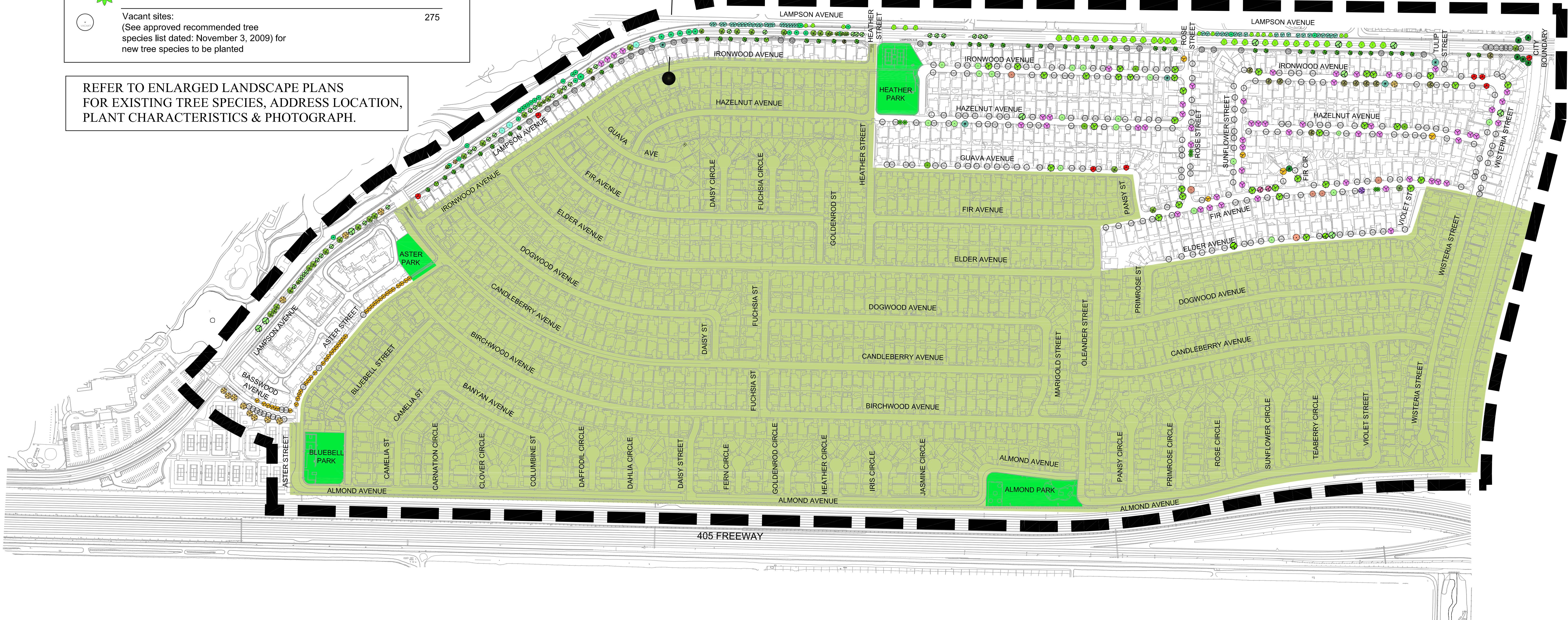
**CITY OF SEAL BEACH  
THE HILL DISTRICT  
BALBOA DR  
(PCH - Marlin Ave.)**

# TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	Callistemon viminalis	Weeping Bottlebrush	8
	Cupanopsis anacardioides	Carrotwood	20
	Eucalyptus cladocalyx	Sugar Gum	3
	Eucalyptus ficifolia	Red Flowering Gum	13
	Eucalyptus rudis	Desert Gum	40
	Eucalyptus sideroxylon	Red Ironbark	32
	Juniperus chinensis 'Torulosa'	Hollywood Juniper	1
	Lagerstroemia indica	Crape Myrtle	57
	Liquidambar styraciflua	American Sweetgum	41
	Tristania conferta	Brisbane Box	40
	Magnolia grandiflora	Southern Magnolia	2
	Melaleuca quinquenervia	Cajeput Tree	13
	Metrosideros excelsus	New Zealand Christmas Tree	50
	Olea europaea	Olive	42
	Persea americana	Avocado Tree	1
	Pinus canariensis	Canary Island Pine	6
	Prunus cerasifera	Purple-Leaf Flowering Plum	2
	Prunus domestica	Prunus Spp.	1
	Pyrus calleryana	English Laurel	1
	Pyrus calleryana 'Bradford'	Bradford Pear	5
	Pyrus kawakamii	Evergreen Pear	44
	Schinus terebinthifolius	Brazilian Pepper	42
	Syagrus romanzoffianum	Queen Palm	6
	Vacant sites:		275
(See approved recommended tree species list dated: November 3, 2009) for new tree species to be planted			

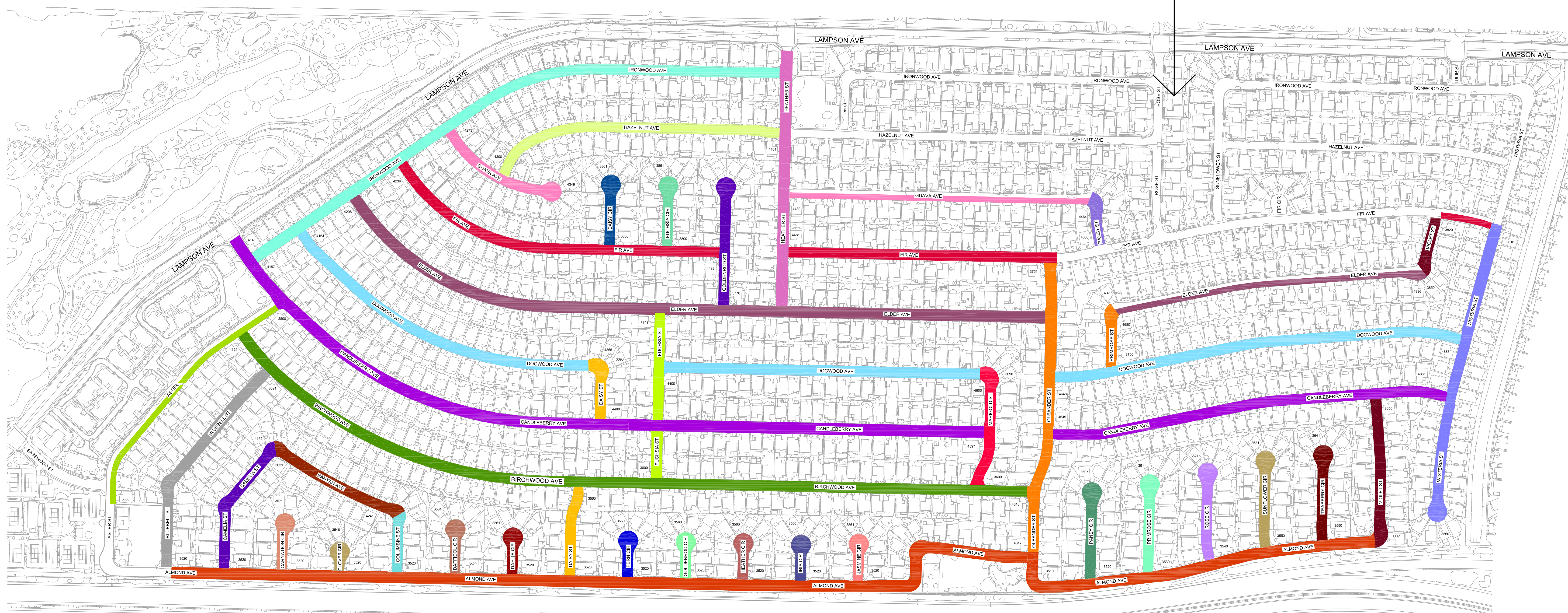
REFER TO ENLARGED LANDSCAPE PLANS FOR EXISTING TREE SPECIES, ADDRESS LOCATION, PLANT CHARACTERISTICS & PHOTOGRAPH.

(AREA SHADED) REPRESENTS STREETS WITH NO LANDSCAPE PARKWAY IN PUBLIC RIGHT OF WAY SEE COLLEGE PARK EAST STREET TREE RECOMMENDATION PLAN 1A.





<b>ALMOND STREET</b> PARK AREA	<b>ASTER STREET</b> 3500-4124	<b>BANYAN AVENUE</b> 3621-4241	<b>BIRCHWOOD AVENUE</b> 4124-4616	<b>BLUEBELL STREET</b> 3520-3691	<b>CAMELIA STREET</b> 3520-3621	<b>WISTERIA STREET</b> 35600-3810	<b>IRONWOOD AVENUE</b> 4141-4464	<b>GUAVA AVENUE</b> 4273-4349	<b>ELDER AVENUE</b> 4208-4886
TREE REC. PINUS CANARIENSIS PINUS CANARIENSIS MAGNOLIA GRANDIFLORA JACARANDA MIMOSIFOLIA	TREE REC. PYRUS KAWAKAMII ALBIZIA JULIBRISSIN BAUHINIA BLAKEANA GLEDITSIA TRICANTHOS	TREE REC. MAGNOLIA GRAND RUSSET LAGERSTROEMIA INDICA CHITALPA TASHKENTENSIS	TREE REC. MAGNOLIA GRAND RUSSET LAGERSTROEMIA INDICA CHITALPA TASHKENTENSIS	TREE REC. LAGERSTROEMIA INDICA CERCIS CANADENSIS MAGNOLIA GRAND RUSSET	TREE REC. LAGERSTROEMIA INDICA MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS	TREE REC. CUPANIOPSIS ANACARDIODES LAGERSTROEMIA INDICA LOPHOSTEMON CONFERTUS BRACHYCHITON POPULNEUS	TREE REC. LOPHOSTEMON CONFERTA CHITALPA TASHKENTENSIS LAGERSTROEMIA INDICA BAUHINIA BLAKEANA	TREE REC. LOPHOSTEMON CONFERTA MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS CERCIS CANADENSIS	TREE REC. MAGNOLIA GRANDIFLORA LOPHOSTEMON CONFERTA BAUHINIA BLAKEANA CHITALPA TASHKENTENSIS
<b>DAISY STREET</b> 3520-3560	<b>DOGWOOD AVENUE</b> 4164-4365	<b>FERN CIRCLE</b> 3520-3560	<b>FUCHSIA CIRCLE</b> 3800-3861	<b>FUCHSIA STREET</b> 3800-3721	<b>GOLDENROD CIRCLE</b> 3520-3560	<b>HAZELNUT AVENUE</b> 4300-4464	<b>FIR AVENUE</b> 4236-3751	<b>HEATHER STREET</b> 0000-0000	<b>VIOLET STREET</b> 3550-3820
TREE REC. LAGERSTROEMIA INDICA MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS	TREE REC. PYRUS CALLERYANA LAGERSTROEMIA INDICA CERCIS CANADENSIS	TREE REC. CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET LAGERSTROEMIA INDICA	TREE REC. PYRUS CALLERYANA LAGERSTROEMIA INDICA MAGNOLIA GRAND RUSSET	TREE REC. MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS CERCIS CANADENSIS	TREE REC. CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET MAGNOLIA GRAND RUSSET	TREE REC. CUPANIOPSIS ANACARDIODES PRUNUS CERASIFERA STENOCARPUS SINUATUS CHITALPA TASHKENTENSIS	TREE REC. LAGERSTROEMIA INDICA LAGERSTROEMIA INDICA CHITALPA TASHKENTENSIS CERCIS CANADENSIS	TREE REC. PYRUS KAWAKAMII LAGERSTROEMIA INDICA MAGNOLIA GRAND RUSSET PYRUS CALLERYANA	TREE REC. EUCALYPTUS SIDEROXYLON BRACHYCHITON POPULIFERA LIRODENDRON TULIPIFERA LAGERSTROEMIA INDICA

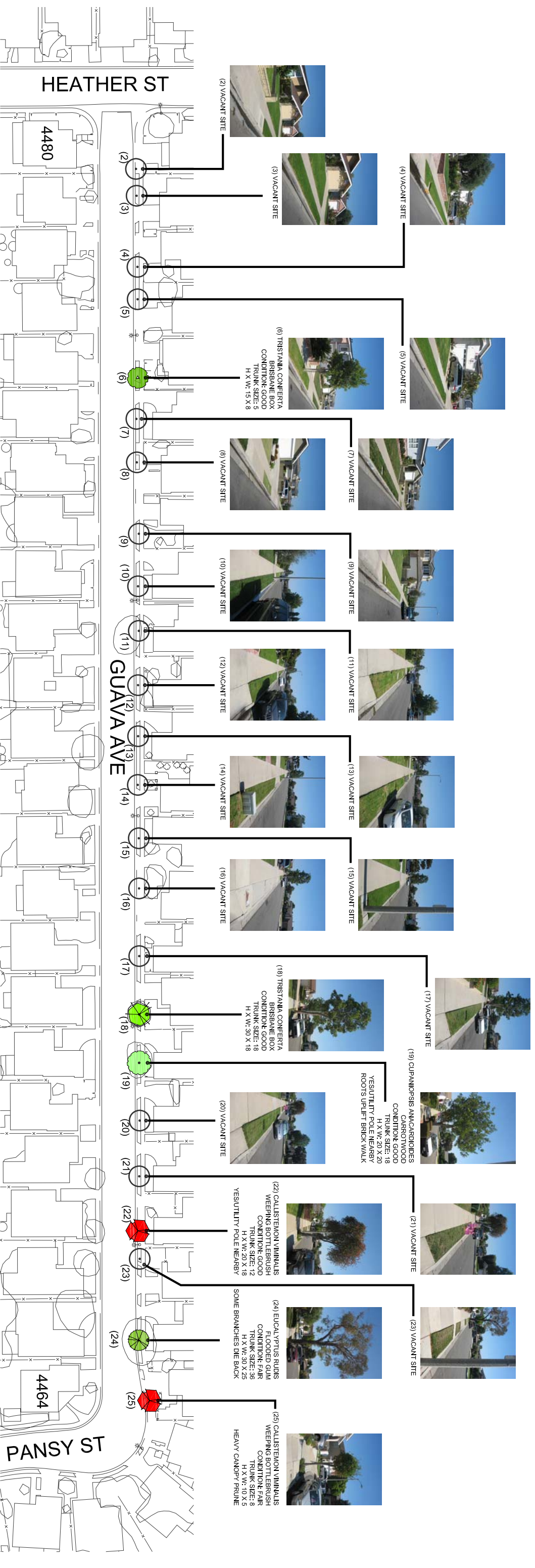


<b>CARNATION CIRCLE</b> 3520-3546	<b>CLOVER CIRCLE</b> 3520-3546	<b>COLUMBINE STREET</b> 3520-3570	<b>DAFFODIL CIRCLE</b> 3520-3561	<b>DAHLIA CIRCLE</b> 3520-3561	<b>DAISY CIRCLE</b> 3800-3861	<b>HEATHER CIRCLE</b> 3520-3560	<b>GOLDENROD STREET</b> 3770-3860	<b>IRIS CIRCLE</b> 3520-3560	<b>JASMINE CIRCLE</b> 3520-3561
TREE REC. MAGNOLIA GRAND RUSSET LAGERSTROEMIA INDICA CERCIS CANADENSIS	TREE REC. MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS CERCIS CANADENSIS	TREE REC. MAGNOLIA GRAND RUSSET CERCIS CANADENSIS LAGERSTROEMIA INDICA	TREE REC. MAGNOLIA GRAND RUSSET CERCIS CANADENSIS CHITALPA TASHKENTENSIS	TREE REC. LAGERSTROEMIA INDICA MAGNOLIA GRAND RUSSET CERCIS CANADENSIS	TREE REC. CHITALPA TASHKENTENSIS CERCIS CANADENSIS MAGNOLIA GRAND RUSSET	TREE REC. LAGERSTROEMIA INDICA CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET	TREE REC. PYRUS CALLERYANA LAGERSTROEMIA INDICA PYRUS CALLERYANA	TREE REC. CHITALPA TASHKENTENSIS PYRUS CALLERYANA MAGNOLIA GRAND RUSSET	TREE REC. LAGERSTROEMIA INDICA PYRUS CALLERYANA MAGNOLIA GRAND RUSSET
<b>MARIGOLD STREET</b> 3600-3690	<b>OLEANDER STREET</b> 3510-3751	<b>PANSY CIRCLE</b> 3520-3607	<b>PANSY STREET</b> 4464-4465	<b>PRIMROSE CIRCLE</b> 3530-3611	<b>PRIMROSE STREET</b> 3700-4680	<b>ROSE CIRCLE</b> 3540-3621	<b>SUNFLOWER CIRCLE</b> 3550-3631	<b>TEABERRY CIRCLE</b> 3550-3641	<b>CANDLEBERRY AVENUE</b> 3800-4881
TREE REC. LAGERSTROEMIA INDICA PYRUS CALLERYANA MAGNOLIA GRAND RUSSET	TREE REC. LAGERSTROEMIA INDICA PYRUS CALLERYANA MAGNOLIA GRAND RUSSET	TREE REC. PYRUS CALLERYANA CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET	TREE REC. LAGERSTROEMIA INDICA PYRUS CALLERYANA MAGNOLIA GRAND RUSSET	TREE REC. CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET LAGERSTROEMIA INDICA	TREE REC. PYRUS CALLERYANA MAGNOLIA GRAND RUSSET CHITALPA TASHKENTENSIS	TREE REC. CHITALPA TASHKENTENSIS MAGNOLIA GRAND RUSSET STENOCARPUS SINUATUS	TREE REC. PYRUS CALLERYANA CHITALPA TASHKENTENSIS PRUNUS CERASIFERA	TREE REC. PYRUS CALLERYANA LAGERSTROEMIA INDICA CERCIS CANADENSIS	TREE REC. PYRUS KAWAKAMII KOELRUTERIA PANICULATA TABBUJIA IMPETIGNOSA JACARANDA MIMOSIFOLIA

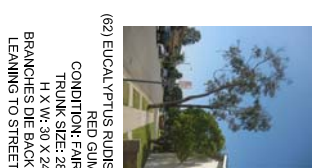
LISTED ARE (3) TREE SPECIES RECOMMENDATIONS FOR STREETS IN THE CITY OF SEAL BEACH WITH NO LANDSCAPE PUBLIC RIGHT OF WAY. TREE RECOMMENDATIONS ALONG WITH INSTALLATION DETAILS AND SPECIFICATIONS HAVE BEEN PROVIDED FOR THE CITY PUBLIC WORKS STAFF AND STREET TREE COMMITTEE TO ASSIST HOMEOWNERS IN THE CITY OF SEAL BEACH WHO WOULD LIKE TO PLANT A TREE ON PRIVATE PROPERTY ADJACENT TO THE CITY STREET.



**CITY OF SEAL BEACH**  
**COLLEGE PARK EAST**  
**STREET TREE RECOMMENDATION PLAN - 1A**



CITY OF SEAL BEACH  
COLLEGE PARK EAST DISTRICT  
GUAVA AVE  
(Heather St. - Pansy St.)



(62) EUCALYPTUS RUDIS  
RED GUM  
CONDITION: FAIR  
TRUNK SIZE: 28  
H X W: 25 X 14  
BRANCHES DIE BACK,  
LEANING TO STREET



(61) VACANT SITE



(60) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 22 X 12  
BRANCHES DIE BACK, UPLIFT VAULT



(59) VACANT SITE



(57) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 22 X 14  
YES/UNDERGROUND VAULT



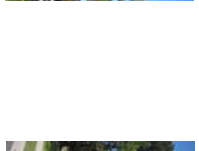
(58) PIRUS KANKAKAMI  
EVERGREEN PEAR  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W: 30 X 20  
YES/UNDERGROUND VAULT  
BRANCHES DIE BACK



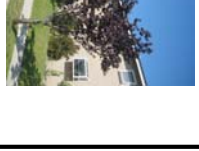
(56) VACANT SITE



(55) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 25 X 12  
SOME BRANCHES DIE BACK



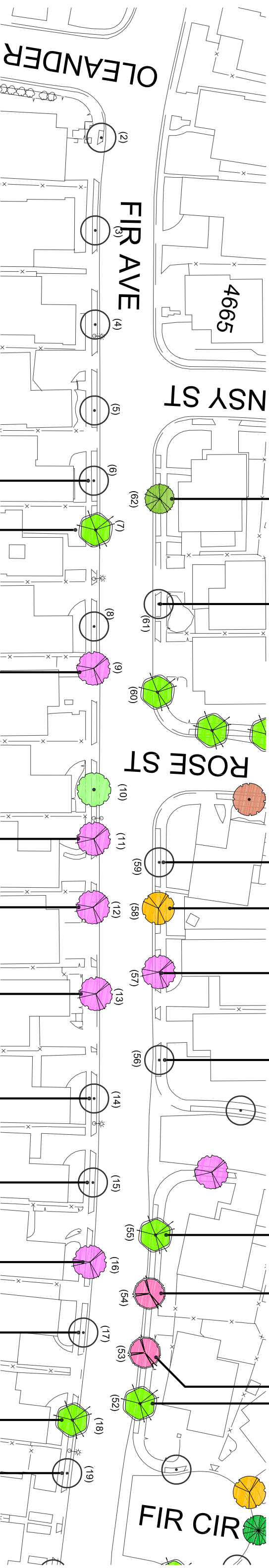
(54) PRUNUS ATROPURPUREA  
PURPLE LEAF-FLOWERING PLUM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 12 X 11  
LOW BRANCH & LEANING TO STREET



(53) PRUNUS ATROPURPUREA  
PURPLE LEAF-FLOWERING PLUM  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 10 X 8  
LOW BRANCH & LEANING TO STREET



(52) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 22 X 12  
SOME BRANCHES DIE BACK



(2) VACANT SITE



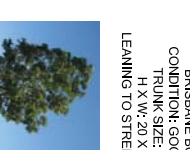
(3) VACANT SITE



(4) VACANT SITE



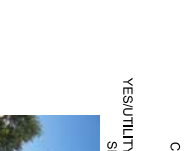
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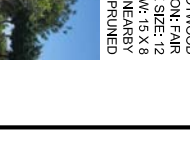
(6) VACANT SITE



(7) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 20 X 18  
LEANING TO STREET



(8) VACANT SITE



(9) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: FAIR  
H X W: 10 X 8



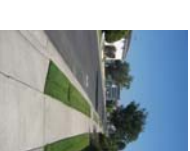
(10) CUPANIOPSIS ANACARDIODES  
CARROTWOOD  
CONDITION: FAIR  
TRUNK SIZE: 12  
H X W: 15 X 8  
YES/UTILITY POLE NEARBY  
SEVERE PRUNED



(11) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 14  
H X W: 20 X 16  
YES/UTILITY POLE NEARBY



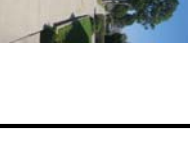
(12) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 12  
H X W: 18 X 12



(13) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 12  
H X W: 18 X 18  
UPLIFT BRICK WALK



(14) VACANT SITE



(15) VACANT SITE



(16) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 12  
H X W: 20 X 12



(17) VACANT SITE

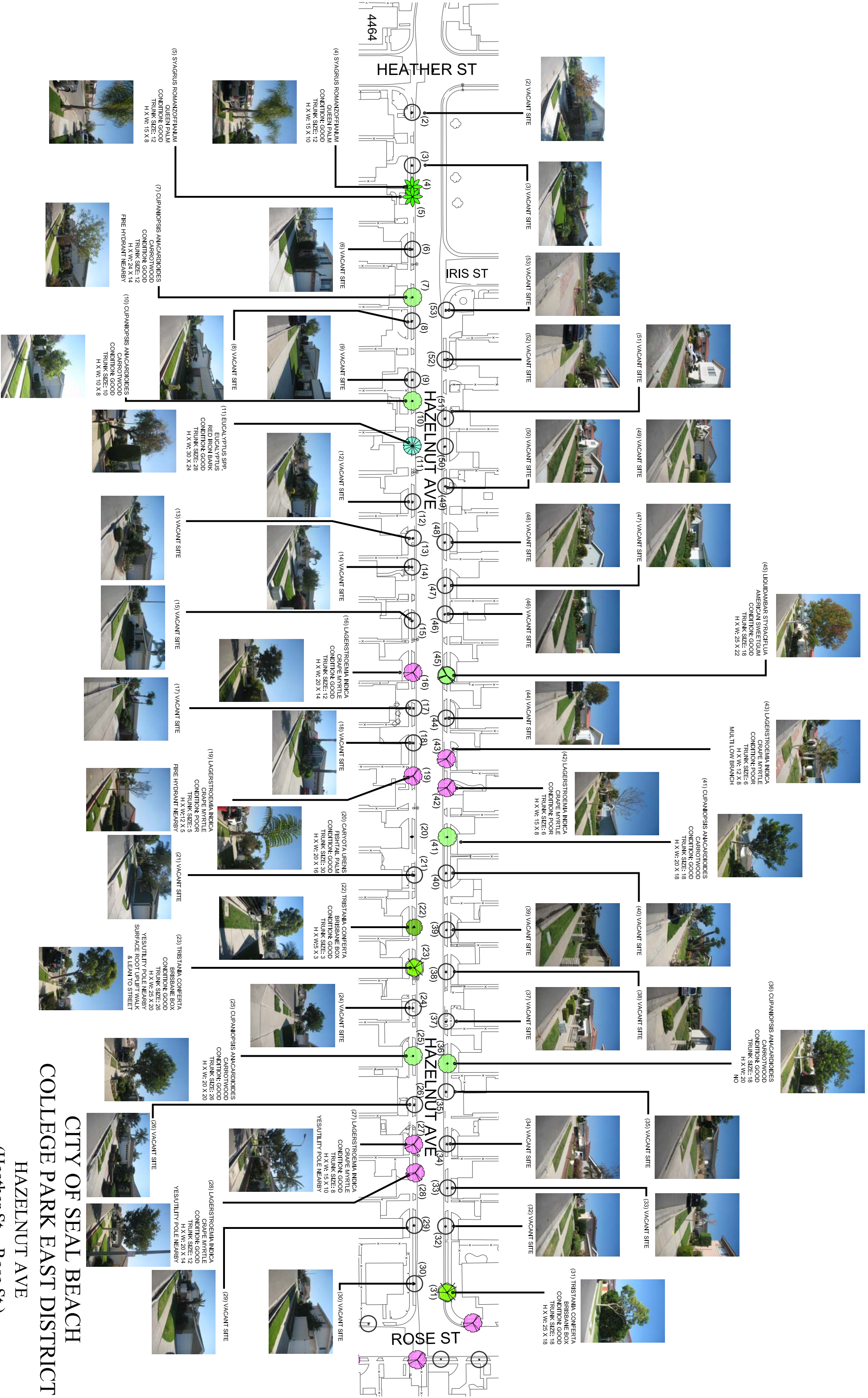


(18) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: EXCELLENT  
TRUNK SIZE: 28  
H X W: 30 X 20  
YES/UTILITY POLE NEARBY  
ROOTS UPLIFTING WALK

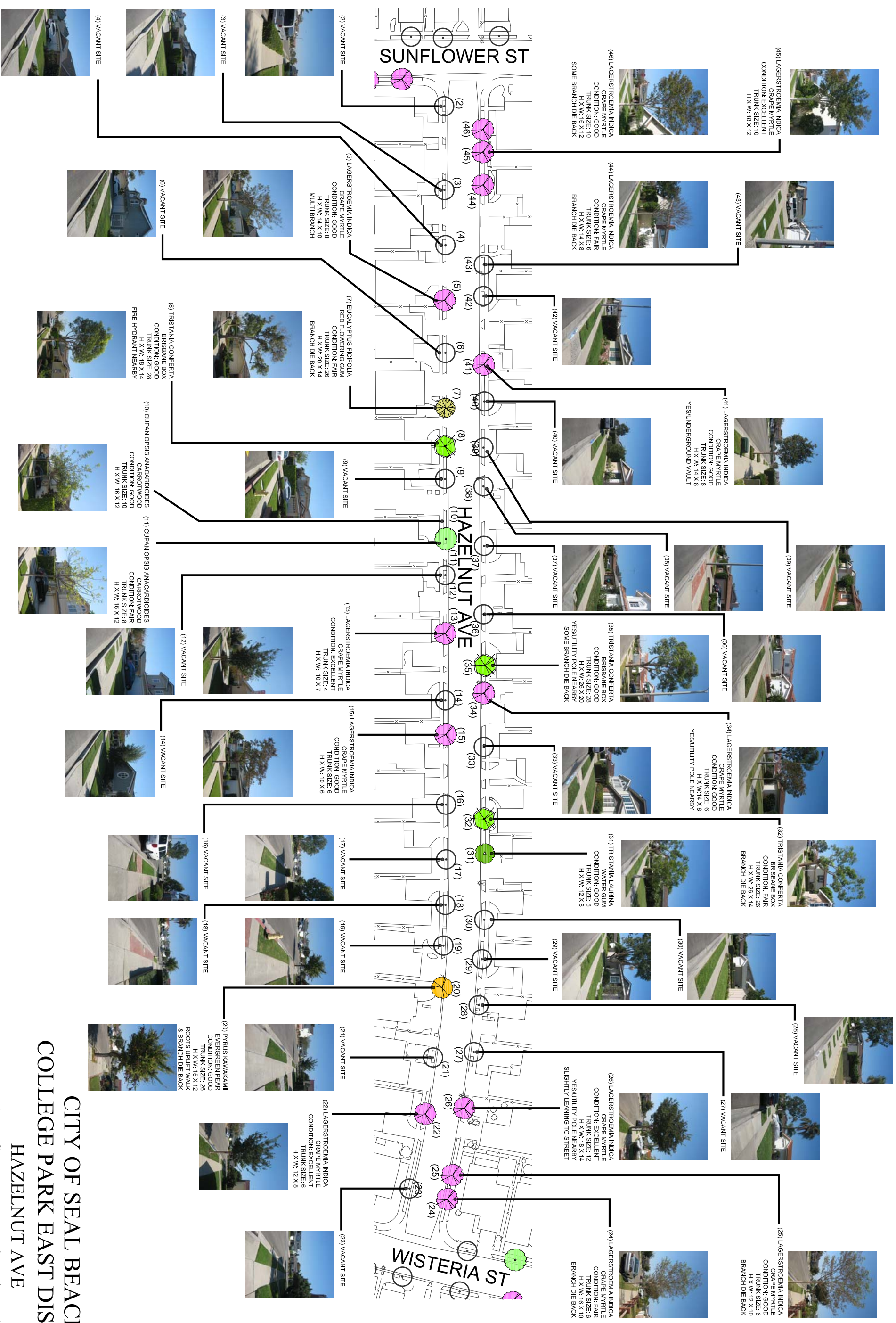


(19) VACANT SITE

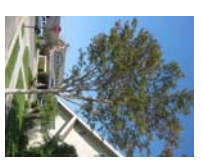
CITY OF SEAL BEACH  
COLLEGE PARK EAST DISTRICT  
FIR AVE  
(Oleander St. - Fir Cir.)



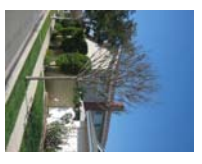
**CITY OF SEAL BEACH**  
**COLLEGE PARK EAST DISTRICT**  
**HAZELNUT AVE**  
**(Heather St. - Rose St.)**



(45) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 10  
H X W: 18 X 12



(46) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 10  
H X W: 16 X 12  
SOME BRANCH DIE BACK



(44) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: FAIR  
TRUNK SIZE: 6  
H X W: 14 X 8  
BRANCH DIE BACK



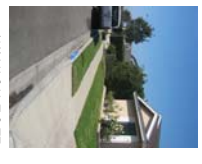
(43) VACANT SITE



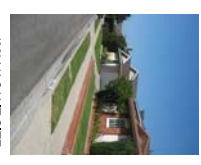
(42) VACANT SITE



(41) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 14 X 8  
YES/UNDERGROUND VAULT



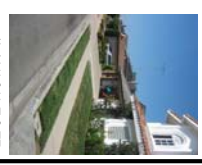
(40) VACANT SITE



(39) VACANT SITE



(38) VACANT SITE



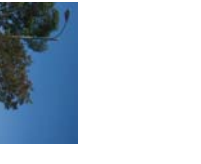
(37) VACANT SITE



(36) VACANT SITE



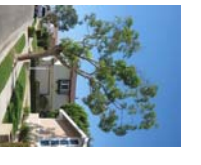
(35) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 28  
H X W: 28 X 20  
YES/UTILITY POLE NEARBY  
SOME BRANCH DIE BACK



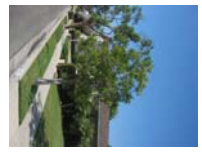
(34) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 14 X 8  
YES/UTILITY POLE NEARBY



(33) VACANT SITE



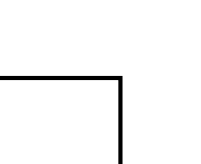
(32) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: FAIR  
TRUNK SIZE: 26  
H X W: 26 X 14  
BRANCH DIE BACK



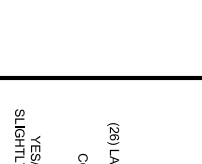
(31) TRISTANIA LAURINA  
WATER GUM  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 12 X 8



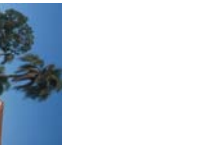
(29) VACANT SITE



(30) VACANT SITE



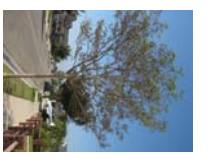
(29) VACANT SITE



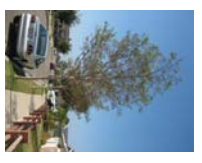
(27) VACANT SITE



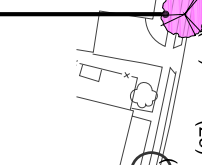
(28) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 12  
H X W: 18 X 14  
YES/UTILITY POLE NEARBY  
SLIGHTLY LEANING TO STREET



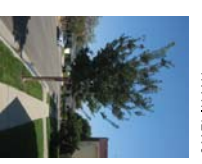
(25) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 12 X 10  
BRANCH DIE BACK



(24) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: FAIR  
TRUNK SIZE: 6  
H X W: 16 X 10  
BRANCH DIE BACK



(22) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 8  
H X W: 12 X 8



(23) VACANT SITE



(20) PYRUS KAWAKAMI  
EVERGREEN PEAR  
CONDITION: GOOD  
TRUNK SIZE: 28  
H X W: 15 X 12  
ROOTS UPLIFT WALK  
& BRANCH DIE BACK



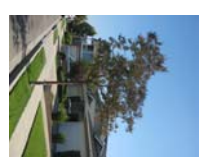
(18) VACANT SITE



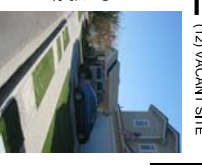
(16) VACANT SITE



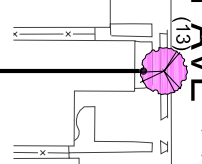
(17) VACANT SITE



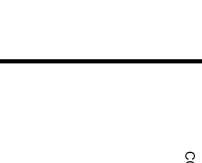
(15) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 10 X 6



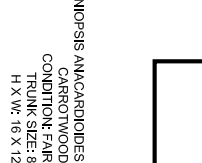
(14) VACANT SITE



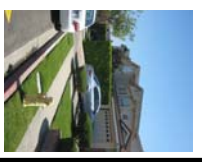
(13) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 4  
H X W: 10 X 7



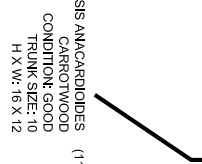
(12) VACANT SITE



(11) CUPANIOPSIS ANACARDIODES  
CARRIOTTWOOD  
CONDITION: FAIR  
TRUNK SIZE: 8  
H X W: 16 X 12



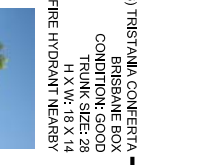
(9) VACANT SITE



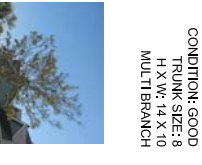
(7) EUCALYPTUS ROSTRATA  
RED FLOWERING GUM  
CONDITION: FAIR  
TRUNK SIZE: 10  
H X W: 20 X 14  
BRANCH DIE BACK



(6) VACANT SITE



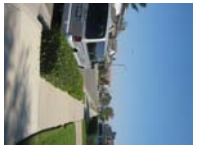
(8) TRISTANIA CONFERTA  
BRISBANE BOX  
CONDITION: GOOD  
TRUNK SIZE: 28  
H X W: 18 X 14  
FIRE HYDRANT NEARBY



(6) VACANT SITE



(9) LAGERSTROEMIA INDICA  
GRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 10  
H X W: 16 X 12  
MULTI BRANCH

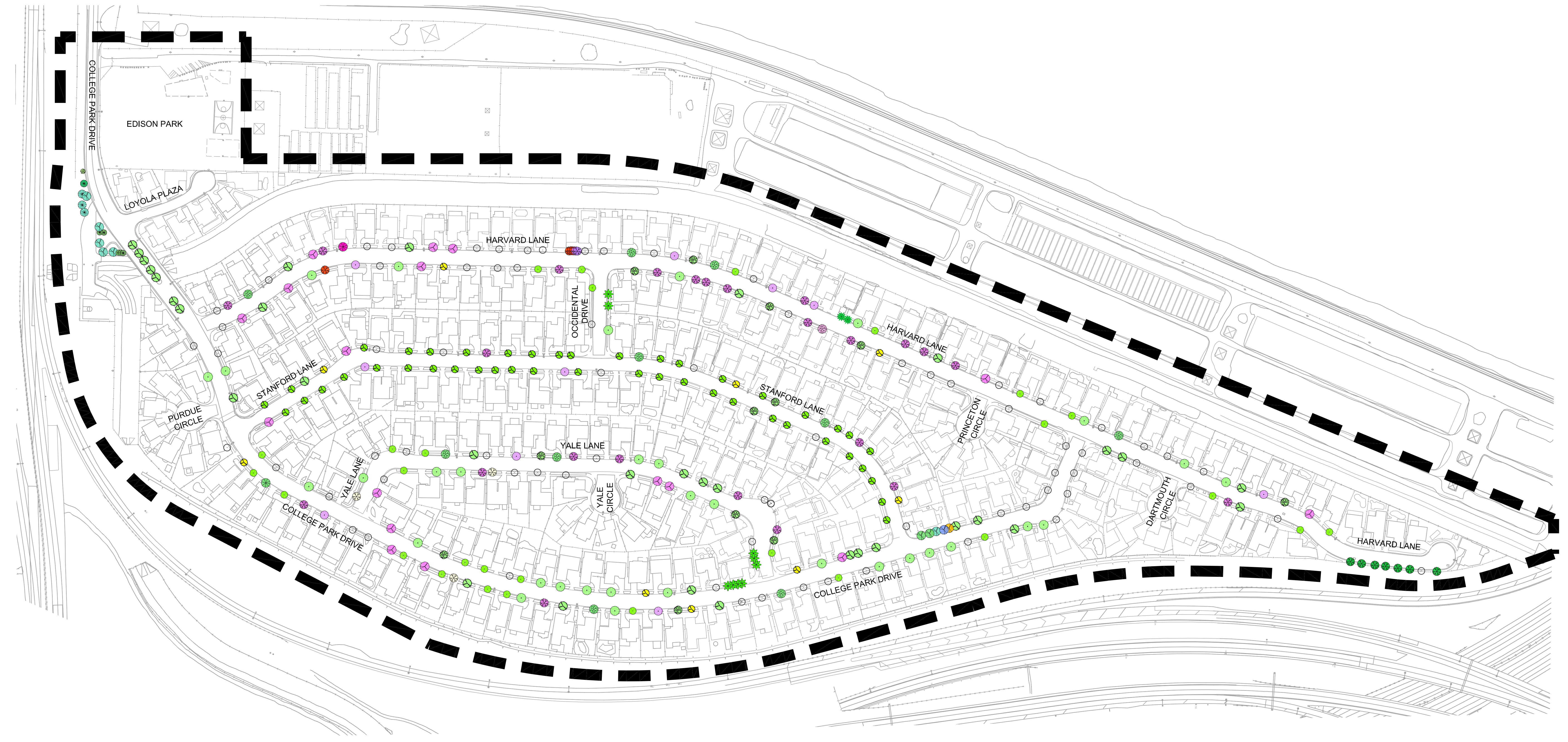


(3) VACANT SITE



(4) VACANT SITE

CITY OF SEAL BEACH  
COLLEGE PARK EAST DISTRICT  
HAZELNUT AVE  
(Sunflower St. - Wisteria St.)

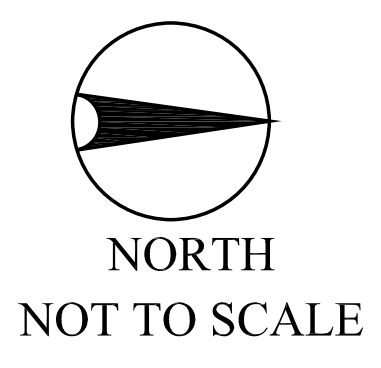


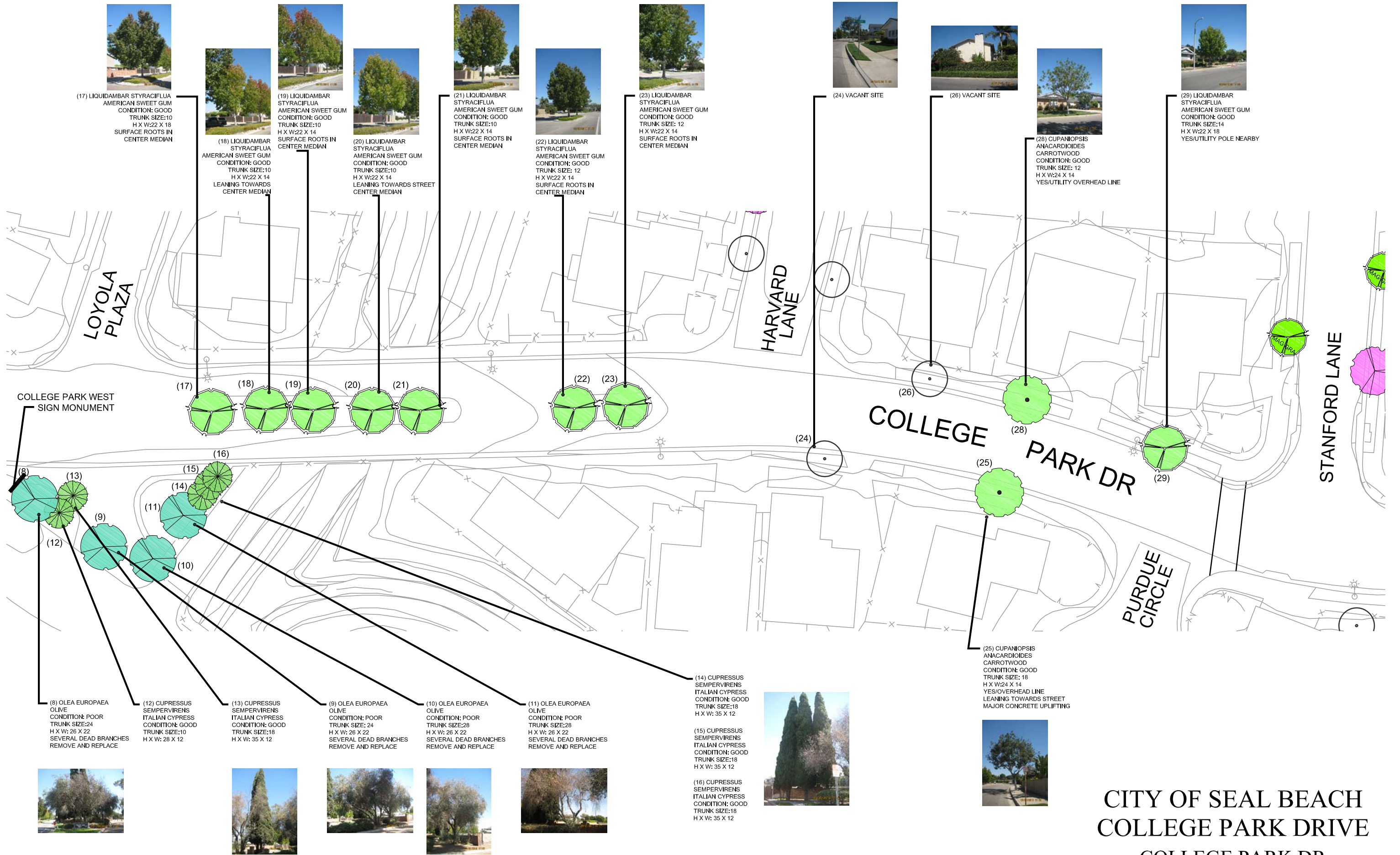
**TREE LEGEND**

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	<i>Albizia julibrissin</i>	Silk Tree	1
	<i>Bauhinia blakeana</i>	Hong Kong Orchid Tree	1
	<i>Cassia leptophylla</i>	Gold Medallion Tree	11
	<i>Ceratonia siliqua</i>	Carob	1
	<i>Chitalpa tashkentensis</i> 'Pink Dawn'	Pink Dawn Chitalpa	4
	<i>Chitalpa tashkentensis</i>	Chitalpa	5
	<i>Cupaniopsis ancardioides</i>	Carrotwood	33
	<i>Cupressus sempervirens</i>	Italian Cypress	5
	<i>Eucalyptus camaldulensis</i>	Red Gum	1
	<i>Eucalyptus sideroxylon</i>	Red Ironbark	3
	<i>Ginkgo biloba</i>	Maidenhair Tree	10
	<i>Lagerstroemia indica</i>	Crape Myrtle	17
	<i>Liquidambar styraciflua</i>	American Sweetgum	33
	<i>Magnolia grandiflora</i>	Southern Magnolia	45
	<i>Olea europaea</i>	Olive	6
	<i>Persea americana</i>	Avocado Tree	2
	<i>Phoenix roebelenii</i>	Pygmy Date Palm	2

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	<i>Podocarpus gracilior</i>	Fern Pine	7
	<i>Prunus armeniaca</i>	Apricot	4
	<i>Prunus domestica</i>	Prunus Spp.	1
	<i>Pyrus calleryana</i> 'Bradford'	Bradford Pear	15
	<i>Pyrus calleryana</i> 'Danicer'	Danicer Pear	5
	<i>Pyrus calleryana</i>	Callery Pear	5
	<i>Schinus terebinthifolius</i>	Brazilian Pepper	28
	<i>Spathodea campanulata</i>	African Tulip Tree	1
	<i>Syagrus romanzoffianum</i>	Queen Palm	9
	<i>Tipuana tipu</i>	Tipu	1
	<i>Ulmus parviflora</i>	Chinese Elm	11
	<i>Ulmus pumila</i>	Siberian Elm	1
	<i>Washingtonia robusta</i>	Mexican Fan Palm	1
	Vacant sites:		71
	(See approved recommended tree species list dated: November 3, 2009 for new tree species to be planted).		

