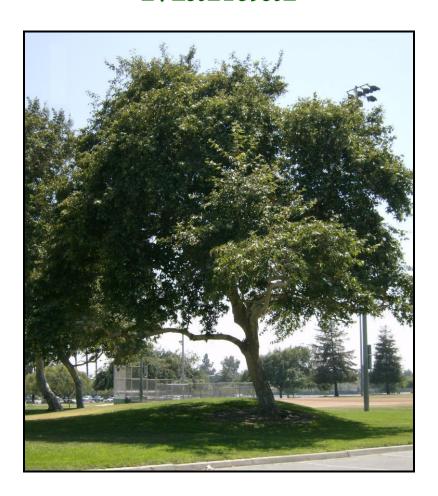
City of Claremont

Tree Policies and Guidelines Manual



Community Services Department (909) 399~5431

Adopted: February 1997 Revised: November 1999

June 2007 June 2011 January 2015 December 2015



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INTRODUCTION

Statement of Commitment

Claremont is a community which recognizes its trees as one of its most valuable resources. It is for this reason that the City has dedicated itself to the preservation, proper maintenance and continued enhancement of our community forest. The over 24,000 City street and park trees throughout Claremont are a community asset valued at more than 84 million dollars. The community forest provides environmental benefits, adds to property values, and contributes to an enhanced quality of life for all of Claremont's residents. Trees also represent a significant facet of our community heritage, playing a central role in the history of the City. The City had a Tree Committee even before it had a formal City Council. These early citizens set a standard of dedication to tree preservation for the enrichment of the community.

There are many benefits to having a healthy, well-maintained community forest, including helping to reduce the "heat island" effect which results from having extensive amounts of unshaded hardscape, conserving energy by reducing cooling costs, significantly increasing property values, slowing down harsh winds, muffling street and traffic noise, and providing shade and overall beauty to our community. Trees improve the environment in which we live by moderating the climate, providing oxygen, filtering out particulate matter from smog-laden air, conserving water, reducing erosion, and harboring wildlife within our urban setting.

Unfortunately, our trees suffer from the rigors of urban life, including air pollution, vandalism, compacted soils, limited growing spaces, and the extremes of the Southern California climate. In order to overcome such rigorous growing conditions for our City trees and reap the benefits of these, our most valuable assets, the care of our community forest must be a public/private partnership.

The Tree Policy Manual

This Tree Policy Manual defines and illustrates the policies and procedures that shall be utilized by City staff in the management and care of all trees located on City property or within the City's public right-of-way. The following pages document the City of Claremont's official guidelines for the planting, pruning, removal, preservation, and protection of all City-owned trees, herein referred to as Claremont's community forest. These policies shall be based upon the highest nationally accepted standards set for tree care, and shall act as the source reference by City staff for the implementation of the duties, authorities and regulations delineated in Chapter 12.26 of the Claremont Municipal Code (Appendix B). These policies have been established to address the specific needs of Claremont's community forest, and should be considered as a whole. Any inconsistency should be viewed in terms of the underlying intent.



Guiding Principles

The City shall adhere to the following principles in all its tree-related policies and processes:

- Recognize that the trees of our urban forest are more than aesthetic enhancements.
- Trees are the backbone of our urban ecosystem and an essential part of our
- community's green infrastructure.
- Promote the health and growth of our urban forest by following scientifically established best practices for tree selection, planting, watering and pruning.
- Promote a robust urban forest through policies and practices that
- reduce its vulnerability to known diseases or pest infestations, and future threats,
- including the anticipated effects of climate change.
- Engage in a continuous process of long-range planning for the growth and
- maintenance of our urban forest.
- Promote public appreciation of our urban forest through educational outreach
- programs.
- Support local businesses, institutions, organizations and individuals in their
- efforts to grow and maintain our urban forest through community education.
- Proceed in a manner that is inclusive and transparent.

Amendments to Policies

These policies shall be reviewed on a regular basis. Amendments may be initiated by staff or members of the Tree Committee, Community and Human Services Commission, or City Council. The City Council reserves the right to approve amendments to the policies, if it is deemed by majority opinion that such revisions or updates are necessary. Any amendments to these policies sought by other public or private interests shall first receive approval from the City Council.

City Easements and Right-of-Ways

Section 12.26.010 of the Claremont Municipal Code (Appendix B) defines "easement," "parkway," or "right-of-way".

The City retains an established right-of-way or easement on each public street. These easements are City-controlled areas for the purpose of public improvements, including streets, sidewalks, curb and gutters, driveway approaches, streetlights, street signs and street trees.