REFER TO ENLARGED LANDSCAPE PLANS FOR EXISTING TREE SPECIES, ADDRESS LOCATION, PLANT CHARACTERISTICS & PHOTOGRAPH.





(17) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W:22 X 18  
SURFACE ROOTS IN  
CENTER MEDIAN

(18) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W:22 X 14  
LEANING TOWARDS  
CENTER MEDIAN

(19) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W:22 X 14  
SURFACE ROOTS IN  
CENTER MEDIAN

(20) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W:22 X 14  
LEANING TOWARDS STREET  
CENTER MEDIAN

(21) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W:22 X 14  
SURFACE ROOTS IN  
CENTER MEDIAN

(22) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W:22 X 14  
SURFACE ROOTS IN  
CENTER MEDIAN

(23) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W:22 X 14  
SURFACE ROOTS IN  
CENTER MEDIAN

(24) VACANT SITE

(26) VACANT SITE

(28) CUPANIOPSIS ANACARDIODES  
CARROTWOOD  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W:24 X 14  
YES/UTILITY OVERHEAD LINE

(29) LIQUIDAMBAR STYRACIFLUA  
AMERICAN SWEET GUM  
CONDITION: GOOD  
TRUNK SIZE:14  
H X W:22 X 18  
YES/UTILITY POLE NEARBY

COLLEGE PARK WEST  
SIGN MONUMENT

(8) OLEA EUROPAEA  
OLIVE  
CONDITION: POOR  
TRUNK SIZE:24  
H X W: 26 X 22  
SEVERAL DEAD BRANCHES  
REMOVE AND REPLACE

(12) CUPRESSUS SEMPERVIRENS  
ITALIAN CYPRESS  
CONDITION: GOOD  
TRUNK SIZE:10  
H X W: 28 X 12

(13) CUPRESSUS SEMPERVIRENS  
ITALIAN CYPRESS  
CONDITION: GOOD  
TRUNK SIZE:18  
H X W: 35 X 12

(9) OLEA EUROPAEA  
OLIVE  
CONDITION: POOR  
TRUNK SIZE: 24  
H X W: 26 X 22  
SEVERAL DEAD BRANCHES  
REMOVE AND REPLACE

(10) OLEA EUROPAEA  
OLIVE  
CONDITION: POOR  
TRUNK SIZE:28  
H X W: 26 X 22  
SEVERAL DEAD BRANCHES  
REMOVE AND REPLACE

(11) OLEA EUROPAEA  
OLIVE  
CONDITION: POOR  
TRUNK SIZE:28  
H X W: 26 X 22  
SEVERAL DEAD BRANCHES  
REMOVE AND REPLACE

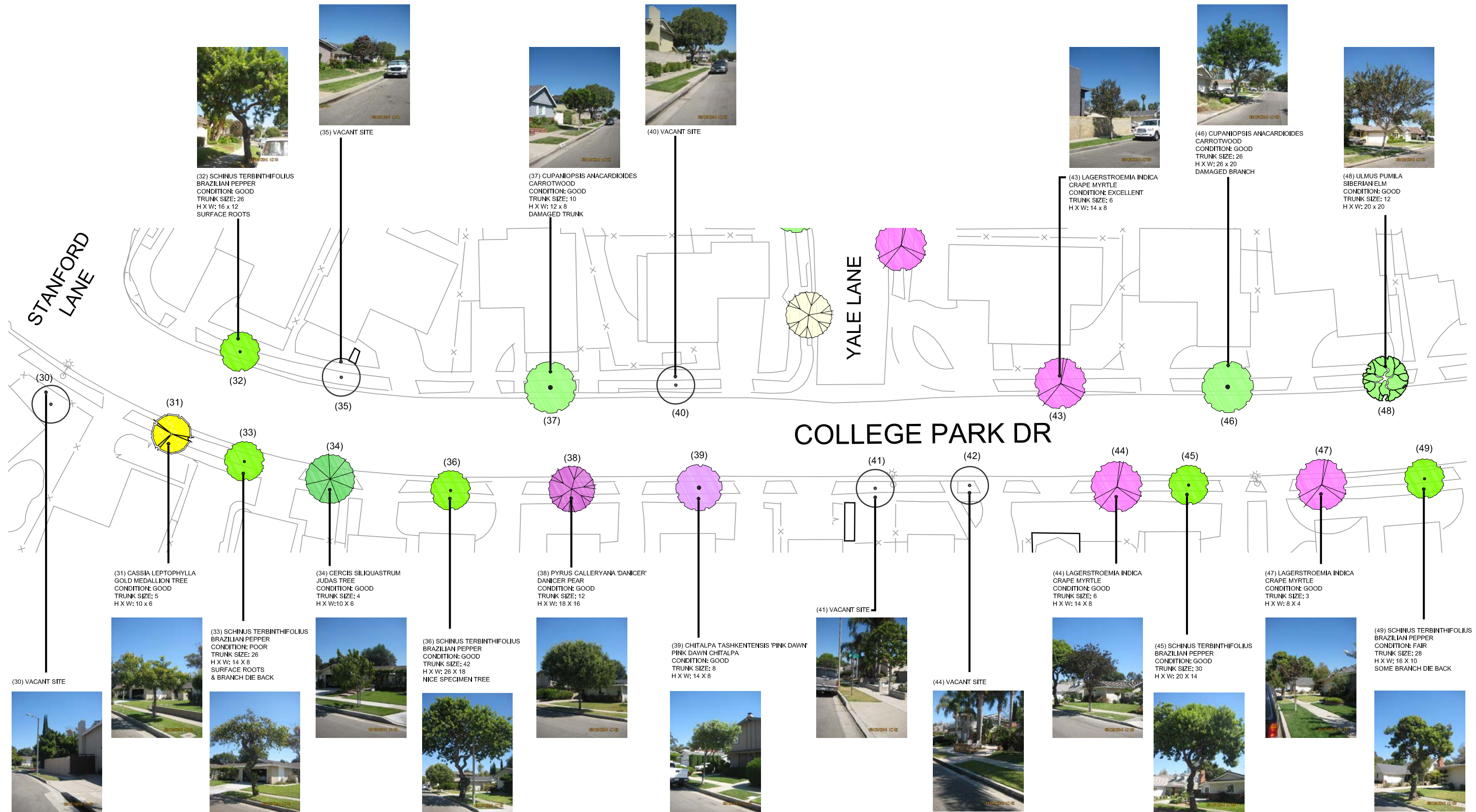
(14) CUPRESSUS SEMPERVIRENS  
ITALIAN CYPRESS  
CONDITION: GOOD  
TRUNK SIZE:18  
H X W: 35 X 12

(15) CUPRESSUS SEMPERVIRENS  
ITALIAN CYPRESS  
CONDITION: GOOD  
TRUNK SIZE:18  
H X W: 35 X 12

(16) CUPRESSUS SEMPERVIRENS  
ITALIAN CYPRESS  
CONDITION: GOOD  
TRUNK SIZE:18  
H X W: 35 X 12

(25) CUPANIOPSIS ANACARDIODES  
CARROTWOOD  
CONDITION: GOOD  
TRUNK SIZE: 18  
H X W:24 X 14  
YES/OVERHEAD LINE  
LEANING TOWARDS STREET  
MAJOR CONCRETE UPLIFTING

CITY OF SEAL BEACH  
COLLEGE PARK DRIVE  
COLLEGE PARK DR  
(LOYOLA PLAZA TO STANFORD)



(32) SCHINUS TERBINTHIFOLIUS  
BRAZILIAN PEPPER  
CONDITION: GOOD  
TRUNK SIZE: 26  
H X W: 16 x 12  
SURFACE ROOTS



(35) VACANT SITE



(37) CUPANIOPSIS ANACARDIODES  
CARROTWOOD  
CONDITION: GOOD  
TRUNK SIZE: 10  
H X W: 12 x 8  
DAMAGED TRUNK



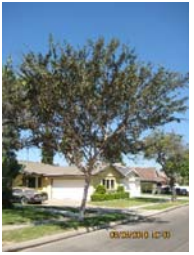
(40) VACANT SITE



(43) LAGERSTROEMIA INDICA  
CRAPE MYRTLE  
CONDITION: EXCELLENT  
TRUNK SIZE: 6  
H X W: 14 x 8



(46) CUPANIOPSIS ANACARDIODES  
CARROTWOOD  
CONDITION: GOOD  
TRUNK SIZE: 26  
H X W: 26 x 20  
DAMAGED BRANCH



(48) ULMUS PUMILA  
SIBERIAN ELM  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 20 x 20

STANFORD LANE

YALE LANE

COLLEGE PARK DR

(30) VACANT SITE



(31) CASSIA LEPTOPHYLLA  
GOLD MEDALLION TREE  
CONDITION: GOOD  
TRUNK SIZE: 5  
H X W: 10 x 6



(31)

(33) SCHINUS TERBINTHIFOLIUS  
BRAZILIAN PEPPER  
CONDITION: POOR  
TRUNK SIZE: 26  
H X W: 14 X 8  
SURFACE ROOTS  
& BRANCH DIE BACK



(33)

(34) CERCIS SILIQUASTRUM  
JUDAS TREE  
CONDITION: GOOD  
TRUNK SIZE: 4  
H X W: 10 X 6



(34)

(36) SCHINUS TERBINTHIFOLIUS  
BRAZILIAN PEPPER  
CONDITION: GOOD  
TRUNK SIZE: 42  
H X W: 26 X 18  
NICE SPECIMEN TREE



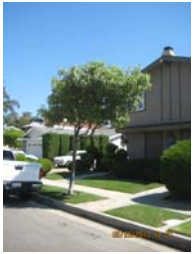
(36)

(38) PYRUS CALLERYANA 'DANICER'  
DANICER PEAR  
CONDITION: GOOD  
TRUNK SIZE: 12  
H X W: 18 X 16



(38)

(39) CHITALPA TASHKENTENSIS 'PINK DAWN'  
PINK DAWN CHITALPA  
CONDITION: GOOD  
TRUNK SIZE: 8  
H X W: 14 X 8



(39)

(41) VACANT SITE



(41)

(44) VACANT SITE



(42)

(44) LAGERSTROEMIA INDICA  
CRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 6  
H X W: 14 X 8



(44)

(45) SCHINUS TERBINTHIFOLIUS  
BRAZILIAN PEPPER  
CONDITION: GOOD  
TRUNK SIZE: 30  
H X W: 20 X 14



(45)

(47) LAGERSTROEMIA INDICA  
CRAPE MYRTLE  
CONDITION: GOOD  
TRUNK SIZE: 3  
H X W: 8 X 4



(47)

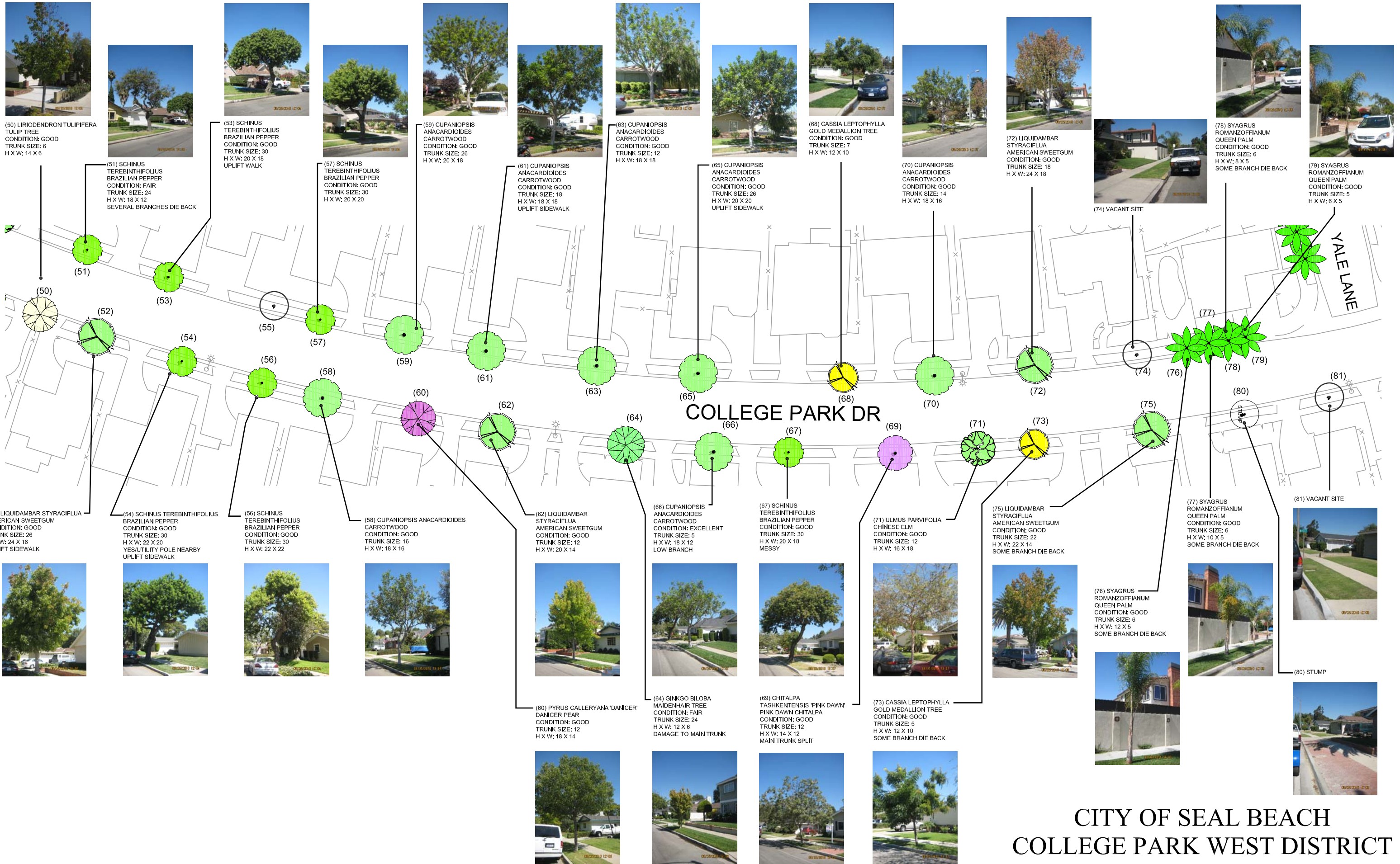
(49) SCHINUS TERBINTHIFOLIUS  
BRAZILIAN PEPPER  
CONDITION: FAIR  
TRUNK SIZE: 28  
H X W: 16 X 10  
SOME BRANCH DIE BACK



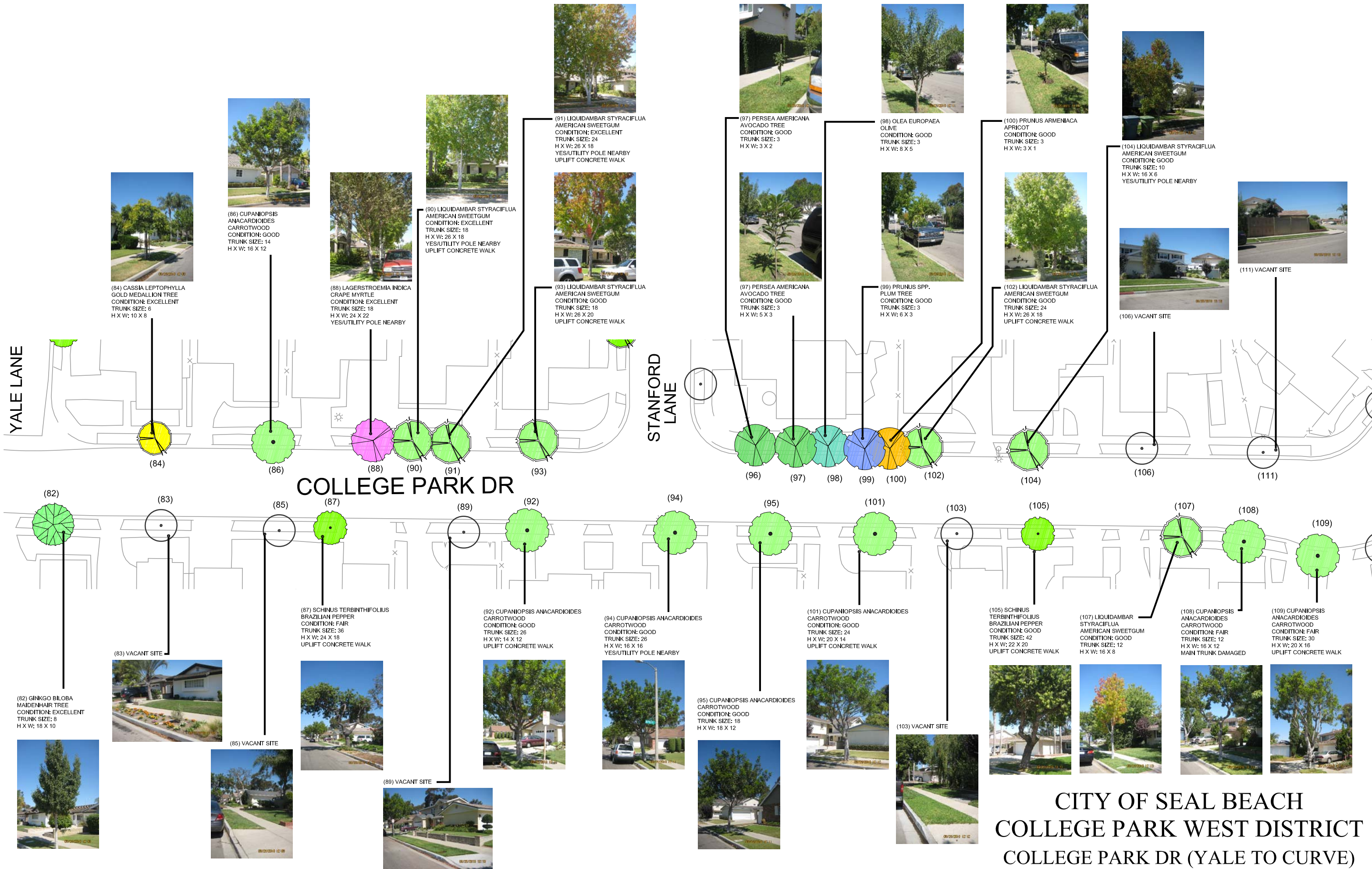
(49)

CITY OF SEAL BEACH  
COLLEGE PARK WEST DISTRICT  
COLLEGE PARK DR (STANFORD TO YALE)

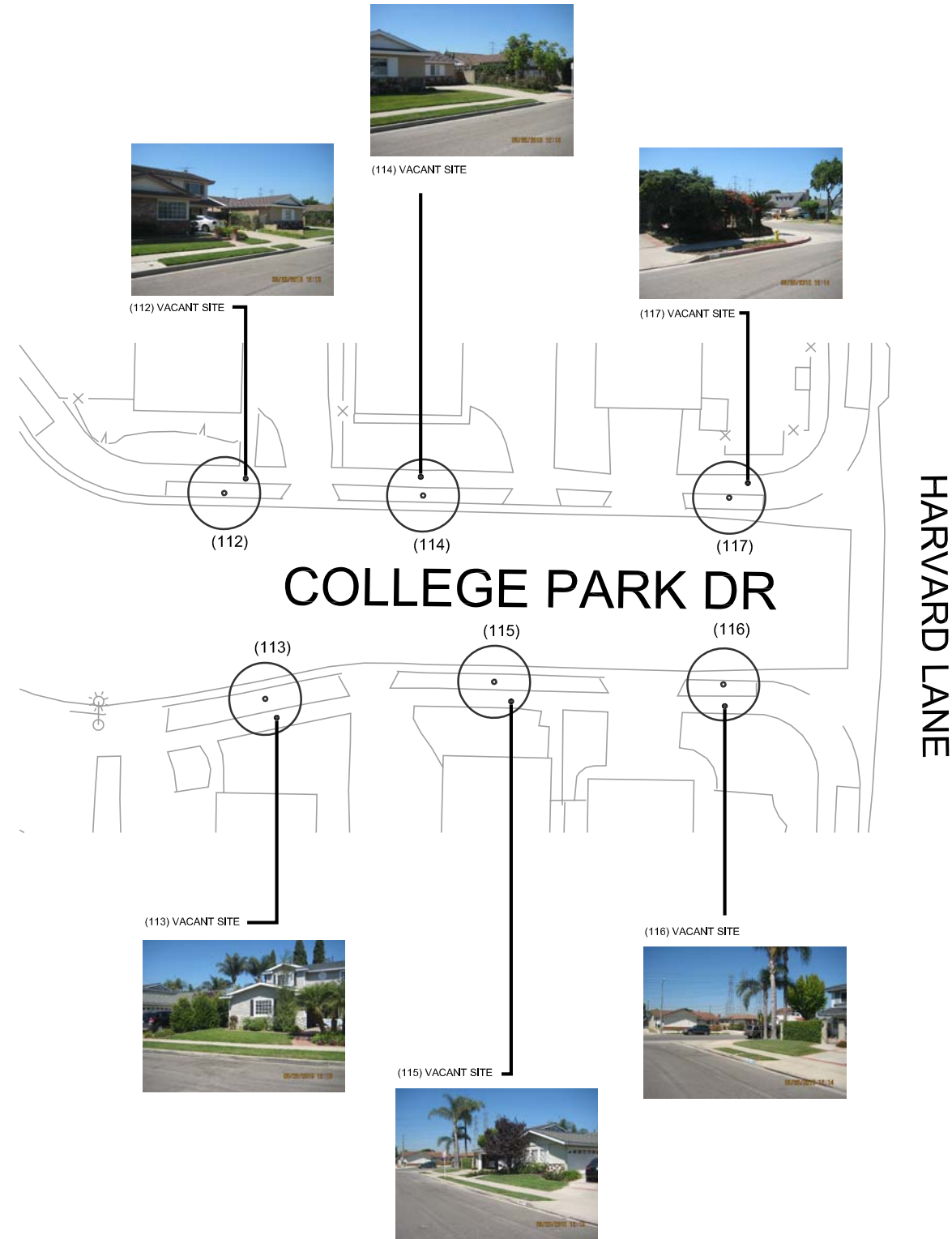




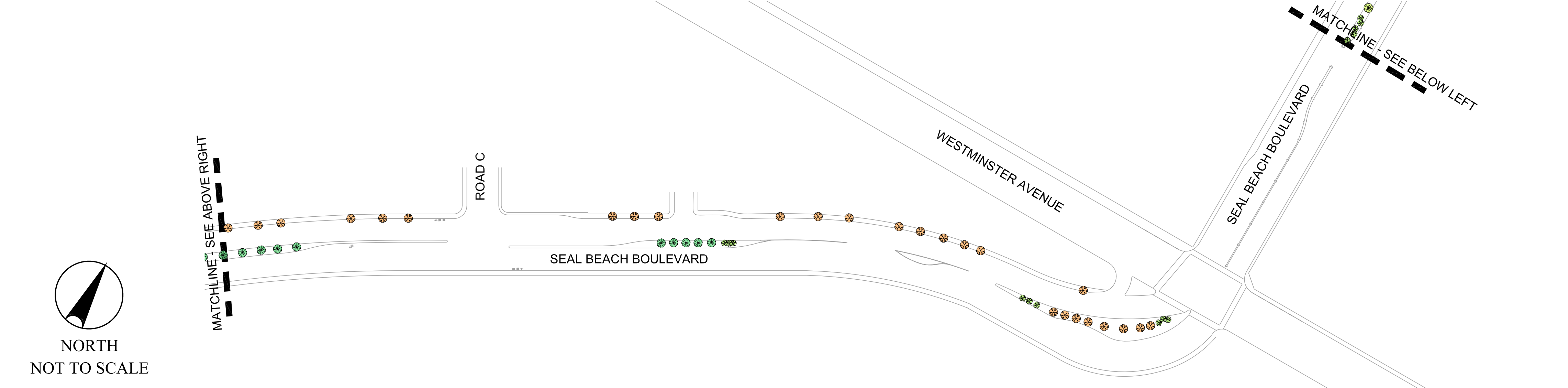
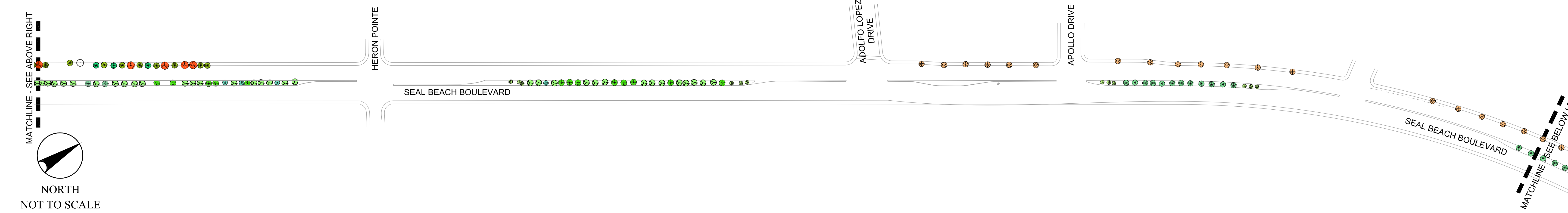
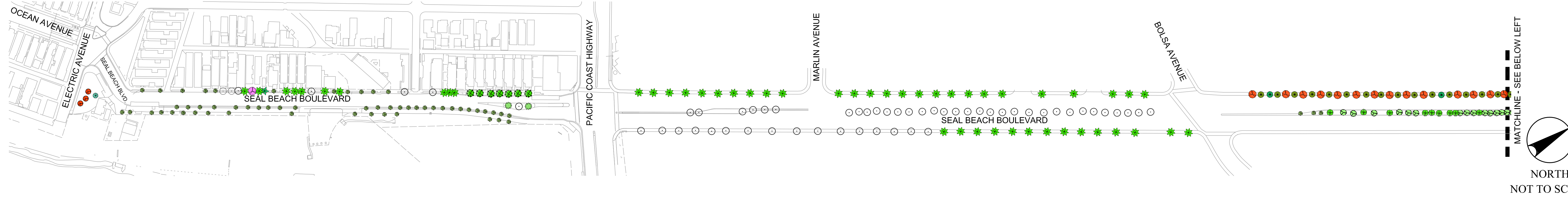
CITY OF SEAL BEACH  
COLLEGE PARK WEST DISTRICT  
COLLEGE PARK DR (280FT TO YALE)



**CITY OF SEAL BEACH  
COLLEGE PARK WEST DISTRICT  
COLLEGE PARK DR (YALE TO CURVE)**

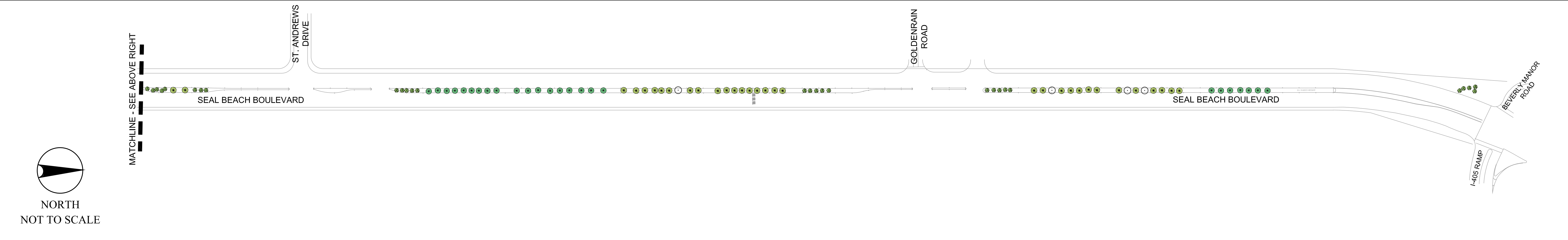


CITY OF SEAL BEACH  
 COLLEGE PARK WEST DISTRICT  
 COLLEGE PARK DR (CURVE TO HARVARD)

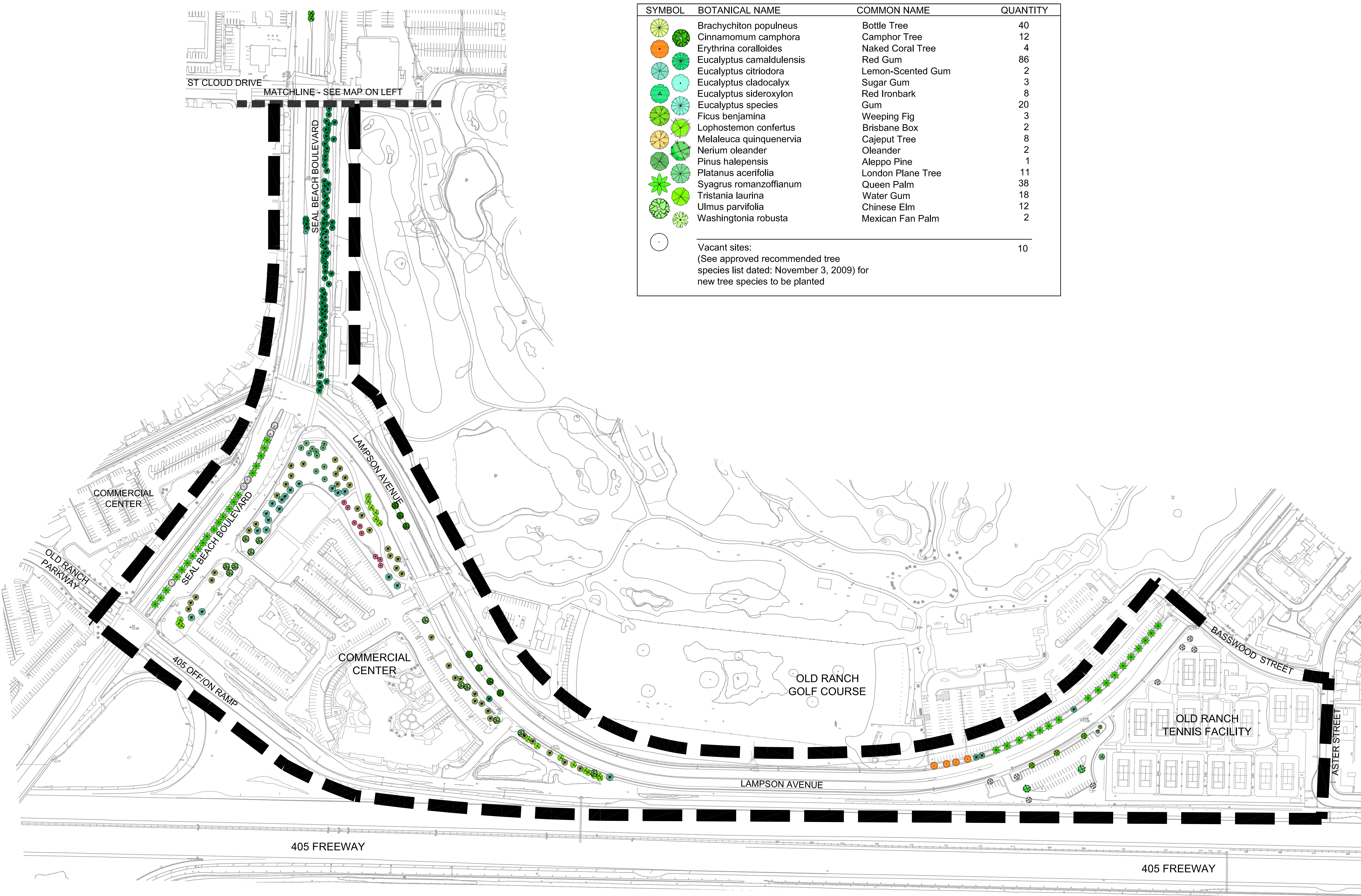
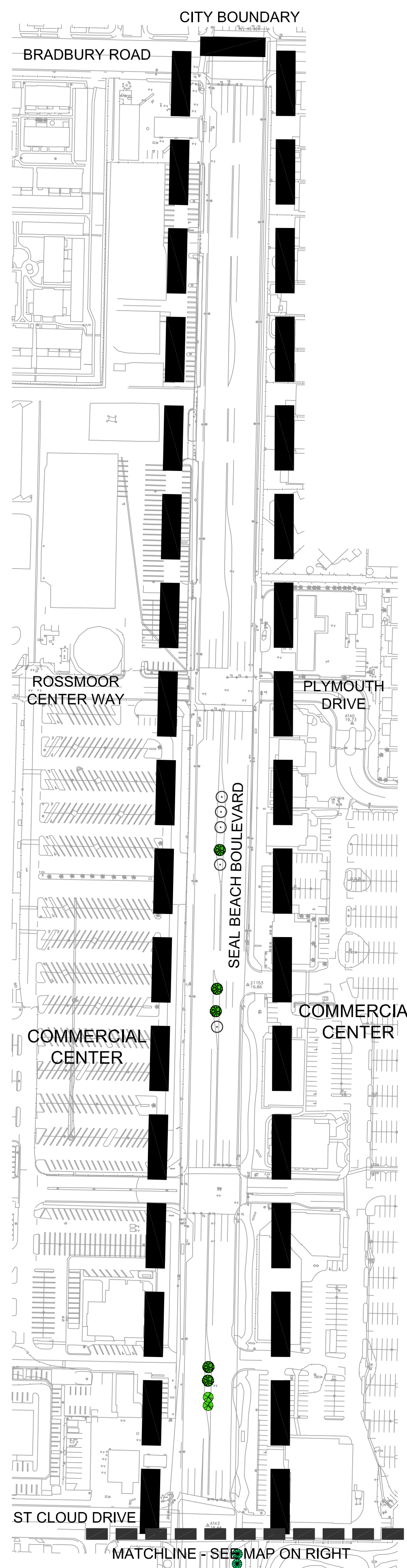


### TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	Archontophoenix cunninghamiana	King Palm	1
	Brachychiton acerifolius	Flame Tree	24
	Brachychiton populneus	Bottle Tree	32
	Erythrina caffra	Coral Tree	3
	Eucalyptus camaldulensis	Red Gum	5
	Eucalyptus citriodora	Lemon-Scented Gum	5
	Lagerstroemia indica	Crape Myrtle	1
	Liquidambar styraciflua	American Sweet Gum	46
	Lophostemon confertus	Brisbane Box	22
	Melaleuca quinquenervia	Cajeput Tree	44
	Metrosideros excelsus	New Zealand Christmas Tree	7
	Pinus species	Pine	2
	Phoenix canariensis	Canary Island Palm	2
	Platanus acerifolia	London Plane Tree	48
	Stenocarpus sinuatus	Firewheel Tree	18
	Syagrus romanzoffianum	Queen Palm	50
	Washingtonia robusta	Mexican Fan Palm	107
	Vacant sites: (See approved recommended tree species list dated: November 3, 2009 for new tree species to be planted).		61



REFER TO ENLARGED LANDSCAPE PLANS FOR EXISTING TREE SPECIES, ADDRESS LOCATION, PLANT CHARACTERISTICS & PHOTOGRAPH.



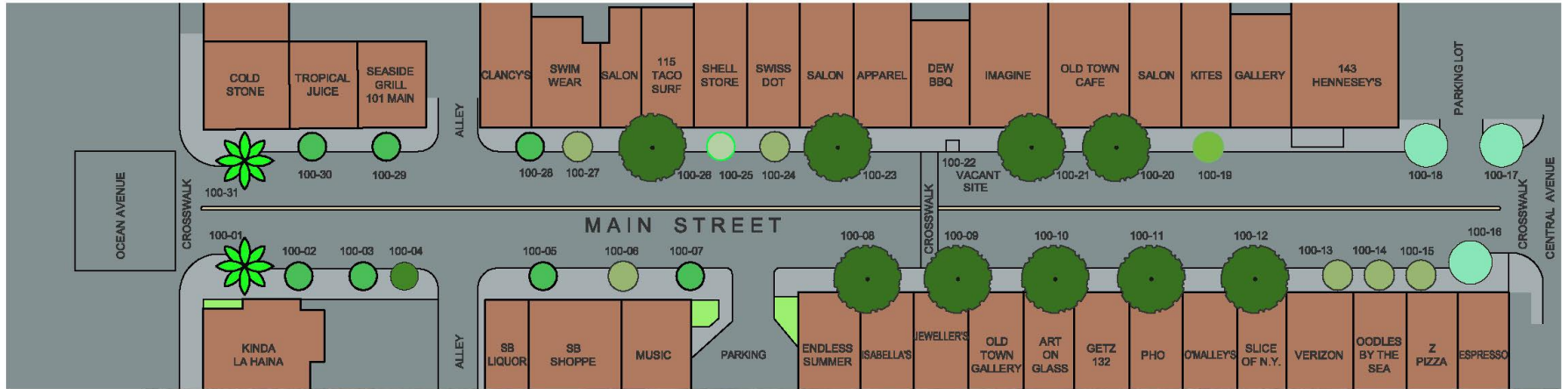
### TREE LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY
	<i>Brachychiton populneus</i>	Bottle Tree	40
	<i>Cinnamomum camphora</i>	Camphor Tree	12
	<i>Erythrina coralloides</i>	Naked Coral Tree	4
	<i>Eucalyptus camaldulensis</i>	Red Gum	86
	<i>Eucalyptus citriodora</i>	Lemon-Scented Gum	2
	<i>Eucalyptus cladocalyx</i>	Sugar Gum	3
	<i>Eucalyptus sideroxylon</i>	Red Ironbark	8
	<i>Eucalyptus species</i>	Gum	20
	<i>Ficus benjamina</i>	Weeping Fig	3
	<i>Lophostemon confertus</i>	Brisbane Box	2
	<i>Melaleuca quinquenervia</i>	Cajeput Tree	8
	<i>Nerium oleander</i>	Oleander	2
	<i>Pinus halepensis</i>	Aleppo Pine	1
	<i>Platanus acerifolia</i>	London Plane Tree	11
	<i>Syagrus romanzoffianum</i>	Queen Palm	38
	<i>Tristania laurina</i>	Water Gum	18
	<i>Ulmus parvifolia</i>	Chinese Elm	12
	<i>Washingtonia robusta</i>	Mexican Fan Palm	2
	Vacant sites: (See approved recommended tree species list dated: November 3, 2009) for new tree species to be planted		10












NORTH STREETSCAPE ELEVATION



SOUTH STREETSCAPE ELEVATION

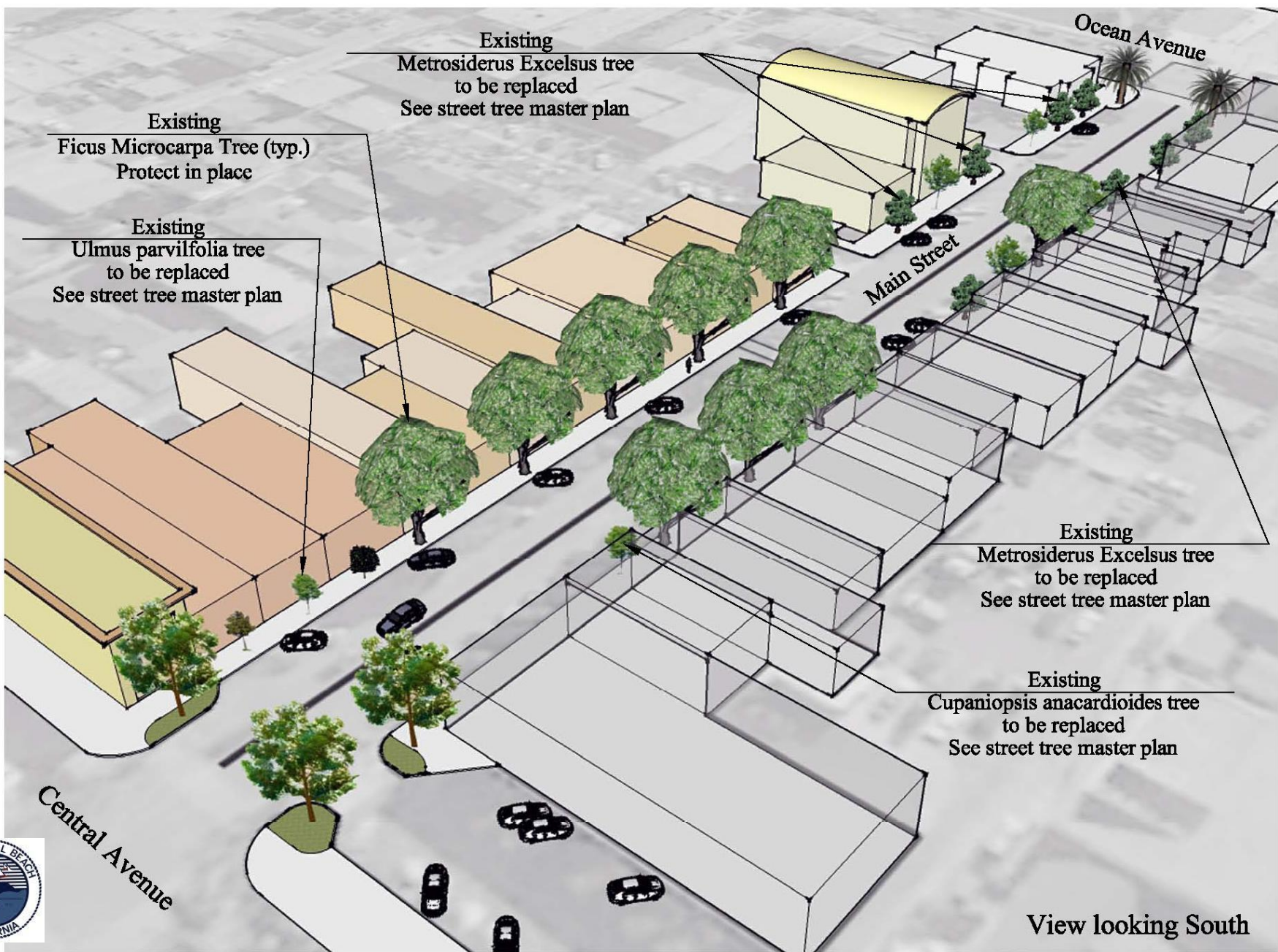
NOTE:  
 EXAMPLE PROJECT REPRESENTS:  
 MAIN STREET ADDRESS BLOCK NUMBER 100  
 STREET TREE SPECIES NUMBERING SYSTEM  
 IS BASED ON CITY STREET ADDRESS BLOCK  
 STREET TREE I.D. NUMBERING:  
 BEGINS AT 100-01 AND ENDS AT 100-31

**EXISTING STREET TREE SPECIES LEGEND**

	PHOENIX CANARIENSIS CANARY ISLAND DATE PALM		EUCALYPTUS FICIFOLIA RED FLOWERING GUM
	METROSIDEROS EXCELSUS NEW ZEALAND CHRISTMAS TREE		CUPANIOPSIS ANACARDIODES CARROTWOOD
	ULMUS PARVIFOLIA CHINESE ELM		EUCALYPTUS CITRIODORA LEMON SCENTED GUM
	FICUS MICROCARPA 'NITIDA' INDIAN LAUREL FIG		ARBUTUS UNEDO STRAWBERRY TREE

**CITY OF SEAL BEACH  
 MAIN STREET (100 BLOCK)  
 EXISTING SITE CONDITIONS**





RMA International, Inc.  
Landscape Architecture

View looking South

City of Seal Beach  
Main Street : 100 Block  
Existing Site Conditions

INSTALL NEW  
FICUS MICROCARPA

INSTALL NEW  
FICUS MICROCARPA

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

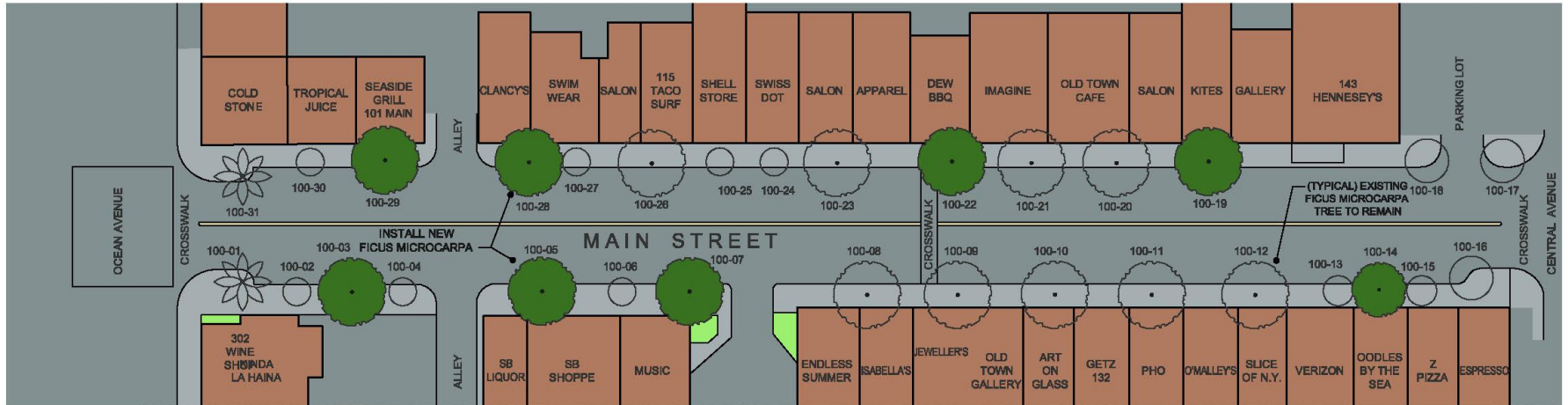
INSTALL NEW  
FICUS MICROCARPA

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREE TO REMAIN

INSTALL NEW  
FICUS MICROCARPA



NORTH STREETScape ELEVATION



INSTALL NEW  
FICUS MICROCARPA  
TYPICAL

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

INSTALL NEW  
FICUS MICROCARPA  
TYPICAL

INSTALL NEW  
FICUS MICROCARPA  
TYPICAL

INSTALL NEW  
FICUS MICROCARPA  
TYPICAL



SOUTH STREETScape ELEVATION

NOTE:  
EXAMPLE PROJECT REPRESENTS:  
MAIN STREET ADDRESS BLOCK NUMBER 100  
STREET TREE SPECIES NUMBERING SYSTEM  
IS BASED ON CITY STREET ADDRESS BLOCK  
STREET TREE I.D. NUMBERING:  
BEGINS AT 100-01 AND ENDS AT 100-31

PROPOSED STREET TREE SPECIES LEGEND

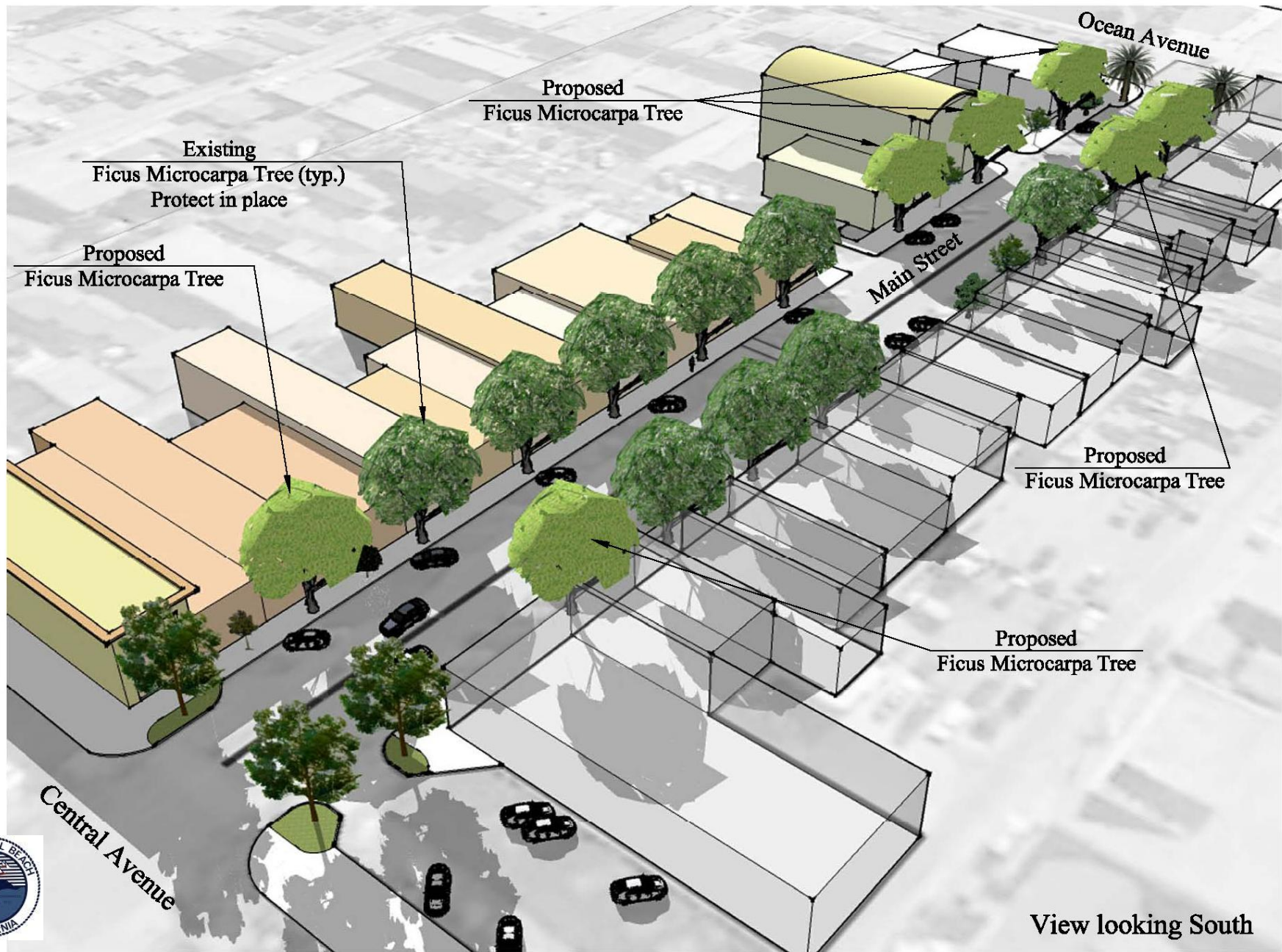


FICUS MICROCARPA 'NITIDA' (BOTANICAL NAME)  
INDIAN LAUREL FIG TREE (COMMON NAME)  
TREE I.D. NUMBER: 100-03, 100-05, 100-07, 100-14,  
100-19, 100-22, 100-28, 100-29

CITY OF SEAL BEACH  
MAIN STREET (100 BLOCK)  
STREET TREE MASTER PLAN







RMA International, Inc.  
Landscape Architecture

View looking South  
City of Seal Beach  
Main Street : 100 Block  
Proposed Street Tree Master Plan

**DISTRICT: OLD TOWN**  
**Existing Street Tree Species**  
**Main Street 100 Block**

November 1, 2010

	Location	Address	Code	Botanical Name	Common Name	Condition	Planting Area (ft)	Size (h x w) (ft)	Trunk Dia, size (in)	Utl.	Paving/ Curb Condition	Misc./Maint.
1	MAIN STREET	100	2	Phoenix canariensis	Canary Island Date Palm	Poor	6 x 8	14 x 10	42	Utility Line	Good	Concrete Paver
2	MAIN STREET	100	3	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	12 x 10	12	Utility Line	Good	Concrete Paver
3	MAIN STREET	100	4	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	8 x 4	5	Utility Line	Good	Concrete Paver
4	MAIN STREET	100	5	Arbutus unedo 'Marina'	Marina Arbutus	Good	4 x 4	8 x 5	5	Utility Line	Good	Concrete-Metal Gate
5	MAIN STREET	101	31	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	13 x 8	12	Yes	Uplifting	Concrete
6	MAIN STREET	101	32	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	12 x 6	10	None	Uplifting	Concrete
7	MAIN STREET	101	33	Phoenix canariensis	Canary Island Date Palm	Fair	6 x 6	16 x 16	42	Yes	Uplifting	Concrete Paving
8	MAIN STREET	112	6	Metrosideros excelsus	New Zealand Christmas Tree	Good	4 x 4	14 x 10	12	Utility Line	Good	Concrete Paver
9	MAIN STREET	113	29	Ulmus parvifolia	Chinese Elm	Fair	4 x 4	12 x 6	6	None	Good	Concrete- Metal Gate
10	MAIN STREET	113	30	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	10 x 5	4	None	Good	Concrete
11	MAIN STREET	116	7	Pyrus calleryana 'Danicer'	Danicer Pear	Fair	4 x 4	13 x 8	8	Utility Line	Good	Concrete- Metal Gate
12	MAIN STREET	117	28	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	26 x 22	36	Utility Line	Uplifting	Concrete Paver
13	MAIN STREET	118	8	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	12 x 6	5	None	Good	Concrete Metal Gate
14	MAIN STREET	119	27	Eucalyptus cladocalyx	Sugar Gum	Good	4 x 4	20 x 10	14	Utility Line	Good	Concrete Paver
15	MAIN STREET	121	26	Ulmus parvifolia	Chinese Elm	Fair	4 x 4	12 x 8	4	Utility Line	Good	Concrete Metal Gate
16	MAIN STREET	123	25	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	28 x 25	30	Utility Line	Good	Concrete Paver
17	MAIN STREET	124	9	Metrosideros excelsus	New Zealand Christmas Tree	Fair	4 x 4	9 x 4	5	None	Good	Concrete- Metal Gate
18	MAIN STREET	126	10	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	26 x 19	30	Utility Line	Good	Concrete Paver
19	MAIN STREET	127	24	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	7 x 4	16 x 8	9	None	Good	Concrete Paver
20	MAIN STREET	129	23	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	22 x 16	30	None	Good	Concrete Paver
21	MAIN STREET	130	11	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	28 x 24	36	Utility Line	Good	Concrete Paver
22	MAIN STREET	132	12	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	28 x 18	30	None	Good	Concrete Paver
23	MAIN STREET	133	22	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	28 x 25	30	Utility Line	Uplifting	Pavers
24	MAIN STREET	136	13	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	28 x 18	30	None	Good	Concrete Paver
25	MAIN STREET	137	21	Cupaniopsis anacardioides	Carrotwood	Good	4 x 4	13 x 10	12	None	Good	Concrete
26	MAIN STREET	140	14	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	28 x 22	32	Utility Line	Uplifting	Concrete Paver
27	MAIN STREET	142	15	Ulmus parvifolia	Chinese Elm	Good	4 x 4	12 x 8	3	Utility Line	Good	Concrete- Metal Gate
28	MAIN STREET	143	19	Eucalyptus camaldulensis	Red Gum	Good	6 x 4	22 x 12	24	Yes	Good	Near Banner Pole
29	MAIN STREET	143	20	Eucalyptus camaldulensis	Red Gum	Good	6 x 4	30 x 22	26	Utility Line	Good	Concrete
30	MAIN STREET	144	16	Ulmus parvifolia	Chinese Elm	Fair	4 x 4	13 x 10	6	None	Good	Concrete Metal Gate
31	MAIN STREET	146	17	Ulmus parvifolia	Chinese Elm	Fair	4 x 4	12 x 6	6	None	Good	Concrete Metal Gate
32	MAIN STREET	146	18	Eucalyptus citriodora	Lemon-Scented Gum	Good	6 x 4	30 x 12	28	Yes	Good	Near Banner Pole

Represents Existing & Recommended Street Tree # 1

Represents trees that are in fair to moderate condition, suggest removal & plant new recommended tree species

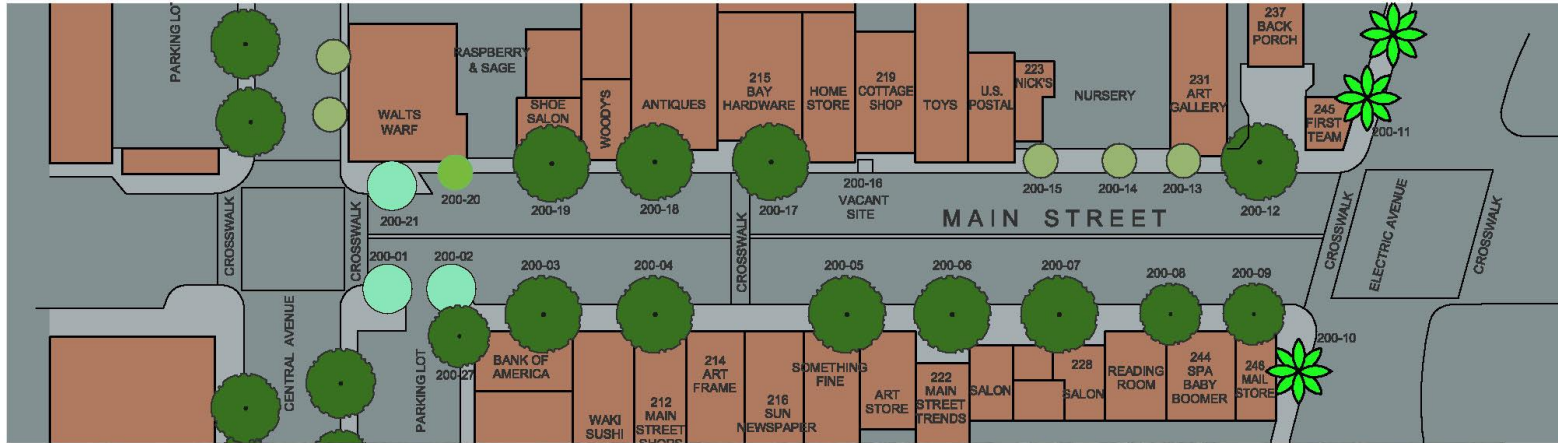
Represents trees that are in good condition but not a recommended tree species, recommend to remain in place

Represents existing concrete paving, recommend removal and install colored concrete pavers





**NORTH STREETScape ELEVATION**








**SOUTH STREETScape ELEVATION**

**NOTE:**  
 EXAMPLE PROJECT REPRESENTS:  
 MAIN STREET ADDRESS BLOCK NUMBER 200

STREET TREE SPECIES NUMBERING SYSTEM  
 IS BASED ON CITY STREET ADDRESS BLOCK

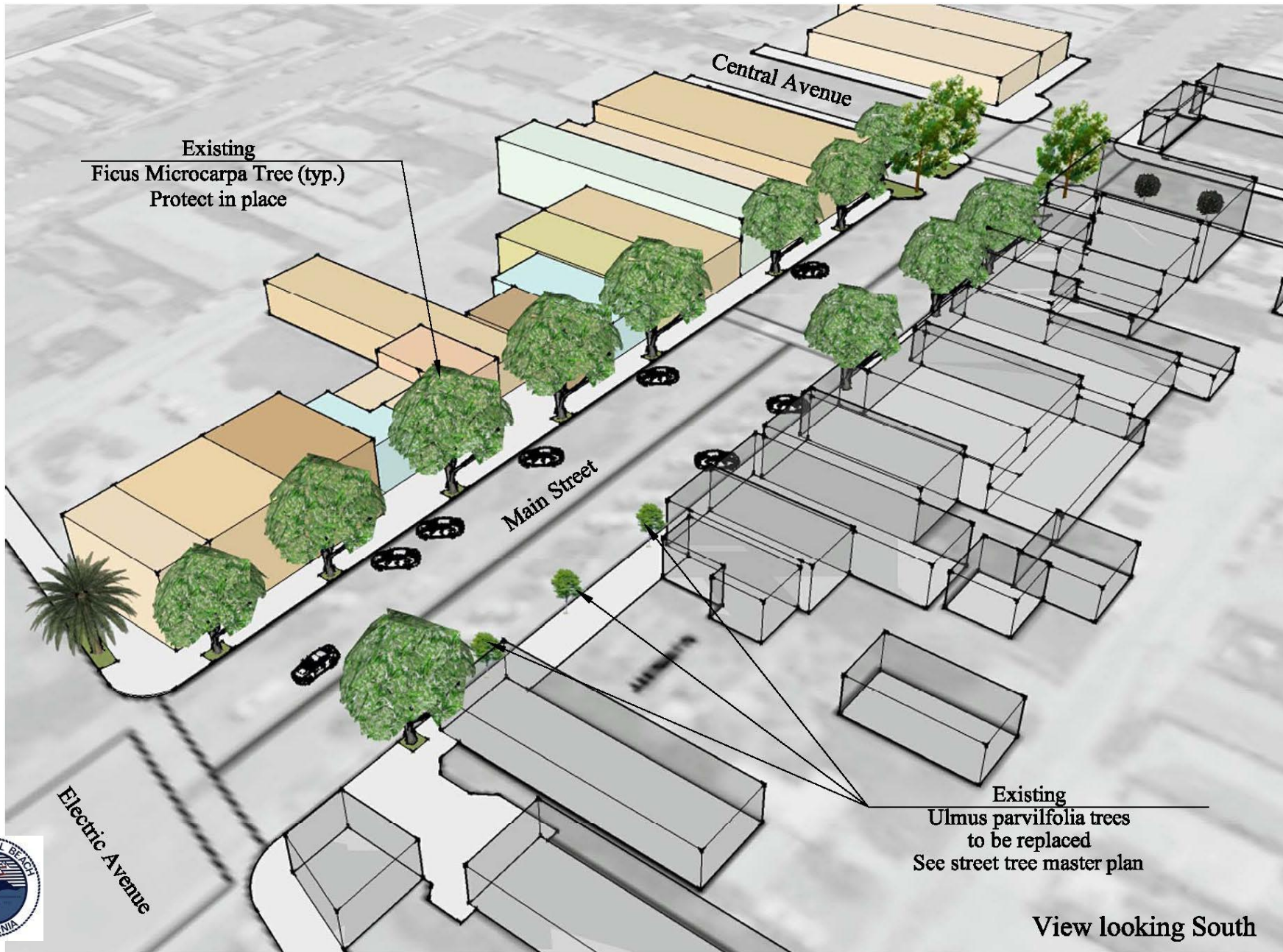
STREET TREE I.D. NUMBERING:  
 BEGINS AT 200-01 AND ENDS AT 200-21

**EXISTING STREET TREE SPECIES LEGEND**

- |   |  |   |  |
|---|--|---|--|
|  | PHOENIX CANARIENSIS<br>CANARY ISLAND DATE PALM |  | CUPANIOPSIS ANACARDIOIDES<br>CARROTWOOD    |
|  | ULMUS PARVIFOLIA<br>CHINESE ELM                |  | EUCALYPTUS CITRIODORA<br>LEMON SCENTED GUM |
|  | FICUS MICROCARPA 'NITIDA'<br>INDIAN LAUREL FIG |   |  |

**CITY OF SEAL BEACH  
 MAIN STREET (200 BLOCK)  
 EXISTING SITE CONDITIONS**





Existing  
Ficus Microcarpa Tree (typ.)  
Protect in place

Existing  
Ulmus parvifolia trees  
to be replaced  
See street tree master plan

View looking South



RMA International, Inc.  
Landscape Architecture

City of Seal Beach  
Main Street : 200 Block  
Existing Site Conditions

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

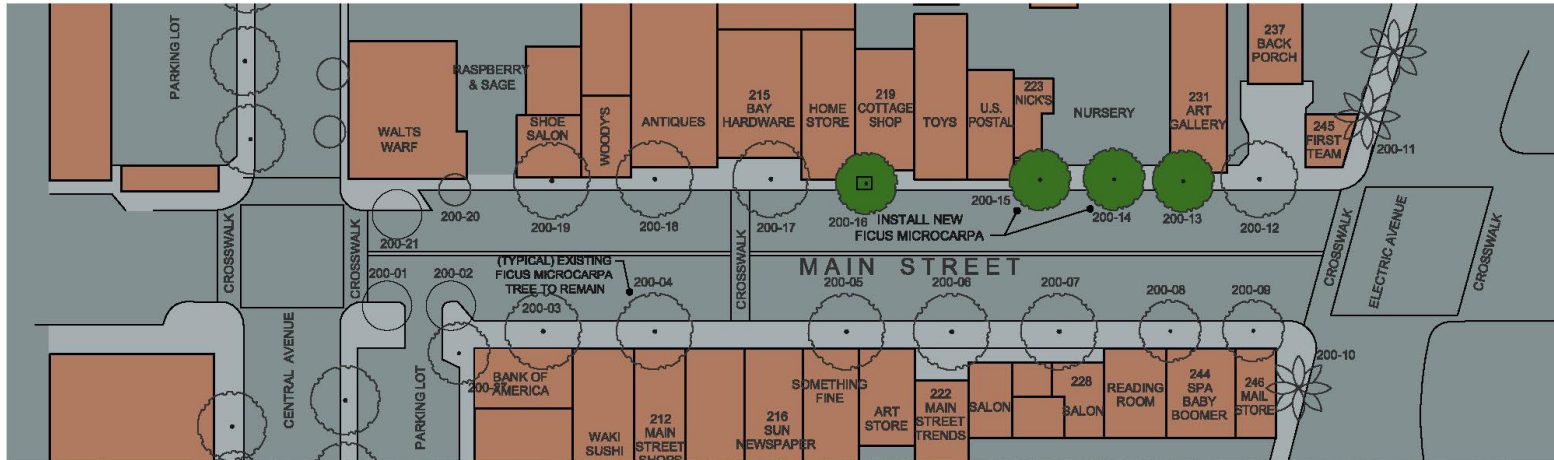
(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

INSTALL NEW  
FICUS MICROCARPA TREES

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREE TO REMAIN



NORTH STREETSCAPE ELEVATION



(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN



SOUTH STREETSCAPE ELEVATION

NOTE:  
EXAMPLE PROJECT REPRESENTS:  
MAIN STREET ADDRESS BLOCK NUMBER 200

STREET TREE SPECIES NUMBERING SYSTEM  
IS BASED ON CITY STREET ADDRESS BLOCK

STREET TREE I.D. NUMBERING:  
BEGINS AT 200-01 AND ENDS AT 200-21

PROPOSED STREET TREE SPECIES LEGEND



FICUS MICROCARPA 'NITIDA' (BOTANICAL NAME)  
INDIAN LAUREL FIG TREE (COMMON NAME)  
TREE I.D. NUMBER: 200-13, 200-14, 200-15, 200-16,

CITY OF SEAL BEACH  
MAIN STREET (200 BLOCK)  
STREET TREE MASTER PLAN





Existing  
Ficus Microcarpa Tree (typ.)  
Protect in place

Proposed  
Ficus Microcarpa Tree

View looking South



RMA International, Inc.  
Landscape Architecture

City of Seal Beach  
Main Street : 200 Block  
Proposed Street Tree Master Plan

**DISTRICT: OLD TOWN**  
**Existing Street Tree Species**  
**Main Street 200 Block**

November 1, 2010

	Location	Address	Code	Botanical Name	Common Name	Condition	Planting Area (ft)	Size (h x w) (ft)	Trunk Dia, size (in)	Utl.	Paving/ Curb Condition	Misc./Maint.
1	MAIN STREET	200	35	Eucalyptus camaldulensis	River Red Gum	Good	6 x 6	32 x 18	28	Utility Line	Good	Concrete
2	MAIN STREET	200	36	Eucalyptus camaldulensis	River Red Gum	Good	4 x 6	32 x 18	28	Utility Line	Good	Concrete
3	MAIN STREET	200	37	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	20 x 14	30	Utility Line	Good	Concrete
4	MAIN STREET	208	38	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	20 x 16	30	Utility Line	Good	Concrete Paver
5	MAIN STREET	212	39	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	22 x 18	30	None	Good	Concrete Paver
6	MAIN STREET	220	40	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	30 x 24	36	None	Good	Concrete Paver
7	MAIN STREET	222	41	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	26 x 22	30	Utility Line	Uplifting	Concrete Paver
8	MAIN STREET	228	42	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	22 x 16	30	None	Poor Uplift	Concrete Paver
9	MAIN STREET	244	43	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	18 x 14	9	Utility Line	Poor Uplift	Concrete Paver
10	MAIN STREET	250	44	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	4 x 4	16 x 12	27	Utility Line	Good	Concrete Paver
11	MAIN STREET	237	45	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	14 x 12	28	None	Good	Concrete Paver
12	MAIN STREET	231	46	Ulmus parvifolia	Chinese Elm	Good	4 x 4	13 x 8	8	Utility Line	Good	Concrete Metal Grate
13	MAIN STREET	227	47	Ulmus parvifolia	Chinese Elm	Good	4 x 4	13 x 8	8	None	Good	Concrete Paver
14	MAIN STREET	223	48	Ulmus parvifolia	Chinese Elm	Good	4 x 4	13 x 8	8	None	Good	Concrete Paver
15	MAIN STREET	219	49	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	22 x 20	36	None	Good	Concrete Paver
16	MAIN STREET	215	50	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	20 x 18	30	Utility Line	Good	Concrete Paver
17	MAIN STREET	211	51	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	5 x 4	22 x 18	30	Utility Line	Good	Concrete Paver
18	MAIN STREET	207	52	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	24 x 22	30	Yes	Good	Tree Leaning to Street
19	MAIN STREET	201	53	Cupaniopsis anacardioides	Carrotwood	Good	4 x 4	13 x 10	14	None	Good	Concrete
20	MAIN STREET	201	54	Eucalyptus camaldulensis	River Red Gum	Good	6 x 6	26 x 14	27	None	Good	Concrete Paver

Represents Existing & Recommended Street Tree # 1

Represents trees that are in fair to moderate condition, suggest removal & plant new recommended tree species

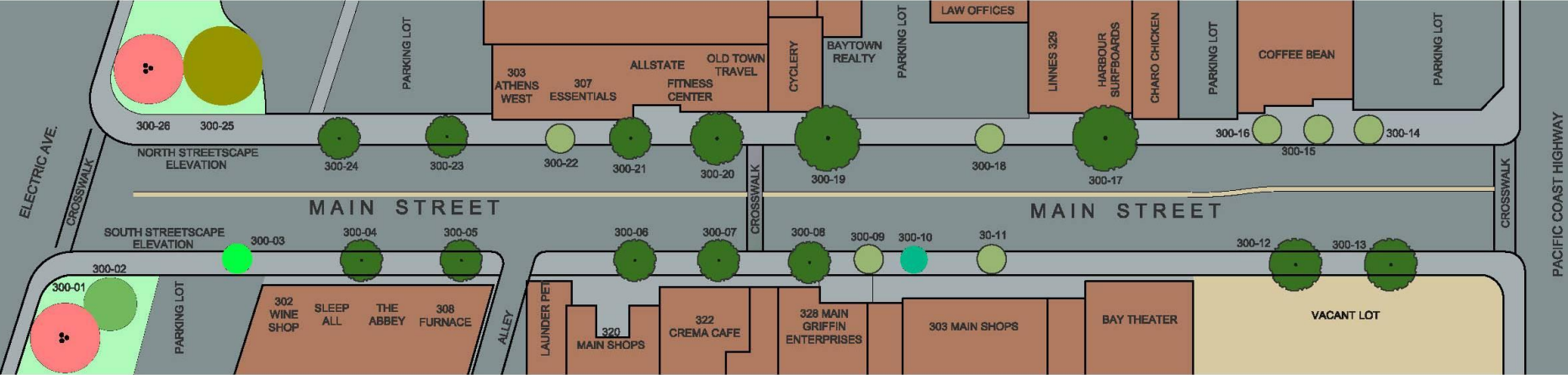
Represents trees that are in good condition but **not** a recommended tree species, recommend to remain in place

Represents existing concrete paving, recommend removal and install colored concrete pavers












NORTH STREETScape ELEVATION



SOUTH STREETScape ELEVATION

EXISTING STREET TREE SPECIES LEGEND

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li> ERYTHRINA CORALLOIDES (BOTANICAL NAME)<br/>NAKED CORAL TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-01, 300-26</li> <li> EUCALYPTUS CITRIODORA (BOTANICAL NAME)<br/>LEMON SCENTED GUM TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-25</li> <li> FICUS MICROCARPA 'NITIDA' (BOTANICAL NAME)<br/>INDIAN LAUREL FIG TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-04, 300-05, 300-06,<br/>300-07, 300-08, 300-12, 300-13, 300-17,<br/>300-18, 300-20, 300-21, 300-23</li> </ul> | <ul style="list-style-type: none"> <li> MELALEUCA QUINQUENRIVIA (BOTANICAL NAME)<br/>CAJEPUT TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-02</li> <li> METROSIDEROS EXCELSUS (BOTANICAL NAME)<br/>NEW ZEALAND CHRISTMAS TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-10</li> <li> LAGERSTROEMIA INDICA (BOTANICAL NAME)<br/>CRAPE MYRTLE TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-03</li> <li> ULMUS PARVIFOLIA (BOTANICAL NAME)<br/>CHINESE ELM TREE (COMMON NAME)<br/>TREE I.D. NUMBER: 300-09, 300-11,<br/>300-14, 300-15, 300-16, 300-18, 300-22</li> </ul> |
|--|---|

NOTE:  
EXAMPLE PROJECT REPRESENTS:  
MAIN STREET ADDRESS BLOCK NUMBER 300

STREET TREE SPECIES NUMBERING SYSTEM  
IS BASED ON CITY STREET ADDRESS BLOCK

STREET TREE I.D. NUMBERING:  
BEGINS AT 300-01 AND ENDS AT 300-26

CITY OF SEAL BEACH  
MAIN STREET (300 BLOCK)  
EXISTING SITE CONDITIONS







Existing  
 Ulmus parvifolia tree to be replaced.  
 See street tree master plan.

Existing  
 Lagerstroemia indica tree to be replaced.  
 See street tree master plan.

Vacant site "Typical"  
 install new tree. See  
 street tree master  
 plan.

Existing  
 Metrosideros excelsus  
 tree to be replaced.  
 See street tree master plan.

Existing  
 Ficus microcarpa tree  
 protect in place.

Existing  
 Ulmus parvifolia tree to be replaced.  
 See street tree master plan.

Existing  
 Ulmus parvifolia tree to be replaced.  
 See street tree master plan.

Existing  
 Ficus microcarpa tree  
 protect in place.

View looking South

RMA International, Inc.  
 Landscape Architecture

City of Seal Beach  
 Main Street: 300 Block  
 Existing Site Conditions



INSTALL NEW  
FICUS MICROCARPA

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

INSTALL NEW  
FICUS MICROCARPA

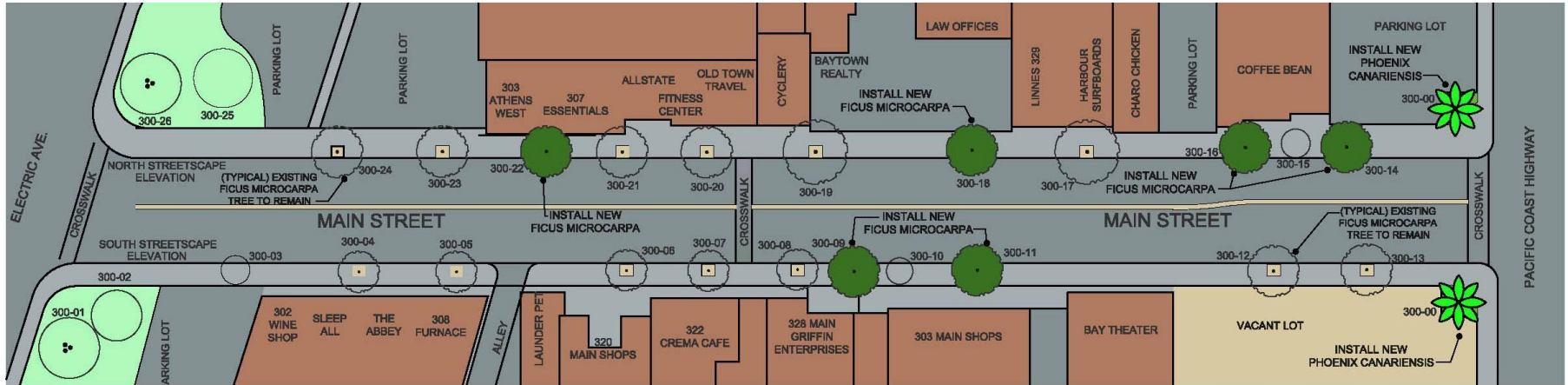
(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREE TO REMAIN

INSTALL NEW  
FICUS MICROCARPA TREES

INSTALL NEW  
PHOENIX CANARIENSIS



NORTH STREETSCAPE ELEVATION



(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

INSTALL NEW  
FICUS MICROCARPA  
TYPICAL

(TYPICAL) EXISTING  
FICUS MICROCARPA  
TREES TO REMAIN

INSTALL NEW  
PHOENIX CANARIENSIS



SOUTH STREETSCAPE ELEVATION

NOTE:  
EXAMPLE PROJECT REPRESENTS:  
MAIN STREET ADDRESS BLOCK NUMBER 300

STREET TREE SPECIES NUMBERING SYSTEM  
IS BASED ON CITY STREET ADDRESS BLOCK

STREET TREE I.D. NUMBERING:  
BEGINS AT 300-01 AND ENDS AT 300-26

PROPOSED STREET TREE SPECIES LEGEND



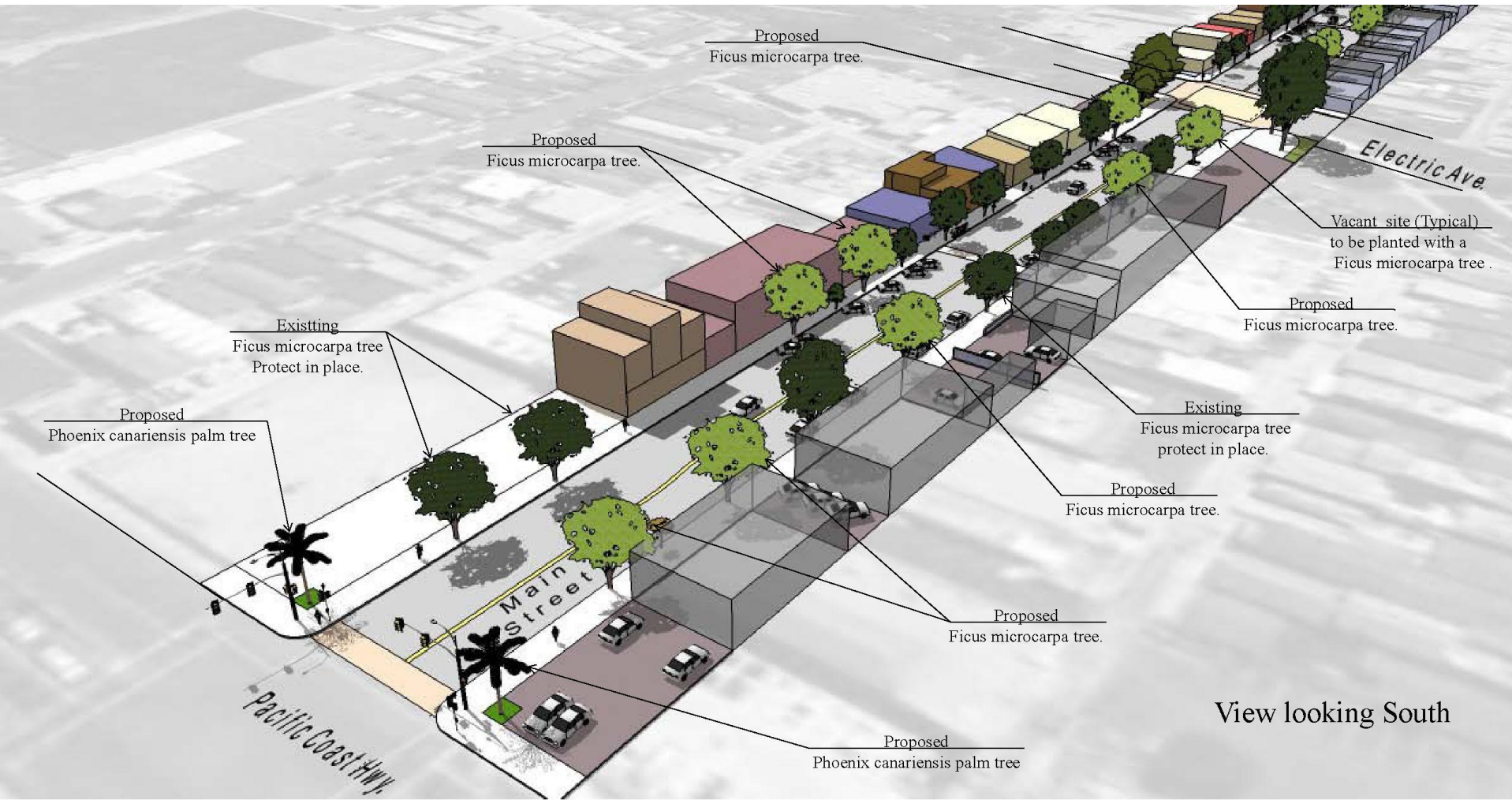
FICUS MICROCARPA 'NITIDA' (BOTANICAL NAME)  
INDIAN LAUREL FIG TREE (COMMON NAME)  
TREE I.D. NUMBER: 300-09, 300-11, 300-14, 300-16,  
300-18, 300-22



PHOENIX CANARIENSIS (BOTANICAL NAME)  
CANARY ISLAND DATE PALM (COMMON NAME)  
TREE I.D. NUMBER: 300-00, 300-00

CITY OF SEAL BEACH  
MAIN STREET (300 BLOCK)  
STREET TREE MASTER PLAN





View looking South

RMA International, Inc.  
Landscape Architecture

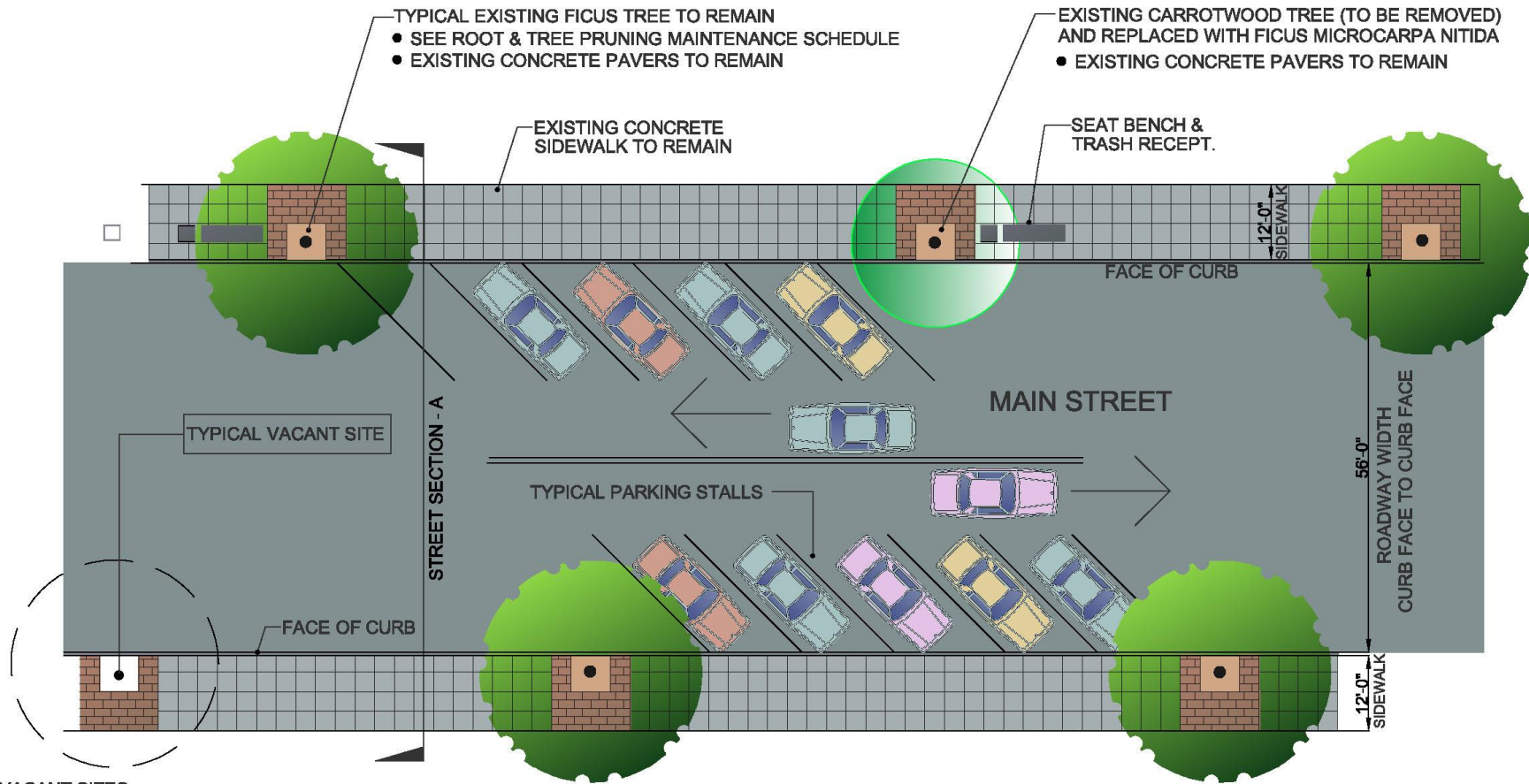
City of Seal Beach  
Main Street: 300 Block  
Proposed Street Tree Master Plan



**DISTRICT: OLD TOWN**  
**Existing Street Tree Species**  
**Main Street 300 Block**  
 November 1, 2010

	Location	Address	Code	Botanical Name	Common Name	Condition	Planting Area (ft)	Size (h x w) (ft)	Trunk Dia, size (in)	Utl.	Paving/ Curb Condition	Misc./Maint.
1	MAIN STREET	300	56	Erythrina caffra	Kaffirboom Coral Tree	Good	6 x 8	26 x 24	48	Utility Pole	Good	Heritage Tree
2	MAIN STREET	300	57	Pyrus kawakamii	Evergreen Pear	Good	6 x 6	18 x 10	22	Utility Line	Good	Concrete
3	MAIN STREET	300	58	Melaleuca quinquenervia	Cajeput Tree	Good	6 x 6	10 x 10	30	Utility Line	Good	Concrete
4	MAIN STREET	300	59	Melaleuca quinquenervia	Cajeput Tree	Good	6 x 6	28 x 10	28	None	Good	Concrete
5	MAIN STREET	302	60	Arbutus unedo	Strawberry Tree	Good	4 x 4	8 x 4	28	Utility Line	Good	Concrete Metal Gate
6	MAIN STREET	304	61	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	4 x 4	20 x 10	28	None	Good	Concrete Paver
7	MAIN STREET	308	62	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	20 x 10	28	None	Good	Concrete Paver
8	MAIN STREET	320	63	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	6 x 4	20 x 10	27	None	Good	Concrete Paver
9	MAIN STREET	326	64	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	6 x 4	20 x 10	26	Utility Line	Uplift	Concrete Paver
10	MAIN STREET	328	65	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	6 x 4	20 x 10	28	Utility Line	Good	Concrete Paver
11	MAIN STREET	328	66	Ulmus parvifolia	Chinese Elm	Good	4 x 4	10 x 8	4	Utility Line	Good	Concrete Paver / Metal Gate
12	MAIN STREET	330	67	Metrosideros excelsus	New Zealand Christmas Tree	Good	3 x 3	14 x 8	8	None	Good	Concrete Paver
13	MAIN STREET	330	68	Ulmus parvifolia	Chinese Elm	Good	3 x 3	8 x 7	4	None	Good	Concrete Paver
14	MAIN STREET	334	69	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	4 x 3	12 x 8	18	Yes	Uplift	Near Banner Pole
15	MAIN STREET	334	70	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	4 x 3	12 x 8	18	None	Uplift	Concrete Paver
16	MAIN STREET	335	73	Ulmus parvifolia	Chinese Elm	Good	4 x 4	10 x 5	8	None	Good	Concrete Paver / Metal Gate
17	MAIN STREET	335	74	Ulmus parvifolia	Chinese Elm	Good	4 x 4	10 x 5	8	Yes	Good	Near Banner Pole
18	MAIN STREET	335	75	Ulmus parvifolia	Chinese Elm	Good	4 x 4	10 x 5	8	None	Good	Concrete Paver / Metal Gate
19	MAIN STREET	329	76	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	5 x 4	22 x 18	36	Utility Line	Good	Concrete Paver
20	MAIN STREET	323	77	Ulmus parvifolia	Chinese Elm	Good	4 x 4	12 x 8	4	Utility Line	Good	Concrete Paver / Metal Gate
21	MAIN STREET	317	78	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 3	20 x 16	36	None	Good	Concrete Paver
22	MAIN STREET	313	79	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	14 x 12	28	None	Good	Concrete Paver
23	MAIN STREET	311	80	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Fair	4 x 4	13 x 10	26	Utility Line	Good	Concrete Paver
24	MAIN STREET	305	81	Lagerstroemia indica	Crape Myrtle	Fair	4 x 4	11 x 6	28	Utility Line	Good	Concrete Paver / Metal Gate
25	MAIN STREET	303	82	Ficus microcarpa 'Nitida'	Indian Laurel Fig	Good	4 x 4	14 x 8	28	Utility Line	Good	Concrete Paver
26	MAIN STREET	301	83	Arbutus unedo	Marina Arbutus	Good	4 x 4	7 x 4	28	Utility Line	Good	Concrete Paver / Metal Gate
27	MAIN STREET	301	84	Ulmus parvifolia	Chinese Elm	Good	4 x 4	8 x 6	8	Utility Line	Good	Concrete Paver / Metal Gate
28	MAIN STREET	301	85	Eucalyptus citriodora	Lemon-Scented Gum	Fair	5 x 5	14 x 8	8	Yes	Good	Near Utility Vault
29	MAIN STREET	301	86	Eucalyptus cladocalyx	Sugar Gum	Good	6 x 6	14 x 8	28	Yes	Good	Near Utility Vault
30	MAIN STREET	301	87	Eucalyptus cladocalyx	Sugar Gum	Good	6 x 6	14 x 10	12	None	Good	Concrete
31	MAIN STREET	301	88	Erythrina caffra	Kaffirboom Coral Tree	Good	8 x 8	24 x 22	48	None	Good	Heritage Tree
		Represents Existing & Recommended Street Tree # 1										
		Represents trees that are in fair to moderate condition, suggest removal & plant new recommended tree species										
		Represents trees that are in good condition but not a recommended tree species, recommend to remain in place										
		Represents existing concrete paving, recommend removal and install colored concrete pavers										





**ALL VACANT SITES:**

- INSTALL 60" BOX FIGUS MICROCARPA 'NITIDA' TREE SEE RELATED DETAILS.
- REMOVE EXISTING CONCRETE PAVING
- INSTALL CONCRETE PAVERS ON SAND BASE (COLORS: CHARCOAL, BROWN, BUFF) PER DETAIL
- INSTALL DECOMPOSED GRANITE PAVING PER DETAIL

**EXISTING TREE MAINTENANCE**

**ROOT PRUNING:**  
SAW CUT ROOTS DURING MONTHS OF JANUARY & FEBRUARY AND / OR WHEN CONCRETE PAVERS ARE RAISED AT AN UNEVEN SURFACE.