Easements may vary per street and will usually extend beyond street width. Generally, the width of these parkways or landscape easements are around ten (10) feet from the



face of the curb, but this dimension may range from anywhere between one (1) foot and thirty (30) feet. The City Engineer shall keep official record of the City easements.

Any tree located within this public easement is recognized as a City-owned tree, and is subject to the policies described herein and in the Municipal Code (Appendix B), which govern all City trees and public property. Illustrations of typical City right-of-ways or easements are included in the Appendix of this manual.

GUARDIANSHIP FOR THE COMMUNITY FOREST

The City Council

The elected officials of the City provide leadership, at the request of the citizens, to ensure that our community trees continue to be a priority in Claremont. They oversee the funds which support the forestation and preservation of the community forest. They also make decisions regarding policies and ordinances which pertain to the care and protection of all trees on public property as well as to the development and enhancement of private property.

The Community and Human Services Commission

Section 12.26.020 of the Claremont Municipal Code (Appendix B) defines the duties of the Community and Human Services Commission.

The commission is made up of City Council appointed citizen representatives, who serve, among other capacities, as the City's tree advisory board. The commission appoints a Tree Committee from its membership on an annual basis and holds regular meetings for the purpose of reviewing tree-related issues and determining the needs of the City with respect to its tree planting and maintenance programs. The Tree Committee and commission make recommendations to the City Council on policies and ordinances, which pertain to the care and protection of public trees. The Tree Committee and commission also make decisions on selecting specific species of trees for designation along City streets. As representatives to the community, commissioners also help educate and inform the public on proper tree care, and promote the value of trees to the community.

The Community Services Department

The Community Services Department is responsible for providing the daily management and emergency services which sustain our community forest. The department provides forestation and maintenance services, and oversees all contracted and permitted work on City trees. The department retains and updates the City's tree inventory, and is the primary resource for residents who contact the City with concerns and questions about trees. The department also provides to residents educational materials on proper tree



care, information on specific City trees, as well as sponsors City-wide events, such as the annual Arbor Day celebration, to enhance the public's awareness of the important role trees play in the community.

Section 12.26.030 of the Claremont Municipal Code (Appendix B) defines the duties of the Director of Community Services. Under general direction from the Director of Community Services, department staff and an International Society of Arboriculture (ISA) Certified Arborist shall be responsible for overseeing the care and management of the community forest.

The Property Owners and Residents of Claremont

Section 12.26.040 of the Claremont Municipal Code (Appendix B) defines the duties of the private property owners in the care of public trees.

Tree care responsibilities for the residents of Claremont include protecting and providing enough water to promote the health and viability of any City tree located within the public easement on their property, and notifying the Community Services Department of any suspected tree hazards or maintenance needs that their City trees may require.

FOUNDATIONS FOR TREE PRESERVATION

The foundations for the preservation and enhancement of our community forest are based upon Claremont's General Plan, Land Use and Development Code, and Municipal Code (Appendix B).

The General Plan

Claremont's General Plan refers to trees in several of its elements. The goal of these tree management policies is to carry out the policies of the plan as follows.

Land Use, Community Character, and Heritage Preservation Element

Community Design Section:

"On-going maintenance and enhancement of Claremont's street trees through implementation of the City's Tree Policy Manual will continue to promote streets as sustainable community "places" that provide shade and contribute to clean air. The City is committed to preserving its existing street trees, replacing trees that are damaged or dying, and expanding community forests in newer areas of Claremont."

Policy 2-13.1: Maintain and enhance the City's collection of street trees and improve Claremont's image of a "City with trees."



Policy 2-12.4: "Encourage all new development to preserve the natural topography of a site and existing mature trees."

Open Space, Parkland, Conservation, and Air Quality Element

Street Trees and Community Forest Section:

"While trees add considerably to the aesthetic quality of Claremont, "community forests" also promote a good community environment and provide biological benefits. They contribute to clean air, provide cooling shade, support wildlife, increase property values, control soil erosion and conserve water, create sound barriers, and provide protection from high winds. The community forest is comprised of a street tree system, trees on parks and other public lands, and trees on private properties and in yards throughout the City. The community forest is distinct within established areas of Claremont where trees have fully matured, particularly in The Village, Historic Claremont, Old Claremont districts, and on The Claremont Colleges' campuses. The City is committed to preserving its existing trees, replacing trees that are damaged or dying, and expanding community forests in newer areas of Claremont."

Policy 5-8.1: "Develop a tree planting policy that strives to accomplish 50% shading of constructed paved and concrete surfaces within five years of construction."

Policy 5-8.2: "Provide adequate funding to manage and maintain the City's urban forest, including sufficient funds for tree planting, pest control, scheduled pruning, and removal and replacement of dead trees."

Policy 5-8.3: "Coordinate with local and regional plant experts (e.g. Rancho Santa Ana Botanic Garden) in selecting tree species that respect the natural region in which Claremont is located, to help create a healthier, more sustainable urban forest."

Policy 5-8.4: "Safeguard and enhance Claremont's community forest by protecting existing stands of trees and other plant material of substantial value."

Policy 5-8.5: "Continue to plant new trees (in particular native tree species where appropriate), and work to preserve mature native trees."

Policy 5-8.6: "Increase the awareness of the benefits of street trees and the community forest through a citywide education effort."

Policy 5-8.7: "Continue to manage and care for all trees located on City property or within the City's right of way."

Policy 5-8.8: "Provide information to the public on correct tree pruning practices."

Policy 5-8.9: "Encourage residents to properly care for and preserve large and beautiful trees on their own private property."



Policy 5-18.5: "Continue to require the planting of street trees along City streets and inclusion of trees and landscaping for all development projects to help improve airshed and minimize urban heat island effects."

Measures for Implementation, Streets section, Measure E. "Street trees shall be selected for their adaptability to the City's environmental conditions, visual characteristics, and shading. Deciduous trees shall be used so that shade is provided in summer with open views in winter."

Land Use and Development Code

Chapter 4, Part 1

Section 413.B Yard Landscaping Requirements

"A minimum of one tree per fifty feet of lot width in addition to street trees is encouraged."

The Claremont Municipal Code

Chapter 12.26 of the Claremont Municipal Code (Appendix B) establishes the duties, authorities and regulations governing all City trees. All of the tree management policies found herein are based upon this ordinance. The purpose of these policies is to implement this section of the Municipal Code (Appendix B). A copy of Chapter 12.26 of the Claremont Municipal Code (Appendix B) is included in the Appendix of this manual.

GENERAL PRESERVATION AND PLANNED MANAGEMENT

One of the most important aspects of preserving Claremont's community forest is the ability to retain a manageable population in terms of species diversity, density and appropriateness. The City shall achieve this through proper planning and gradual reforestation efforts, rather than through drastic deforestation and replacement measures, whenever possible. No healthy, living tree shall be removed for the sole purpose of altering an area's existing tree species composition.

Species Diversification and Density

A diversified population of tree species helps to guard against the negative impacts of monocultures. Monocultures, large populations of a single tree species, may be ravaged during insect or disease epidemics. On the other hand, too diversified a population may create an unmanageable inventory of trees. Thus, as a means of controlling species vicissitude, it shall be the goal of the City to retain a population of trees in which the optimum quantity of a single tree species shall make up between .5



and 5 percent of the total tree population, and that no single tree genus shall exceed 12 percent of that population.

Heritage Trees and Historic Grove Preservation

Specific trees, which by virtue of their species, size, age, appearance or historical significance are determined to be outstanding, shall be protected by declaration of Heritage Tree status, and shall so be protected by ordinance. Sections 12.26.010 and 12.26.090 of the Claremont Municipal Code (Appendix B) defines "Heritage Trees" and the protection criteria established for them.

Historic groves of a particular species in a specific area, such as the American Elms along Indian Hill Boulevard and the Eucalyptus trees along College Avenue, shall also be afforded the same protective status as Heritage Trees.

In order to preserve unique neighborhood characteristics, iconic streets with mature, integrated canopies will be preserved and continue to have the historically dominant species planted as long as the streetscape remains healthy and vibrant.

All nominations for Heritage Tree or historic grove candidates shall first be reviewed and approved by the Community and Human Services Commission. The Community Services Department shall retain a detailed inventory record of all Heritage Trees. A copy of the Heritage Tree and Historic Grove List is included in the Appendix G of this manual.

The City shall encourage property owners to consider nominating large trees on private property as candidates for Heritage Tree status. To be considered a Heritage Tree on private property, the tree must be visible from publicly accessible location(s).

Claremont's Designated Street Tree List

Claremont's tree population management plan shall be based primarily upon the City's Designated Street Tree List. Section 12.26.010 of the Claremont Municipal Code (Appendix B) defines and authorizes the creation and implementation of this list. A copy of the Designated Street Tree List is included in the Appendix of this manual.

The Designated Street Tree List shall identify several tree species designated for each City street, including drought-tolerant varieties¹. Multiple species will be identified in an effort to increase species diversification, prevent deforestation related to pests and disease, and minimize the negative impacts of species monocultures. Providing a selection of species will also provide options for locations where there are overhead clearance conflicts or grow space limitations. In some cases selection of tree species may be designated for a particular block or segment of a street.