**TREE BRANCH STRUCTURE PRUNING**

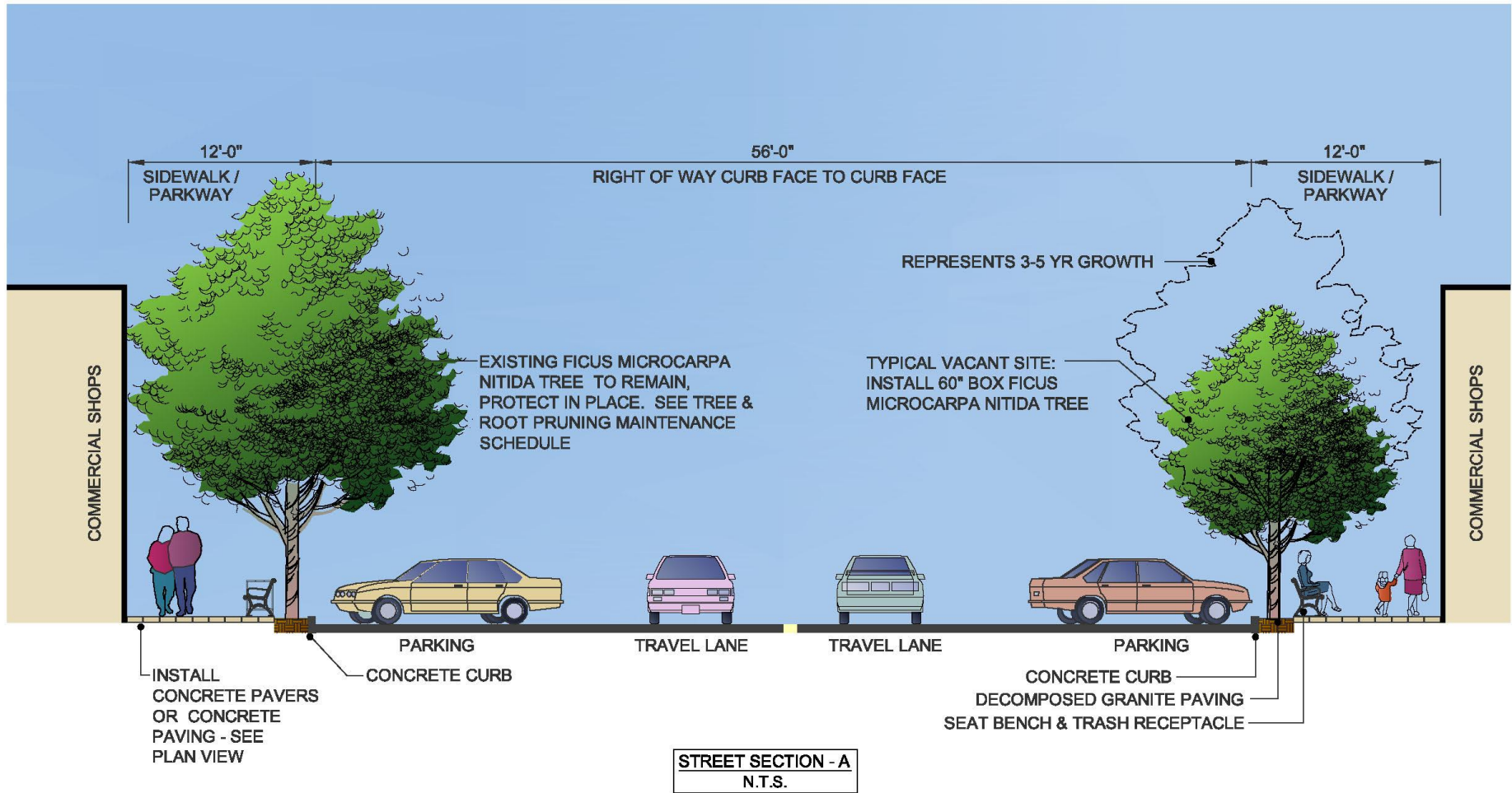
CONTROL OR MAINTAIN SHAPE AND SIZE OF TREE  
ALLOW MORE LIGHT AND AIR TO THE TREE  
REMOVE DEAD, DISEASED OR PEST INFESTED FOLIAGE

THIN CUT TREE BRANCH STRUCTURE TO ELIMINATE COMPETING OR OLD STEMS AND TO OPEN UP STRUCTURE.  
SEE RELATED DETAILS.

PLAN VIEW  
N.T.S.

**CITY OF SEAL BEACH  
MAIN STREET  
RIGHT OF WAY 80 FEET  
LANDSCAPE RECOMMENDATIONS**





CITY OF SEAL BEACH  
 MAIN STREET  
 RIGHT OF WAY 80 FEET  
 LANDSCAPE RECOMMENDATIONS





**EXISTING ARBUTUS UNEDO TREE  
TO BE REPLACED**

**EXISTING FICUS NITIDA TREES  
TO REMAIN**





**NEW FICUS NITIDA TREE**





**CITY OF SEAL BEACH, CALIFORNIA**

**CITY WIDE STREET TREE MASTERPLAN**

**LANDSCAPE MAINTENANCE GUIDELINE MANUAL**

**March 21, 2011**

**Prepared by: RMA INTERNATIONAL**

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## CITY WIDE STREET TREE MASTERPLAN LANDSCAPE MAINTENANCE GUIDELINE MANUAL

Proper care for the City of Seal Beach Trees shall be performed by skilled, trained and properly insured professionals, both for the health and beauty of the trees and for the safety of the community.

American National Standards Institute (ANSI) for Tree, Shrub and other Woody Plant Management Standards have been developed by professionals in the field of arboriculture. The standards for tree maintenance are designated to provide a more uniform level of service and to help ensure public safety.

The International Society of Arboriculture (ISA) has developed companion publications known as Best Management Practices to aid in the interpretation and implementation of the ANSI standards. These publications are intended as guides for practicing arborists, tree workers and the City Staff representatives.

It is recommended that the City of Seal Beach adopt these standards and best practices to ensure proper care for the Street Tree Master Program.

For proper tree care and maintenance the following standards and best management practices are included within this document.

**Safety Standard Requirements Z133.1-2006**  
**Pruning Standards ANSI A300 (Part 1)-2008**  
**Fertilization Standards ANSI A300 (Part 2)-2004**  
**Supplemental Support Systems (part 3)-2006**  
**Transplanting Standards A300 (part 6).**

Other online resources available for tree care basics, determining tree problems and general plant care are:

- [www.treecaretips.org](http://www.treecaretips.org)
- [www.treesaregood.com](http://www.treesaregood.com)

## City of Seal Beach Landscape Maintenance requirements:

### I. GENERAL MAINTENANCE INFORMATION

The key to a trees healthy success is having proper soil conditions, regular watering, fertilization and maintenance. Outlined below are recommendations & guidelines for the existing and newly planted trees for the City of Seal Beach Forestry.

#### A. Regulatory Requirements:

1. Any dead and/or dying trees within the City Right of Way shall be removed and replaced with a new tree species from the City of Seal Beach approved recommended street tree species list dated November 3, 2009.
2. Tree Replacement: Except for emergency removal, do not remove any tree from the City without prior direction or approval from the Director of Public Works, City Maintenance Supervisor and/or City Representative as well as the City of Seal Beach Street Tree Committee designated representative.
  - a. If a tree is badly damaged and/ or diseased and in need of removal and replacement, notify the City of Seal Beach Director of Public Works or his designated representative at the earliest possible time following discovery. Photograph with date stamp and documentation damaged tree conditions
  - b. All tree box sizes to be planted or replaced shall be based on the City budget allowance or the discretion of the Director of Public Works, City Maintenance Supervisor and/or City Representative as well as the City of Seal Beach Street Tree Committee designated representative.
3. When planting new tree species consider all aspects of the trees location. Look up for power lines, down for underground lines, and around for potential trouble spots. Many future problems can be avoided by taking a few moments for proper planning.
4. All Trees shall be thinned as defined in the American National Standards Institute, ANSI, A-300 Tree Care Operation Manual to eliminate crowding or x-crossing branches, to remove dead or broken limbs, and to remove structurally weak branch attachments.
5. All tree canopies shall not be topped (to remove or cut the top of the tree) or pollarded (to cut back to the trunk to promote the growth of a dense head of foliage) as defined in the American National Standards Institute, ANSI, A-300 Tree Care Operation Manual.
6. All trees shall adhere to the International Society of Arboriculture (ISA) publications for Best Management Practices to aid in the interpretation and implementation of the ANSI standards.
7. All trees shall be pruned as defined in the American National Standards Institute, ANSI, Pruning Standards A300 (Part 1)-2008
8. All trees shall be fertilized as defined in the American National Standards Institute,

ANSI, Fertilization Standards A300 (Part 2)- 2004.

9. All trees to be relocated and/ or transplanted shall be as defined in the American National Standards Institute, ANSI, Safety Standards, Support Systems Standard (part 3) and Transplanting Standards.

10. All Fertilizers and Herbicides shall have a certificate of compliance from governing authority having jurisdiction indicating approval of fertilizer and herbicide mixture.

11. All trees shall be grown in a California licensed nursery, specializing in growing and cultivating. All trees shall comply with recommendations and requirements of ANSI (260.1-2004) - American Standard for Nursery Stock.

12. Upon acceptance of delivery on site all trees shall be certified by the state department of agriculture; free of disease and hazardous insects.

## II. EXISTING TREE INSPECTIONS

Tree inspection is an evaluation tool to call attention to any change in the tree's health before the problem becomes too serious. Provide regular inspections of newly planted and mature trees at least once a year, to prevent or reduce the severity of future disease, insect, and environmental problems. During tree inspection, examine four characteristics of tree vigor: new leaves or buds, leaf size, twig growth, and absence of crown dieback (gradual death of the upper part of the tree).

A reduction in the extension of shoots (new growing parts), such as buds or new leaves, is a fairly reliable cue that the tree's health has recently changed. To evaluate this factor, compare the growth of the shoots over the past three years. Determine whether there is a reduction in the tree's typical growth pattern.

Further signs of poor tree health are trunk decay, crown dieback, or both. These symptoms often indicate problems that began several years before. Loose bark or deformed growths, such as trunk conks (mushrooms), are common signs of stem decay.

Any abnormalities found during these inspections, including insect activity and spotted, deformed, discolored, or dead leaves and twigs, should be noted and watched closely. Report any findings to licensed certified arborist on treatment.

### A. Recognizing Tree Hazards

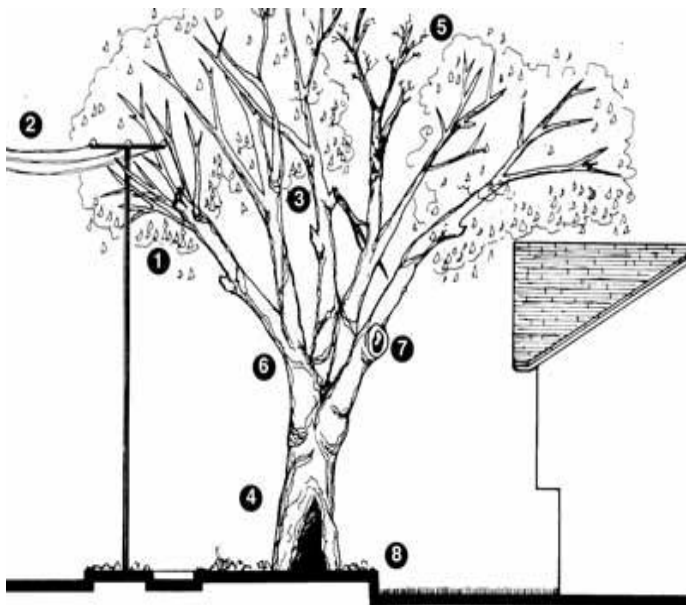
Trees provide significant benefits to our homes and cities, but when trees fall and injure people or damage property, they are liabilities. Taking care of tree hazards will prolong the life of the tree and make the community safer.

Trees that fall into utility lines have additional serious consequences. Not only can they injure people or property near the line, but hitting a line may cause power outages, surges, fires, and other damage. Downed lines still conducting electricity are especially dangerous.

## B. Tree Hazard Checklist

Consider these questions:

1. Are there large dead branches in the tree?
2. Are there detached branches hanging in the tree?
3. Does the tree have cavities or rotten wood along the trunk or in major branches?
4. Are mushrooms present at the base of the tree?
5. Are there cracks or splits in the trunk or where branches are attached?
6. Have any branches fallen from the tree?
7. Have adjacent trees fallen over or died?
8. Has the trunk developed a strong lean?
9. Do many of the major branches arise from one point on the trunk?
10. Have the roots been broken off, injured, or damaged by lowering the soil level, installing pavement, repairing sidewalks, or digging trenches?
11. Has the site recently been changed by construction, raising the soil level, or installing lawns?
12. Have the leaves prematurely developed an unusual color or size?
13. Has the tree been topped or otherwise heavily pruned?



The following are defects or signs of possible defects in urban trees

1. Re-growth from topping, line clearance, or other pruning
2. Electrical line adjacent to tree
3. Broken or partially attached branch
4. Open cavity in trunk or branch
5. Dead or dying branches
6. Branches arising from a single point on the trunk
7. Decay and rot present in old wounds

### C. Managing Tree Hazards and Treatment

Recognizing and reducing tree hazards not only increases the safety of the tree's health it also ensures the safety for the community.

The treatment method used for a particular insect or disease problem will depend on the species involved, the extent of the problem, and a variety of other factors specific to the situation.

The City's licensed certified arborist shall manage the trees in the City and provide treatments that will make the tree safer to reduce the risk associated with a hazardous tree. Evaluations of tree hazards shall include the following:

- 1. Prune the tree.** Remove the defective branches of the tree.
- 2. Cable and brace the tree.** Provide physical support for weak branches and stems to increase their strength and stability.
- 3. Provide routine care.** Mature trees need routine care in the form of water, fertilizer (in some cases), mulch, and pruning as dictated by the season and their structure.
- 4. Remove the tree.** Some hazardous trees are best removed. If possible, plant a new tree in an appropriate place as a replacement.

### D. Removal

1. Although tree removal is a last resort, there are circumstances when it is necessary. Do not remove any tree from the City without prior direction or approval from the Director of Public Works, City Maintenance Supervisor and City of Seal Beach Street Tree Committee designated representative.
2. The City's licensed certified arborist shall help decide whether or not a tree should be removed. Removal is recommended when a tree:
  - a. Is dead, dying, or considered irreparably hazardous
  - b. Has caused an obstruction or is crowding and causing harm to other trees and the situation is impossible to correct through pruning
  - c. Is to be replaced by a more suitable specimen tree.



### III. NEW TREE PLANTING OPERATIONS

The ideal time to plant trees is during the dormant season in the fall after leaf drop or early spring before bud break. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. However, trees properly cared for in the approved nursery given the appropriate care during transport to prevent damage, can be planted throughout the growing season. In subtropical climates where trees grow year round, any time is a good time to plant a tree, provided that sufficient water is available. In either situation, proper handling during planting is essential to ensure a healthy future for new trees. Before any planting of a tree is to begin tree, contact all underground utilities located prior to digging.

Containerized trees may experience transplant shock, particularly if they have circling roots that must be cut. Transplant shock is indicated by slow growth and reduced vigor following transplanting. Proper site preparation before and during planting coupled with good follow-up care reduces the amount of time the plant experiences transplant shock and allows the tree to quickly establish in its new location. Below are recommendations for installing newly planting trees that can significantly reduce the stress placed on the plant at the time of planting.

#### A. General

1. Protect trees at all times from sun or drying winds.
2. Keep trees that cannot be planted immediately upon delivery in the shade, well protected and well watered.

#### B. Handling of Plant Material

1. Do not lift or handle any trees by tops, stems or trunks at any time. Do not bind or handle plants with wire or rope at any time.
2. Protect plant material during delivery to prevent damage to root ball and desiccation of leaves.
3. Do not bend or bind-tie trees or shrubs in such manner as to damage bark, break branches, or destroy natural shape.
4. Provide protective coverings during delivery.
5. Do not drop plant materials during delivery.
6. Anti-Desiccant: Spray all evergreen or deciduous plant material in full leaf immediately before transporting with anti-desiccant. Apply an adequate film over trunks, branches, twigs, and foliage.

- C. Installation: (Soils report shall govern over recommendation below)
1. Positioning: After removing plant from container, scarify side of rootball to prevent root-bound condition and position plant in planting pit. Remove bottom of specimen container boxes before planting. After partial backfill of hole, remove sides of boxes without damage to root ball.
  2. Backfilling: Use backfill mix to backfill plant pits. Set each plant plumb and brace rigidly in position until planting soil has been tamped solidly around the ball and roots. When plant pits have been backfilled approximately two-thirds (2/3) full, water thoroughly and saturate rootball, before installing remainder of the backfill mix to top of pit, eliminating all air pockets.
  3. Staking shall be performed as outlined below.
  4. Fertilizer Tablets: Place evenly distributed in plant pits when backfilled two thirds (2/3) to finish grade.
- D. Adjustment: Adjust trees that after full settlement has occurred, the natural grade at the base of the plants is one (1) inch above the adjacent planting finish grade.
- E. Watering Basin: Form saucer with four (4) inches high berm centered around tree and shrub pits twelve (12) inches wider than ball diameter. Do not form saucer around trees in lawn areas. Maintain all watering basins around plants so that enough water can be applied to establish moisture through major root zones. In rainy season, open basins to allow surface drainage away from the root crown where excess water may accumulate. Restore watering basins at end of rainy season.
- F. Growing Conditions: Plants shall be nursery-grown in accordance with good horticultural practices under climatic conditions similar to those or project for at least two years unless otherwise specifically authorized by the Agency's Authorized Representative.
- G. Appearance: All plants shall be symmetrical, tightly knit, so trained or factored in development and appearance as to be superior in form, number of branches, compactness and symmetry. Position plants to face with fullest growth into prevailing wind.
- H. Vigor: Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insect pest, eggs, or larvae. They shall have healthy, well-developed root systems. Plants shall be free from physical damage or adverse conditions which would prevent thriving growth.
- I. Container Stock: Verify that all container stock has been in the containers in which they were delivered for at least six (6) months, but not over two (2) years. Samples must prove to be free of kindled, circling or girdling roots and with no evidence of a pot-bound condition. Do not install container plants that have cracked or broken balls of earth when taken from container.

- J. Measurements: Measure plants when branches are in their normal upright position. Height and spread dimensions specified refer to main body of plant and not branch tip to tip. Take caliper measurement at a point on the trunk four (4) inches above natural ground line for trees up to four (4) inches in caliper and at a point twelve (12) inches above the natural ground line for trees over four (4) inches in caliper.
- K. Finish Grades: Finish grades for all planting areas shall have been established in another section. Verify that all grades are within one (1) inch plus or minus of required finish grade, and that all soil amendments have been installed as specified under Section on Soil Preparation.
- L. Palm Trees: Most all palm trees are grown in containers at nurseries, although larger specimens may be field stock. Generally the larger specimen palms are specified by brown trunk height (BTH). Below are some tips on selecting a healthy palm for the best results.

***A high quality palm has:***

1. A root ball extending from about 8 inches to 2 feet (0.2 to 0.6 meters) beyond the trunk for palms less than 16 feet (5 meters) tall, depending on the species.
2. A trunk free of mechanical wounds and/or wounds from incorrect pruning.
3. A full crown of healthy, vigorous fronds
4. Uniform trunk diameter

***A low-quality palm has:***

1. Trunk selections of varying diameter ("hour-glass") or small diameter below the terminal bud ("pencil").
2. A trunk with wounds from mechanical impacts or incorrect pruning.
3. Few fronds, poor color for the species, or pest infestation.

Protect the terminal bud to avoid damaging or killing the palm. This is especially important when transporting the palm because excessive vibration may crack the bud. Containerized palms should have their fronds tied together during transport and installation. Dead or dying fronds should be removed prior to transport. If field stock palms need to be pruned, fronds that stand 45 degrees or more over the horizontal plane should not be removed. Fronds should be tied during transport.

Because of the weight and size large field stock palms they are often installed with a crane. The palm tree nursery will provide weight of the tree to assist in how large of a crane to have on-site.

#### IV. SOIL PREPARATION & CONDITIONING

##### General Qualifications

- A. Composition: Use only fertile, well-drained soil, of uniform quality, free of stones over 1 in. diameter, sticks, oils, chemicals as a planting medium.

Spoils: Before soil amendment work commences dispose of excess subsoil removed from planting excavations. Do not mix with planting soil or use as backfill. Clear and clean soil of roots, plants, grasses, stones, clay lumps, and other extraneous materials that are harmful or toxic to plant growth. All rocks and debris generated in the preparation of soil shall be disposed of in a legal manor.

- B. Agronomic Soils Testing:

Testing shall be performed by testing agency samples of the native soil shall be submitted to the agronomic soils testing laboratory prior to soil preparation. Testing shall be performed for fertility and suitability analysis, with written recommendations for soil amendment, fertilizer and chemical conditioners, application rates for soil preparation, planting backfill mix, pot-soil mix, hydro spray, and post-maintenance fertilization programs. Do not artificially dry soil prior to testing.

Inspect existing soil and do all work existing soil to be amended necessary to bring it to standards specified under "General Qualifications" above. Amend as specified herein.

- C. Excavating:

All pits shall be dug square with bottoms level; the width shall be equal to twice the size of the root ball and depth equal to the root ball or container plus 12-inches. Compacted soil at the sides and bottom shall be loosened by scarifying or other approved methods in accordance with planting details.

- D. Soil Backfill Mix for Tree Plant Pits:

Sixty (60) percent Native Soil excavated from plant pit  
Forty (40) percent Nitrogen-treated sawdust  
One (1) lb. 12-12-12 cubic yard of mix  
Two (2) lbs. Iron Sulfate per cubic yard of mix  
One (1) lb. Urea Formaldehyde per cubic yard of mix

- E. Moisture Content:

Do not work soil when moisture content is so dry that dust will form in air that clods will not break readily. Apply water, if necessary, to bring soil to an optimum moisture content of tilling and planting.

## F. Palm Trees:

The planting hole for a palm should be large enough to allow room for backfilling soil around the root ball. For field stock palms, this is typically about 18 inches (46 centimeters) wider than the root ball on the sides. Plant the palm at the same depth as it was originally grown. Locate the top of the root initiation zone about even with the soil surface. Planting too deeply may lead to manganese or iron deficiencies, and planting too high may cause the palm to blow over and expose the root initiation zone to air.

## V. PLANTING SOIL AND AMENDMENTS

### A. Planting Soil:

1. The existing soil on the site shall be used as planting soil as practicable. Existing soil shall be prepared as necessary to be free of debris, oil, weeds, or other foreign matter detrimental to plant growth. Contaminated soil shall not be used but shall be removed and replaced with acceptable existing soil or imported soil.
2. Imported soil shall be sandy textured soil, with silt plus clay containing minimal trace amounts of boron, sodium and acidity range (pH) organic matter. To ensure compliance, samples of imported soil shall be analyzed by an agricultural soil testing laboratory prior to being delivered onsite.

B. Soil Amendments shall be provided according to soil testing as specified.

C. Organic Amendments: Nitrogen stabilized organic amendment, derived from redwood sawdust, fir sawdust or fir bark. Amendment derived from pine will not be acceptable.

All amendments shall be tested for nitrogen, particle size, texture, salinity, iron ash or other particular content.

D. Mineral Amendments: All soil planting amendments shall conform to the soils test recommendations. Such as: soil sulfur, iron sulfate, calcium carbonate and gypsum prior to applying to existing soils.

E. Palm Trees: Shall have sand or loamy sand soils which are best for providing aeration for the roots and adequate drainage. Backfill the planting hole of container palms the same as for trees. Large specimen palm trees shall have a backfill of clean washed plaster sand.

## VI. FERTILIZATION (ALL TREES)

- A. Fertilizing a tree can improve growth; however, if fertilizer is not applied wisely, it may not benefit the tree at all and may even adversely affect the tree. Mature trees making satisfactory growth may not require fertilization.

When considering supplemental fertilizer, it is important to know which nutrients are needed and when and how they should be applied. The City's consulting arborist, agronomist, or university extension service shall recommend testing laboratories and help interpret the results.

Listed below are general guidelines for tree fertilization, note that soils report and/or professional arborist report shall govern these recommendations.

1. Fertilize with a chemical, granular fertilizer with a guaranteed analysis of:

Total Nitrogen	12.0 - 16.0%
Available Phosphoric Acid	12.0 - 16.0%
Soluble Potash	12.0 - 16.0%
Sulfur	3.0 - 5.0%

2. Avoid applying fertilizer to root ball and base of main stem of plants. Rather, spread evenly under tree from main stem or trunk out to drip line.

### B. Existing Mature Trees:

1. Trees shall be deeply fertilized with a balanced fertilizer at the rates specified by the fertilizer manufacturer.
2. Balanced, once-a-season application controlled-released fertilizers shall be used with a blend of coated pills which supply controlled-release nitrogen, phosphorus and potassium, and phosphorus.

### C. Newly Planted Trees:

1. Prior to installation of newly planted trees an agronomic soils testing report with fertilization recommendations shall be preformed.
2. Install "Agriform" twenty-one (21) gram tablets with 20-10-5 (N-P-K) Tablets weighing 21 gr., slow release fertilizer, with composition of nitrogen 20 percent, phosphoric acid 10 percent, potash 5 percent, humus 5 percent, and humic acids 2 percent.
3. After water has completely drained, place planting tablets as follows:  
Seven tablets per 24-inch box.  
Fifteen tablets per 36-inch box

#### D. Palm Trees:

Palm nutritional requirements vary considerably from other plants, particularly turf. Specially formulated palm fertilizers are available that can help prevent nutritional deficiencies. Improper fertilization can lead to problems such as magnesium deficiency (yellowing fronds), iron deficiency (yellowing young fronds, green mature fronds), manganese deficiency, particularly in alkaline soils (yellowed, frizzled young fronds), and zinc deficiency (small fronds).

### VII. WATERING

Listed below are general guidelines for watering of trees, note that soils report and/ or professional arborist report shall govern these recommendations.

#### A. General Qualifications:

1. Use clean potable water thoroughly but infrequently to encourage tree roots to grow downward. Do not over water.
2. Water all trees immediately after installation. Continue watering newly planted trees for the first (3) three years as often as necessary to keep the rootball and soil moist to a depth of 18". Fill excavations for trees with water and allow water to percolate out prior to planting.
3. Maintain a large enough water basin around plants so that enough water can be applied to establish moisture through the major root zone. When hand watering, use a water wand to break force of water.
4. For supplement hand watering of watering basins, use a water wand to break the water force. Do not permit crown roots to become exposed to air through dislodging of soil and mulch.
5. No water run-off onto the streets or walkways shall be permitted.
6. Take extra care during the dry summer months to assure that trees receive the necessary quantities of water.
7. Water practices should be as efficient as possible with updated automatic low flow irrigated systems and smart controllers.
8. When applicable, set automatic irrigation controllers to provide approximately 1½" of water per week. Adjust emitters and sprinkler heads to keep the soil within the drip line of mature trees moist to a depth of 36" to 48".
9. Set the automatic irrigation controllers to water between 10 PM and 6 AM when evaporation is much lower and the air is generally calmer.
10. Reprogram the automatic irrigation controllers for seasonal weather changes. Turn the irrigation systems off during periods of rain.

## VIII. STAKING

### A. General:

1. Trees shall be able to stand upright without support, and shall return to the vertical after their tops have been deflected horizontally and released. Stake or guy trees which do not meet this qualification. All plant materials shall remain plumb and straight for all given conditions from installation through the guarantee period.
2. Use staking method per planting details, specifications and standards in this document.

### B. Staking:

1. Locate stakes in a line with trunk of tree, perpendicular to prevailing wind, and as close to the main trunk is practical, avoiding root injury. Drive stakes at least thirty (30) inches into firm ground.
2. Remove tree from nursery-supplied stake and tie to new stakes using four (4) accepted tree ties. Find proper height for point of tree ties and attach as follows:
  - a. Hold trunk in one hand, pull top to one side and release. Attach tree ties to trunk approximately twenty-four (24) inches above Base Height.
  - b. Nail tree ties to stakes using two (2) galvanized roofing nails at each end of tie.
3. Remove all nursery stakes. Ensure that permanent stakes remain in place through maintenance period. Monitor stakes to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds
4. Inspect tree supports monthly to insure that supports are intact and that the tree has not outgrown the supports.
  5. Adjust supports as necessary to maintain support and to make sure that tying materials are not too tight around trunks or limbs. Re-stake and tighten and repair as necessary at trees.
6. Remove supports as soon as tree is able to withstand moderate wind or when the tree has outgrown the support.
7. Install all newly planted trees per a details and specifications outlined in this document. Along with the recommended procedures of staking and guying as outlined in the ANSI Standards, "Staking Landscape Trees".
8. Containerized palms shall be installed the same as container trees. Specimen Palms generally do not require staking unless the area is prone to high winds.



## IX. MULCHING (ALL TREES)

Mulching can reduce environmental stress by providing trees with a stable root environment that is cooler and contains more moisture than the surrounding soil. Mulch can also prevent mechanical damage by keeping machines such as lawn mowers and string trimmers away from the tree's base. Further, mulch reduces competition from surrounding weeds and turf.

- A. Listed below are general guidelines for mulch around the tree, note that soils report and/or professional arborist report shall govern these recommendations.
  1. Inspect plants and soil in the area to be mulched. Determine whether drainage is adequate and whether there are plants that may be affected by the mulch.
  2. If mulch is already present, check the depth. Do not add mulch if there is a sufficient layer in place. Rake the old mulch to break up any matted layers and to refresh the appearance.
  3. If mulch is piled against the stems or tree trunks, pull it back several inches so that the base of the trunk and the root crown are exposed.
  4. Organic mulches usually are preferred to inorganic materials due to their soil-enhancing properties. If organic mulch is used, it should be well aerated and, preferably, composted.
  5. Avoid using non composted wood chips that have been piled deeply without exposure to oxygen.
  6. For well-drained sites, apply a (2) -two inch layer of mulch. If there are drainage problems, a thinner layer should be used. Avoid placing mulch against the tree trunks. Place mulch out to the tree's drip line or beyond.
  7. Plastic should not be used because it interferes with the exchange of gases between soil and air, which inhibits root growth.

## X. PRUNING, THINNING & SHAPING (ALL TREES)

Pruning is the most common tree maintenance procedure next to watering. Pruning is often desirable or necessary to remove dead, diseased, or insect-infested branches and to improve tree structure, enhance vigor, or maintain safety. Because each cut has the potential to change the growth of (or cause damage to) a tree, no branch should be removed without permission of the City's Director of Public Works and/ or City Representative.

Proper pruning is essential in developing a tree with a strong structure and desirable form. Trees that receive the appropriate pruning measures while they are young will require little corrective pruning when they mature.

### A. Pruning Techniques

Specific types of pruning may be necessary to maintain a mature tree in a healthy, safe, and attractive condition.

1. **Cleaning** is the removal of dead, dying, diseased, crowded, weakly attached, and low-vigor branches from the crown of a tree.
2. **Thinning** is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the tree's natural shape.
3. **Raising** removes the lower branches from a tree in order to provide clearance for buildings, vehicles, pedestrians.
4. **Reduction** reduces the size of a tree, often for clearance for utility lines. Reducing the height or spread of a tree is best accomplished by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). Compared to topping, reduction helps maintain the form and structural integrity of the tree.

### B. Recommendations

Refer to (ANSI) Standards along with these recommendations before pruning a tree:

1. Avoid over pruning which is extremely harmful because without enough leaves, a tree cannot gather and process enough sunlight to survive.
2. Prune all trees to achieve a natural growth pattern. Under no circumstances shall any species of tree be "poodled", "topped" and/or pruned in a highly contrived manner. Rather, the pruning procedure shall include cleaning and thinning of the foliage from the inside out. This procedure promotes air circulation in the canopy of the tree and allows filtered light to reach the crown. Prune all deciduous trees during the months of January or February.
3. Maintain a single dominant leader growing upward. Do not prune back the tip of this leader. Do not allow secondary branches to outgrow the leader. Prune trees for removal of suckers as they develop.
4. Regularly prune and clear limbs from streets, walkways, adjacent buildings and walls.
5. Prune trees to select and develop permanent scaffold branches that are smaller in diameter than the trunk or branch to which they are attached, and which have vertical spacing of eighteen (18) inches to forty-eight (48) inches and radial orientation so as not to overlay one another.

6. Prune trees to eliminate diseased or damaged growth, and narrow V-shaped branched forks that lack strength. Reduce topping and wind damage by thinning out crowns.
7. Prune trees to maintain growth within space limitations, maintaining a natural appearance and balancing crown with roots.
8. No stripping of lower branches ("raising up") of young trees will be permitted.
9. Retain lower branches in a "tipped back" or pinched condition to promote caliper trunk growth (tapered trunk). Do not cut back to fewer than six buds or leaves on such branches. Only cut lower branches flush with the trunk after the tree is able to stand erect without staking or other support.
10. Thin out and shape evergreen trees when necessary to prevent wind and storm damage. Do primary pruning of deciduous trees during the dormant season. Do not permit any pruning of trees prone to excessive "bleeding" during growth season.
11. Prune damaged trees or those that constitute health or safety hazards at any time of year as required.
12. Make all cuts clean and close to the trunk, without cutting into the branch collar. "Stubbing" will not be permitted. Cut smaller branches flush with trunk or lateral branch.
13. Branches too heavy to handle shall be pre-cut in three stages to prevent splitting or peeling of bark.
14. Do not damage tree trunks with a string-type edger. Do not use a string-type edger near tree trunks unless the trunk is completely protected with a tree guard.
15. Avoid over thinning the interior of the tree. The leaves of each branch must manufacture enough food to keep that branch alive and growing.. Removal of too many leaves can "starve" the tree, reduce growth, and make the tree unhealthy. A good rule of thumb is to maintain at least half the foliage on branches arising in the lower two-thirds of the tree.
16. Consult California licensed arborist for the purposes of recommending a fruit abatement program for all fruit bearing trees.
17. A California licensed arborist shall recommend treatment with the use of chemical or organic materials or by the use of a high pressure blast of water (from a pressure washer) to remove flower or fruit. Either method should be repeated as needed during the flowering period so that complete control is achieved.
18. The California licensed Arborist's report shall be provided to the City Maintenance Supervisor prior to carrying out the recommendations.
19. The Contractor hired by the City shall be responsible to remove on a regular basis any fruit that does mature and fall into the landscape, roadway or other hardscape surfaces.
20. Most pruning on palms is done to remove dead or dying fronds and/or fruiting clusters, particularly when such parts are large enough to represent a potential hazard to the public.
21. Climbing spikes should generally not be used to climb palms for pruning since they wound the palm trunk.
22. Remove lower fronds on palm trees that are chlorotic or dead. It is best for the palm if green fronds remain intact.
23. Do not over prune palms this may have slower growth and may attract pests. They are also more likely to have terminal buds nicked during pruning or to have terminal buds break from winds after pruning, either of which may kill the palm.
24. Avoid using Wound dressings on tree wound closures.

## C. Pruning Schedule

1. Large canopy shade/ flowering trees shall be pruned on a two (2) year pruning cycle
2. Eucalyptus and Coral trees shall be pruned on a one (1) year pruning cycle
3. Pine trees shall be pruned on a three (3) year pruning cycle
4. Palm tree fronds shall be pruned on a one (1) year pruning cycle

## XI. ROOT PRUNING

A. Refer to (ANSI) Standards, a licensed certified arborist and these recommendations before pruning a tree:

Whenever trees are root pruned, there is always some risk of tree failure. Many factors are involved. Tree species, age, size, site conditions, existing problems, vigor and extent of pruning are just some of the factors.

Mature trees are less tolerant of root pruning than young trees, trees on sites exposed to high winds are less tolerant than sheltered trees, and trees with defects or poor general health are not good candidates for root pruning.

The closer to the trunk the roots are pruned, the greater the negative effect on the tree. Because trees can experience tremendous damage following root pruning, have the trees inspected by a certified arborist prior to pruning

1. Make all cuts at least a distance of three times the trunk diameter from the outside of the trunk. Thus, root pruning of a tree with a trunk diameter of two feet should be done no closer than six feet from the trunk.
2. Make all cuts even farther from the trunk for trees which are judged intolerant of root pruning.
3. When root pruning mature and intolerant trees use a stump grinder to level the offending roots. Grinding produces less damage than indiscriminate root pruning. After grinding the offending roots, add coarse gravel as a base for a new sidewalk or pavers. Root pruning machines and vibrating plows cause less damage than do trenchers and backhoes.
4. Prune only one quadrant of a tree's root system in a given year; wait at least two years before pruning another quadrant.

## XII. DISEASE & INSECT PROBLEMS

Insects and diseases can threaten tree health. As soon as you notice any abnormality in a tree's appearance, begin a careful examination of the problem. By identifying the specific symptoms of damage and understanding their causes, the licensed certified arborist will select an appropriate treatment.

### A. Stress

Basic elements that influence plant health include sufficient water and light, and a proper balance of nutrients. Too much or too little of any of these environmental conditions may cause plant stress.

B. Environmental stress weakens plants and makes them more susceptible to insect and disease attack. Trees deal with environmental stresses, such as shading and competition for water and nutrients in their native environment, by adjusting their growth and development patterns to reflect the availability of the resources. Although trees are adapted to living in stressful conditions in nature, many times the stresses they experience in the landscape are more than they can handle and may make them more susceptible to insects and diseases.

### C. Diagnosis

Correct diagnosis of plant health problems requires a careful examination of the situation.

1. Accurately identify the plant. Because many insects and diseases are plant-specific, this information can quickly limit the number of suspected diseases and disorders.
2. Look for a pattern of abnormality. It may be helpful to compare the affected plant with other plants on the site, especially those of the same species. Differences in color or growth may present clues as to the source of the problem. Non uniform damage patterns may indicate insects or diseases. Uniform damage over a large area (perhaps several plant species) usually indicates disorders caused by such factors as physical injury, poor drainage, or weather.
3. Carefully examine the landscape. The history of the property and adjacent land may reveal many problems. The number of species affected may also help distinguish between infectious pathogens that are more plant-specific as compared to chemical or environmental factors that affect many different species. Most living pathogens take a relatively long time to spread throughout an area, so if a large percentage of plants becomes diseased virtually overnight, a pathogen is probably not involved.
4. Examine the roots. Note their color: brown or black roots may signal problems. Brown roots often indicate dry soil conditions or the presence of toxic chemicals. Black roots usually reflect overly wet soil or the presence of root-rotting organisms.
5. Check the trunk and branches. Examine the trunk thoroughly for wounds because they provide entrances for pathogens and wood-rotting organisms. Wounds can be caused by weather, fire, lawn mowers, and rodents, as well as a variety of other environmental and mechanical factors. Large defects may indicate a potentially hazardous tree.
6. Note the position and appearance of affected leaves. Dead leaves at the top of the tree are usually the result of environmental or mechanical root stress. Twisted or curled leaves may indicate viral infection, insect feeding, or exposure to herbicides. The size and color of the foliage may tell a great deal about the plant's condition. Make note of these and any other abnormalities.

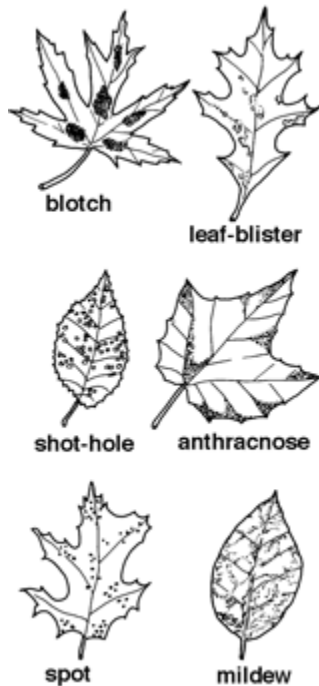
## D. Diseases

Three things are required for a disease to develop:

1. The presence of a pathogen (the disease-causing agent)
2. Plant susceptibility to that particular pathogen
3. An environment suitable for disease development

Plants vary in susceptibility to pathogens. Many disease-prevention programs focus on the use of pathogen-resistant plant varieties. Even if the pathogen is present and a susceptible plant host is available, the proper environmental conditions must be present over the correct period of time for the pathogen to infect the plant.

Diseases can be classified into two broad categories: those caused by infectious or living agents (diseases) and those caused by noninfectious or nonliving agents (disorders). Examples of infectious agents include fungi, viruses, and bacteria. Noninfectious diseases, which account for 70 to 90 percent of all plant problems in urban areas, can be caused by such factors as nutrient deficiencies, temperature extremes, vandalism, pollutants, and fluctuations in moisture. Noninfectious disorders often produce symptoms similar to those caused by infectious diseases; therefore, it is essential to distinguish between the two in order to give proper treatment.

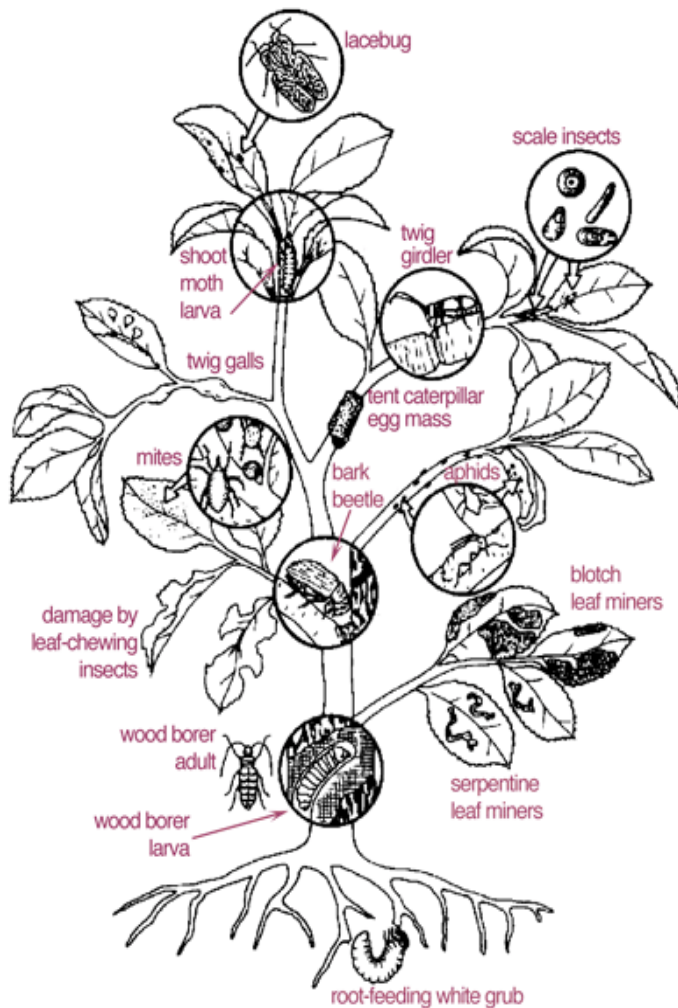


## E. Insects

Some insects can cause injury and damage to trees by defoliating or sucking their sap, insects can retard plant growth. By boring into the trunk and branches, they interfere with sap flow and weaken the tree structure. Insects may also carry some plant diseases. In many cases, however, the insect problem is secondary to problems brought on by a stress disorder or pathogen.

*It is important to remember that most insects are beneficial rather than destructive. They help with pollination or act as predators of more harmful species. Therefore, killing all insects without regard to their kind and function can actually be detrimental to tree health.*

Insects may be divided into three categories according to their method of feeding: chewing, sucking, or boring. Insects from each group have characteristic patterns of damage that will help determine the culprit and the proper treatment. Always consult a licensed certified arborist for tree care expert of the insect problem or the proper treatment.



1. **Chewing insects** eat plant tissue such as leaves, flowers, buds, and twigs. Indication of damage to a tree by these insects is often seen by uneven or broken margins on the leaves, skeletonization of the leaves, and leaf mining. Chewing insects can be beetle adults or larvae, moth larvae (caterpillars), and many other groups of insects. The damage they cause (leaf notching, leaf mining, leaf skeletonizing, etc.) will help in identifying the pest insect.
2. **Sucking insects** insert their beak (proboscis) into the tissues of leaves, twigs, branches, flowers, or fruit and then feed on the plant's juices. Some examples of sucking insects are aphids, mealy bugs, thrips, and leafhoppers. Damage caused by these pests is often indicated by discoloration, drooping, wilting, leaf spots (stippling), honeydew, or general lack of vigor in the affected plant.
3. **Boring insects** spend time feeding somewhere beneath the bark of a tree as larvae. Some borers kill twigs and leaders when adults feed or when eggs hatch into larvae that bore into the stem and develop into adults. Other borers, known as bark beetles, mate at or near the bark surface, and adults lay eggs in tunnels beneath the bark.

### XIII. PESTS AND DISEASE CONTROL

All trees are susceptible to infections by viruses, bacteria, and fungi, as well as to infestation by insects and other pests. Infectious agents and pests vary widely.

The City's Licensed Certified arborist shall provide a diagnosis and make suggestions for treatment of trees that are susceptible to disease or pest. Some additional recommendations are listed below.

Apply all pesticides suitable for plants, complying with manufacturer's instructions and recommendations and all environmental protection regulations.

- A. Inspection: Inspect all plant materials for signs of stress, damage and potential trouble from the following:
  - 1. Presence of insects, moles, gophers, ground squirrels, snails and slugs in planting areas.
  - 2. Discolored or blotching leaves or needles.
  - 3. Unusually light green or yellowish green color inconsistent with normal green color of leaves.
  - 4. Make monthly inspections for evidence of disease, harmful insects or rodents.
  - 5. If evidence of disease, harmful insects or rodents is found, submit a report immediately to the City Director of Public Works. The report shall include:
    - a. The exact location(s) where the disease, harmful insects or rodents are prevalent.
    - b. The opinion of the type of disease, insect or rodent.
    - c. The recommendation for control and elimination of the disease, harmful insect or rodent.
- B. Personnel: Perform spraying for insect, pest and disease control only by qualified, trained personnel.
- C. Application: Spray with extreme care to avoid all hazards to any person or pet in the area or adjacent areas.

Carefully record the following data should chemical control be necessary to control a disease, harmful insect or rodent.

- 1. Type of chemical to be applied
- 2. Application rate of chemical
- 3. Total quantity of chemical used
- 4. Location of application
- 5. Type of application

Be prepared to submit the above listed data to the local County Agricultural Department or the California Department of Agriculture upon request.



#### XIV. WEED CONTROL

- A. All areas around basin of trees, including watering basins shall be weed free.
- B. Use only recommended and legally approved herbicides to control weed growth per manufacturers recommended rates and in conformance with manufacturer's instructions for application.
  - 1. Avoid frequent soil cultivation that destroys shallow roots and breaks the seal of pre-emergent herbicides.
  - 2. Control weeds, preferably with pre-emergent herbicides and with selective systemic herbicides Pre-Planting Herbicide: Round-Up or approved equivalent. Pre-Emergent Weed Control: Ronstar-G, or approved equivalent
  - 3. Keep areas around trees free of weeds. Use recommended, legally approved herbicides. Avoid frequent soil cultivation that destroys shallow roots.
  - 4. Provide monthly record of all herbicides, insecticides and disease control chemicals used on site.
  - 5. The exact location(s) where the herbicide is to be used.
  - 6. Be prepared to submit the above listed data to the local County Agricultural Department or the California Department of Agriculture upon request.