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¹ As of 2014, the current Designated Street Tree List identifies one to two trees per street or segment of street. The City will undertake a process to expand the Designated Street Tree List following City Council approval of this policy.



Each street shall be assessed and a selection of designated species chosen to ensure that the right tree is planted in the right place. Appropriate tree species shall be selected for designation based upon the following criteria:

- **Species hardiness.** Based upon the trees adaptability to the region in terms of its resistance to frost or freezing temperatures.
- **Growspace.** The amount of parkway space available relative to the expected tree trunk circumference and root flare at maturity.
- Overhead clearance. The potential for conflicts between the tree's canopy and overhead obstructions, such as utility lines, at the tree's mature height.
- Character and basic design plan for the neighborhood. The general compatibility between the tree and its location; e.g., an eighty foot tall tree may not be appropriate in a neighborhood of small, single story homes.
- **Pest and disease resistance.** Species known for having a lack of significant pest or disease problems are preferred.
- **Drought tolerance.** Species that are more tolerant of long, dry periods and lack of water are preferred.
- **Durability and wind resistance.** Species that are not brittle in nature and provide for good wind buffers are preferred.
- Canopy and subsurface growth habits. Species that do not have growth characteristics such as invasive surface roots, extensive sucker production, or abundant fruit litter are preferred.
- Irrigation drainage and soil qualities. Trees that do well under a variety of different irrigation and soil conditions are preferred.
- **General aesthetics and shading potential.** Trees that provide some aesthetic benefits, such as showy flowers or attractive fall color, or trees that provide a good amount of shade are preferred.
- Existing, traditional or native plant palettes. Species that already exist in a particular area, have traditionally or historically existed in that area, or are native to this region are preferred.
- Availability. Trees that are generally available in local nurseries are preferred.

The Designated Street Tree List shall be retained by the Community Services Department. The list shall identify every public street in the City with approximately three to five designated species being denoted in both botanical and common names. Cultivars or hybrids of the designated species may also be identified parenthetically by the characteristics sought after in referencing that particular tree; e.g., Pyrus calleryana (blight resistant).

Redesignation Process

Sections 12.26.020 and 12.26.030 of the Claremont Municipal Code (Appendix B) declares that all revisions or updates to the Designated Street Tree List shall first be reviewed by the Director of Community Services, or his or her designee, and forwarded to the Community and Human Services Commission for approval.

Property Owner Appeals. If a property owner does not agree with the Commission's decision, the property owner may appeal the decision to the City Council. The Community Services Department shall provide interested property owners with information on the commission appeal process.

Inventory Administration

The Community Services Department shall keep current an inventory of all City-owned trees, including detailed site characteristics and work histories for each tree. This record shall be updated on a continual basis by the City's contractor and/or staff.

The inventory of City trees identifies location, species (both scientific and common names), location, diameter (DBH), height, parkway size, overhead utilities, estimated asset value, recommended maintenance, and work history.

MAINTENANCE GUIDELINES

Planting

Sections 12.26.050 and 12.26.060 of the Claremont Municipal Code (Appendix B) establish the conditions for all tree plantings that take place on City property or within City right-of-ways. The Community Services Department shall be responsible for the planting of all City trees. The following guidelines have been developed to promote the health and safety of City trees from the time that they are planted through their maturity. These specifications shall be required for any City tree that is to be planted.

Season to Plant. Unless otherwise approved by the Community Services Department, most planting of trees shall take place between mid-fall and early spring to take advantage of the dormant period for most trees and the cooler, wetter seasons of the year. If a resident wants a tree planted sooner than the City schedule can accommodate, they may make a tree donation to the City (refer to the Tree Donations section of this manual).

Viable Planting Sites. It shall be the objective of the City to plant all viable vacant sites located on City property or within City right-of-ways, to honor all resident requests for new street trees in viable locations, and to replace any City tree which has been removed with the provision that the remaining vacant site is viable for planting. Viability shall be based upon the following criteria:

- **Spacing.** There is adequate spacing present overhead, underground and radially to allow for the healthy, unimpeded growth of the tree to its mature size. Specific examples of spacing conditions that may make a site unsuitable for planting include inappropriate canopy room between existing trees, too close a proximity of a planting site to existing water, gas or sewer lines, potential for conflict with overhead power lines, or inadequate width of the location's parkway for accommodating the tree's girth.
- **Traffic Clearance.** There is adequate line of sight visibility between normal vehicular or pedestrian traffic and necessary signage, street lights or views.
- **Maintenance Resources.** There is an adequate and consistent water source available.
- **Funding.** There is funding available in the current fiscal year's budget for tree planting.