#### XV. AVOIDING TREE DAMAMGE DURING CONSTRUCTION

Unfortunately, the processes involved with construction can be deadly to nearby trees. Unless the damage is extreme, the trees may not die immediately but could decline over several years. With this delay in symptom development, you may not associate the loss of the tree with the construction.

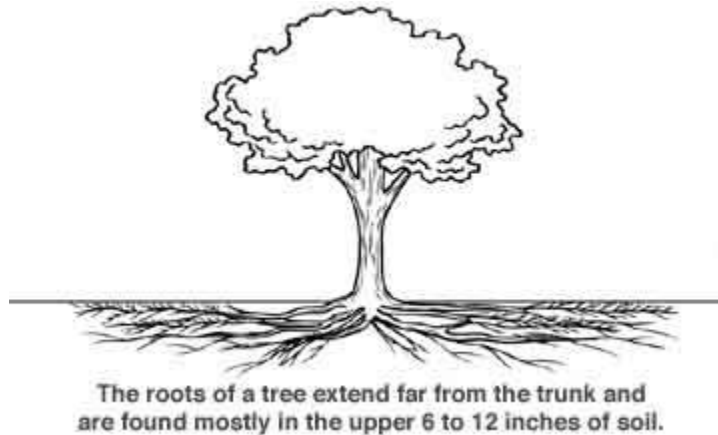
It is possible to preserve trees on building sites if the right measures are taken. Consult with City licensed certified arborist during any construction activity around a tree.

##### A. How Trees Are Damaged During Construction

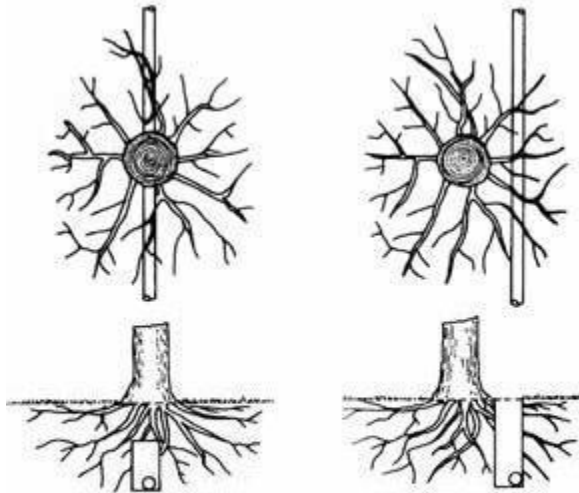
**Physical Injury to Trunk and Crown.** Construction equipment can injure the aboveground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.

**Cutting of Roots.** The digging and trenching that are necessary to construct a house and install underground utilities will likely sever a portion of the roots of many trees in the area. It is easy to appreciate the potential for damage if you understand where roots grow. The roots of a tree are found mostly in the upper 6 to 12 inches of the soil. In a mature tree, the roots extend far from the trunk. In fact, roots typically are found growing a distance of one to three times the height of the tree. The amount of damage a tree can

suffer from root loss depends, in part, on how close to the tree the cut is made. Severing one major root can cause the loss of 5 to 20 percent of the root system.



Another problem that may result from root loss caused by digging and trenching is that the potential for the trees to fall over is increased. The roots play a critical role in anchoring a tree. If the major support roots are cut on one side of a tree, the tree may fall or blow over. Less damage is done to tree roots if utilities are tunneled under a tree rather than across the roots.



1. Soil Compaction. An ideal soil for root growth and development is about 50 percent pore space. These pores—the spaces between soil particles—are filled with water and air. The heavy equipment used in construction compacts the soil and can dramatically reduce the amount of pore space. This compaction not only inhibits root growth and penetration but also decreases oxygen in the soil that is essential to the growth and function of the roots.

2. Smothering Roots by Adding Soil. Almost 90 percent of the fine roots that absorb water and minerals are in the upper 6 to 12 inches of soil. Roots require space, air, and water. Roots grow best where these requirements are met, which is usually near the soil surface. Piling soil over the root system or increasing the grade smothers the roots. It takes only a few inches of added soil to kill a sensitive mature tree.
3. Exposure to the Elements. Trees grow as a community, protecting each other from the elements. The trees grow tall, with long, straight trunks and high canopies. Removing neighboring trees or opening the shared canopies of trees during construction exposes the remaining trees to sunlight and wind. The higher levels of sunlight may cause sunscald on the trunks and branches.

## XVI. LANDSCAPE PRODUCT MATERIALS

A. Bark Mulch: Small fir bark mulch as manufactured by Whittier Fertilization, or equal. Mulch shall consist of fir bark mulch with a particle range of 3/4- to 1-inch in diameter. Shredded bark will not be acceptable.

B. Gravel: Water-worn, hard, durable gravel, washed free of loam, sand, clay, and other foreign substances, and of following size range and color. Size shall range from 1-1/2 inches maximum to 3/4-inch.

C. Sand: Cleaned washed plaster sand shall be used for all palm tree backfill.

D. Perforated Drain Piping and Filtration/Separation Fabric: as per required.

E. Staking Materials:

1. Tree stakes: Lodge pole pine, full treated with Copper naphthanate Wood Preservative in strict accordance with FS TT-W-572 Type I, Composition B,(2)-2 inch minimal normal size diameter by 10 feet long, no split stakes. as manufactured by C & E Lumber Company, Pomona, CA., Tel. (909) 626-3591, or equal

2. Wire ties: 2-strand, twisted, pliable galvanized steel wire, not lighter than 10 gage.

3. Eye bolts and turnbuckles: Zinc-coated, of sufficient strength to withstand wind pressure and resultant movement of plant life.

## XVII. ROOT BARRIERS

Deep Root products are high-quality tree care and storm water management tools to promote ecological function in urban areas.

Contact: Deep Root Partners  
530 Washington Street,  
San Francisco, CA 94111  
Tel: (800) 458-7668

### Deep Root Guidelines:

- A. Install root barriers for newly planted trees (5) five feet from City improvements (i.e. sidewalks, curb & gutter, storm drain structures, wall structures etc.). Root barriers shall be installed along the tree-side edge of the sidewalk. The barrier will deflect tree roots to grow deep below the sidewalk, thus preventing paving uplifting.
- B. Install barrier and extend one foot deep and at least ten (10) feet in both directions from the point on the sidewalk edge closest to the tree.
- C. See Deep Root barrier product specifications within this document for installation procedures.

## XVIII. PAVING SURFACES

Paving Materials -Throughout the City there are conditions where the existing concrete sidewalks have been uplifted and/or broken which are in need of repair due to existing tree species root systems. It is recommended to replace the existing concrete with new and/or install recycled rubberized surface materials that could be flexible as the tree root system expands.

In the Downtown Area where concrete is in need of repair/replacement it is recommended to be replaced with colored concrete pavers to match other existing areas.

### Contacts:

#### Surface America, Inc.

PO Box 157  
Williamsville, NY 14231  
( 800)-999-0555

#### United Sports Surfacing of America, Inc

4000 Barranca Parkway, Suite 250,  
Irvine California, 92604  
(949) 551-4696

### Paving guidelines:

- A. Install expansion joints in new concrete sidewalks near trees. This will limit possible sidewalk replacements to small sections rather than large areas.
- B. Curve and narrow concrete sidewalk sections near trees to reduce uplifting.
- C. Install concrete sidewalks on a bed of coarse road base gravel. Tree roots will not grow through porous gravel, they will grow deeper.

## XIX. IRRIGATION PRODUCTS & SPECIFICATION

### MATERIALS

#### A. General:

1. All specific items required to complete work, perform such work in accordance with best standard practice, with prior approval from City Agency's Authorized Representative.
2. P.V.C. pipe and fittings shall be thoroughly cleaned of dirt, dust and moisture before installation. Installation and solvent welding methods shall be as recommended by the pipe and fitting manufacturer.
3. On P.V.C. to metal connections, the Contractor shall work the metal connections first. Teflon tape or approved equal shall be used on all threaded P.V.C. to P.V.C., and on all threaded P.V.C. to metal joints. Light wrench pressure is all that is required. Where threaded P.V.C. connections are required, use the threaded P.V.C. adapters into which the pipe may be welded.
4. Quick coupling valves: Unless otherwise indicated, locate valves within twelve (12) inches of hardscape.
5. Install backflow assemblies in shrub areas at minimum height permitted by local codes, unless otherwise approved.
6. All major equipment shall be verified for exact location with the Agency's Authorized Representative.
7. After all new sprinkler pipe lines and risers are in place and connected, all necessary diversion work has been completed, and prior to installation of sprinkler heads, the control valves shall be opened and full head of water used to flush out the system.
8. Sprinkler heads shall be installed only after flushing of the system has been accomplished to the complete satisfaction of the Agency's Authorized Representative.

### PIPES AND FITTINGS

- A. Pressure Main Line Piping and Fittings: Pipe sizes two (2) inches or larger shall be P.V.C. Class 315 solvent weld type.
- B. Pressure Main Line Piping and Fittings: Pipe sizes smaller than two (2) inches shall be Scheduled 40 P.V.C.
- C. Non-pressure lines (buried): Shall be P.V.C. Class 200.

- D. Sleeves or conduit lines: Shall be installed under all paving (asphalt concrete or concrete); shall be P.V.C. Schedule 40; shall be two times diameter of the pipe enclosed; shall be installed under paving a minimum 24 inches depth; shall have separate sleeves for control wire, pressure mainline and non-pressure lateral line. Control wire sleeve size shall be as required to allow ample room for any future wire installation. (Twice the diameter of the wires to be sleeved, 3/4" diameter minimum sized sleeve).
- E. All pipe fittings shall conform to specific requirements as follows:
1. P.V.C. (Solvent Weld)
    - a. Pipe: Manufactured from virgin polyvinyl chloride compound in accordance with ASTM D 1784 or ASTM D 2241, cell classification 12454B, hydrostatic design stress rating not less than two thousand (2,000) p.s.i.
    - b. Fittings (solvent weld or thread): Standard weight, Schedule 40, side gated, injected molded P.V.C. complying with ASTM D 1784, cell classification 13454B, including threads when required.
  2. P.V.C. nipples shall be scheduled 80 with molded threads.
  3. All P.V.C. pipe must bear the following markings:
    - a. Manufacturer's name
    - b. Nominal pipe size
    - c. Schedule or class
    - d. Pressure rating in A.S.T. (not required on drip tubing)
    - e. NSF (National Sanitation Foundation) approval (not required on drip tubing)
  4. Brass Pipe & Fittings:
    - a. Brass pipe shall be eighty-five (85) percent red brass, American National Standard Institute (ANSI), Schedule 40 screwed pipe.
    - b. Fittings shall be medium brass, screwed 125 pound class.
  5. Solvent cement and primer for P.V.C. solvent-weld pipe and fittings shall be of type and installation method prescribed by the manufacturer.
  6. All pipe shall be bell end, conforming to ASTM D-2672. Install concrete thrust blocks as recommended in Johns-Manville installation guide no. TR-624, where conditions dictate.

## ELECTRICAL (LOW VOLTAGE)

- A. Connections between controller and remote control valves shall be made with direct burial A WG-UF, 600 volt wire, insulation thickness three-sixty-fourths (3/64) inch, utilizing low density high molecular weight polyethylene insulation.
- B. Splices, where permitted, shall be waterproofed using Rain Bird, Pen-Tite Connectors or fusible heat shrinking tubing, and housed in a box. Boxes for other irrigation use may be utilized for this purpose.
- C. Wire sizing shall be a minimum of #14 "UF" 600 volt underground wiring, unless a shielded cable is used in which case #18 wire may be used. Common wire is to be white in color, and all others a different color.

Electrical control wire shall be AEF 14 AWG Type UP 600 volt (U.L.) direct burial. The wire shall be bundled, taped every ten (10) linear feet, placed adjacent to the main line. An eighteen (18") inch expansion loop will be provided for every change of direction greater than 45E.

The common wire shall be white and the valve control wires shall be black and marked with numbered tags at both ends to identify the valve zones and controller.

## ELECTRICAL (LOW VOLTAGE)

The control wire shall be installed at a depth of 18" minimum below finish grade and sidewalk and sleeved 24" minimum below hard surfaces (i.e. driveways, parking lots, 36" for streets). At each electric control valve an expansion coil of twenty-four (24") inches minimum per wire shall be provided. The coil can be achieved by coiling (winding) the wire around a piece of 3/4 PVC pipe. At the controller pedestal, each control wire shall be twenty-four (24") inches longer than the required connection. The installed wire shall be neatly organized with the excess wire looped and secured to the bottom of the controller cabinet. The control wire shall be sleeved separately in SCH 40 PVC pipe sized to the number of wires to be sleeved (minimum 3/4 inch) under all hard surfaces.

When valve control wiring from two (2) different controllers is located within the same trench, the second controllers wiring shall be as follows:

Common Wire: White with a colored strip

Pilot Wire: Red with tags at each end identifying the controller with valve number and controller I.D.

Additional controller wiring in the same trench from a third, fourth, or more controllers shall be different in color for the pilot wires and the common wire shall be white with a different colored strip. The pilot wires shall be tagged identifying the valve and controller.



Extra control pilot wires will be installed at each controller to the terminal end. The extra wire(s) shall be looped a minimum of 48" up into each valve box. The extra wires will be identified as extra and numbered with tags at each valve box.

All valve control wiring shall be continuous runs. Splicing of wire is unacceptable.

#### BALL VALVES

- A. Three (3) inches or smaller ASTM B-62 brass body, 150 pound saturated steam rated; with screwed joints; non-rising stem; screwed bonnet, solid disc. Provide with handwheel.
- B. Four (4) inches and larger ASTM A126 Class B, iron body 150 pound w.o.g. with flanged joints, non-rising stem, bolted bonnet, and double disc. Provide with handwheel.
- C. Ball valves shall be Nibco or Hammond brands or approved equal.

#### QUICK COUPLING VALVES

- A. Brass body, 150 pound class, with three-fourths (3/4) inch female threads opening at base, permitting operation with a special connecting device (coupler) designed for this purpose. [Rain Bird #33D or equal].
  - 1. Coupler threads: lug type
  - 2. Hinge cover: Provide with rubber-like vinyl cover.
- B. Quick coupler(s) shall be installed within a ten (10) inch round lockable plastic valve box placed a maximum of 150 lineal feet apart.
- C. Quick coupler(s) shall be supported with a SCH 40 PVC pipe stake or equal of adequate length. The quick coupler shall be attached to the stake with two (2) hose clamps.
- D. The quick coupler shall be attached to the main line via a triple swing assembly.

#### BACKFLOW PREVENTION UNITS

- A. Backflow preventer design to operate on a "reduced pressure" principle; equipped with gate valves and field test cock.
- B. Wye strainers in backflow prevention units shall be 125# class cast brass with forty (40) mesh monel screen, unless otherwise noted on drawing.
- D. Backflow device shall be Febco Model 860. Backflow device shall be housed in a "GuardShack" CGS SERIES 1-800-266-5411 by BPD I steel mesh enclosure or equal.

## AUTOMATIC CONTROLLER

- A. A smart automatic irrigation controller installed in an approved stainless steel Edison meter box enclosure.
- B. Provide Sensor Input Board to interface with flow meter and rain shut off device.
- C. Provide radio link kit to communicate with Central Command. Radio equipment shall be VHF compatible.

## AUTOMATIC CONTROLLER

- D. Provide Tipping Bucket Rain Gauge
- E. Install as per manufacturer's instructions. Remote control valves shall be connected to controller in numerical sequence.
- F. Controller shall be mounted inside the electrical pedestal.

## REMOTE CONTROL VALVES

- A. Valve type: spring-loaded, packless diaphragm activated, normally closed type with brass body, equipped with flow control and pressure regulation capabilities when noted on drawing. Electric valves shall be:
- B. Valve solenoid: 24 volt a.c. 4.5 watt maximum, 500 mili-amp maximum surge, corrosion-proof, stainless steel construction, epoxy encapsulated to form a single integral unit.
- C. Provide bleeder valve to permit operation in the field without power at the controller.
- D. Valves shall be installed in shrub planting areas a minimum of six (6) feet from all fixed objects and twenty-four (24) inches apart. [One (1) valve per box; valve boxes shall be installed a minimum of twelve (12) inches apart].

## TURF, SHRUB & TREE SPRINKLER HEADS

- A. Sprinklers shall be similar in all respects to type
- B. Heads shall have screw adjustments.
- C. Nozzle shall rise a minimum of 6 inches.
- D. Body shall be equipped with a built-in check valve for eliminating low head drainage.

- E. The sprinkler heads shall be attached to the lateral lines via a triple
- F. Spacing of heads shall not exceed the maximum indicated by the manufacturer. In no case shall the spacing exceed the maximum recommended by the manufacturer.

#### ROTARY SPRINKLER HEADS

- A. Type: gear driven, with pop-up sprinkler heads equipped with built-in check valves.
- B. Part circle heads shall have variable arc setting.
- C. Rotary sprinkler heads shall be attached to the lateral lines via a triple swing assembly.

#### VALVE BOXES

- A. Valve boxes shall be fabricated from a durable plastic material resistant to weather, sunlight and chemical action of soils with green covers.
- B. Remote control valve and flow sensor boxes shall be rectangular lockable plastic boxes (12" x 18") AMETEK or approved equal, with hinged snap covers.
- C. Gate valve boxes shall be ten (10) inch round lockable plastic boxes with exterior as required to properly protect valve, AMETEK or approved equal.
- D. All buried valves and equipment shall be installed with a proper box.
- E. Fill area under box with a minimum of three (3) cubic feet of three-fourths (3/4) inch gravel before box is installed.
- F. Identification tags shall be attached to each remote control valve, showing number that corresponds with controller sequence. Tags shall be manufactured of polyurethane Behr Desopaid, yellow in color with black letters two and three-fourths (2-3/4) inches by two and one-fourth (2-1/4) inches.
- G. Brand valve box covers in four (4) inch high numbers that corresponds to sequencing shown on drawings.

## TESTING OF IRRIGATION SYSTEM

### A. General:

1. Test all pressure lines under hydrostatic pressure of one hundred fifty (150) pounds per square inch or fifty (50) pounds per square inch more than the normal static pressure (whichever is greater), and prove watertight. Note: This test must be performed prior to paving.
2. Testing of pressure main lines occur prior to installation of electrical control valves, quick couplers or any other equipment that might prevent a proper test from being performed.
3. All piping under paved main lines shall be tested under hydrostatic pressure of one hundred fifty (150) pounds per square inch or fifty (50) pounds per square inch more than normal static pressure (whichever is greater).
4. Sustain pressure in lines for not less than three (3) hours. If leaks develop, replace joints and repeat test until entire system is proved watertight.
5. All hydrostatic tests shall be made only in the presence of the Agency's Authorized Representative, or other duly authorized representative of the Agency. No pipe shall be completely backfilled until it has been inspected, tested and approved in writing.
6. Furnish necessary pressure force pump and all other test equipment.
7. When the sprinkler irrigation system is completed, perform a coverage test in the presence of the Agency's Authorized Representative, to determine if the water coverage for planting areas is complete and adequate. Furnish all materials and perform all work required to correct any inadequacies of coverage due to deviations from plans, or where the system has been willfully installed as indicated on the drawings when it is obviously inadequate, without bringing this to the attention of the Agency's Authorized Representative. This test shall be accomplished and passed before any ground cover of turf is planted.
8. Upon completion of each phase of work, entire system shall be tested and adjusted to meet site requirements.
9. Low voltage wiring under paving shall be tested for continuity, prior to paving when over fifty (50) feet.
10. No planting of trees, shrubs, ground cover or turf shall be installed prior to approval of the irrigation coverage test by the Agency's Authorized Representative.

## MAINTENANCE

- A. The entire sprinkler irrigation system shall be under full automatic operation for a period of seven days prior to any planting.
- B. The Agency's Authorized Representative reserves the right to waive or shorten the operation period.
- C. After the maintenance period, the Contractor shall demonstrate in the presence of the Agency's Authorized Representative the system is in perfect operating order.

## CLEAN-UP

- A. Clean-up shall be performed as each portion of the work progresses. Refuse and excess dirt shall be removed from the site, all walks and paving shall be washed down, and any damage sustained to the work of others shall be repaired and work of others shall be repaired and work returned to its original condition.

## OPERATING INSTRUCTIONS

- A. The Contractor shall be required to train City Agency's maintenance personnel in proper operation of all major equipment. Provide written evidence of the person or persons so trained to the Agency's Authorized Representative.

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END OF SECTION

## XX. CONTACT INFORMATION & SUPPLIERS

### **TREE NURSERIES**

Approved recommended tree species available at:

Southern California Nurseries

Shade, Flowering & Fruit bearing Trees

Valley Crest Tree Company

24151 Ventura Blvd., Calabasas, CA 91302

Contact: Bill Long

Sunny Slope Trees

1545 N. Glassell St, Orange

Phone (714) 532-1440

Contact: Mark

Bamboo Pipeline

321 N. Aviator Street Suite 201

Camarillo, CA 93010

Phone (888) 288-1619

Berylwood Tree Farm

1048 E La Loma Ave

Somis, CA 93066

Phone (805) 485-7601

Contact: Rolla J Wilhite

Southern California Nurseries

Palm Trees

W D Young & Sons Palm Nursery

81910 Arus Ave, Indio, CA

(760) 347-7906

Landscape Center

9505 Cleveland Ave.,

Riverside, CA 92503

(951) 352-8383

## **TREE TRIMMING COMPANIES:**

### Sims Tree Health Specialists, Inc.

6111 Appaloosa Avenue, Pedley, CA 92509

Phone: (951) 685-6662

## **REGISTERED CONSULTING ARBORIST**

To find other Registered Consulting Arborist, please visit the American Society of Consulting Arborists' website: [www.asca-consultants.org](http://www.asca-consultants.org).

### Arborgate Consulting

Greg Applegate, RCA #365

1131 Lucinina Way

Tustin, CA 92780

(714) 731-6240

Ms. Lisa Smith, RCA # 464

Los Angeles, CA

(310) 663-2290

## **SOIL TESTING & ANALYSIS LABORATORIES**

### Wallace Laboratories

365 Coral Circle

El Segundo, CA 90245

(310) 615-0116

### Soil and Plant Laboratory

1594 North Main Street

Orange, CA 92867

(714)-282-8777

## XXI. PRODUCT MANUFACTURERS & SUPPLIERS

### **Fertilizer & Soils**

#### Orange County Farm Supply Co.

1826 W Chapman Ave  
Orange, CA 92868-2695  
(714) 978-6500

#### Southcoast Supply

18851 Goldenwest St.  
Huntington Beach , CA 92648  
(714) 842-8866

#### Southern California Organic Fertilizer Company

El Monte, CA (714/750-3830)

#### Irrigation Materials & Landscape Products

Whitecap, Santa Ana, CA  
(714/258-3300)

#### Ewing Irrigation & Industrial Products

2899 Walnut Ave  
Signal Hill, CA 90755-1833  
(562) 989-9530

#### Landscape Products

Deep Root Barriers  
ArborGard+ Tree trunk protector

### **Concrete Pavers**

#### Sepulveda Building Products

359 East Gardena Blvd  
Gardena, CA 90248-2815  
(310) 436-1400

#### Southeast Construction Products

16514 East Whittier Blvd.  
(562) 943-0201

#### Rubberized Surfacing

#### Surface America, Inc.

PO Box 157  
Williamsville, NY 14231  
( 800) 999-0555



XXI. PRODUCT MANUFACTURERS & SUPPLIERS (cont.)

United Sports Surfacing of America, Inc  
4000 Barranca Parkway, Suite 250,  
Irvine California, 92604  
(949) 551-4696

Synthetic Grass

PolyTurf, Inc.  
4000 Barranca Parkway #250  
Irvine, CA 92604  
Phone: 949-551-4696

**City of Seal Beach**  
**Street Tree Removal and Installation Cost Estimate**  
December 20, 2010

Item	# of Units	Unit	Cost/Unit	Total
<b>DEMOLITION</b>				
Removal of concrete curb & gutter		LF		
Removal of concrete Sidewalk		SF		
Removal of existing tree & root System		EA		
Over excavate soil (2x) new tree container size		CY		
<i>Subtotal</i>				\$0
<b>CONSTRUCTION</b>				
Construct P.C.C. concrete curb & gutter		LF		
Install 4" thick P.C.C. natural gray concrete paving		SF		
Install precast colored concrete paver w/ sub-base		SF		
Install deep root tree barrier		LF		
Install crushed aggregate base		SF		
Install decomposed 2" thick granite paving		SF		
<i>Subtotal</i>				\$0
<b>WATER / UTILITIES</b>				
Adjust existing irrigation heads & laterals		SF		
Install irrigation schedule 40 mainline		LF		
Install irrigation class 315 mainline		LF		
Install irrigation schedule 40 lateral		LF		
Install irrigation remote control valve		EA		
Install irrigation Leit 4000 solar powered controller		EA		
Install irrigation controller in stainless steel enclosure		EA		
Install electrical conduit & wiring		LF		
Relocate existing utility lines &/ or valves		EA		
<i>Subtotal</i>				\$0
<b>PLANTING</b>				
Purchase & Install new 15 gallon tree		EA		
Purchase & Install new 24" box tree		EA		
Purchase & Install new 36" box tree		EA		
Purchase & Install new 48" box Tree		EA		
Purchase & Install new 60" box tree		EA		
Imported Class A topsoil / fill		CY		
Install soil planter mix		CY		
Install tree fertilizer tablets		EA		
<i>Subtotal</i>				\$0
<b>MAINTENANCE</b>				
Watering - 1 month cycle		LS		
Fertilization - 6 month interval cycle		LS		
Tree Trimming - 36 month pruning cycle		LS		
Root Pruning - 12 month pruning cycle		LS		
<i>Subtotal</i>				\$0
<b>MISCELLANEOUS</b>				
Furnish & Provide soils report		EA		
1 Year maintenance period		LS		
Clean-up		LS		
Traffic control		LS		
Mobilization		LS		
<i>Subtotal</i>				\$0
<b>Subtotal</b>				<b>\$0</b>
<b>Contingency @ 10%</b>				<b>\$0</b>
<b>Grand Total</b>				<b>\$0</b>

Legend:

EA=Each                      LS=Lump Sum  
SF=Square Feet            CY=Cubic Yards  
LF=Linear Feet

# American National Standard

for Arboricultural Operations—  
**Safety Requirements**

ANSI®  
Z133.1-2006  
Revision of  
ANSI Z133.1-2000

American National Standard  
for Arboricultural Operations—  
**Safety Requirements**

Secretariat  
International Society of Arboriculture  
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# American National Standard

Approval of an American national standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered and that a concerted effort be made toward their resolution.

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The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American national standard. Moreover, no person shall have the right or authority to issue an interpretation of an American national standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

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This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Safety in Tree Trimming Operations, Z133. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z133 Committee had the following members:

H. Dennis P. Ryan III, Chair  
 Donald F. Blair, Vice Chair  
 Jim Skiera, Secretary  
 Peggy Currid, Editor

**Organization Represented**

**Name of Representative**

ACRT, Inc.

Peter J. Dubish

Jim Rooney (Alt.)

American Insurance Services Group -- NIP Group, Inc.  
 ArborMaster Training, Inc.

J. George Klinger

Ralph (Rip) Tompkins

Sean Gere (Alt.)

Arizona Public Service

Dieter Paries

Nick Fiscina (Alt.)

Asplundh Tree Expert Company

Andrew J. Salvatore

Gil Niedenthal (Alt.)

The F.A. Bartlett Tree Expert Company

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Joe Bones (Alt.)

Buckingham Mfg.

Jim Pennefeather

California Arborist Association

Don Blair

The Care of Trees

Joe Engberg

John Hendricksen (Alt.)

The Davey Tree Expert Company

Joe Tommasi

Edison Electric Institute

Mark "Scott" McDaniel

Herschel Hale (Alt.)

Husqvarna

Cary Shepherd

Tim Ard (Alt.)

International Brotherhood of Electrical Workers

James Tomaseski

Kurt Groenendaal (Alt.)

International Society of Arboriculture

Bruce Smith

Ken Palmer (Alt.)

Lewis Tree Service, Inc.

Daniel H. Oberlies

Allan Fraser (Alt.)

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- 3.3.4 Employees who may be faced with a rescue decision shall receive training in emergency response and rescue procedures appropriate and applicable to the work to be performed, as well as training to recognize the hazards inherent in rescue efforts (Annex F).
- 3.3.5 Cardiopulmonary resuscitation (CPR) and first-aid training shall be provided in the absence of an infirmary, clinic, or hospital near the worksite.

### **3.4 Personal Protective Equipment (PPE)**

- 3.4.1 Personal protective equipment (PPE), as outlined in this section, shall be required when there is a reasonable probability of injury or illness that can be prevented by such protection. Training shall be provided in the use, care, maintenance, fit, and life of personal protective equipment.
- 3.4.2 Workers engaged in arboricultural operations shall wear head protection (helmets) that conforms to ANSI Z89.1. Class E helmets shall be worn when working in **proximity to electrical conductors**, in accordance with ANSI Z89.1. Workers shall not place reliance on the **dielectric** capabilities of such helmets.
- 3.4.3 Face protection shall comply with applicable federal regulations as well as with ANSI Z87.1.
- 3.4.4 Clothing and footwear appropriate to the known job hazards shall be **approved** by the employer and worn by the employee.
- 3.4.5 Respiratory protection shall comply with applicable federal regulations as well as with ANSI Z88.2.
- 3.4.6 Hearing protection provided by the employer shall be worn when it is not practical to decrease or isolate noise levels that exceed acceptable standards.
- 3.4.7 Eye protection shall comply with ANSI Z87.1 and shall be worn when engaged in arboricultural operations.
- 3.4.8 Chain-saw-resistant **leg protection** shall be worn while operating a chain saw during ground operations.

### **3.5 Fire Protection**

- 3.5.1 Equipment shall be refueled only after the engine has stopped. Spilled fuel shall be removed from equipment before restarting.
- 3.5.2 Equipment shall not be operated within 10 feet (3.05 m) of refueling operations or areas in which refueling has recently taken place.
- 3.5.3 Flammable liquids shall be stored, handled, and dispensed from approved containers.

**Table 1. Minimum approach distances from energized conductors for qualified line-clearance arborists and qualified line-clearance arborist trainees.**

Nominal voltage in kilovolts (kV) phase to phase	Includes 1910.269 elevation factor, sea level to 5,000 ft*		Includes 1910.269 elevation factor, 5,000–10,000 ft*		Includes 1910.269 elevation factor, 10,001–14,000*	
	ft-in	m	ft-in	m	ft-in	m
0.051 to 0.3	<i>Avoid contact</i>		<i>Avoid contact</i>		<i>Avoid contact</i>	
0.301 to 0.75	1-01	0.33	1-03	0.38	1-04	0.41
0.751 to 15.0	2-05	0.70	2-09	0.81	3-00	0.88
15.1 to 36.0	3-00	0.91	3-05	1.04	3-09	1.00
36.1 to 46.0	3-04	1.01	3-10	1.16	4-02	1.09
46.1 to 72.5	4-02	1.26	4-09	1.44	5-02	1.30
72.6 to 121.0	4-06	1.36	5-02	1.55	5-07	1.68
138.0 to 145.0	5-02	1.58	5-11	1.80	6-05	1.96
161.0 to 169.0	6-00	1.80	6-10	2.06	7-05	2.23
230.0 to 242.0	7-11	2.39	9-00	2.73	9-09	2.95
345.0 to 362.0	13-02	3.99	15-00	4.56	16-03	4.94
500.0 to 550.0	19-00	5.78	21-09	6.60	23-07	7.16
765.0 to 800.0	27-04	8.31	31-03	9.50	33-10	10.29

\*Exceeds phase to ground; elevation factor per 29 CFR 1910.269.

Note: At time of publication, the minimum approach distances in this table for voltages between 301 and 1,000 volts exceed those specified by 29 CFR 1910.269, in anticipation of OSHA adopting these distances during the life of ANSI Z133.1-2006.

- 4.2.3 Only qualified line-clearance arborists or **qualified line-clearance arborist trainees** shall be assigned to work where an electrical hazard exists. Qualified line-clearance arborist trainees shall be under the direct supervision of qualified line-clearance arborists.
- 4.2.4 A second qualified line-clearance arborist or line-clearance arborist trainee shall be within visual or voice communication during line-clearing operations aloft when an arborist must approach closer than 10 feet (3.05 m) to any energized electrical conductor in excess of 750 volts (**primary conductor**) or when
- branches or limbs are being removed, which cannot first be cut (with a nonconductive pole pruner/pole saw) to sufficiently clear electrical conductors, so as to avoid contact; and/or
  - roping is required to remove branches or limbs from such electrical conductors.

**Table 2. Minimum approach distances to energized conductors for persons other than qualified line-clearance arborists and qualified line-clearance arborist trainees.**

Nominal voltage in kilovolts (kV) phase to phase*	Distance	
	ft-in	m
0.0 to 1.0	10-00	3.05
1.1 to 15.0	10-00	3.05
15.1 to 36.0	10-00	3.05
36.1 to 50.0	10-00	3.05
50.1 to 72.5	10-09	3.28
72.6 to 121.0	12-04	3.76
138.0 to 145.0	13-02	4.00
161.0 to 169.0	14-00	4.24
230.0 to 242.0	16-05	4.97
345.0 to 362.0	20-05	6.17
500.0 to 550.0	26-08	8.05
785.0 to 800.0	35-00	10.55

\*Exceeds phase to ground per 29 CFR 1910.333.

- 4.3.4 Line-clearance operations shall be suspended when adverse weather conditions or emergency conditions develop involving energized electrical conductors. Electrical system owners/operators shall be notified immediately.

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## 5 SAFE USE OF VEHICLES AND MOBILE EQUIPMENT USED IN ARBORICULTURE

### 5.1 General

- 5.1.1 Prior to daily use of any vehicles and mobile equipment (units), visual walk-around inspections and operational checks shall be made in accordance with manufacturers' and owners' instructions and applicable federal, state, and local requirements.
- 5.1.2 Units shall be equipped and maintained with manufacturers' safety devices, instructions, warnings, and safeguards. Arborists and other workers shall follow instructions provided by manufacturers.
- 5.1.3 Manufacturers' preventive maintenance inspections and parts replacement procedures shall be followed.
- 5.1.4 Manufacturers' instructions shall be followed in detecting hydraulic leaks. No part of the body shall be used to locate or stop hydraulic leaks.
- 5.1.5 Units shall be operated or maintained only by **authorized** and **qualified personnel** in accordance with company policies and federal, state, or local laws.
- 5.1.6 Material and equipment carried on vehicles shall be properly stored and secured in compliance with the design of the unit in order to prevent the movement of material or equipment.
- 5.1.7 Step surfaces and platforms on mobile equipment shall be skid resistant.
- 5.1.8 Safety seat belts, when provided by the manufacturer, shall be worn while a unit is being operated.
- 5.1.9 Riding or working outside or on top of units shall not be permitted unless the units are designed for that purpose or the operator is performing maintenance or inspection.
- 5.1.10 Hoisting or lifting equipment on vehicles shall be used within rated capacities as stated by the manufacturers' specifications.
- 5.1.11 Units with obscured rear vision, particularly those with towed equipment, should be backed up only when absolutely necessary and then should be used with external rear guidance, such as a **spotter**, or a backup alarm.
- 5.1.12 When units are left unattended, keys shall be removed from ignition, the wheels chocked, and, if applicable, the parking brake applied.

- 5.2.9 Clearances from passing vehicles shall be maintained, or traffic control shall be provided when booms or buckets are operated over roads.
- 5.2.10 One-person buckets shall not have more than one person in them during operations.
- 5.2.11 Hydraulic/pneumatic tools shall be disconnected when they are being serviced or adjusted, except where manufacturers' procedures require otherwise.
- 5.2.12 To avoid flying particles or whipping hydraulic/pneumatic hoses, pressure shall be released before connections are broken, except where **quick-acting connectors** are used. Hydraulic/pneumatic hoses shall never be kinked in order to cut off pressure.
- 5.2.13 No part of the body shall be used to locate or stop hydraulic leaks.
- 5.2.14 Hoses affecting dielectric characteristics of equipment shall meet manufacturers' requirements.
- 5.2.15 The flash point of hydraulic fluid shall meet the minimum set by the manufacturer.
- 5.2.16 Combined loads shall not exceed rated lift capacities. Load ratings shall be conspicuously and permanently posted on aerial devices in accordance with ANSI A92.2.
- 5.2.17 Electric cables/cords used with electric saws or lights, or other conductive material shall not be run from the vehicle to the bucket when arborists are working in proximity to energized electrical conductors.
- 5.2.18 Aerial devices shall not be moved with an arborist on an elevated platform (for example, a bucket) except when equipment is specifically designed for such operation.
- 5.2.19 Holes shall not be drilled in buckets or liners.
- 5.2.20 During aerial device operations, arborists and other workers who are not qualified line-clearance arborists shall maintain a minimum approach distance from energized electrical conductors in accordance with Table 2. Only qualified line-clearance arborists or qualified line-clearance arborist trainees using an insulated aerial device may operate in accordance with minimum approach distances provided in Table 1.
- 5.2.21 Arborists and other workers shall be instructed that insulated aerial buckets do not protect them from other electric paths to the ground, such as paths through trees, guy wires, or from one phase wire to the second phase wire, any one of which can be fatal.
- 5.2.22 All underground hazards shall be located prior to operating aerial lift devices off-road. These hazards could include natural gas tanks, underground oil tanks, and septic systems.

- 5.4.3 Equipment on which the applicator/operator stands while the vehicle is in motion shall be equipped with guardrails around the working area. Guardrails shall be constructed in accordance with ANSI A1264.1.
- 5.4.4 The applicator/operator shall make a visual inspection of hoses, fittings, exposed plumbing, tanks, covers, and related equipment prior to its use each workday.
- 5.4.5 The applicator/operator shall not allow hoses or other parts of the equipment to create a tripping hazard for coworkers or the public.
- 5.4.6 The applicator/operator shall have a firm grip on the spray gun/excavation tool when pulling the trigger.
- 5.4.7 The operator of **high-pressure excavation** equipment shall wear a face shield in addition to eye protection.
- 5.4.8 Related Equipment
  - 5.4.8.1 The applicator/operator shall be aware of underground utility locations when drilling holes in the ground for fertilizer or pesticide applications.
  - 5.4.8.2 The equipment shall have splash guards, and the applicator shall wear eye protection when injecting liquid fertilizer or pesticides into the ground.
  - 5.4.8.3 The applicator shall wear eye protection and follow label instructions when injecting liquids into trees.

## **5.5 Stump Cutters**

- 5.5.1 The items contained in section 5.1 shall always be included in the review of this section.
- 5.5.2 Stump cutters shall be equipped with enclosures or guards that reduce the risk of injury during operation. Enclosures or guards shall be kept in place when stump cutters are operative.
- 5.5.3 Arborists and other workers in the immediate stump-cutting work zone shall wear vision, hearing, and/or other personal protective equipment in accordance with section 3.4, Personal Protective Equipment.
- 5.5.4 When in a towing position, stump-cutter safety chains shall be crossed under the tongue of the stump cutter and properly affixed to the towing vehicle.
- 5.5.5 Towable stump cutters or stump-cutter trailers, when detached from the vehicle, shall be chocked or otherwise secured in place.
- 5.5.6 The operator shall be aware of underground utility locations prior to performing work.

- 5.7.8 Riding the load line of a crane while it is under load tension shall be prohibited, except for circumstances outlined in subsection 5.7.9.11.
- 5.7.9 A qualified arborist may be hoisted into position utilizing a crane if the arborist is **tied in** with an **arborist climbing line** and **arborist saddle** and secured to a designated anchor point on the boom line or crane. The following procedures shall be followed when an arborist is to be lifted by a crane:
- 5.7.9.1 The person specifically responsible for the work shall authorize the use of a crane for hoisting an arborist into position only when he or she has determined that it is the safest, most practical way to perform the work or gain access to the tree.
- 5.7.9.2 The **qualified crane operator** and the person responsible for the work to be performed shall meet prior to the work to review the procedures to be followed. If the work involves a signal person and/or arborist being lifted, these persons shall participate in the review as well. A job briefing shall be done before any work begins, in accordance with subsection 3.1.4.
- 5.7.9.3 The arborist climbing line shall be secured to the crane in such a way that it does not interfere with the function of any damage-prevention or warning device on the crane and so that no part of the crane compromises the climbing line or any component of the climbing system.
- 5.7.9.4 The crane operator shall test the adequacy of footing prior to any lifting. The crane shall be uniformly level and located on firm footing. If necessary, blocking shall be used so that the support system does not exceed its load-bearing capabilities. Cranes equipped with outriggers shall have them all fully extended and properly set, as applicable, before lifting and lowering operations begin and/or before the qualified arborist is lifted.
- 5.7.9.5 Lifting and supporting shall be done under controlled conditions and under the direction of a qualified arborist or an appointed signal person.
- 5.7.9.6 The load-line hoist drum shall have a system or other device on the power train, other than the load hoist brake, that regulates the lowering speed of the hoist mechanism.
- 5.7.9.7 Communication between the crane operator and the arborist being lifted shall be maintained either directly or through the appointed signal person. This communication shall either be visual, using the accepted hand signals, or audible, using voice or radio. Radio communication should be used to control blind picks. The crew members shall know and follow hand signals for standard crane operations (Annex G).
- 5.7.9.8 The crane operator shall remain at the controls when the qualified arborist is attached to the crane and during lifting and lowering operations.

- 5.9.4 Cable hooks and attachment points shall be inspected for damage. Damaged hooks or attachment assemblies shall be taken out of service.
- 5.9.5 All mounting bolts and hardware shall be inspected for loose or missing components. The winch shall not be used until complete repairs are made to damaged or missing bolts and hardware.
- 5.9.6 Operators shall be aware of the dangers of load or cable breakage and ensure that all personnel remain clear of the recoil area in the event of load or cable breakage.
- 5.9.7 All winch operators shall be properly trained and be aware of the inherent dangers associated with winch operations.
- 5.9.8 Operators shall be aware of the winch cable at all times during extension and ensure that it does not become a hazard to personnel or machinery.
- 5.9.9 Winch systems and cables shall be used only as intended and instructed by the manufacturer.
- 5.9.10 The winch shall never be used with personnel, including the operator, within the span of the winch cable and the winch.
- 5.9.11 Pinch point hazards develop during winching operations; therefore, all operators involved in the winching operation shall constantly be aware of such hazards and stand clear of these areas.
- 5.9.12 All loads shall be pulled in such a manner as to avoid angles that may result in tipping, cause the vehicle to become unstable, or result in unintended movement of the vehicle.
- 5.9.13 Pulling loads from the side requires special equipment and techniques. Therefore, loads shall be pulled in line with the winch unless the winch is properly equipped with a fair lead and the operator is trained to pull loads at an angle.
- 5.9.14 The operator shall ensure that the vehicle supporting the winch is secured to avoid unintended movement.
- 5.9.15 The operator shall ensure that all rigging points comply with section 8.4, Rigging.
- 5.9.16 To ensure precise communication, an effective means of communication shall be established and used with all workers involved in the winching operations (see subsection 8.4.11).

### 6.3 Chain Saws

- 6.3.1 The items contained in section 6.1 shall always be included in the review of this section.
- 6.3.2 Chain saws shall not be operated unless the manufacturer's safety devices are in proper working order. Chain-saw safety devices shall not be removed or modified.
- 6.3.3 When an arborist or other worker is working in a tree other than from an aerial device, chain saws weighing more than 15 pounds (6.8 kg) service weight shall be made safe against falling (i.e., supported by a separate line or tool lanyard).
- 6.3.4 Secure footing shall be maintained when starting the chain saw.
- 6.3.5 When starting a chain saw, the operator shall hold the saw firmly in place on the ground or otherwise support the saw in a manner that minimizes movement of the saw when pulling the starter handle. The chain saw shall be started with the chain brake engaged, on saws so equipped. **Drop-starting** a chain saw is prohibited.
- 6.3.6 Chain-saw engines shall be started and operated only when other arborists and workers are clear of the chain saw.
- 6.3.7 When operating a chain saw, the arborist or other worker shall hold the saw firmly with both hands, keeping the thumb and fingers wrapped around the handle.
- 6.3.8 Arborists shall use a second point of attachment (for example, **lanyard** or double-crocheted climbing line) when operating a chain saw in a tree, unless the employer demonstrates that a greater hazard is posed by using a second point of attachment while operating a chain saw in that particular situation. Using both ends of a two-in-one lanyard shall not be considered two points of attachment when using a chain saw.
- 6.3.9 Chain-saw mufflers and spark arresters (if the latter are provided) shall be maintained in good condition.
- 6.3.10 The chain brake shall be engaged, or the engine shut off, before setting a chain saw down.
- 6.3.11 When a chain saw is being carried more than two steps, the chain brake shall be engaged or the engine shut off. The chain saw shall be carried in a manner that will prevent operator contact with the cutting chain and the muffler.
- 6.3.12 The chain-saw operator shall be certain of footing before starting to cut. The chain saw shall not be used in a position or at a distance that could cause the operator to become off-balance, have insecure footing, or relinquish a firm grip on the saw.



- 7.2.3 Points of hooks shall be at least 2 inches (5 cm) long and kept sharp.
- 7.2.4 Arborists and other workers shall always stand uphill from rolling logs, and all workers shall be warned and in the clear before logs are moved.

### **7.3 Wedges, Chisels, and Gouges**

- 7.3.1 The items contained in section 7.1 shall always be included in the review of this section.
- 7.3.2 Wedges, chisels, and gouges shall be inspected for cracks and flaws before use. Tools with damaged heads shall not be used.
- 7.3.3 Wedges and chisels shall be properly pointed and tempered.
- 7.3.4 Eye protection shall be used during impact operations.
- 7.3.5 Only wood, plastic, or soft-metal wedges shall be used while operating chain saws.
- 7.3.6 Wood-handled chisels should be protected with a ferrule on the striking end.
- 7.3.7 Wood, rubber, or high-impact plastic mauls, sledges, or hammers should be used when striking wood-handled chisels or gouges.