Replacement Trees. Each year City staff and the City's arborist will together determine a list of appropriate planting sites. This list will include resident requests for new trees and those that have been removed and are in need of replacement. The following factors will be taken into consideration:

Proximity to hardscape (driveways, walkways, walls, planters) Location of overhead and subsurface utility lines Availability of water

After evaluating these criteria, staff and the arborist will determine if there is an appropriate site at each location to plant one or more trees.

Resident Notification. The City Arborist will evaluate all potential planting sites to determine if they are viable. If the property is not a viable planting site, the resident will receive a letter outlining the reason(s) that the City has decided not to plant a tree. Properties that have a viable planting site will be marked at the curb to identify where the tree will be planted. Each resident will then receive a letter confirming that the City will plant a tree at the property. The notification letter will outline the environmental and economic benefits of City trees as well as the watering requirements. Residents will be invited to select the species of tree that will be adjacent to their property from the



options available on the Designated Street Tree List. A species selection will be made on behalf of residents that are non-responsive.

Nursery Stock Standards. The City shall make every effort to insure that it plants only vigorous, healthy trees which can easily be trained into an attractive natural form, with strong roots and good crown development. The specifications for acceptable nursery stock shall be as follows:

- All trees shall be true to type or botanical name as ordered or shown on planting plans.
- All trees should be of a size equivalent to that of a twenty-four inch (24") box sized containerized tree with a trunk caliper of one and one half inches (1.5"), or greater, measured at six (6) inches above soil grade. Exception shall be made by a staff arborist on trunk caliper size that is less than one and one half inches (1.5") based upon inspection of the tree.
- All trees shall have a single, fairly straight trunk with a good taper and good branch distribution vertically, laterally and radially.
- All trees shall be healthy, have a form typical for the species or cultivar, be well rooted, and shall be properly trained.
- The root ball of all trees shall be moist throughout and the crown shall show no sign of moisture stress.
- All trees shall comply with Federal and State laws requiring inspection for plant diseases and pest infestations.
- No tree shall be accepted that has been severely topped, headed back, pollarded or lion-tailed.
- No tree shall be accepted that has co-dominant stems or excessive weak branch attachments that cannot be trained out without jeopardizing the natural form of the species.
- No tree shall be accepted that is root bound, shows evidence of girdling or kinking roots, or has "knees" (roots) protruding above the soil.

The City shall reserve the right to refuse any nursery stock that does not meet these standards and may require any person who has planted such sub-standard trees, on City property or within City right-of-ways, to have these trees removed and replaced at that person's own expense.

Planting Material Standards. Unless otherwise approved by the Community Services Department, all City trees shall be planted using materials that meet the following criteria:

- Tree Stakes Shall be two (2) sturdy, ten (10) foot long lodge pole pine stakes. Stakes shall be placed on the outer edge of the root ball on either side of the tree, parallel to the curb or walkway, or perpendicular to prevailing winds.
- Staking Ties Shall be sixteen (16) to eighteen (18) inch rubber cinch ties to be fastened to each stake with galvanized roofing nails. Ties will be pulled around the tree's trunk in a manner which supports the top-heaviness of the canopy, but is loose enough to allow for free movement of the tree in the wind.
- Wood Chip Mulch A three (3) to four (4) inch layer of City-approved wood chip mulch shall be placed within the planting basin of the tree. A space of three (3) inches shall be left between the tree's stem and the mulch layer to allow airflow and to restrict moisture from remaining static around the base of the trunk.
- Appropriate linear root barriers may be utilized adjacent to hardscape as recommended by a certified arborist. Types to be considered include herbicide treated fabric, plastic or any other types as deemed appropriated by a certified arborist.

Tree Planting Specifications. Most nursery tree stock in California is sold in a containerized form. The following guidelines are specific for containerized stock. If utilizing bare root or balled and burlaped trees, refer to the appropriate ISA guidelines for planting instructions.

All trees shall be planted immediately after the planting container has been removed. Containers shall not be cut or otherwise damaged prior to delivery of trees to the planting area.

The planting hole is one of the most important factors in establishing a healthy tree. Measure the width and depth of the root ball prior to digging. The diameter of the planting hole shall be dug at least two (2) times wider than that of the root ball. The depth of the planting hole shall be dug slightly shallower than the depth of the root ball to allow for the top two (2") inches of the root crown to remain above the finished grade.

Before placing the tree into the planting hole, tamp down the base of the hole to allow the tree to stand straight and to avoid the potential of the tree settling below the finish grade. Scarify or scrape the sides of the planting hole to break down any glazing or compaction which may have occurred as a result of digging.

Position the tree in the hole so that the tree stands upright and the top of the root crown is slightly exposed above the grade. Then, backfill the planting hole with clean, native

soil no higher than halfway up the root ball. Slightly tamp the soil to remove air pockets, but be sure not to compact the soil too much. Complete the backfilling to the finish grade. Once again, tamp the soil slightly to remove air pockets.

Form a watering basin out of backfill material, approximately six (6) inches high, around the drip line of the tree. Remove all nursery stakes, ties, and ribbons from the tree, and install the planting materials as specified above. Give the tree an initial deep watering.

Tree stakes and ties should be removed from the tree within three years after planting, or when the circumference of the tree's trunk is equal to or exceeds the circumference of the stakes.

For specific details on proper planting procedures refer to the Standard Tree Planting and Staking instructions in the Appendix of this manual.

Site Cleanup. Work areas shall be left in a condition equal to or better than that which existed prior to the commencement of forestry operations. All debris shall be cleaned up each day before the work crew leaves the site, unless permission is given by the City to do otherwise. All lawn areas shall be raked, all street and sidewalks shall be swept, and all brush, branches, rocks or other debris shall be removed from the site.

Maintaining the Tree's Growing Space

A tree in a natural forest will deposit mulch in the form of fallen leaves or pine needles, several inches deep at its base. Naturally occurring mulch provides nutrients while allowing air and water to permeate the soil.

In urban environments, however, residents and property owners may have reasonable concerns about preventing the growth of weeds around the base of trees, and avoiding the accumulation of leaves and pine needles that may clutter walkways.

Acceptable Methods of Mulching and Weed Suppression. Mulching the planting area with 3-4 inches of wood chips or chunk bark is recommended. Weed barriers, if used, should be made of permeable fabric.

Unacceptable methods of Weed Suppression. Property owners shall avoid applying any landscaping material to the base of trees that will compress the soil below it or make it impermeable to air and water:

- Bricks
- Cement
- Heavy rocks or boulders
- Plastic weed barriers



Watering Schedule

Section 12.26.040 of the Claremont Municipal Code (Appendix B) defines the responsibilities of property owners with a public easement over their property. These responsibilities include providing adequate water to any City tree planted in the easement.

Newly installed trees, including drought-tolerant species, are dependent upon supplemental irrigation until established, typically for two years. If a tree is native to areas of higher rainfall, then the tree will require supplemental water throughout its life cycle, unless the tree finds a subterranean water source. Periods of extreme heat, wind or drought may require more or less water than recommended in these specifications.

Deep Watering. Watering to the root depth, sometimes referred to as "deep watering", is a universally accepted best practice for nurturing the health of both newly established and mature trees.

The goal of deep watering is to deliver water to the lower extremity of the tree's roots, promoting a deeper rooting of the tree and thereby reducing the tendency of roots to search for moisture at the surface. In urban environments, this produces the additional benefit of directing tree roots downward, where they are less likely to interfere with hardscape at street level.

Although deep watering is always preferable, it may not be sufficient to compensate for the typical root growth patterns of some tree species. The typical root growth pattern of a species of tree should always be taken into consideration when planting new City trees.

Watering Newly Planted Trees. Watering requirements for newly-planted trees will vary based on species, location, and soil conditions. Although professional advice should be sought whenever possible, the following recommendations generally apply:

During the first two years after a tree is planted in the ground it shall be watered thoroughly to their root depth as frequently as needed. The minimum standards shall be as follows:

- One to three months in the ground: four times per month or as necessary
- Four to six months in the ground: two times per month or as necessary
- Seven to twelve months in the ground: one time per month or as necessary

Newly planted trees should be watered slowly for several hours during each watering cycle in order to allow the tree's roots to adequately absorb the available water. Water may be provided in a variety of ways:

Applying a garden hose on a slow drip for several hours



- Creating a "tree-well" around the base of the tree and filling it with water that can slowly be absorbed into the ground
- Using a drip irrigation system that is set to deliver water for several hours
- Filling a plastic bladder or "tree bag" with water and allowing it to slowly release water into the ground

In an effort to encourage appropriate watering practices for City trees, the City encourages the use of water bags when new trees are planted. Water bags may be filled by property owners once per week and provide slow release, deep water saturation to newly planted trees. The water bags also provide a visual reminder to property owners to water newly planted street trees. Tree watering bags are recommended during the first two years of establishment. Depending on available funding, the City may provide water bags at the time of planting. Watering bags are also available for private purchase through local retailers, including home improvement and garden suppliers.

Newly Planted Trees in Drought-Tolerant Landscapes. Newly planted trees in drought-tolerant landscapes still need water. Even if a species of tree is classified as "California native" or "drought-tolerant", it still requires regular watering. Once the tree is established, less water will be required.