### **7.4 Chopping Tools**

- 7.4.1 The items contained in section 7.1 shall always be included in the review of this section.
- 7.4.2 Chopping tools should not be used while working aloft.
- 7.4.3 Chopping tools shall not be used as wedges or used to drive metal wedges.
- 7.4.4 Chopping tools shall be swung away from the feet, legs, and body, using the minimum force practical for function and control.
- 7.4.5 When swinging tools such as grub hoes, mattocks, and axes, a secure grip, firm footing, and clearance of workers and overhead hazards shall be maintained.

### **7.5 Ladders**

- 7.5.1 The items contained in section 7.1 shall always be included in the review of this section.
- 7.5.2 Ladders made of metal or other conductive material shall not be used where electrical hazards exist. Only wooden ladders (constructed in accordance with ANSI A14.1) or nonconductive ladders made of synthetic material equal to or exceeding the strength of wooden ladders shall be used.
- 7.5.3 Metal ladders used where no electrical hazard exists shall conform to ANSI A14.2.

- 8.1.7 Hardware used in the manufacture of arborist saddles shall meet the hardware material, strength, and testing requirements outlined in ANSI 359.1.
- 8.1.8 Arborist climbing lines shall have a minimum diameter of 1/2 inch (12.7 mm) and be constructed from a synthetic fiber, with a minimum breaking strength of 5,400 pounds (24.02 kilonewtons [kN]) when new. Maximum working elongation shall not exceed 7 percent at a load of 540 pounds (2.402 kN). Arborist climbing lines shall be identified by the manufacturer as suitable for tree climbing.

**EXCEPTION**

In arboricultural operations not subject to regulations that supersede Z133.1, a line of not less than 7/16 inch (11 mm) diameter may be used, provided the employer can demonstrate it does not create a safety hazard for the arborist and the arborist has been instructed in its use. The strength and elongation ratings of the line selected shall meet or exceed that of 1/2-inch (12.7 mm) arborist climbing line.

- 8.1.9 Prusik loops, split-tails, and work-positioning lanyards used in a climbing system shall meet the minimum strength standards for arborist climbing lines.
- 8.1.10 Snap hooks (rope snaps) used in climbing shall be self-closing and self-locking, with a minimum tensile strength of 5,000 pounds (22.24 kN).
- 8.1.11 Carabiners used in climbing shall be self-closing and self-locking, with a minimum tensile strength of 5,000 pounds (22.24 kN). Carabiners shall be designed to release the load by requiring at least two consecutive, deliberate actions to prepare the gate for opening.
- 8.1.12 Splicing shall be done in accordance with cordage manufacturers' specifications.
- 8.1.13 All load-bearing components of the climbing system shall meet the minimum standards for arborist climbing equipment.
- 8.1.14 Equipment used to secure an arborist in the tree or from an aerial lift shall not be used for anything other than its intended purpose.

**EXCEPTION**

The arborist climbing line may be used to raise and lower tools.

- 8.1.15 Rope ends shall be finished in a manner to prevent raveling.
- 8.1.16 Ropes and climbing equipment shall be stored and transported in such a manner to prevent damage through contact with sharp tools, cutting edges, gas, oil, or chemicals.
- 8.1.17 Arborist climbing lines shall never be left in trees unattended.
- 8.1.18 Arborists shall have available a climbing line and at least one other means of being secured while working aloft; for example, an arborist climbing line and a work-positioning lanyard.

- 8.2.6 Dry conditions and dead palm fronds present an extreme fire hazard. When dry conditions exist, arborists and other workers shall not smoke while working in or near dead palm fronds. All chain saws used under such conditions shall have mufflers and spark arresters in good working condition.
- 8.2.7 Palm frond skirts that have three years or more of growth shall be removed from the top down. Arborists performing this work shall be supported by an arborist climbing line and a false crotch. Arborists shall never attempt to remove skirts of three years or more by positioning themselves below work areas while being supported by a lanyard.
- 8.2.8 Cut branches shall not be left in trees upon completion of work.

### 8.3 Cabling

- 8.3.1 Arborists and other workers on the ground shall not stand under the work area of a tree when a cabling system is being installed.
- 8.3.2 Tools used for cabling, bark tracing, and cavity work shall be carried in a bag, on a belt designed to hold such tools, or attached to a tool lanyard.
- 8.3.3 Arborists installing cabling systems in trees shall be positioned off to one side in order to avoid injury in case of cable system failure that could occur when a block and tackle or a hand winch is released.

### 8.4 Rigging

- 8.4.1 Arborists performing rigging operations shall inspect trees for their integrity to determine whether the trees have any visible defect that could affect the operation. If it is determined that the tree poses a risk of failure due to the forces and strains that will be created by the design of the rigging operation, an alternate plan shall be used.
- 8.4.2 The number of connecting links used for connecting components of a rigging system shall be minimized when possible. Care shall be taken to ensure that connecting links interface properly and in compliance with manufacturers' recommendations.
- 8.4.3 The qualified arborist shall ensure that load ratings shown on the rigging equipment or provided by the manufacturer for all ropes, connecting links, and rigging equipment are observed in all rigging operations. Rigging equipment shall be chosen for the specific task based on **working-load limits** and design specifications.
- 8.4.4 All equipment used for rigging operations shall be in **good working condition**. Equipment that has been damaged or overloaded shall be removed from service.
- 8.4.5 When the potential exists for rigging equipment to be confused with climbing equipment, the equipment shall be clearly marked to indicate their different purposes.

- 8.4.15 Arborists working aloft shall position themselves so as to be above or to the side of the piece being rigged and out of the path of movement of the piece when it has been cut. Climbers and their climbing systems shall be positioned outside of the rigging system itself when a cut is being made or a load is being moved or lowered. Climbers shall have an escape plan prepared.
- 8.4.16 The spars, limbs, or leaders being worked on and the spars being used for tie-in and/or rigging points shall be assessed for structural integrity and potential reaction forces that could cause a spar to split when it is cut.
- 8.4.17 Steps shall be taken to prevent spars from splitting or tearing during the rigging operation, and climbers shall take steps to avoid trapping, pinning, or entangling themselves in the system should the tree split or the rigging fail. Load binders are one possible means of preventing splitting.

## **8.5 Tree Removal**

- 8.5.1 Before beginning any tree removal operation, the chain-saw operator and/or crew leader shall carefully consider all relevant factors pertaining to the tree and site and shall take appropriate actions to ensure a safe removal operation. The following factors should be considered:
  - (a) the area surrounding the tree to be removed, including nearby trees;
  - (b) species and shape of the tree;
  - (c) lean of the tree;
  - (d) loose limbs, chunks, or other overhead material;
  - (e) wind force and direction;
  - (f) decayed or weak spots throughout the tree (be aware of additional hazards if these conditions exist in the hinge area);
  - (g) location and means to protect other persons, property, and electrical conductors;
  - (h) size and terrain characteristics or limitations of the work area; and
  - (i) evidence of bees or wildlife habitation in the tree.
- 8.5.2 Work plans for removal operations shall be communicated to all workers in a job briefing before commencing work.
- 8.5.3 Workers not directly involved in the removal operation shall be clear of the work area, where practicable, beyond the length of the tree, unless a team of workers is necessary to remove a particular tree.

- 8.5.15.1 The notch cut used shall be a **conventional notch**, an **open-face notch**, or a **Humboldt notch**.
- 8.5.15.2 Notches shall be 45 degrees or greater and large enough to guide the fall of the tree or trunk to prevent splitting.
- 8.5.15.3 Notch depth should not exceed one-third the diameter of the tree.
- 8.5.15.4 The back cut shall not penetrate into the predetermined hinge area.
- 8.5.16 With a conventional notch or Humboldt notch, the back cut shall be 1 to 2 inches (2.5 to 5 cm) above the apex of the notch to provide an adequate platform to prevent kick-back of the tree or trunk. With an open-face notch (greater than 70 degrees), the back cut should be at the same level as the apex of the notch.
- 8.5.17 The two cuts that form the notch shall not cross at the point where they meet.
- 8.5.18 Before making the back cut, there shall be a command such as "stand clear" from the arborist operating the chain saw and a response such as "all clear" from the workers supporting the removal operation. Pre-arranged, two-way hand signals may also be used. Only designated persons shall give such signals. All workers in the vicinity shall be out of range when the tree or trunk falls. Visual contact should be maintained with the tree or trunk until it is on the ground.
- 8.5.19 When the back cut has been completed, the chain-saw operator shall immediately move a safe distance away from the tree or trunk using the planned escape route.
- 8.5.20 Workers shall not approach mechanical tree removal or mechanical re-clearing operations, such as with a rotary or flail mower, until the operator has acknowledged that it is safe to do so.

## **8.6 Brush Removal and Chipping**

- 8.6.1 Traffic control around the jobsite shall be established prior to the start of chipping operations along roads and highways (see section 3.2, Traffic Control Around the Jobsite).
- 8.6.2 Brush and logs shall not be allowed to create hazards in the work areas.
- 8.6.3 To prevent an entanglement hazard, loose clothing, climbing equipment, body belts, harnesses, lanyards, or gauntlet-type gloves (for example, long-cuffed lineman's or welder's gloves) shall not be worn while operating chippers.
- 8.6.4 Personal protective equipment shall be worn when in the immediate area of chipping operations in accordance with section 3.4, Personal Protective Equipment, of this standard.
- 8.6.5 Training shall be provided in the proper operation, feeding, starting, and shutdown procedures for the chipper being used.

- 8.7.4 The worker shall make sure of firm footing before and during limbing and bucking. The worker shall not stand on loose chunks or logs that will roll when the log being bucked is sawed off.
- 8.7.5 Trees, limbs, or saplings under tension shall be considered hazardous. Appropriate cutting techniques and precautions shall be followed.
- 8.7.6 Wedges should be used as necessary to prevent binding of the guide bar or chain when bucking trunks of trees.
- 8.7.7 Cant hooks or peaveys should be used as an aid in rolling large or irregular logs to complete bucking.
- 8.7.8 If mechanized equipment is to be used, the equipment operator shall establish an effective means of communication with other workers (see subsection 8.4.11).
- 8.7.9 Workers shall not approach mechanized equipment operations until the equipment operator has acknowledged that it is safe to do so.

## **8.8 Pesticide Application**

- 8.8.1 The applicator shall follow label instructions in regard to pesticide applications.
- 8.8.2 The applicator shall follow pesticide label instructions in regard to laundering his or her clothing.
- 8.8.3 The applicator should shower or bathe at the end of each workday.
- 8.8.4 The employer shall provide a clean water source at the worksite, which may be used for emergency personal decontamination. Precautions shall be taken to prevent contamination of the clean water source. Drinking water and decontamination water shall be kept in separate containers.
- 8.8.5 The applicator shall not direct a solid spray column into contact with electrical conductors.

**back cut** (8.5.15): The cut made in a tree limb or trunk on the side opposite the intended direction of fall.

**brush hog** (5.8.3): A heavy-duty rotary mower, normally pulled by a farm-type tractor, used for cutting and mulching brush.

**bucket** (5.2.3): A basket-type platform approximately 4 feet (1.22 m) high, which is attached to the end of the upper boom on an aerial device, providing a work platform for working aloft.

**bucking** (8.7.1): The act of sawing trees, limbs, or both, into smaller sections once they are on the ground.

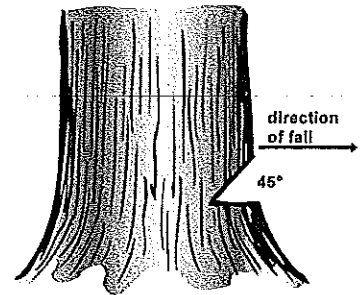
**cant hook** (7.2.2): A long-handled lever fixed with a blunt metal end to handle logs; includes a swinging, metal hook opposing the blunt end to create leverage.

**carabiner** (8.1.3): A connector generally composed of a trapezoidal or oval-shaped body with a closed gate or similar arrangement that may be opened to receive an object and, when released, automatically closes to retain the object.

**chopping tool** (7.4.2): A wooden-, fiberglass-, or steel-handled tool with a sharp, single- or double-edged steel head or blade mounted to it that is used to cut or split wood (for example, an ax or machete).

**climbing hitch** (8.1.24): A hitch used for securing a tree climber to the climbing line, permitting controlled ascent, descent, and work positioning. Examples of climbing hitches include, but are not limited to, the tautline hitch, Blake's hitch, and the Prusik hitch.

**conventional notch** (8.5.15.1): A directional felling cut into the side of a tree, facing the intended direction of fall and consisting of a horizontal face cut and an angle cut above it, creating a notch of approximately 45 degrees (see drawing).



**crew leader** (8.5.1): The qualified arborist designated as the individual in charge of a specific job or group of workers.

**crotch** (8.2.5): (n.) Branch union; the angle formed by two branches in the tree. (v.) To place a line through a branch union.

**deadman control** (5.8.3): A safety switch, electrical or mechanical, that deactivates the equipment's function when released by the operator.

**dielectric** (3.4.2): Nonconductive of electrical current.

**direct contact** (4.1.3[a]): A direct contact is made when any part of the body touches or contacts an energized electrical conductor.

**job briefing** (3.1.4): The communication of at least the following subjects for arboricultural operations: hazards associated with the job, work procedures involved, special precautions, electrical hazards, job assignments, and personal protective equipment.

**kilovolt, kV** (Tables 1 and 2): The term for 1,000 volts, abbreviated as kV. Higher voltages are generally given as kilovolts. Example: 12.5 kV (12,500 volts) and 19.9 kV (19,900 volts).

**kilonewton, kN** (8.1.8): The measurement of force, abbreviated as kN. Equal to 224.8 pounds. Example: 24.02 kilonewtons equals 5,400 pounds.

**ladder** (7.5.2): A two-, three-, or four-legged structure that utilizes vertical side legs with cross sections uniformly placed between the side legs to be used as steps; available in wood, aluminum, or fiberglass; used to ascend to and descend from a height. Also see *tripod/orchard ladder*.

**lanyard** (6.3.8): A component of a climbing system consisting of a flexible line of rope, wire rope, or a strap that generally has a connector at each end for connecting the body support to a fall arrester, energy absorber, anchorage connector, or anchorage.

**leg protection** (3.4.8): Personal protective equipment intended to reduce the risk of injury to the legs during chain-saw operations.

**line clearance** (4.3.2): The pruning, trimming, repairing, maintaining, removing, treating, or clearing of trees or the cutting of brush (vegetation management) that is within 10 feet (3.05 m) of electric supply lines and equipment; vegetation management work performed by qualified line-clearance arborists or qualified line-clearance arborist trainees for the construction or maintenance of electric supply lines and/or the electric utility right-of-way corridor.

**manual land clearing** (8.5.13): The removal of trees, shrubs, and vines using chain saws or other cutting tools where there are no structures or objects that need to be avoided and pull lines are not used to pull or drop a tree and/or trunk to the ground.

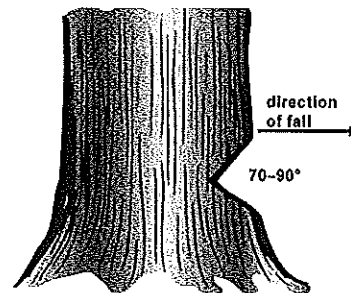
**maul** (7.3.7): A heavy-handled hammer, sometimes made with a single edge; used to drive wedges or split wood.

**minimum approach distance** (4.1.4): Safe working distances from overhead electrical conductors as defined in Tables 1 and 2 of this standard.

**open-face notch** (8.5.15.1): A directional felling cut into the side of the tree, facing the intended direction of fall and consisting of two cuts creating a notch greater than 70 degrees (see drawing).

**outrigger** (5.2.6): Built-in device used to stabilize cranes, aerial devices, and similar equipment.

**phase** (4.1.3[a]): Any current-carrying conductor that has an electric potential other than ground (ground is assumed to be 0 volts).





**quick-acting connector** (5.2.12): Hose connectors in a hydraulic or pneumatic system designed to allow rapid connection or disconnection without leakage when the system is pressurized.

**saddle, arborist** (5.7.9): See *arborist saddle*.

**secured (object)** (5.1.6): Made firm or tight; fastened. Example: The load is secured to the truck.

**secured (person)** (8.1.19): When an arborist is safeguarded from unintended movement by utilizing a climbing system that is attached to the arborist and connected to a tree or other stable support. Examples of being secured include, but are not limited to, (a) being tied in, (b) using a work-positioning lanyard, (c) being on belay, and (d) ascending the arborist climbing line using the footlock technique while utilizing a Prusik loop or ascenders.

**shall** (1.4): As used in this standard, denotes a mandatory requirement.

**should** (3.1.3): As used in this standard, denotes an advisory recommendation.

**snap hook** (8.1.10): Commonly called a self-locking or double-locking rope snap. The locking type (required by this standard for climbing) has a self-closing, self-locking gate that remains closed and locked until intentionally opened by the user for connection or disconnection. A captive eye is an integral part of a snap hook but is independent of the hook and gate portion.

**spotter** (5.1.11): A person within voice and visual communication of the driver and located in a position to view the area in which the vehicle (unit) is backing to help ensure that the backing operation is, and will remain, safe.

**step potential** (4.1.3[c]): The voltage between the feet of a person standing near an energized grounded object. It is equal to the difference in voltage, given by the voltage distribution curve, between two points at different distances from the electrode. A person could be at risk of injury during a fault simply by standing near the grounding point.

**tackle blocks and pulleys** (8.5.10): Equipment used in most tree situations to take a strain rather than move a load. Critical components of the system are the appropriate ropes, blocks, and, especially, the lock or connecting link.

**termination knot** (8.1.3): Any knot suitable for rope termination; includes, but is not limited to, double fisherman's loop (scaffold hitch), anchor hitch, and buntline hitch.

**tied in** (5.7.9): The term that describes an arborist whose climbing line has been run through a natural or false crotch attached to an arborist's saddle and completed with a climbing hitch or mechanical device, permitting controlled movement and work positioning.

**tool lanyard** (6.2.5[c]): Short line or strap used to secure a tool while working aloft.

**footlock:** To climb up a suspended rope by pulling with the hands and arms and pushing upward with the feet. The loose end of the rope is wrapped under the middle and over the top of one foot and is locked in place with pressure from the other foot.

**friction point:** The point at which the rope surface of the climber's hitch rubs against the climbing line.

**guarded:** Covered, fenced, enclosed, or otherwise protected by suitable covers or casings, barrier rails or screens, mats, or platforms that have been designed by the electrical system owner/operator to minimize the possibility of dangerous approach or accidental contact by persons or objects under normal conditions. Also see *unguarded*.

**Prusik knot:** A sliding friction knot, as in a work-positioning lanyard.

**unguarded:** Not guarded from approach or contact with electrical conductors.

**working load:** Limiting load values derived from the minimum breaking strength of a cord or rope divided by the design factor. For example, given a minimum breaking strength of 10,000 pounds (44.48 kN) and a design factor of 10:

$$10,000/10 = 1,000 \text{ (working load, in pounds)}$$

Or, given a minimum breaking strength of 10,000 pounds (44.48 kN) and a design factor of 5:

$$10,000/5 = 2,000 \text{ (working load, in pounds)}$$

**work-positioning system:** An arborist climbing system designed to be used under tension to support the arborist or other worker on an elevated vertical surface, such as a tree limb, and allow him or her to work with both hands free.

- B.1.3.4 Provide education and training relative to predominant tree species within geographic area, such as identification, growth habits, structure, and wood strength.
- B.1.3.5 Provide education and training for recognition and evaluation of potentially hazardous conditions related to tree structure. Refer to recommended resources in Annex D.

## **B.2 GENERAL SAFETY**

### **B.2.1 OSHA Standards**

Familiarize employees with the requirements of federal and/or state OSHA standards as applicable to employee job assignments. Refer to recommended resources in Annex D.

### **B.2.2 American National Standards**

Familiarize employees with the requirements in ANSI Z133.1 as applicable to employee job assignments. Refer to additional recommended standards in Annex D.

### **B.2.3 Public Safety and Traffic Control**

Provide education and training in the use of public safety and traffic control devices as applicable under federal, state, or local regulations.

### **B.2.4 Electrical Hazards**

Provide education and training in the recognition and avoidance of electrical hazards applicable to employee job assignments (line clearance or tree care).

### **B.2.5 Emergency Conditions**

Provide education and training in the proper procedures for safely performing work in emergency conditions applicable to employee job assignments.

### **B.2.6 Jobsite Briefings**

Provide education and training in jobsite-specific hazards associated with the job, work procedures, and practices involved. Instruct employees about special precautions, personal protective clothing, and equipment requirements as applicable to employee job assignments.

## **B.3 PERSONAL SAFETY**

### **B.3.1 Personal Protective Equipment**

Provide personal protective equipment as required for applicable job assignments, and instruct employees in its proper use, fit, life, and maintenance.

## **B.5 OPERATIONAL SAFETY**

### **B.5.1 Climbing Techniques**

Provide education and training in climbing techniques as appropriate to employee job assignments.

### **B.5.2 Rigging and Tree Removal**

B.5.2.1 Provide education and training appropriate to employee job assignments, such as knots and ropes, rigging techniques, tree strength and weight characteristics, and potential electrical hazards.

B.5.2.2 Provide education and training in the identification and removal of hazard trees. Such training shall be appropriate to employee job assignments.

### **B.5.3 Hazard Communications**

Provide education and training necessary to comply with federal and state regulations appropriate to employee job assignments.

### **B.5.4 Pesticide Use**

Provide education and training necessary to comply with federal and state regulations appropriate to employee job assignments.

***The following is a sample procedure.***

**Sequence for Securing Equipment (Sample)**

1. The authorized person shall notify the crew and/or affected employees that maintenance or repair is to be done and that such equipment must be shut down and secured.
2. The authorized person shall refer to the manufacturer's manual for proper procedures (as needed).
3. If equipment is in an operational mode, it shall be shut down by normal procedures.
4. Rotating parts, such as chipper blades, shall be stopped before maintenance or repair. Keyed ignition systems must be in working order.
5. Keys shall be removed and pocketed by the foreman or mechanic. When there is no keyed ignition system, the battery cables or spark plug wires may be disconnected.
6. The power takeoff should be disengaged before beginning service or repair tasks, such as hose replacement. All hydraulic tools should be disconnected before equipment is adjusted or serviced.
7. An employee shall never attempt to stop a hydraulic leak with his or her body.
8. Materials or parts that must be raised or disconnected and suspended shall be properly secured, such as with an appropriate sling or jackstand. Flywheels, such as chipper cutter heads, are to be blocked to prevent pinch points.
9. Before proceeding with maintenance or repair, the authorized person shall ensure that equipment is isolated and will not operate.
10. Any piece of equipment being serviced or repaired shall not be started, energized, or used by any other worker not under the direction of the authorized person.
11. When the engine must be running for tuning or adjustment, special care must be given to moving parts.

**Restoring Equipment to Service (Sample)**

When maintenance or repair is complete and equipment is ready to return to normal operation, the following steps shall be taken by the authorized person to restore the equipment to service:

1. To prevent accidental contact with moving or electrical components when the equipment is engaged, check for loose parts or tools that may have been left in the immediate area.
2. Ensure that all guards are in place and employees are in the clear.
3. Confirm that controls are in neutral.
4. Reconnect key, cable, or plug wires.
5. Notify affected employees that equipment is ready to return to service.

## **D.4 OTHER RESOURCES**

### **D.4.1 Associations**

International Society of Arboriculture; P.O. Box 3129, Champaign, IL 61826-3129  
([www.isa-arbor.com](http://www.isa-arbor.com))

Tree Care Industry Association; 3 Perimeter Road, Unit 1, Manchester, NH 03103  
([www.treecareindustry.org](http://www.treecareindustry.org))

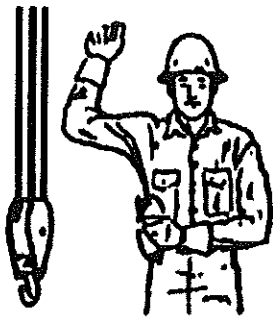
### **D.4.2 Government Agencies**

National Institute for Occupational Safety and Health/Fatality Assessment and Control  
Evaluation Program ([www.cdc.gov/niosh/face](http://www.cdc.gov/niosh/face))

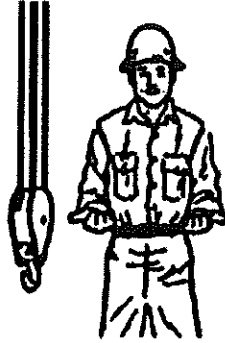
Occupational Safety and Health Administration Safety and Health Topics for Tree Care  
([www.osha.gov/SLTC/treecare](http://www.osha.gov/SLTC/treecare))

Occupational Safety and Health Administration Safety and Health Topics for Landscape  
and Horticultural Services ([www.osha.gov/SLTC/landscaping](http://www.osha.gov/SLTC/landscaping))

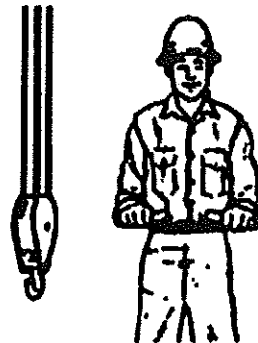
Scientific name	Common name	Weight, lb per ft <sup>3</sup>	Weight of a 1-foot section, based on average diameter							
			10"	12"	14"	16"	18"	20"	22"	24"
<i>Prunus serotina</i>	black cherry	45	25	35	48	63	79	98	119	141
<i>Pseudotsuga menziesii</i>	Douglas-fir	39	21	30	41	55	69	85	103	122
<i>Quercus alba</i>	white oak	62	34	48	66	86	109	135	163	194
<i>Quercus coccinea</i>	scarlet oak	64	35	50	68	89	113	140	169	201
<i>Quercus kelloggii</i>	California black oak	66	36	51	70	92	116	144	174	207
<i>Quercus palustris</i>	pin oak	64	35	50	68	89	113	140	169	201
<i>Quercus robur</i>	English oak	52	28	41	55	72	92	113	137	163
<i>Quercus rubra</i>	red oak	63	34	49	67	88	111	137	166	198
<i>Quercus stellata</i>	post oak	63	34	49	67	88	111	137	166	198
<i>Quercus virginiana</i>	live oak	76	41	60	81	106	134	166	200	238
<i>Robinia pseudoacacia</i>	black locust	58	32	45	62	81	102	126	153	182
<i>Salix</i> spp.	willow	32	17	25	34	45	56	70	84	100
<i>Sequoia sempervirens</i>	coast redwood	50	27	39	53	70	88	109	132	157
<i>Taxodium distichum</i>	baldcypress	51	28	40	54	71	90	111	135	160
<i>Thuja plicata</i>	western red cedar	28	15	22	30	39	49	61	74	88
<i>Tilia americana</i>	basswood	42	23	33	45	59	74	92	111	132
<i>Tsuga canadensis</i>	eastern hemlock	49	27	38	52	68	86	107	129	154
<i>Tsuga heterophylla</i>	western hemlock	41	22	32	43	57	72	89	108	129
<i>Ulmus americana</i>	American elm	54	29	42	58	75	95	118	142	169



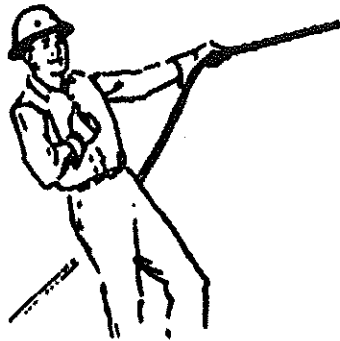
TRAVEL. (One Side Track). Lock the track on side indicated by raised fist. Travel opposite track indicated by circular motion of other fist, rotated vertically in front of body (for land cranes only).



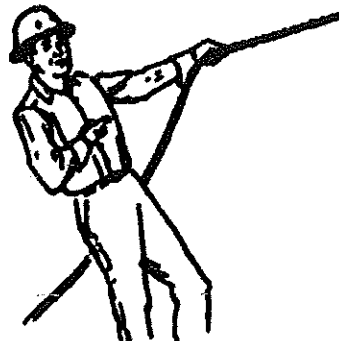
EXTEND BOOM. (Telescoping Booms). Hold both fists in front of body, thumbs pointing outward.



RETRACT BOOM (Telescoping Booms). Hold both fists in front of body, thumbs pointing toward each other.



EXTEND BOOM (Telescoping Boom). One-hand signal. Hold one fist in front of chest, thumb tapping chest.



RETRACT BOOM (Telescoping Boom). One-hand signal. Hold one fist in front of chest, thumb pointing outward and heel of fist tapping chest.



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Recommendation to  
ACCREDITED STANDARDS COMMITTEE Z133  
STANDARDS FOR ARBORICULTURAL OPERATIONS  
SECRETARIAT INTERNATIONAL SOCIETY OF ARBORICULTURE  
1400 W. ANTHONY DRIVE  
CHAMPAIGN, IL 61821

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Firm, organization, or subgroup: \_\_\_\_\_  
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E-mail: \_\_\_\_\_

Section/Paragraph(s): \_\_\_\_\_

Subject/Problem: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I recommend that: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Note: All recommendations must be in writing. Be concise but complete. Reference all appropriate page, section, and/or paragraph numbers unless your recommendation is for a new section. State the problem and provide a possible solution, and provide references to any resources that the committee should review in making its determination regarding your recommendation. Attach additional pages if necessary. You will receive a written response.

---

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Passed on \_\_\_\_\_ Rejected on \_\_\_\_\_

Subject for further study \_\_\_\_\_

Notes:

# American National Standard

*Tree, Shrub, and Other Woody Plant  
Maintenance — Standard Practices  
(Supplemental Support Systems)*

---



American National Standard  
for Tree Care Operations –

Tree, Shrub, and Other Woody Plant Maintenance –  
Standard Practices (*Supplemental Support Systems*)

Secretariat

**Tree Care Industry Association, Inc.**

Approved August 4, 2006

**American National Standards Institute, Inc.**

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\* indicates illustration adapted and formatted, with permission, from *Arborist Equipment: A Guide to the Tools and Equipment of Tree Maintenance and Removal*. International Society of Arboriculture Publishing, Champaign, IL.

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## American National Standard for Tree Care Operations –

# Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (*Supplemental Support Systems*)

Clause 1 excerpted from ANSI A300 (Part 1)  
– 2001 *Pruning*

## 1 ANSI A300 standards

### 1.1 Scope

ANSI A300 standards present performance standards for the care and maintenance of trees, shrubs, and other woody plants.

### 1.2 Purpose

ANSI A300 standards are intended as guides for federal, state, municipal and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications.

### 1.3 Application

ANSI A300 standards shall apply to any person or entity engaged in the business, trade, or performance of repairing, maintaining, or preserving trees, shrubs, or other woody plants.

### 1.4 Implementation

Specifications for tree maintenance should be written and administered by an arborist.

## 30 Part 3 – Supplemental Support Systems standards

### 30.1 Purpose

The purpose of Part 3 is to provide standards for writing specifications for supplemental support systems.

<sup>1)</sup>Available from U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210.

### 30.2 Reasons for supplemental support systems

Supplemental support systems are used to provide additional support or limit movement of a tree or tree part.

### 30.3 Safety

30.3.1 Tree maintenance shall only be performed by an arborist or arborist trainee.

30.3.2 This standard shall not take precedence over arboricultural safe work practices.

30.3.3 Operations shall comply with applicable Occupational Safety and Health Administration (OSHA) standards, ANSI Z133.1, as well as state and local regulations.

## 31 Normative references

The following standards contain provisions which, through reference in the text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard shall apply the most recent edition of the standards indicated below.

ANSI A300 Part 1 *Pruning*

ANSI A300 Part 4 *Lightning Protection Systems*

ANSI A300 Part 6 *Transplanting*

ANSI B18.12, *Glossary of Terms for Mechanical Fasteners*

ANSI Z60.1, *Nursery stock*

ANSI Z133.1, *Arboricultural operations – safety requirements*

ANSI/UL 96, *Lightning Protection Components*

ASTM A475, *Standard Specification for Zinc-Coated Steel Wire Strand*

Federal Standard: FF-T-276b, *Thimbles, Rope*

29 CFR 1910, *General industry*<sup>1</sup>

**32.18 ground anchor:** A cable to ground attachment.

**32.19 guy:** A steel cable or synthetic-fiber cable system installed between a tree and an external anchor to provide supplemental support

**32.20 guying:** The installation of a guy system.

**32.21 lag eye:** A lag-thread, drop-forged, closed-eye anchor.

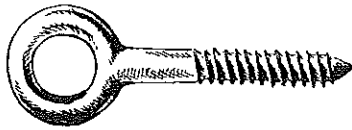


Fig. 32.21 lag eye

**32.22 lag hook (J-hook):** A lag-thread, J-shaped anchor.

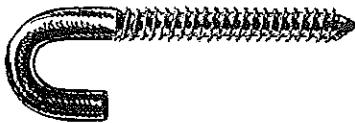


Fig. 32.22 lag hook

**32.23 lag thread:** A coarse screw thread designed for self-tapping into wood.

**32.24 lag-thread hardware:** Anchors or braces with lag-threads. Lag-thread hardware includes, but is not limited to, lag eyes, lag hooks, and lag-thread screw rod.

**32.25 lag-thread screw rod:** A lag-thread, steel rod used for dead-end and through-brace installations.



Fig. 32.25 lag-thread screw rod

**32.26 loop anchor:** A synthetic fiber termination that serves as an anchor.

**32.27 machine thread:** A fine screw thread designed for fittings (such as nuts).

**32.28 machine-threaded rod:** A machine-thread, steel rod used for through-brace installations.

**32.29 peen:** The act of bending, rounding or flattening the fastening end(s) of through-hardware for

the purpose of preventing a nut from "backing-off."

**32.30 prop:** Rigid support placed between a trunk, limb, or branch and the ground.

**32.31 propping:** The installation of a prop to provide supplemental support.

**32.32 shall:** As used in this standard, denotes a mandatory requirement.

**32.33 should:** As used in this standard, denotes an advisory recommendation.

**32.34 specifications:** A document stating a detailed, measurable plan or proposal for provision of a product or service.

**32.35 standards, ANSI A300:** Performance parameters established by industry consensus as a rule for the measure of quantity, weight, extent, value, or quality.

**32.36 supplemental support system:** A system designed to provide additional support or limit movement of a tree or tree part.

**32.37 taut:** Tightened to the point of eliminating visible slack.

**32.38 termination:** A device or configuration that secures the end of a cable to the anchor in a cabling or guying installation.

**32.39 termination hardware:** Hardware used to form a termination. Termination hardware includes, but is not limited to, dead-end grips and thimbles used in eye-splice configurations.

**32.40 thimble:** An oblong galvanized or stainless steel fitting with flared margins and an open-ended base.

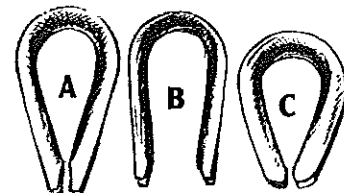


Fig. 32.40 thimble

**32.41 through-brace:** A brace formed by installing through-hardware into a limb, leader, or trunk completely through the side opposite the installation.



Equation for percentage of sound wood for through-bolt applications:

$$[(X + Y) \div Z] \times 100 = \% \text{ of sound wood for through-bolt applications.}$$

Equation for percentage of sound wood for dead-end applications:

$$(X \div Z) \times 100 = \% \text{ of sound wood for dead-end applications.}$$

**33.4.5** Steel cables or guys in trees with existing lightning protection conductors shall be bonded to the lightning protection system. A connector clamp, designed for use in lightning protection systems, shall be used to bond steel cables or guys to the lightning protection system. Refer to ANSI A300 Part 4 – *Lightning Protection Systems*.

**33.4.6** Supplemental support systems shall be installed in compliance with minimum distance specification in Table 1 in ANSI Z133.1 for overhead, energized conductors.

**33.4.7** Steel hardware shall be corrosion resistant. Synthetic fiber cable systems shall be ultra-violet (UV) light resistant.

**33.4.8** Wire rope clamps shall not be used to form terminations in cables larger than 1/8 inch (3 mm).

**33.4.9** Treatment of cavities by filling shall not be considered to provide support.

### 33.5 Installation practices

**33.5.1** Holes should not be drilled closer together than the diameter of the branch or trunk being drilled or 12 inches (30 cm), whichever is less. The diameter of the hole shall not be greater than one-sixth (1/6) the diameter of the limb, trunk, or branch at the point of installation (see Fig. 33.5.1).

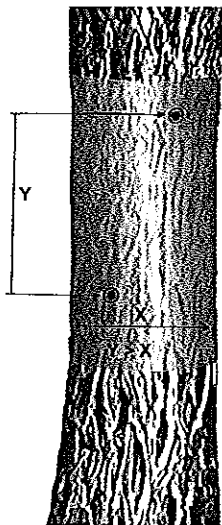


Fig. 33.5.1 Correct brace positioning

**33.5.2** Longitudinal alignment of anchors and/or braces should be avoided.

**33.5.3** Anchor(s) shall be installed in alignment with the cable and termination hardware, and not be subjected to side loading (see Fig. 33.5.3).



Fig. 33.5.3 Correct cable and hardware alignment

**33.5.4** Synthetic cable systems shall have a restraint to prevent movement of the loop anchor and shall not girdle the trunk, limb or branch.

**33.5.5** Only one termination shall be attached to an anchor.

**33.5.6** Lag-thread hardware shall only be installed in sound wood. The hole shall be 1/16" to 1/8" (1.5-3 mm) smaller than the diameter of the lag-thread hardware.

**33.5.7** For through-hardware applications, holes should be no greater than 1/8" (3 mm) larger in diameter than the hardware being installed.

**33.5.8** Lag hooks shall only be used when they can be seated to the full length of the threads. If it is not possible to seat the full length of lag hook threads, other hardware shall be selected.

**33.5.9** Lag hooks shall be installed to prevent the termination from coming off the hook. Bark should not be damaged beyond the scope of the work during installation.

should be used only when minimal direct support is needed (see Fig. 33.6.2.3).

#### 33.6.2.3.1 Location of hardware shall be specified.

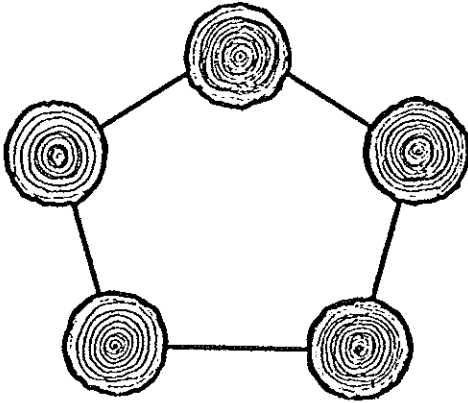


Fig. 33.6.2.3 Box system

**33.6.2.4 Hub and Spoke:** Consists of a center attachment (hub) with spans (spokes) of cable radiating to three or more leaders. Hub and Spoke cabling should only be used when other installation techniques cannot be installed to achieve the objective (see Fig. 33.6.2.4).

#### 33.6.2.4.1 Location of hardware shall be specified.

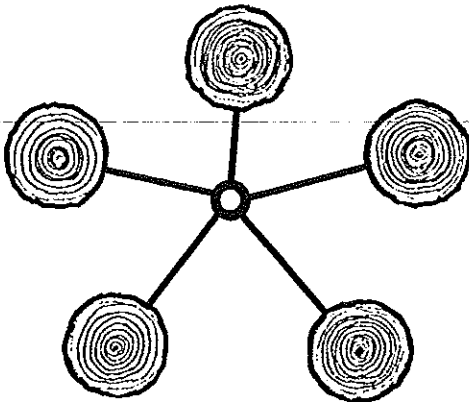


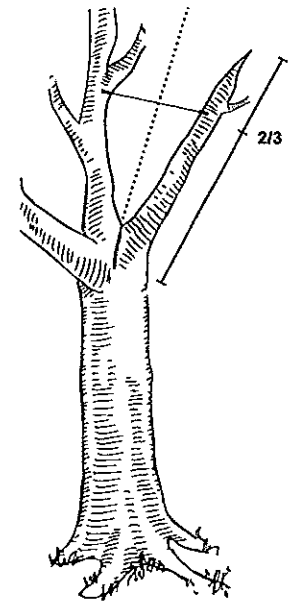
Fig. 33.6.2.4 Hub and spoke system

### 33.6.3 Cabling installation

**33.6.3.1** Steel cables should be taut following installation.

**33.6.3.2** Anchor(s) should be installed at or near a point two-thirds (2/3) of the length/height of the limb or leader to be supported (see Fig. 33.6.3.2).

Fig. 33.6.3.2 Correct cable installation



**33.6.3.3** The correct angle of cable installation should be perpendicular to an imaginary line bisecting the angle between the tree parts being cabled (see Fig. 33.6.3.2).

**33.6.3.4** The continuous support function of existing cables shall be maintained when replacing or upgrading cable systems.

### 33.7 Bracing

#### 33.7.1 Bracing objectives

Bracing objectives shall be established prior to beginning any bracing operation.

#### 33.7.2 Bracing types

Bracing system specifications should include one or more of the following types:

**33.7.2.1 Single:** Single bracing consists of one installed rod (see Fig. 33.7.2.1).

Fig. 33.7.2.1 Single brace system

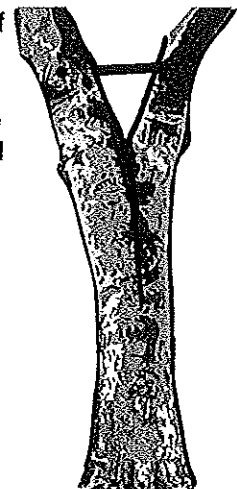


Table 1 Minimum hardware requirements for bracing trees, English and metric equivalent

Diameter at Brace (in inches)	Brace Rod Diameter (in inches)	Minimum number of rods with split or included bark	Minimum number of rods with no apparent split or included bark
<5	1/4	1	1
5-8	3/8	1	1
8-14	1/2	2	1
14-20	5/8	2	1
20-40	3/4	3 min. with one additional for each 8" in excess of 30"	2 min. with one additional for each 8" in excess of 30"
>40	7/8	4 min. with one additional for each 8" in excess of 40"	3 min. with one additional for each 12" in excess of 40"

Diameter at Brace (in cm)	Brace Rod Diameter (in mm)	Minimum number of rods with split or included bark	Minimum number of rods with no apparent split or included bark
<13	6	1	1
13-20	10	1	1
20-36	12	2	1
36-51	16	2	1
51-102	20	3 min. with one additional for each 20 cm in excess of 76 cm	2 min. with one additional for each 20 cm in excess of 76 cm
>102	22	4 min. with one additional for each 20 cm in excess of 102 cm	3 min. with one additional for each 30 cm in excess of 102 cm

**33.8 Propping****33.8.1 Propping objectives**

Propping objectives shall be established prior to beginning any propping operation.

**33.8.2 Propping installation**

**33.8.2.1** Props shall be of sufficient strength and durability to meet the objective.

**33.8.2.2** Props shall be fastened to the branch in such a manner as to minimize damage and prevent the branch from falling off the prop.

**33.8.2.3** Props shall be constructed in a manner so as not to restrict future growth of the branch.

**33.8.2.4** Equipment and work practices that damage roots beyond the scope of the work shall be avoided.

**33.8.2.5** Props shall be supported by the ground.

**33.9 Guying established trees****33.9.1 Guying established trees – objectives**

Objectives for guying established trees shall be established prior to beginning any guying operation.

**33.9.2 Guying established trees – types**

Specifications for guying established trees should include one or more of the following types:

### **33.10.2 Guying installation**

**33.10.2.1** Guys shall be attached using a method that minimizes damage to the tree.

**33.10.2.2** A minimum of two guys should be installed at an angle sufficient to support the landscape plant.

**33.10.2.3** For trees over 10-inch diameter, guys should be installed in accordance with subclause 33.9.

**33.10.2.4** Guys shall be secured to a ground anchor(s) sufficient to achieve the objective.

**33.10.2.5** Guys should be taut following installation.

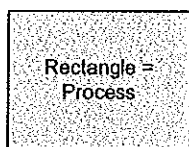
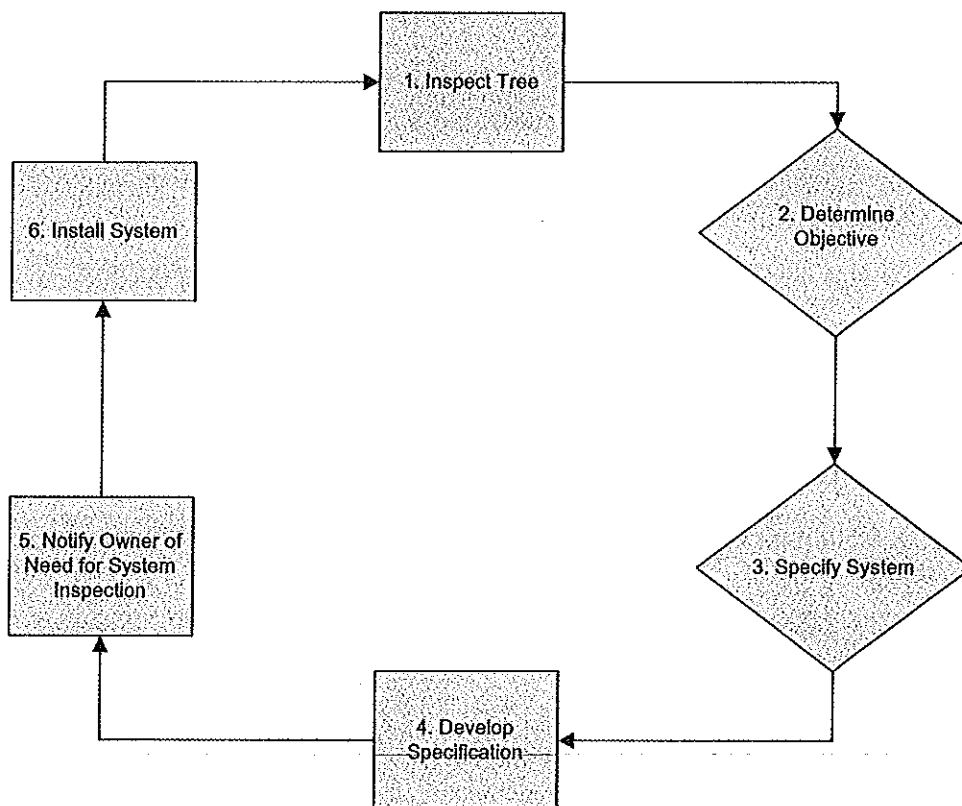
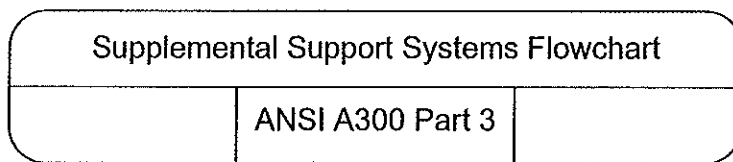
**33.10.2.6** Guys or other supplemental support systems shall be maintained and be removed when they are no longer needed as part of post planting care practices (see ANSI A300 Part 6 Transplanting).