Watering Established Trees. Effective methods of delivering water to the roots of an established tree vary depending on several factors. However, a few basic principles apply:

- Water slowly for longer durations. Doing so will allow more time for water to penetrate to the tree's root system. If water begins to run off, stop watering or cut back the rate of water flow so that it penetrates the ground. Allow sufficient intervals for the soil to dry out between watering.
- Water deeply rather than frequently. Depending on the age and species of the tree, soil type, shade, sun, slope, drainage, and current temperature, appropriate watering times may vary from as frequently as every ten days to as little as once per month.
- Water at the tree's "drip line." When it is raining, most mature trees naturally shed
 rain water at the perimeter of the tree's canopy much like an umbrella. This is
 the area capable of absorbing the most water and it is where watering efforts
 should be concentrated, if possible. Watering closer to the trunk is not as
 effective and may increase the risk of disease.

Tree Watering Alerts. The Community Department shall prepare community education regarding tree watering needs, including watering alerts during extreme weather conditions. Alerts shall be issued through the City website and through the City's other established public communication channels.

Pruning

The Community Services Department shall be responsible for any and all pruning of City trees. Section 12.26.090 of the Claremont Municipal Code (Appendix B) defines the custody and protections established for public trees.

All City trees shall be evaluated for pruning needs on a regular basis and pruned as necessary using professionally accepted standards, as established by the International Society of Arboriculture (ISA), Tree Care Industry Association (TCIA) and American National Standards Institute (ANSI) Section Z133.1. All City trees shall be pruned in a manner that will encourage good development while preserving their health, structure and natural appearance. For specific details on proper pruning refer to the Tree Pruning Standards in the Appendix of this manual.

Pruning Techniques. "Thinning" cuts in mature trees shall be the standard pruning technique for City trees. A thinning cut is the removal of a branch at its point of origin, or the shortening of a branch to a lateral that is large enough to assume the terminal role.

When removing a live branch, pruning cuts should be made just outside the branch bark ridge and collar. This location of cut is in contrast to a "flush cut" which is made inside the branch bark ridge and collar. Flush cuts should be avoided because they result in a larger wound and expose trunk tissues to the possibility of decay. If no collar is visible, the angle of the cut should approximate the angle formed by the branch bark ridge and trunk.

When removing a dead branch, the final cut should be made just outside the branch bark ridge and collar of live callus or wound wood tissue. If the collar has grown out along the branch stub, only the dead stub should be removed; the live collar should remain intact.

If it is necessary to reduce the length of a branch, the final cut should be made just beyond (without violating) the branch bark ridge of the branch being cut to. The remaining branch should be no less than one third (1/3) the diameter of the branch being removed, and with enough foliage to assume the terminal role.

Pruning cuts should be clean and smooth, leaving the bark at the edge of the cut firmly attached to the wood. A three-cut process, sometimes referred to as "jump-cutting", should be used to remove larger limbs in order to avoid stripping or tearing of the bark, and to minimize unnecessary wounding.

Prohibited Pruning Techniques. Use of the following pruning techniques on City trees is prohibited under any circumstances:

Topping

- Heading Back
- Stubbing
- Lion-Tailing
- Pollarding
- Rounding-Over

Training Young Trees. All newly planted trees shall be placed on the City's written schedule to receive young tree maintenance immediately after completion of a planting program. Properly trained trees will develop into structurally strong trees well suited for their surrounding environment. These trees should require little corrective pruning as they mature. All City trees should be trained to develop in their own style, consistent with each species' natural growth pattern, rather than imposing a "standard style" on each tree. Young trees that reach a large mature size should have a sturdy, tapered trunk with well-spaced branches that are smaller in diameter than the trunk.

All newly planted trees shall be included in the City's Young Tree Maintenance Program. As part of the Young Tree Maintenance Program, each City tree shall be scheduled for training at least once within the first three years after planting. The Young Tree Maintenance Program shall include

- evaluating the overall condition of the tree
- cleaning out of any dead wood
- selectively pruning the tree in such a manner as to develop good structure
- checking to insure stakes and ties are providing adequate support for the tree
- examining the watering basin to verify that the tree is receiving adequate water

Pruning Mature Trees. As trees mature, their need for structural pruning should decrease. Pruning should then focus on maintaining tree structure, form, health and natural appearance, accomplished through one of the three methods described below Specific details on proper pruning are included in Appendix I, Pruning Mature Trees and as include the following processes:

- **Crown cleaning**, or cleaning out, is the removal of dead, dying, broken, diseased, crossing, weakly attached, and low-vigor branches from a tree's crown; as well as the elimination of water sprouts, sucker growth and foreign materials from the entire tree. Crown cleaning shall be completed on an as-needed basis.
- Crown restoration is intended to improve structure and appearance of trees that
 have sprouted vigorously after being broken, topped or severely pruned using
 heading cuts. One to three sprouts, on main branch stubs, should be selected to
 form a natural appearing crown. The more vigorous sprouts may need to be
 thinned or cut to a lateral to control length growth or ensure adequate attachment
 for the size of the sprout. Crown restoration may require several prunings over a
 number of years. Crown restoration shall be completed as is necessary, based



upon the specific condition and circumstances surrounding the tree.