## **34 Supplemental support systems inspection and maintenance**

**34.1** Systems should be inspected periodically for wear, corrosion, degradation of hardware and damage to the tree. The inspection should include the system's condition, position, cable tension, and the tree's structural integrity.

**34.2** If problems are detected they should be corrected or the system should be repaired, replaced or modified.

### Annex B – Supplemental Support Systems specification flowchart



ANSI A300 (Part 2)-2004 Fertilization  
Revision of ANSI A300 (Part 2)-1998

# American National Standard

ANSI A300 (Part 2)-2004 Fertilization  
Revision of ANSI A300 (Part 2)-1998

*for Tree Care Operations —  
Tree, Shrub, and Other Woody Plant  
Maintenance — Standard Practices  
(Fertilization)*

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**ANSI®**  
**A300 (Part 2)-2004**  
Revision of  
ANSI A300 (Part 2)-1998

American National Standard  
for Tree Care Operations –  
Tree, Shrub, and Other Woody Plant Maintenance –  
Standard Practices (*Fertilization*)

Secretariat

**Tree Care Industry Association, Inc.**

Approved March 24, 2004

**American National Standards Institute, Inc.**

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<i>Davey Tree Expert Company</i> .....	<i>Joseph Tommasi</i> <i>Dick Jones (Alt.)</i>
<i>International Society of Arboriculture</i> .....	<i>Ed Brennan</i> <i>John Ball (Alt.)</i>
<i>National Park Service</i> .....	<i>Robert DeFeo</i> <i>Dr. James Sherald (Alt.)</i>
<i>Professional Grounds Management Society</i> .....	<i>Jennifer Gulick</i>
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- Sharon Lilly (Observer)*

American National Standard  
for Tree Care Operations –  
Tree, Shrub, and Other  
Woody Plant  
Maintenance –  
Standard Practices  
(Fertilization)

Clause 1 excerpted from ANSI A300 (Part 1) – 2001  
Pruning

## 1 ANSI A300 standards

### 1.1 Scope

ANSI A300 standards present performance standards for the care and maintenance of trees, shrubs, and other woody plants.

### 1.2 Purpose

ANSI A300 standards are intended as guides for federal, state, municipal, and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications.

### 1.3 Application

ANSI A300 standards shall apply to any person or entity engaged in the business, trade, or performance of repairing, maintaining, or preserving trees, shrubs, or other woody plants.

### 1.4 Implementation

Specifications for tree maintenance should be written and administered by an arborist.

## 10 Part 2 – Fertilization standards

### 10.1 Purpose

The purpose of this clause is to provide standards for developing specifications for fertilization.

### 10.2 Reason for fertilization

The reason for fertilization is to supply nutrients determined to be deficient to achieve a clearly defined plant management objective. That objective should be accomplished in the manner most beneficial to the plant and the environment.

Fertilization practices for agricultural and horticultural production or silvicultural purposes are exempt from this standard.

### 10.3 Safety

**10.3.1** Tree maintenance shall be performed only by arborists or arborist trainees who, through related training or on-the-job experience, or both, are familiar with the practices and hazards of arboriculture and the equipment used in such operations.

**10.3.2** This standard shall not take precedence over arboricultural safe work practices.

**10.3.3** Operations shall comply with applicable Occupational Safety and Health Administration (OSHA) standards, ANSI Z133.1, as well as state and local regulations.

## 11 Normative references

The following standards contain provisions that through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI Z60.1, Nursery stock

ANSI Z133.1, *for Arboricultural Operations – Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush – Safety Requirements*

29 CFR 1910, General industry<sup>1)</sup>

29 CFR 1910.268, Telecommunications<sup>1)</sup>

29 CFR 1910.269, Electric power generation, transmission, and distribution<sup>1)</sup>

29 CFR 1910.33-335, Electrical safety-related work practices<sup>1)</sup>

<sup>1)</sup> Available from U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210.

**13.5** Soil and/or foliar nutrient analysis should be used to determine the need for fertilizer.

**13.6** Soil pH shall be considered when selecting the fertilizer.

**13.7** New transplants and plants sensitive to fertilizer salt should only be fertilized with a slow-release fertilizer.

**13.8** Plant conditions such as disease, insect infestations and herbicide damage shall be considered.

**13.9** Soil modification to improve nutrient uptake shall be considered prior to fertilization.

## **14 Fertilizer applications**

### **14.1 When to fertilize**

Applications should be timed to meet management objectives.

### **14.2 Types and rates of fertilizer**

**14.2.1** In the absence of soil and/or foliar nutrient analysis, fertilizers with higher ratios of  $P_2O_5$  and  $K_2O$  should be avoided.

**14.2.2** Fertilizer ratio should be adjusted based on local knowledge, site conditions, species, age, and/or condition of the plant.

**14.2.3** Slow-release fertilizers with a minimum 50 percent WIN should be preferred due to site considerations and plant sensitivity.

**14.2.3.1** Slow-release fertilizers should be applied at rates between 2 and 4 pounds of actual nitrogen per 1000 ft<sup>2</sup> (1 to 2 kg N/100 m<sup>2</sup>) and should not exceed 6 pounds of actual nitrogen per 1000 ft<sup>2</sup> (2.9 kg N/100 m<sup>2</sup>) within 12 months.

**14.2.3.2** The amount of WIN shall be considered.

**14.2.4** Quick-release fertilizers should be applied at rates between 1 and 2 pounds of actual nitrogen per 1000 ft<sup>2</sup> (0.5 to 1 kg N/100 m<sup>2</sup>) per application and shall not exceed 4 pounds actual nitrogen per 1000 ft<sup>2</sup> (2 kg N/100 m<sup>2</sup>) every 12 months.

**14.2.5** Fertilizers with a salt index of less than 50 should be preferred.

### **14.3 Fertilization area**

**14.3.1** The fertilization area shall be defined prior to application. Consideration shall be given to root accessibility, root location, fertilization objectives, plant species, and site considerations.

**14.3.2** For most trees and shrubs, the fertilization area should be from near the trunk to near or just beyond the drip line. Inaccessible surfaces shall not be included in the rate calculation.

**14.3.3** For fastigate trees and unusual situations, the method for determining the fertilization radius is by multiplying the plant's diameter at 4 ½ feet (1.4 m) above ground, measured in inches (cm), by 1 to 1½ (0.12 to 0.18) to determine the radius, expressed in feet (m), from the trunk of the plant.

For example, a 15-inch (38.1 cm) DBH tree would have a fertilization area radius of 15 to 23 feet (4.6 to 6.9 m).

### **14.4 Surface application**

**14.4.1** Fertilizer shall be uniformly distributed within the defined fertilization area.

**14.4.2** Where turf or ground covers exist, subsurface fertilization should be the preferred method of fertilization.

**14.4.3** Surface application shall not be made where surface runoff is likely to occur.

### **14.5 Sub-surface dry fertilization**

**14.5.1** Damage to the buttress roots should be avoided.

**14.5.2** Holes shall be evenly spaced within the defined fertilization area.

**14.5.3** Hole depth, diameter, and spacing shall be specified. Holes should be 2 to 4 inches (5 to 10 cm) in diameter, spaced 12 to 36 inches (30 to 91 cm) apart, and 4 to 8 (10 to 20 cm) inches deep.

**14.5.4** The fertilizer shall be evenly distributed among the holes.

**14.5.5** Fertilizer should not be closer than 2 inches (5 cm) to the soil surface.

**Annex A**  
(informative)

**Reference publications**

International Society of Arboriculture. *Best Management Practices – Fertilization*, 2002.

ANSI A300 (Part 1)-2008 Pruning  
Revision of ANSI A300 (Part 1)-2001

# American National Standard

*for Tree Care Operations —  
Tree, Shrub, and Other Woody Plant  
Management —  
Standard Practices (Pruning)*

---



for Tree Care Operations —  
Tree, Shrub, and Other Woody Plant Management —  
Standard Practices (*Pruning*)

Secretariat  
Tree Care Industry Association, Inc.

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**Foreword** This foreword is not part of American National Standard A300 (Part 1)-2008  
*Pruning*

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Fertilization, etc).

These standards are used to develop written specifications for work assignments. They are not intended to be used as specifications in and of themselves. Management objectives may differ considerably and therefore must be specifically defined by the user. Specifications are then written to meet the established objectives and must include measurable criteria.

ANSI A300 standards apply to professionals who provide for or supervise the management of trees, shrubs, and other woody landscape plants. Intended users include businesses, government agencies, property owners, property managers, and utilities. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

This standard has been developed by the Tree Care Industry Association (TCIA), an ANSI-accredited Standards Developing Organization (SDO). TCIA is secretariat of the ANSI A300 standards, and develops standards using procedures accredited by the American National Standards Institute (ANSI).

Consensus for standards writing was developed by the Accredited Standards Committee on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300).

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard:

The result – ANSI A300 standards – unify and take authoritative precedence over all previously existing tree care industry standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

TCIA was accredited as a standards developing organization with ASC A300 as the consensus body on June 28, 1991. ASC A300 meets regularly to write new, and review and revise existing ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

Suggestions for improvement of this standard should be forwarded to: A300 Secretary, c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite B101-B110, Londonderry, NH, 03053.

ANSI A300 (Part 1)-2008 Pruning was approved as an American National Standard by ANSI on May 1, 2008. ANSI approval does not require unanimous approval by ASC A300. The ASC A300 committee contained the following members at the time of ANSI approval:

Tim Johnson, Chair  
(Artistic Arborist, Inc.)

Bob Rouse, Secretary  
(Tree Care Industry Association, Inc.)

*(Continued)*



American National Standard  
for Tree Care Operations —  
Tree, Shrub, and Other  
Woody Plant  
Maintenance —  
Standard Practices  
(*Pruning*)

## 1 ANSI A300 standards

### 1.1 Scope

ANSI A300 standards present performance standards for the care and management of trees, shrubs, and other woody plants.

### 1.2 Purpose

ANSI A300 performance standards are intended for use by federal, state, municipal and private entities including arborists, property owners, property managers, and utilities for developing written specifications.

### 1.3 Application

ANSI A300 performance standards shall apply to any person or entity engaged in the management of trees, shrubs, or other woody plants.

## 2 Part 1 – Pruning standards

### 2.1 Purpose

The purpose of Part 1 – *Pruning* is to provide performance standards for developing written specifications for pruning.

### 2.2 Reasons for pruning

The reasons for tree pruning may include, but are not limited to, reducing risk, managing tree health and structure, improving aesthetics, or achieving other specific objectives. Pruning practices for agricultural, horticultural production, or silvicultural purposes are exempt from this standard unless this standard, or a portion thereof, is expressly referenced in standards for these other related areas.

## 2.3 Implementation

2.3.1 Specifications for pruning should be written and administered by an arborist.

2.3.1.1 Specifications should include location of tree(s), objectives, methods (types), and extent of pruning (location, percentage, part size, etc).

2.3.2 Pruning specifications shall be adhered to.

## 2.4 Safety

2.4.1 Pruning shall be implemented by an arborist, familiar with the practices and hazards of pruning and the equipment used in such operations.

2.4.2 This performance standard shall not take precedence over applicable industry safe work practices.

2.4.3 Performance shall comply with applicable Federal and State Occupational Safety and Health standards, ANSI Z133.1, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and other Federal Environmental Protection Agency (EPA) regulations, as well as state and local regulations.

## 3 Normative references

The following standards contain provisions, which, through reference in the text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard shall apply the most recent edition of the standards indicated below.

ANSI Z60.1, Nursery stock

ANSI Z133.1, Arboriculture – Safety requirements  
29 CFR 1910, General industry <sup>1)</sup>

29 CFR 1910.268, Telecommunications <sup>1)</sup>

29 CFR 1910.269, Electric power generation,  
transmission, and distribution <sup>1)</sup>

29 CFR 1910.331 - 335, Electrical safety-related  
work practices <sup>1)</sup>

## 4 Definitions

4.1 **arboriculture:** The art, science, technology, and business of commercial, public, and utility tree care.

<sup>1)</sup> Available from U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210

- 4.19 interfering branches:** Crossing, rubbing, or upright branches that have the potential to damage tree structure and/or health.
- 4.20 internode:** The area between lateral branches or buds.
- 4.21 job briefing:** The communication of at least the following subjects for arboricultural operations: work specifications, hazards associated with the job, work procedures involved, special precautions, electrical hazards, job assignments, and personal protective equipment.
- 4.22 leader:** A dominant, typically upright, stem – usually the main trunk. There can be several leaders in one tree.
- 4.23 lion's tailing:** The removal of an excessive number of inner and/or lower lateral branches from parent branches. Lion's tailing is not an acceptable pruning practice (6.1.7).
- 4.24 live crown ratio:** Crown height relative to overall plant height.
- 4.25 mechanical pruning:** A pruning technique where large-scale power equipment is used to cut back branches (9.3.2).
- 4.26 method:** A procedure or process for achieving an objective.
- 4.27 peeling:** The removal of dead frond bases without damaging living trunk tissue at the point they make contact with the trunk. (syn.: shaving)
- 4.28 petiole:** A stalk of a leaf or frond.
- 4.29 pollarding:** Pruning method in which tree branches are initially headed and then reduced on a regular basis without disturbing the callus knob (6.6).
- 4.30 pruning:** The selective removal of plant parts to meet specific goals and objectives.
- 4.31 qualified line-clearance arborist:** An individual who, through related training and on-the-job experience, is familiar with the equipment and hazards in line clearance and has demonstrated the ability to perform the special techniques involved. This individual may or may not be currently employed by a line-clearance contractor.
- 4.32 qualified line-clearance arborist trainee:** An individual undergoing line-clearance training under the direct supervision of a qualified line-clearance arborist. In the course of such training, the trainee becomes familiar with the equipment and hazards in line clearance and demonstrates ability in the performance of the special techniques involved.
- 4.33 raise:** Pruning to provide vertical clearance (7.3).
- 4.34 reduce:** Pruning to decrease height and/or spread (7.4).
- 4.35 remote area:** As used in the utility pruning section of this standard, an unpopulated area.
- 4.36 restoration:** Pruning to redevelop structure, form, and appearance of topped or damaged trees (6.3).
- 4.37 rural area:** As used in the utility pruning section of this standard, a sparsely populated place away from large cities, suburbs, or towns but distinct from remote areas.
- 4.38 shall:** As used in this standard, denotes a mandatory requirement.
- 4.39 shoot:** Stem or branch and its leaves, especially when young.
- 4.40 should:** As used in this standard, denotes an advisory recommendation.
- 4.41 specifications:** A document stating a detailed, measurable plan or proposal for provision of a product or service.
- 4.42 sprouts:** New shoots originating from epicormic or adventitious buds, not to be confused with suckers. (syn.: watersprouts, epicormic shoots)
- 4.43 standard, ANSI A300:** The performance parameters established by industry consensus as a rule for the measure of extent, quality, quantity, value or weight used to write specifications.
- 4.44 stem:** A woody structure bearing buds, foliage, and giving rise to other stems.
- 4.45 structural pruning:** Pruning to improve branch architecture (6.2).

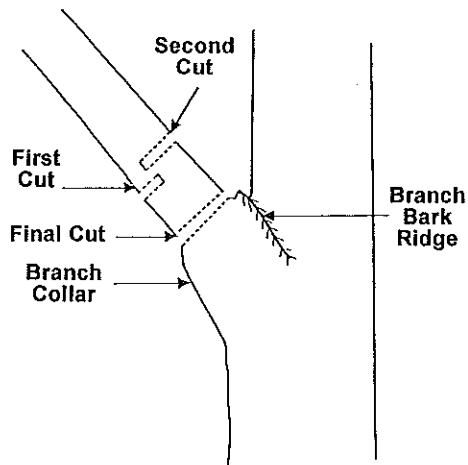


Figure 5.3.2. A cut that removes a branch at its point of origin. (See Annex A – Pruning cut guideline).

5.3.3 A pruning cut that reduces the length of a branch or parent stem shall be made at a slight downward angle relative to the remaining stem and not damage the remaining stem. Smaller cuts shall be preferred (see Fig. 5.3.3).

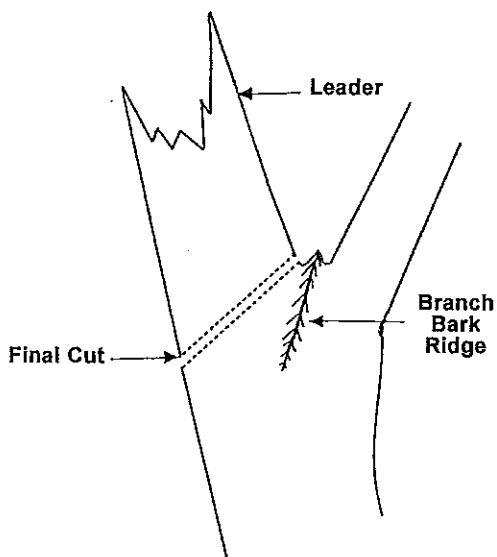


Figure 5.3.3. A cut that reduces the length of a branch or parent stem.

5.3.4 When pruning to a lateral, the remaining lateral branch should be large enough to assume the terminal role.

5.3.5 The final cut should result in a flat surface with adjacent bark firmly attached.

5.3.6 When removing a dead branch, the final cut shall be made just outside the collar of living tissue.

5.3.7 Tree branches shall be removed in such a manner so as to avoid damage to other parts of the tree or to other plants or property. Branches too large to support with one hand shall be precut to avoid splitting of the wood or tearing of the bark (see Figure 5.3.2). Where necessary, ropes or other equipment shall be used to lower large branches or portions of branches to the ground.

5.3.8 A cut that removes a branch with a narrow angle of attachment should be made from the outside of the branch to prevent damage to the parent branch (see Figure 5.3.8).

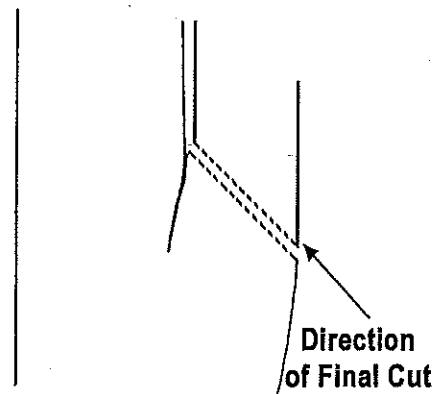


Figure 5.3.8. A cut that removes a branch with a narrow angle of attachment.

5.3.9 Severed branches shall be removed from the crown upon completion of the pruning, at times when the tree would be left unattended, or at the end of the workday.

5.4 Wound treatment

5.4.1 Wound treatments shall not be used to cover wounds or pruning cuts, except when necessary for disease, insect, mistletoe, or sprout control, or for cosmetic reasons.

**6.6.3** Heading cuts shall be made at specific locations to start the pollarding process. After the initial cuts are made, no additional heading cuts shall be made.

**6.6.4** Sprouts growing from the cut ends of branches (knuckles) should be removed annually during the dormant season.

## 7 Pruning methods (types)

**7.1** One or more of the following methods (types) shall be specified to achieve the objective.

**7.2 Clean:** Cleaning shall consist of pruning to remove one or more of the following non-beneficial parts: dead, diseased, and/or broken branches.

**7.2.1** Location of parts to be removed shall be specified.

**7.2.2** Size range of parts to be removed shall be specified.

**7.3 Raise:** Raising shall consist of pruning to provide vertical clearance.

**7.3.1** Clearance distance shall be specified.

**7.3.2** Location and size range of parts to be removed should be specified.

**7.3.3** Live crown ratio should not be reduced to less than 50 percent.

**7.4 Reduce:** Reducing shall consist of pruning to decrease height and/or spread.

**7.4.1** Consideration shall be given to the ability of a species to tolerate this type of pruning.

**7.4.2** Location of parts to be removed or clearance requirements shall be specified.

**7.4.3** Size of parts should be specified.

**7.5 Thin:** Thinning shall consist of selective pruning to reduce density of live branches.

**7.5.1** Thinning should result in an even distribution of branches on individual branches and throughout the crown.

**7.5.2** Not more than 25 percent of the crown should be removed within an annual growing season.

**7.5.3** Location of parts to be removed shall be specified.

**7.5.4** Percentage of foliage and size range of parts to be removed shall be specified.

## 8 Palm pruning

**8.1** Palm pruning should be performed when fronds, fruit, or loose petioles may create a dangerous condition.

**8.2** Live healthy fronds should not be removed.

**8.3** Live, healthy fronds above horizontal shall not be removed. Exception: Palms encroaching on electric supply lines (see Fig. 8.3a and 8.3b).

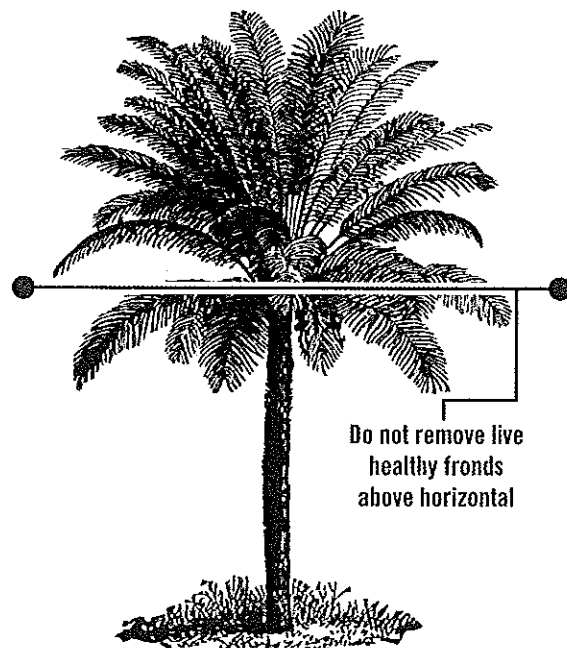


Figure 8.3a Frond removal location.

**9.3.1.2** A minimum number of pruning cuts should be made to accomplish the purpose of facility/utility pruning. The structure and growth habit of the tree should be considered.

**9.3.1.3** Trees directly under and growing into facility/utility spaces should be removed or pruned. Such pruning should be done by removing entire branches or leaders or by removing branches that have laterals growing into (or once pruned, will grow into) the facility/utility space.

**9.3.1.4** Trees growing next to, and into or toward, facility/utility spaces should be pruned by reducing branches to laterals (5.3.3) to direct growth away from the utility space or by removing entire branches. Branches that, when cut, will produce sprouts that would grow into facilities and/or utility space should be removed.

**9.3.1.5** Branches should be cut to laterals or the parent branch and not at a pre-established clearing limit. If clearance limits are established, pruning cuts should be made at laterals or parent branches outside the specified clearance zone.

### **9.3.2 Rural/remote locations – mechanical pruning**

Cuts should be made close to the main stem, outside of the branch bark ridge and branch collar. Precautions should be taken to avoid stripping or tearing of bark or excessive wounding.

### **9.4 Emergency service restoration**

During a utility-declared emergency, service must be restored as quickly as possible in accordance with ANSI Z133.1, 29 CFR 1910.331 – 335, 29 CFR 1910.268, or 29 CFR 1910.269. At such times, it may be necessary, because of safety and the urgency of service restoration, to deviate from the use of proper pruning techniques as defined in this standard. Following the emergency, corrective pruning should be done as necessary.

## Annex B Specification writing guideline

A300 (Part 1)-2008 *Pruning* standards are performance standards, and shall not be used as job specifications. Job specifications should be clearly detailed and contain measurable criteria.

The words "should" and "shall" are both used when writing standards. The word "shall" is used when writing specifications.

Writing specifications can be simple or complex and can be written in a format that suits your company/the job. The specifications consist of two sections.

---

### I. General:

---

This section contains all aspects of the work to be performed that needs to be documented, yet does not need to be detailed.

Saying under the General section that "all work shall be completed in compliance with A300 Standards" means the clauses covering safety, inspections, cuts, etc. will be adhered to. There is no need to write each and every clause into every job specification.

Other items that may be covered in the General section could be: work hours and dates, traffic issues, disposal criteria, etc.

The second section under Job Specifications would be:

---

### II. Details:

---

This section provides the clear and measurable criteria; the deliverables to the client.

This section, to be written in compliance with A300 standards, shall contain the following information:

**1. Objective – Clause 6**

These objectives originate from/with the tree owner or manager. The arborist shall clearly state what is going to be done to achieve the objective(s).

Objectives can be written for the entire job or individual trees. Rarely can one or two words clearly convey an objective so that all parties involved (client, sales, crew, etc.) can visualize the outcome.

**2. Method – Clause 7**

Here the method(s) to be used to achieve the objective are stated. Again, depending on the type of job, this can be stated for the individual tree or a group of trees.

**3. Location – Clause 7.2.1, 7.3.2, 7.4.2, 7.5.3**

This is the location in the tree(s) that the work methods are to take place.

**4. Density – Clause 7.3.1, 7.3.3, 7.5.1, 7.5.2, 7.5.4**

This is the amount or volume of parts that are to be removed and can be stated exactly or in ranges.

**5. Size – Clause 7.2.2, 7.3.2, 7.4.3, 7.5.4**

This is the size or range of sizes of cut(s) utilized to remove the volume specified.

**NOTE:** Items # 4 & 5 are directly related to resource allocation, staffing and dollars.

### SAMPLE PRUNING SPECIFICATIONS

**#1. Scope:** Large live oak on west side of pool

**Objectives:** Increase light penetration through east side of tree. Reduce risk potential of 1-inch-diameter branches falling.

**Specifications:** All broken branches and 1-inch-plus diameter dead branches shall be removed from the crown.

The three lowest 8-inch-plus diameter branches on the east side shall be thinned 25 percent with 1-inch- to 3-inch-diameter cuts.

**NOTE:** All work shall be completed in compliance with ANSI A300 and Z133.1 Standards.

## Annex C

### Applicable ANSI A300 interpretations

---

The following interpretations apply to Part 1 – *Pruning*:

#### **C-1 Interpretation of “should” in ANSI A300 standards**

“An advisory recommendation” is the common definition of “should” used in the standards development community and the common definition of “should” used in ANSI standards. An advisory notice is not a mandatory requirement. Advisory recommendations may not be followed when defensible reasons for non-compliance exist.

#### **C-2 Interpretation of “shall” in ANSI A300 standards**

“A mandatory requirement” is the common definition of “shall” used in the standards development community and the common definition of “shall” used in ANSI standards. A mandatory requirement is not optional and must be followed for ANSI A300 compliance.

# American National Standard

*for Tree Care Operations —  
Tree, Shrub, and Other Woody Plant  
Maintenance — Standard Practices  
(Transplanting)*

---





**ANSI®**  
**A300 (Part 6)-2005**

American National Standard  
for Tree Care Operations –  
Tree, Shrub, and Other Woody Plant Maintenance –  
Standard Practices (*Transplanting*)

Secretariat  
**Tree Care Industry Association, Inc.**

Approved April 29, 2005

**American National Standards Institute, Inc.**

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- Peter Gerstenberger (Observer)*
- Myron Laible (Observer)*
- Richard Rathjens (Observer)*
- Richard Roux (NFPA-780 Liaison)*
- Sharon Lilly (Observer)*

## American National Standard for Tree Care Operations –

# Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (*Transplanting*)

*Clause 1 excerpted from ANSI A300 (Part 1) – 2001 Pruning*

## 1 ANSI A300 standards

### 1.1 Scope

ANSI A300 standards present performance standards for the care and maintenance of trees, shrubs, and other woody plants.

### 1.2 Purpose

ANSI A300 standards are intended as guides for federal, state, municipal, and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications.

### 1.3 Application

ANSI A300 standards shall apply to any person or entity engaged in the business, trade, or performance of repairing, maintaining, or preserving trees, shrubs, or other woody plants.

### 1.4 Implementation

Specifications for tree maintenance should be written and administered by an arborist.

## 60 Part 6 – Transplanting standards

### 60.1 Purpose

The purpose of this document is to provide standards for developing specifications for transplanting and planting trees and shrubs.

### 60.2 Reasons for transplanting

Transplanting is performed to relocate landscape plants to meet specific objectives. Horticultural production or silvicultural purposes are exempt from this standard.

### 60.3 Safety

**60.3.1** This standard shall not take precedence over arboricultural safe work practices.

**60.3.2** Operations shall comply with applicable Department of Transportation (DOT) standards, Occupational Safety and Health Administration (OSHA) standards, ANSI Z133.1, as well as state and local regulations.

**60.3.3** The sites shall be inspected for hazards prior to beginning any transplanting procedure.

**60.3.3.1** The location of utilities and other obstructions both below and above ground shall be taken into consideration prior to transplanting any tree or plant. Utilities and other obstructions include, but are not limited to gas, electric, communications, sewer, drainage, signage, overpasses, or bridges. Locations include the plant source site, the entire transportation route, and the planting site. Transplanting shall comply with all legal and regulatory requirements for identifying and marking utilities and for highway transport.

## 61 Normative references

The following standards contain provisions that, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI Z60.1, *Nursery stock*

ANSI Z117.1, *Safety Requirements for Confined Spaces*

**62.20 lifting sling, certified:** A sling certified for a rated load capacity.

**62.21 lifting strap, certified:** A strap certified for a rated load capacity.

**62.22 percolation test:** As used in this standard, a field test conducted to determine water infiltration rate.

**62.23 planting:** Installing a plant in the landscape.

**62.24 protective material:** Fabric or device used to limit injury to any portion of the landscape plant during preparation and transplanting operations.

**62.25 root ball:** The root mass of a tree or shrub after digging or removal from a container.

**62.26 root collar:** The transition zone between the trunk and the root system.

**62.27 root pruning:** The cutting of roots to meet specific goals and objectives.

**62.28 shall:** As used in this standard denotes a mandatory requirement.

**62.29 should:** As used in this standard denotes an advisory recommendation.

**62.30 soil amendment:** Any material added to soil to alter its composition and structure, such as sand, fertilizer, or organic matter.

**62.31 soil anchor:** A device driven, buried, or otherwise inserted into the ground to which a guy is attached.

**62.32 specifications, industry-standard:** Details that set result-orientated expectations for the manufacture of a specific product or provision of a specific service, written in compliance with industry-consensus standards.

**62.33 spreader bar:** An apparatus used to spread the lifting chain or strap to avoid damage to the root ball and crown.

**62.34 standards, industry-consensus:** A set of parameters developed by a group of materially affected parties in accordance with accepted essential requirements for openness, balance, consensus and due process. The parameters provide the mini-

imum requirements and recommendations for manufacture of products, provision of services, or safety.

**62.35 tensiometer:** An instrument for determining the moisture content of soil.

**62.36 thimble:** An oblong galvanized or stainless steel fitting with flared margins and an open-ended base.

**62.37 transplanting:** The process of relocating an existing plant in the landscape.

**62.38 tree spade:** Equipment used to transplant large trees.

**62.39 tree wrap:** Material installed on a tree trunk to protect it from injury.

**62.40 trunk flare:** 1. The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots. 2. The area of transition between the root system and the stem or trunk.

**62.41 turnbuckle:** A drop-forged, closed eye device for adjusting tension.

**62.42 wire basket:** A balled and wrapped method (see 62.2) using a pre-fabricated wire mesh basket for support of the root ball.

**62.43 wire-wrapped:** A balled and wrapped method (see 62.2) using wire or a wire mesh for support of the root ball.

## **63 Transplanting practices**

### **63.1 Transplanting objectives**

Transplanting objectives shall be established prior to beginning operations.

### **63.2 Plant and site inspection**

**63.2.1** Compass orientation of trees and shrubs shall be considered.

**63.2.2** Ball sizes should be of a diameter and depth to encompass enough of the root system as necessary for establishment. ANSI Z60.1 provides a reference for caliper sizes under 8 inches (20 cm).

**63.5.9 Digging the tree or shrub**

**63.5.9.1** The following methods should be considered when specifying a tree or shrub for relocation:

- a. Balled and wrapped;
- b. Bare root;
- c. Boxed; and,
- d. Tree spade.

**63.5.9.2** Mechanical and hand digging operations should start outside the finished root ball size, exception: Mechanical tree spade.

**63.5.9.3 Balled and wrapped**

**63.5.9.3.1** Methods and materials used to protect or secure the root ball shall hold the ball firmly.

**63.5.9.4 Boxed**

**63.5.9.4.1** Box sides shall be tight against the root ball.

**63.5.9.4.2** Box sides should be fastened together to limit movement.

**63.5.9.4.3** Box bottom, if installed, shall be tight against the root ball.

**63.5.9.4.4** Box top shall be installed if the box will be tilted during transport.

**63.5.9.5 Tree spade**

**63.5.9.5.1** Clearance between the tree or shrub and tree spade shall be provided.

**63.5.9.5.2** Tree spade shall be free of fluid leaks with blades properly aligned.

**63.5.9.5.3** Adjustments shall be made for differences between slope of the old and new site.

**63.5.10 Lifting**

**63.5.10.1** Prior to lifting root balls, roots should be separated from the surrounding soil.

**63.5.10.2** The system used for lifting shall prevent damage to the root ball, trunk, and crown.

**63.5.10.3** Spreader bars should be used to distribute forces away from the root ball and to provide crown clearance.

**63.5.11 Transporting**

**63.5.11.1** The system used for transporting shall minimize desiccation and other damage to crown, trunk, and root ball.

**63.5.12 Storing trees and shrubs before planting**

**63.5.12.1** The health and vigor of the trees or shrubs shall be maintained during storage.

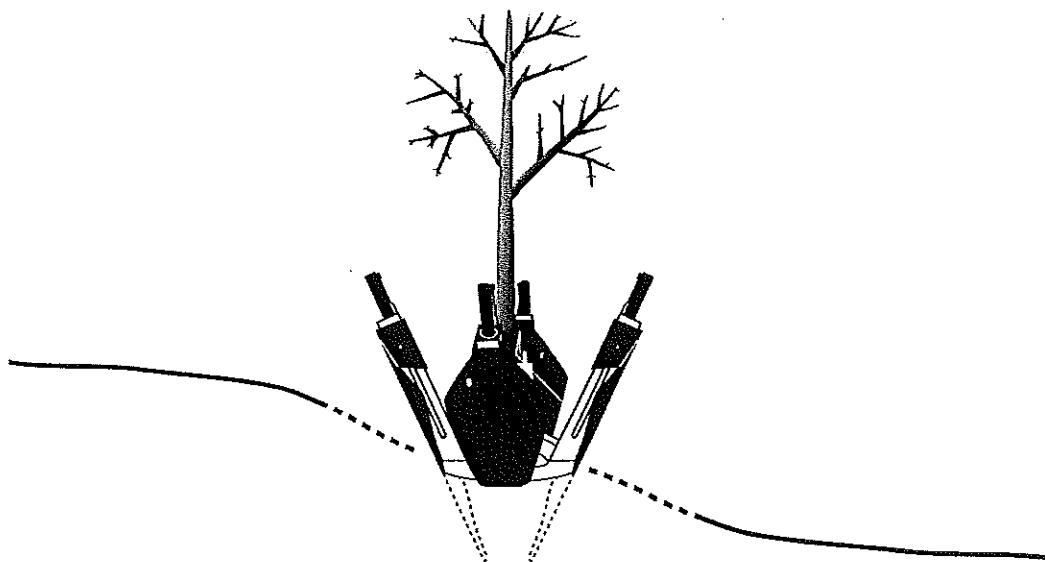


Fig. 63.5.9.5.3 Example of an adjustment made for differences in slope.

**63.6.2.10** Mulch type shall be specified to meet an objective.

### 63.7 Support systems

**63.7.1** Support systems shall not be specified or installed except when needed.

**63.7.2** Support systems shall be installed according to ANSI A300 Part 3 *Support Systems*.

### 63.8 Specialty transplanting practices

#### 63.8.1 Palms

**63.8.1.1** The minimum root ball radius should be 6 inches (15 cm) from the base of the trunk at ground level. Root balls larger than the minimum radius shall be preferred.

**63.8.1.2** The root ball should have adequate mass and depth to structurally support the tree.

**63.8.1.3** The root ball depth should be at least 1.5 times the root ball diameter or width.

### 63.9 Post-planting care practices

**63.9.1** Post-planting care shall be specified for an appropriate period of time in consideration of region, site conditions, and species.

**63.9.2** Post-planting care for a minimum of one year should be considered.

**63.9.3** Specifications for post-planting care should consist of, but are not limited to, one or more of the following:

- a. soil moisture management;
- b. mulching;
- c. integrated pest management;
- d. pruning (see ANSI A300 Part 1 – *Pruning* standard);
- e. monitoring;
- f. nutrient management (see ANSI A300 Part 2 – *Fertilization* standard); and,
- g. maintenance/removal of tree support systems (see ANSI A300 Part 3 – *Support Systems* standard).

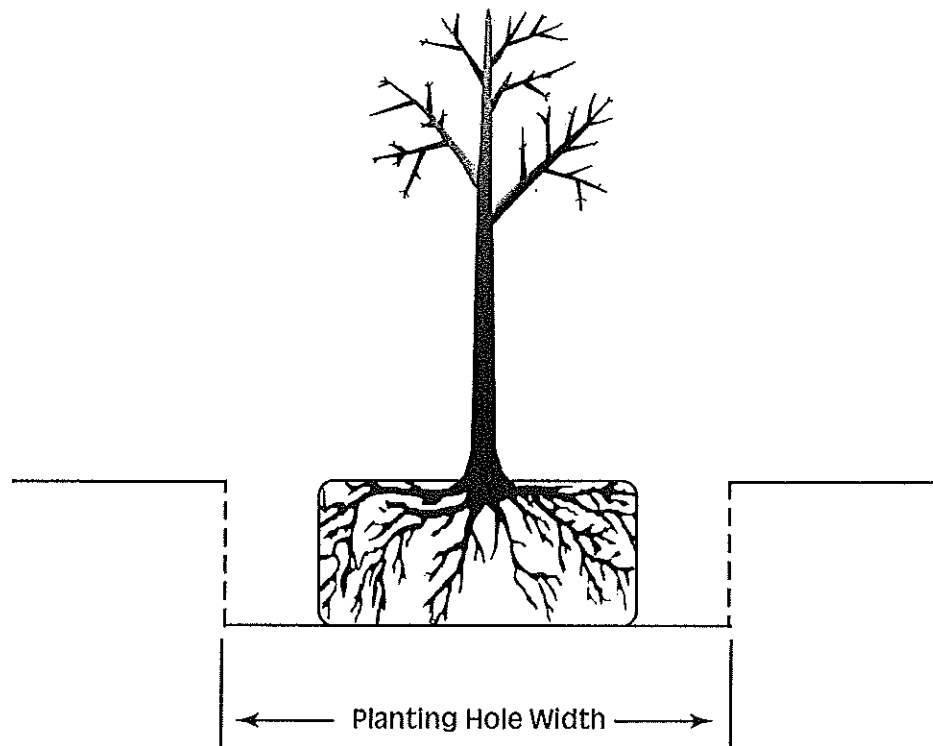


Fig. 63.6.1 Example of a properly prepared planting hole.

## **Annex B** (Informative)

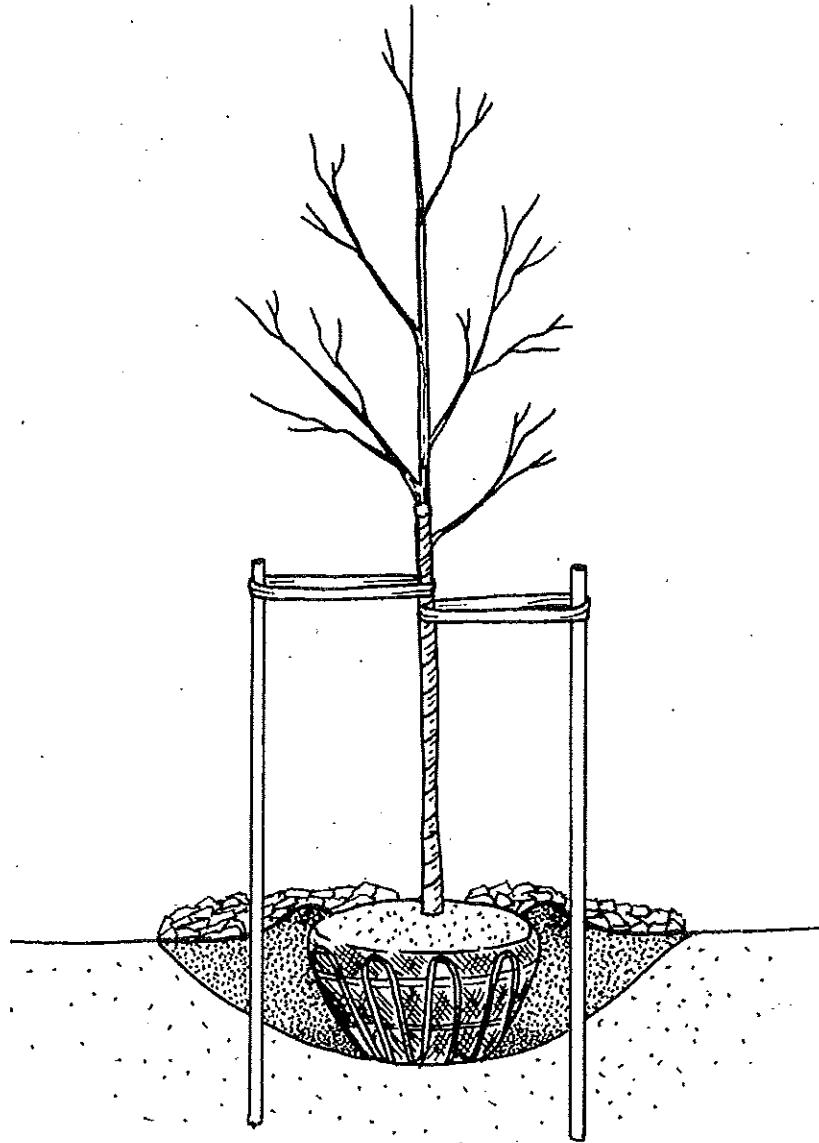
### **Lifting chain and sling, proper inspection and record-keeping protocol**

- B-1** Each sling must be affixed with a permanent tag clearly showing the sling's working load limit, type, size, serial number, and manufacturer.
- B-2** Each sling should have its own record-keeping file.
- B-3** Each sling must have a proof test certificate kept on file for inspectors and company use showing the sling's working load limit, type, size, serial number, lot number, and manufacturer. The proof test shows that the sling is fully OSHA compliant.
- B-4** Each sling must have an annual inspection card filed in order to comply with OSHA standards. Each sling must be inspected at least once a year for nicks, gouges, and other defects that might make it unsafe. The inspection card is proof that a qualified person has made these inspections.



# Best Management Practices

## TREE PLANTING



Special companion publication to the ANSI A300 Part 6: Tree, Shrub, and  
Other Woody Plant Maintenance—Standard Practices (Transplanting)

# Best Management Practices

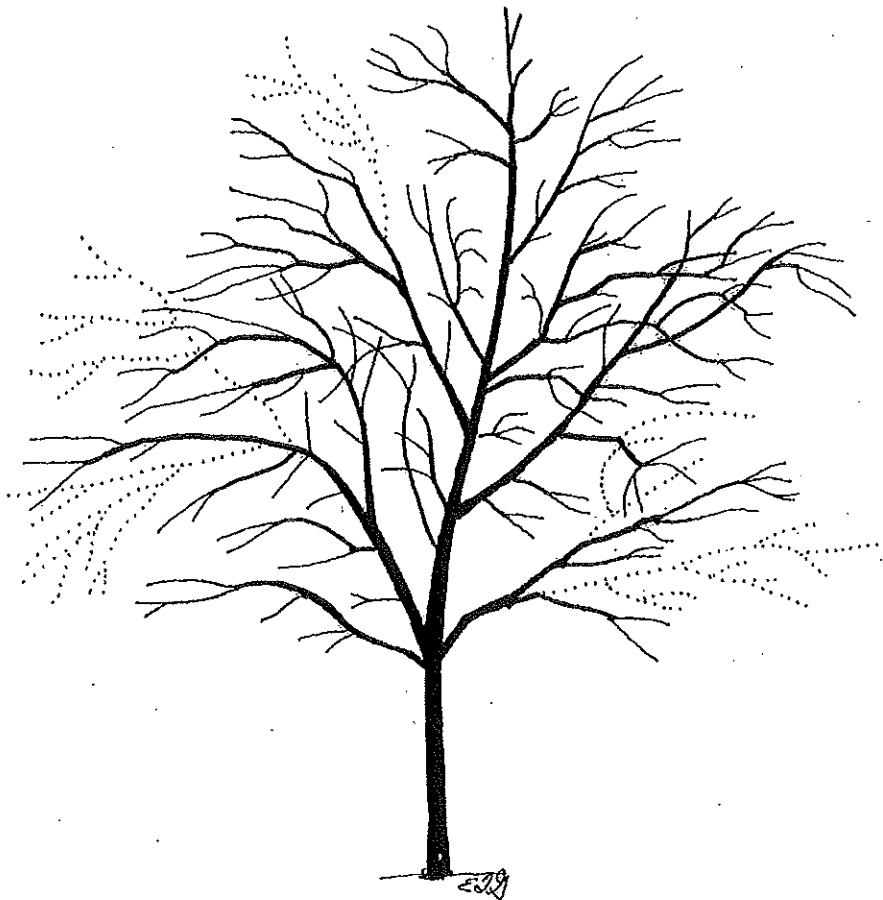
## TREE AND SHRUB FERTILIZATION



Companion publication to the ANSI A300 Standard for Tree, Shrub, and  
Other Woody Plant Fertilization

# Best Management Practices

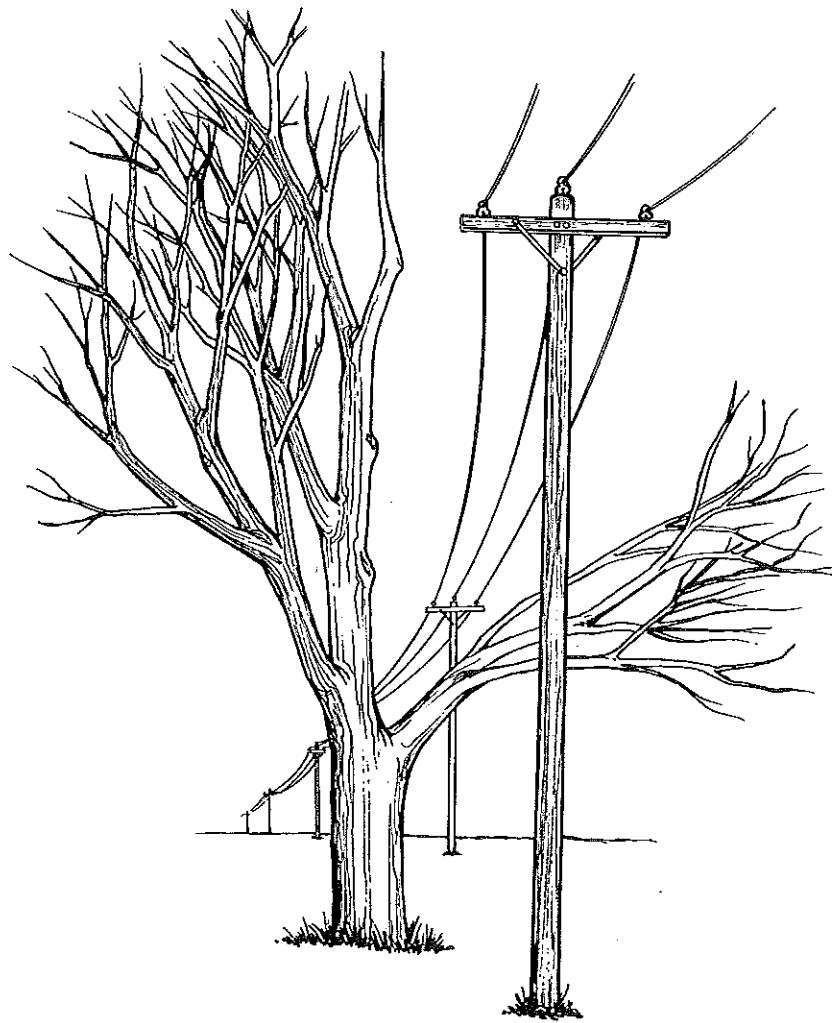
## TREE PRUNING (Revised 2008)



Companion publication to the ANSI A300 Part 1: Tree, Shrub, and  
Other Woody Plant Maintenance—Standard Practices, Pruning

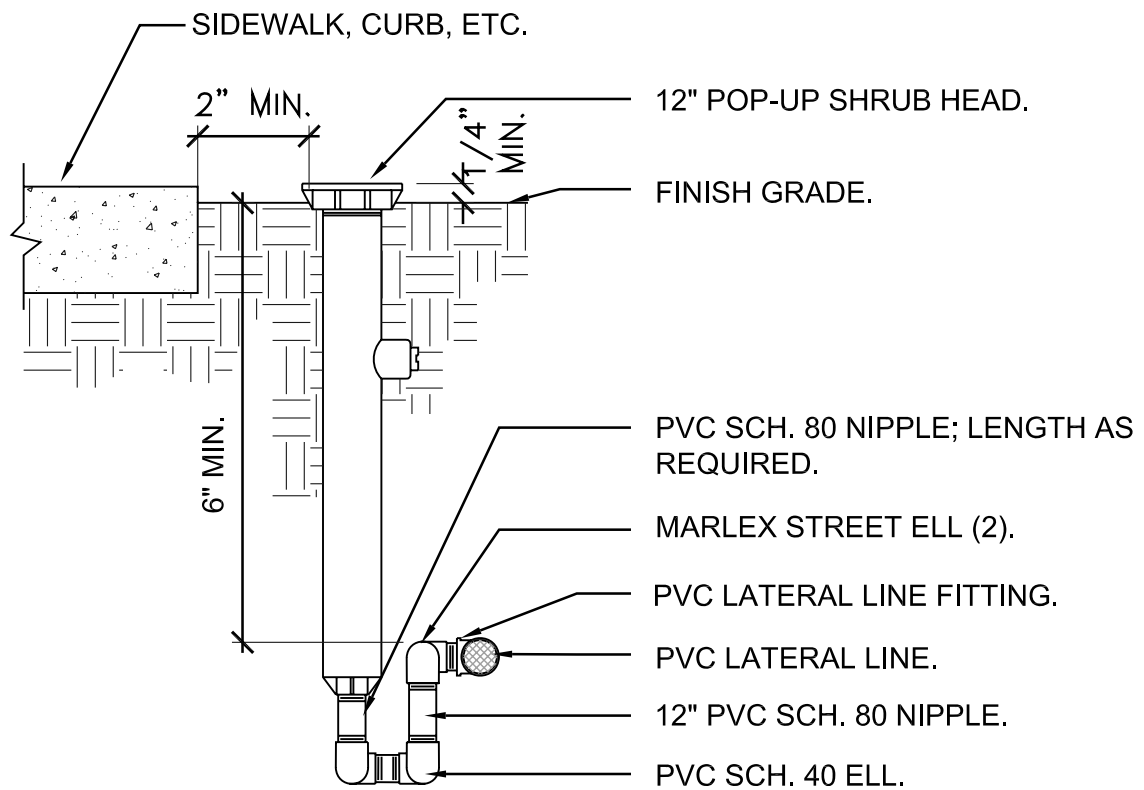
# Best Management Practices

## UTILITY PRUNING OF TREES

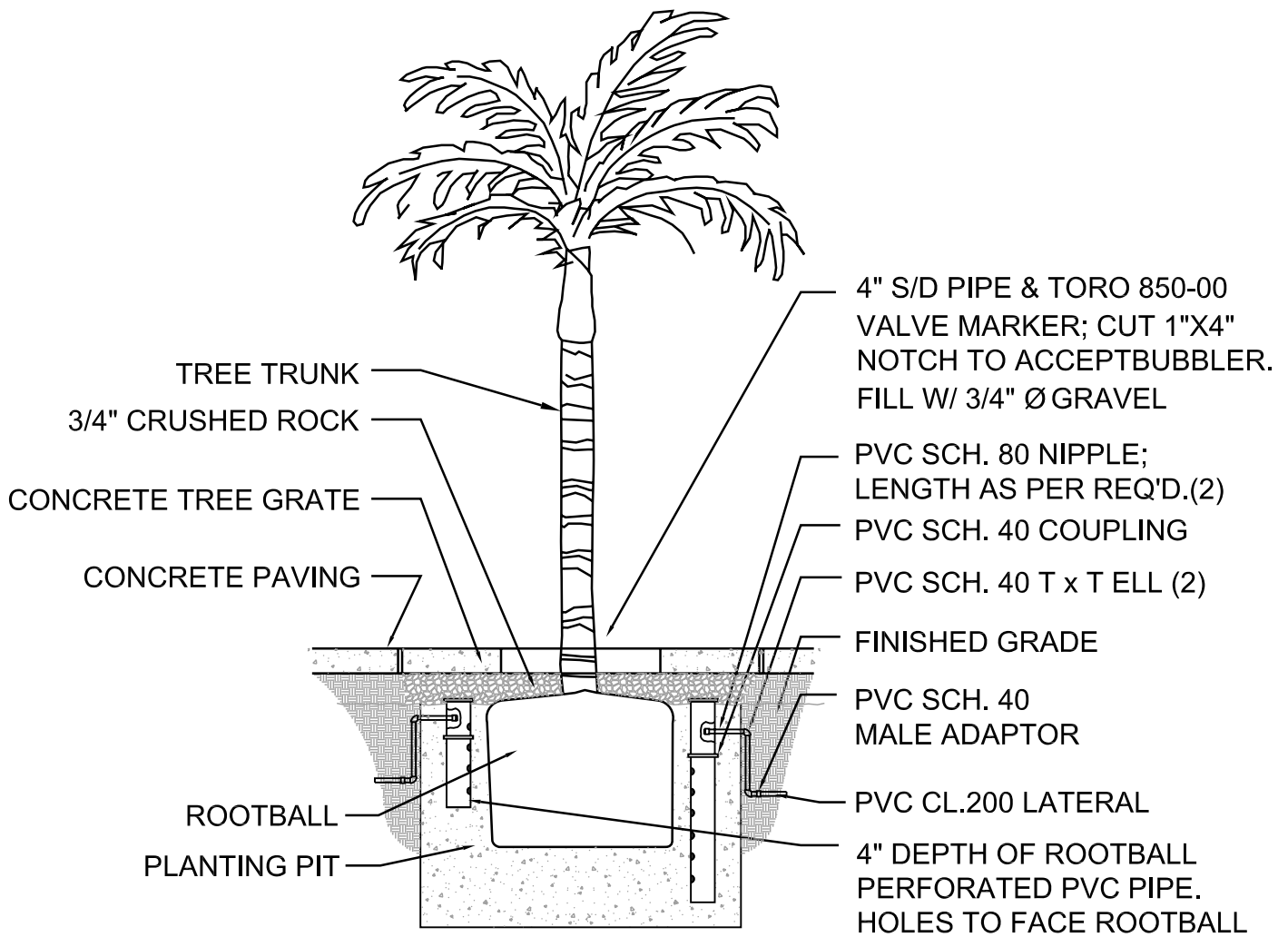


Special companion publication to the ANSI A300 Part 1: Tree, Shrub, and  
Other Woody Plant Maintenance—Standard Practices, Pruning





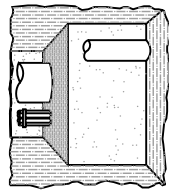
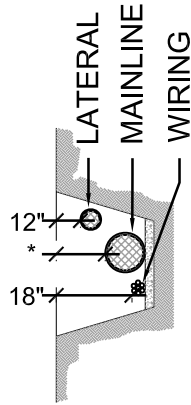
# IRRIGATION POP-UP HEAD



**IRRIGATION BUBBLER  
 AT PALM TREE DETAIL**

# IRRIGATION PIPING & WIRING

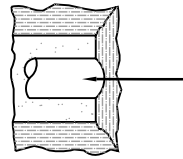
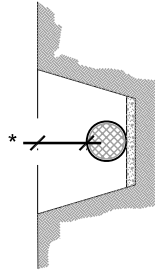
MAIN SUPPLY,  
LATERAL AND  
WIRING



TAPE AND  
BUNDLE  
WIRING AT 10  
FT. O.C.  
MAXIMUM.

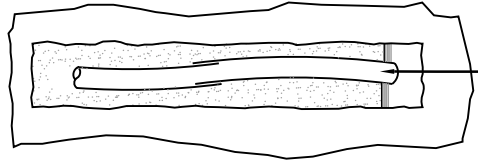
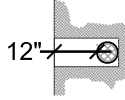
MAIN SUPPLY

\* 2 1/2" AND SMALLER: 18"  
3" AND LARGER: 24"



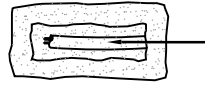
ALL MAINLINE  
SHALL BE  
INSTALLED PER  
MFG'S.  
SPECIFICATIONS.

LATERAL



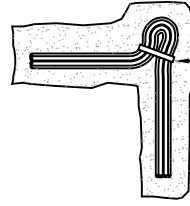
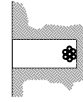
SLAKE ALL  
PLASTIC PIPE  
INTO  
TRENCHES  
AS SHOWN.

120 VOLT



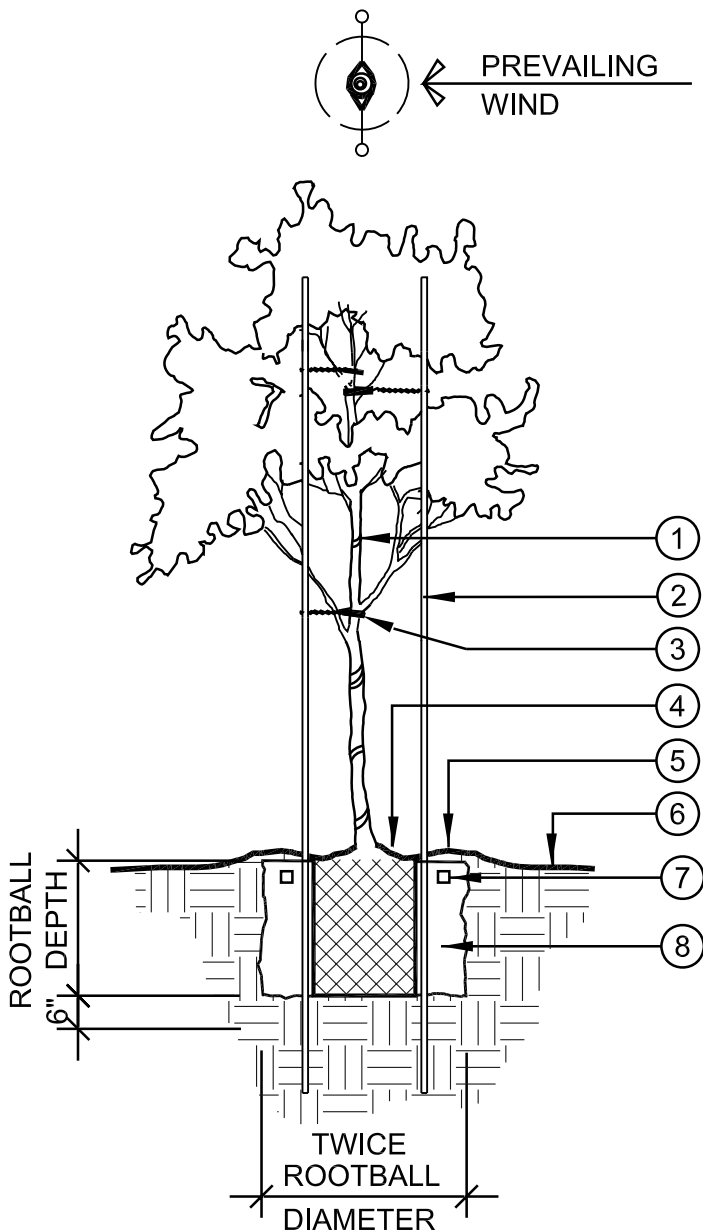
INSTALL ALL  
120 VOLT WIRE  
IN CONDUIT  
PER LOCAL CODE

WIRING



PROVIDE A 20"  
LOOP IN WIRE AT  
ALL CHANGES OF  
DIRECTION  
GREATER THAN  
30'. REMOVE  
TIES AFTER ALL  
CONNECTIONS  
HAVE BEEN  
MADE.

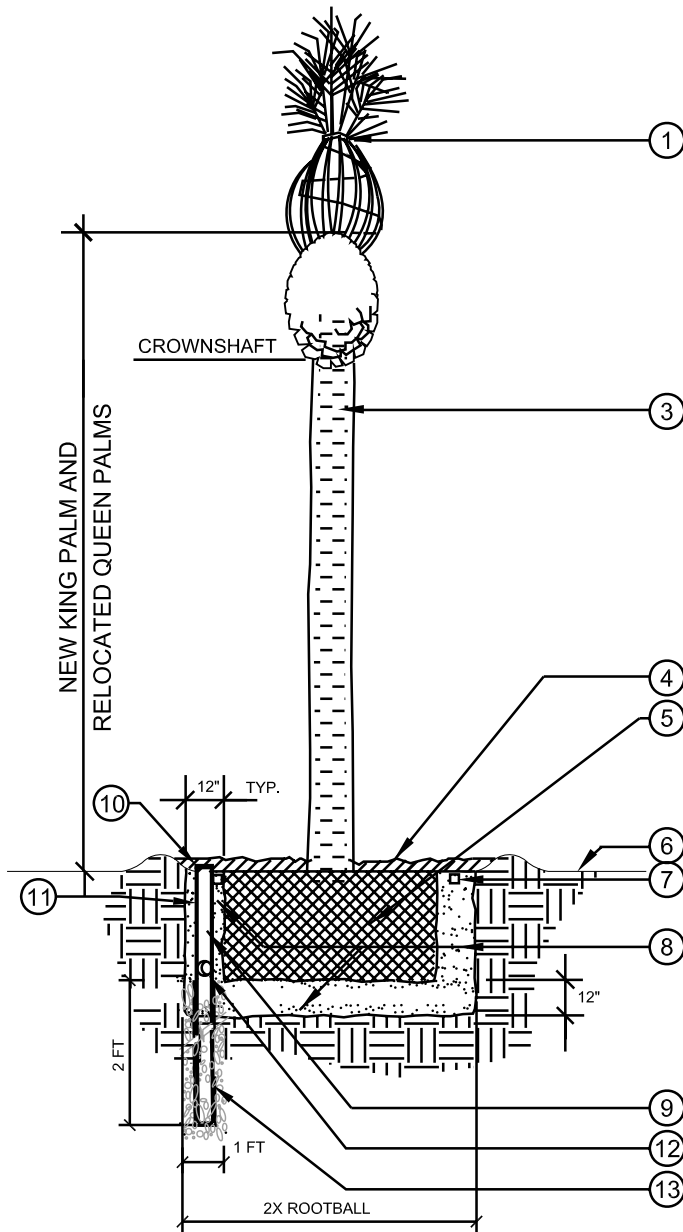




- ① TREE TRUNK
- ② 2" DIA. x 12' LONG MIN. LODGE POLE PINE STAKES: (2)
- ③ NEW 1/2"Ø GREEN REINFORCED GARDEN HOSE, 18" LONG LOOPED AT EACH BRANCH WITH SINGLE STRAND OF #12 GALVANIZED WIRE. FASTEN TO STAKE BY DRILLING THROUGH THE CENTER AND THREADING THE WIRE THROUGH. WRAP WIRE ONCE AROUND STAKE AND TWIST TO SECURE. PROVIDE 3 TIES
- ④ TREE ROOTBALL: 3" ABOVE GRADE, TAPER ROOTBALL TO GRADE
- ⑤ 3" HIGH WATER RETENTION BASIN. FORM FROM PLANT PIT EXCAVATION. MAY BE RAKED OUT PRIOR TO OTHER WORK AS DIRECTED BY BY CITY REPRESENTATIVE
- ⑥ FINISH GRADE
- ⑦ FERTILIZER TABLETS PER PLANTING NOTES
- ⑧ PREPARED BACKFILL PER PLANTING NOTES & SOILS REPORT

NOTE:  
 WATER SATURATE ALL EXCAVATIONS PRIOR TO PLANTING.

# NEW TREE PLANTING DETAIL

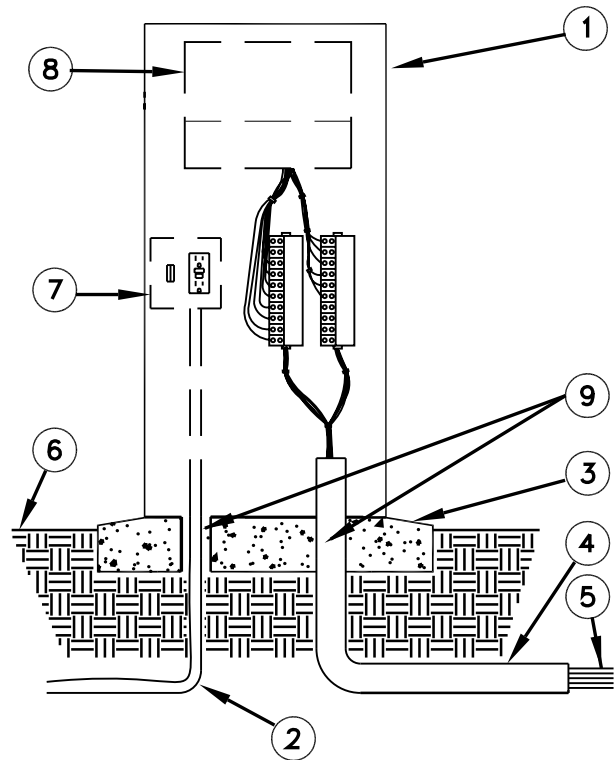
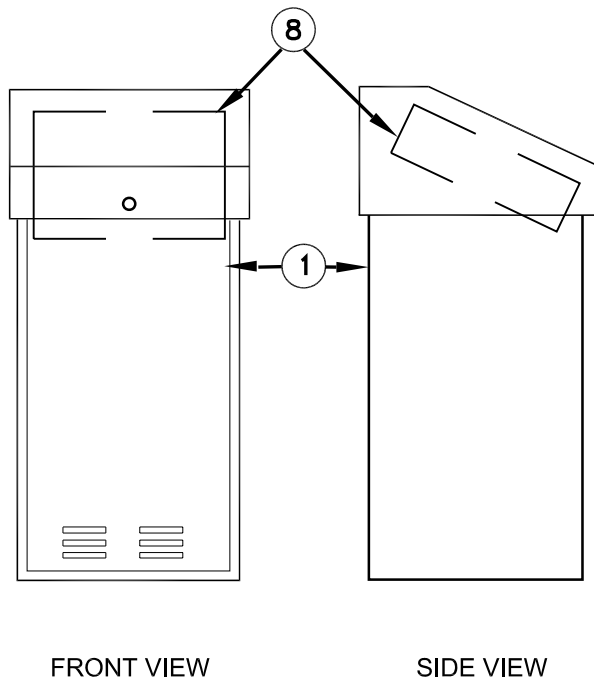


- ① TIE FRONS WITH ORGANIC TWINE
- ② NOT USED
- ③ PALM TRUNK TO BE STRAIGHT AND INSTALLED VERTICAL(PLUMB).
- ④ SAND BACKFILL @ FINISH GRADE
- ⑤ ROOTBALL
- ⑥ FINISHED GRADE
- ⑦ FERTILIZER TABLETS PER PLANTING NOTES.
- ⑧ PLANT PIT BACKFILL 100% WASHED PLASTER SAND.
- ⑨ 4" DIA. ROOTBALL DRAINLINE AND AERATION RISER
- ⑩ THREADED PVC CAP (BLACK)
- ⑪ 4"Ø SOLID SDR-35 PVC PIPE
- ⑫ HORIZONTAL 4"Ø PERF. SDR-35 PVC PIPE SLOPE TO SUMP DRAIN @ 2% MIN. EXTENDED TO LENGTH OF PIT
- ⑬ VERTICAL 4"Ø PERF. SDR-35 PVC PIPE WRAPPED W/ FILTER FABRIC & BACK FILL W/ 12" DRAIN GRAVEL

NOTE:

ALL BACKFILL TO BE WATER JETTED DURING PLANTING FOR MAXIMUM STABILITY.

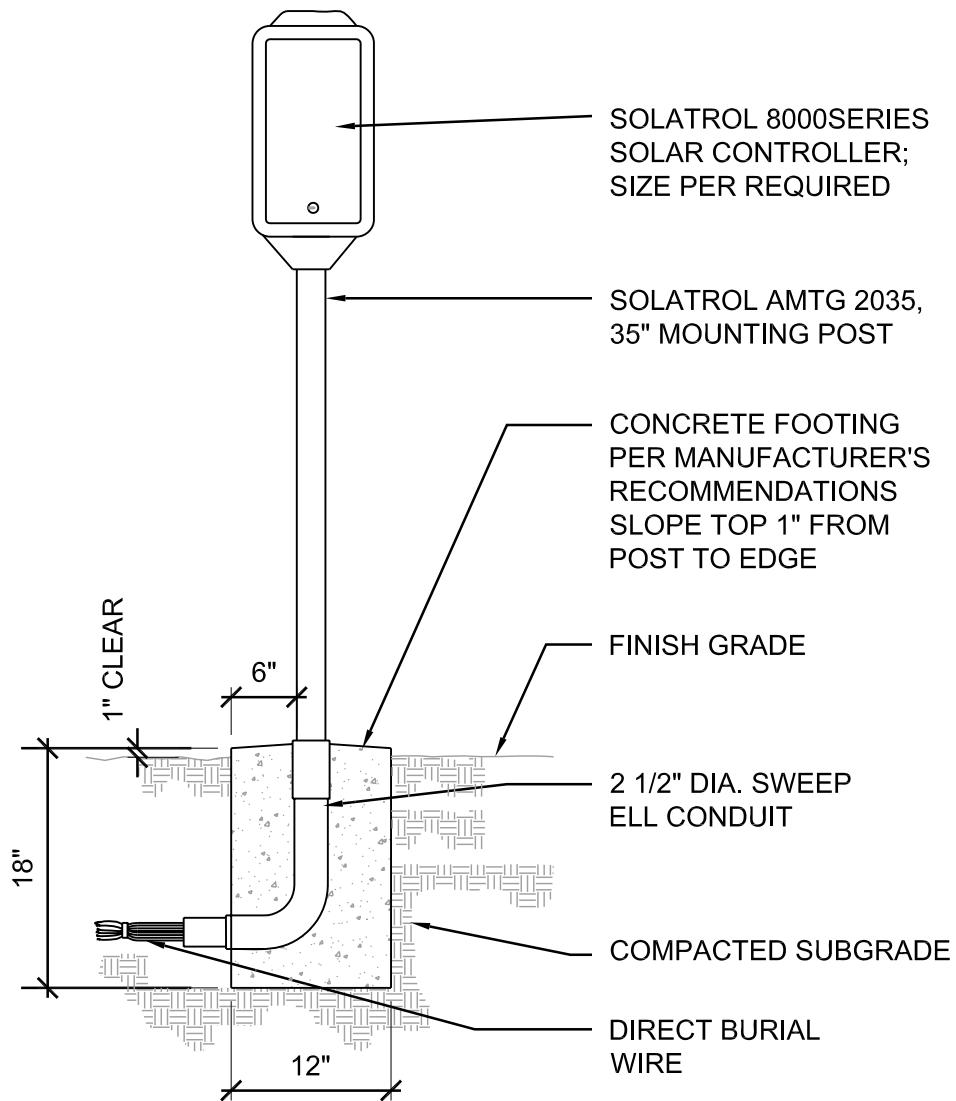
# PALM TREE PLANTING DETAIL



LEGEND

- |  |  |
|--|--|
| <p>1. CONTROLLER ENCLOSURE.</p> <p>2. 120-VOLT SERVICE IN CONDUIT.</p> <p>3. POURED CONCRETE BASE - 6" MIN. THICKNESS - EXTEND CONCRETE 6" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE WITH 1/2" SLOPE FOR DRAINAGE.</p> <p>4. PVC LONG SWEEP ELL - SIZE AS REQUIRED.</p> | <p>5. DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES.</p> <p>6. FINISH GRADE.</p> <p>7. 110 VAC GFI RECEPTACLE; DUAL OUTLET WITH LOCKING SWITCH &amp; TERMINAL STRIPS.</p> <p>8. AUTOMATIC CONTROLLER.</p> <p>9. 3' DIAMETER OPENINGS IN BASE</p> |
|--|--|

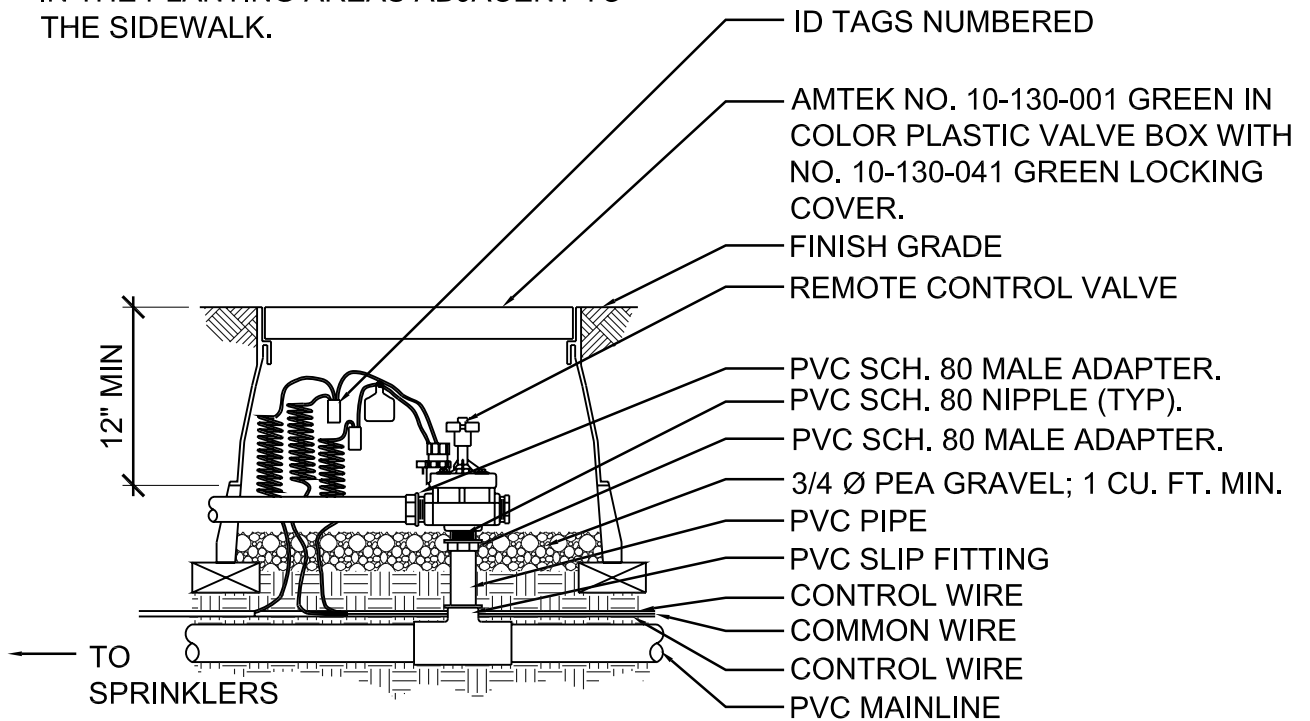
# IRRIGATION SMART CONTROLLER



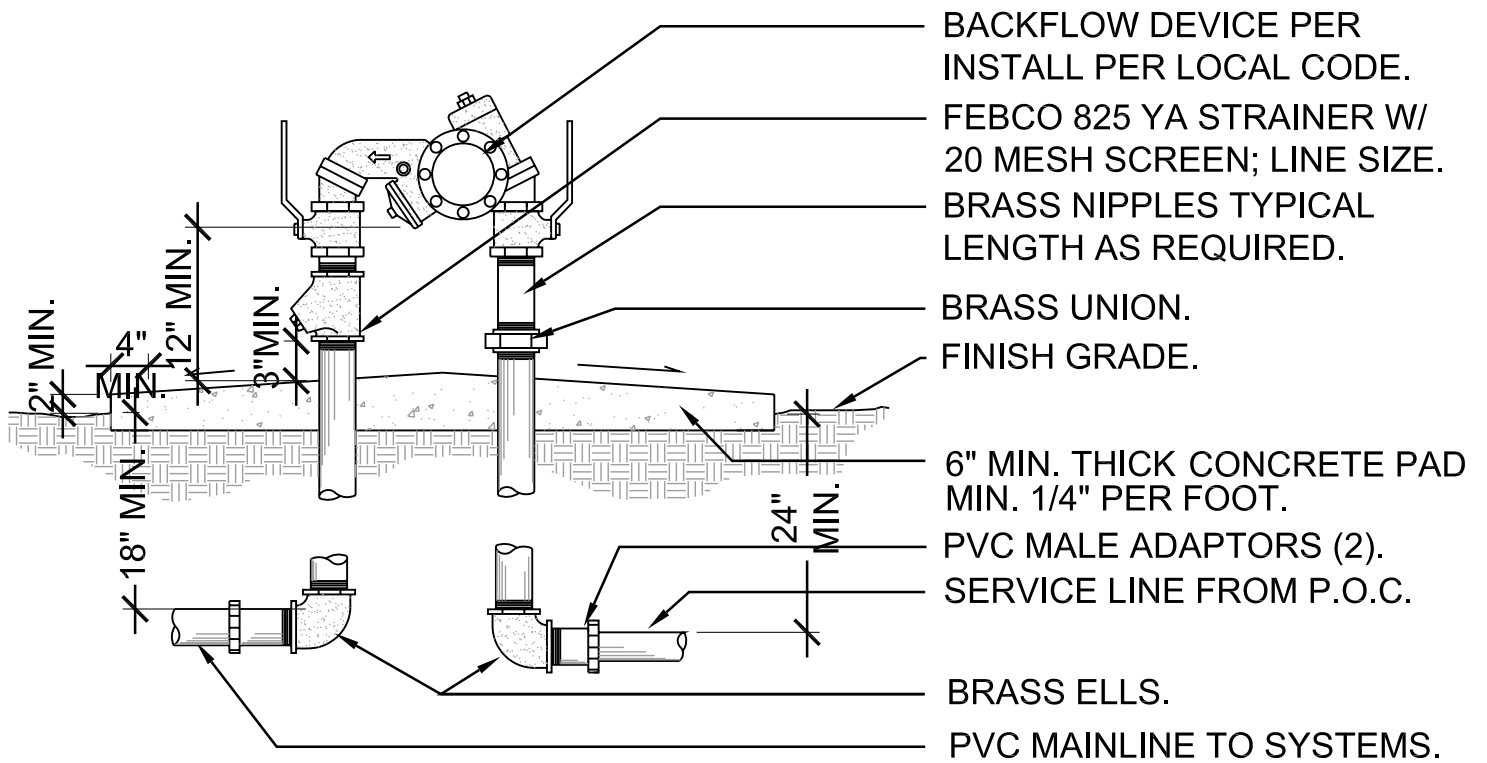
# IRRIGATION SOLAR CONTROLLER

**NOTE:**

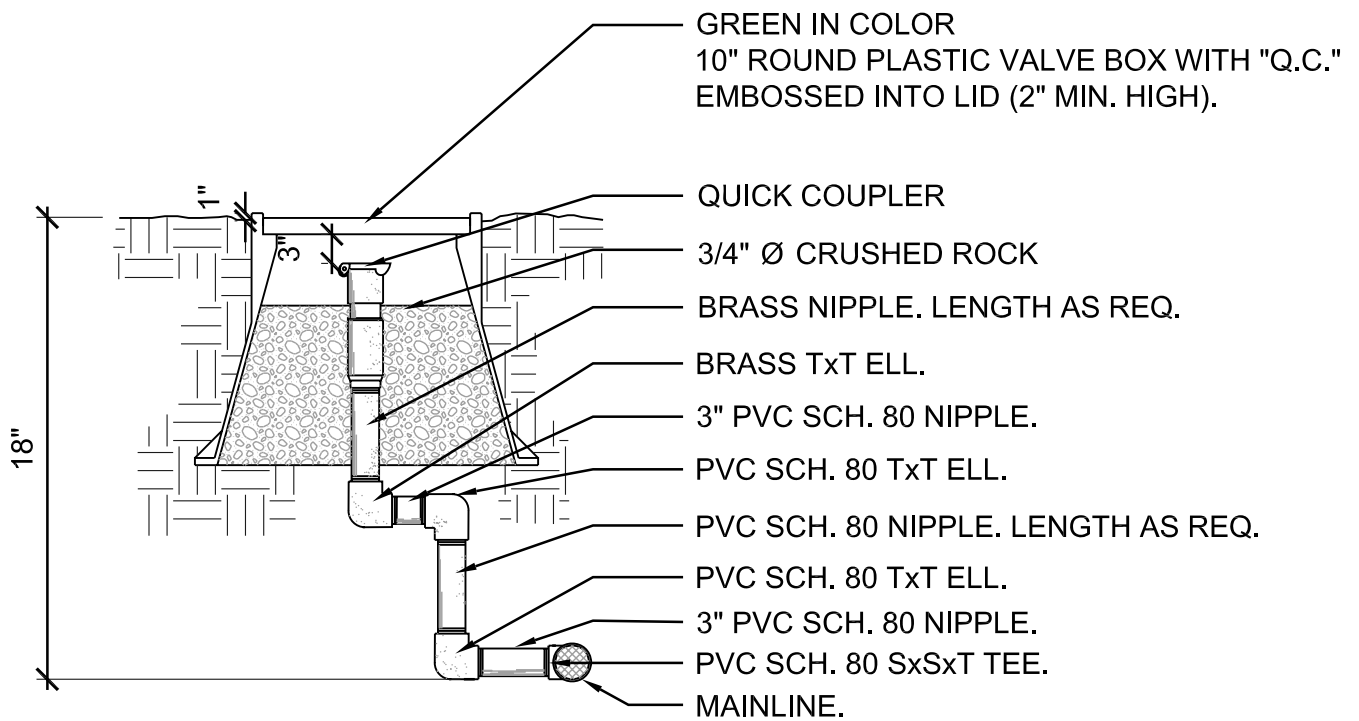
1. INSTALL ALL WIRE PER LOCAL CODE.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (10 WRAPS AROUND A 1/2"Ø PIPE).
3. EMBOSS VALVE BOX LID WITH VALVE NUMBER, MIN. 2" HIGH
4. ALL VALVE BOXES SHALL BE LOCATED IN THE PLANTING AREAS ADJACENT TO THE SIDEWALK.



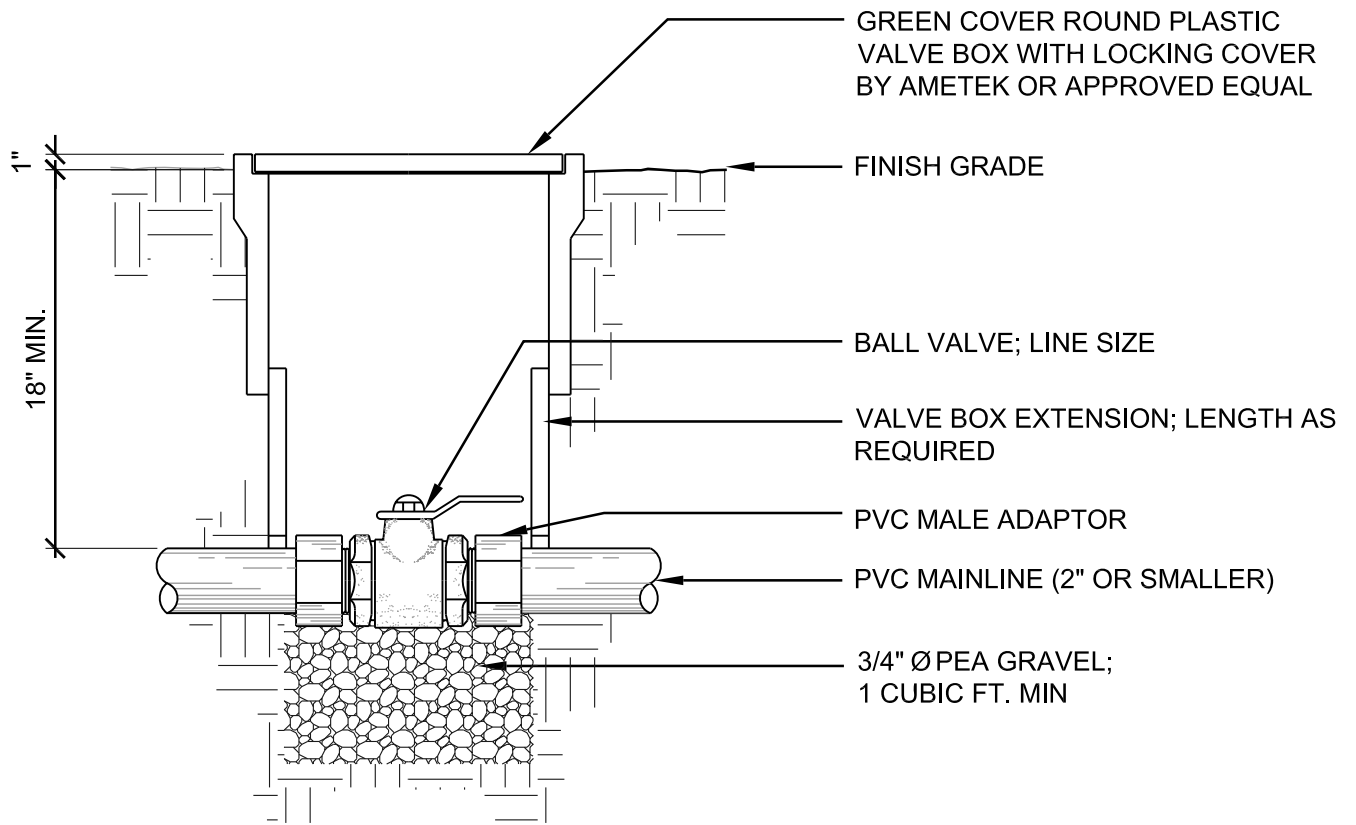
## IRRIGATION REMOTE CONTROL VALVE



## IRRIGATION BACKFLOW PREVENTER



## IRRIGATION QUICK COUPLER



# IRRIGATION BALL VALVE



**Exhibit G**  
**Chapter 9.40 Trees**

**§ 9.40.005 Definitions.**

For the purpose of this chapter, the following words and phrases shall mean:

A. “*Director*”: director of development services in matters involving private property and director of public works/city engineer in matters involving public property.

B. “*Caliper*”: the maximum cross sectional width of the trunk of a tree measured at 4 feet above the natural grade. In the case of multi-trunked trees, “caliper” means the sum of the calipers of each trunk measured at 4 feet above grade; provided, however, that if the caliper of at least one trunk is not at least 4 inches, the tree shall be deemed to have no caliper.

C. “*Eucalyptus tree*”: a tree of the eucalyptus species measuring more than 12 inches in diameter at a point 4.5 feet above the ground.

D. “*Eucalyptus grove*”: Cluster of 15 or more eucalyptus trees

E. “*Top*”: severely cut back limbs to stubs larger than 3 inches in diameter within the tree’s crown to such a degree as to remove the normal canopy and disfigure the tree.

**§ 9.40.010 City trees and Structures.**

A. No person shall do any of the following:

1. Remove, cut, destroy, relocate, trim, prune, deface, burn, or otherwise injure any tree, hedge, plant, shrub or flower growing upon city property.

2. Top any tree growing upon city property.

3. Hitch an animal to, attach a sign upon, deface, burn, cut or otherwise injure any frame, post, trellis or other structure used to protect or support any tree, hedge, plant, shrub or flower growing upon city property.

B. Paragraph A does not apply to the following when done with written authorization from the director or by city employees engaged in the discharge of official duties:

1. Trimming or pruning for the protection or maintenance of traffic control devices, public utility lines or water, sewer or utility lines.
2. Removal of tree parts that have been damaged by an act of God and that create a hazard to life or property.
3. Removal of a tree that is nonviable as a result of disease or damage.

**§ 9.40.015 Eucalyptus Tree Permit Requirement.**

No person shall remove, cut, destroy, relocate or perform any activity that may damage a eucalyptus grove without first obtaining a eucalyptus tree permit. This prohibition does not apply to eucalyptus trees located on private property in a residential subdivision that is regulated by a homeowners association.

**§ 9.40.020 Approval or Denial of Eucalyptus Tree Permit.**

A. The city council shall be the decision maker for eucalyptus tree permits involving property owned or controlled by the city. The planning commission shall be the decision maker for eucalyptus tree permits involving the use or development of private property. The director shall be the decision maker for other eucalyptus tree permits involving private property.

B. The decision maker may approve or conditionally approve a eucalyptus tree permit if the proposed work is consistent with the public health, safety and welfare; otherwise the permit shall be denied. In making such determination, the decision maker shall consider the following factors:

1. Tree condition with respect to disease, risk of falling and potential danger to life, property or a grove.
2. The number of trees that can adequately be supported on the subject property.
3. Extent of tree interference with existing utility services, streets and highways.
4. Effect of the proposed work on erosion, soil retention, surface water flow and neighboring properties.
5. Feasibility of alternative development plans that do not jeopardize the trees.

C. A public hearing shall be held for eucalyptus tree permit applications for which the city council or the planning commission is the decision maker. Notice of the hearing shall be mailed to property owners within 300 feet of the subject property and published in a newspaper of general circulation not less than 10 days before the hearing date.

D. Eucalyptus tree permit decisions of the director may be appealed to the planning commission, and the eucalyptus tree permit decisions of the planning commission may be appealed to the city council. Appeals shall be filed and processed in accordance with the zoning ordinance.

**§ 9.40.025 Eucalyptus Tree Permit Expiration.**

Eucalyptus tree permits shall expire one year after issuance or on the date specified in the permit, whichever is earlier, unless the work authorized by the permit is commenced prior to such date. On written application, the director may extend the term of the permit for a period not exceeding 1 year.

**§ 9.40.030 Property Owner Responsibilities.**

A. Each owner of property containing a tree that overhangs an abutting city parkway, street, sidewalk or right-of-way shall do the following:

1. Prune the branches of the tree so as to prevent obstruction of traffic control devices or lighting from street lamps, and so as to ensure a clear space of at least 8' above the surface of the street or sidewalk.

2. Remove dead, diseased or dangerous limbs or trees that constitute a menace to public safety.

B. The city manager may cause such work to be performed summarily whenever the tree presents an immediate threat to the public health, safety, or welfare. Otherwise, the work shall be performed by the property owner upon written notification from the city manager. The property owner shall be responsible for the city's actual costs of performing the work.

**§ 9.40.035 Violations.**

In addition to any misdemeanor penalty assessed, any person violating this chapter shall reimburse the city an amount equal to the actual cost of replacing the tree, hedge, plant, shrub or flower. The director shall determine such cost by considering the characteristics of the damaged or removed tree, including without limitation its age, condition, species, and shade potential. Any debt incurred as a

result of this chapter shall be enforceable in the same manner as a civil debt. Unless determined otherwise by the director, illegally removed or destroyed trees shall be replaced with a species and in a location designated by the director in accordance with the following schedule:

<u>Caliper Width of The Tree Removed</u>	<u>Number Removed</u>	<u>Replace With Up To</u>	<u>Size</u>
10 inches and under	1	4	24 inch box
10 inches – 14 inches	1	4	36 inch box
15 inches and above	1	4	48 inch box

\* \* \* \* \*