• **Crown thinning** is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of the tree, reduces weight on heavy limbs, distributes ensuing invigoration throughout the tree and helps retain the tree's natural form.

When thinning the crown of mature trees, no more than fifteen percent (15%) of the tree's live growth should be removed. In slower growing or particularly sensitive species (such as native Oaks), no more than ten percent (10%) of live growth should be removed. Trees shall always be thinned to their natural form and should retain well spaced inner lateral branches with foliage. Trees and branches so pruned will have mechanical stress more evenly distributed along the branch and throughout the tree.

Pruning Cycles. Frequency of pruning is also important to a tree's health. The frequency for a complete thinning of a tree's crown should be based upon that species' growth rate, growth pattern, propensity to breakage, and susceptibility to environmental factors. Each City tree shall be inspected and pruned as necessary, or as program funds allow. Funded pruning cycles shall not preclude any necessary maintenance that may be required on individual trees.

Resident Notification. Residents shall be notified of any large-scale crown-thinning project affecting a City tree located in front of their home.

Street, Sidewalk and Visibility Clearance. Street and sidewalk clearance standards shall be achieved through crown raising. Crown raising is the removal of lower branches in order to provide clearance for vehicles, pedestrians and bicyclists. Only those branches that must be removed to achieve the established height clearance standard shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found above the set minimum height standard. Where possible, young or developing trees should be maintained in such a manner that at least one half (1/2) of the foliage should be on branches that originate in the lower two thirds (2/3) of the tree. Similarly, branches should have even distribution of foliage along their lengths. This will ensure a well formed, tapered structure and will uniformly distribute stress within the tree.

All City trees shall be maintained to the height clearance specifications established below:

Over sidewalks or park paths, limbs shall be raised to a minimum of seven (7') feet and a maximum of eight (8') feet from grade to wood. In locations where no sidewalks exist, limbs may be retained below this minimum elevation as long as they conform to the natural shape of the species. In locations where City street trees are set back from, or do not interfere with, sidewalk traffic, limbs may also be retained below this minimum height specification.

- Over residential or collector streets, limbs shall be raised gradually from eight (8') feet at curb to fourteen (14) feet over traffic lanes from the grade to wood giving the appearance of an arch rather than an angle. Select streets may require a higher maximum over traffic lanes for existing mature canopy-forming limbs.
- Over arterial streets, limbs shall be raised to fourteen (14) feet from grade to wood. Select streets may require a higher maximum over traffic lanes for existing mature canopy-forming limbs.

Visibility clearance for streetlights or signage shall be achieved through "windowing" through the foliage of a tree, rather than severely raising or reducing its crown. Only those branches that need to be removed to attain the visibility clearance desired shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found away from the structure that is to be cleared.

Utility Clearance Pruning. In general line clearance is performed by the utility companies. Line clearance tree workers must be trained to work safely around high voltage conductors. The United States Occupational Safety and Health Act (OSHA) and the American National Standards Institute (ANSI) have established minimum distances to be maintained by tree workers from electrical conductors. All line clearance work involving City trees shall adhere to these standards, as well as the utility pruning standards established by the International Society of Arboriculture (ISA) and the Utility Arborists Association (UAA). General Order 95, Rule 35 of the California Public Utilities Commission (CPUC) mandates that trees must maintain an eighteen-inch clearance from high voltage transmission lines.

The following guidelines are designed to maintain the required clearance of City trees from high voltage transmission lines with a minimum of resprouting and fewer pruning cycles. These guidelines are based upon known tree responses to various pruning techniques. In no sense should they take precedence over safe work practices.

- As few cuts as are reasonable should be used to achieve the required clearances.
- Limbs should not be arbitrarily cut off based on a pre-established clearing limit.
- A tree's growth under utility lines is most economically managed by lateral or directional pruning (thinning cuts). Directional pruning (V-notching) is the removal of a branch to the trunk or a significant lateral branch growing away from the conductor. Heading cuts (topping), on the other hand, encourage vigorous sprouting and increase the frequency of pruning cycles and the cost of maintenance. Heading cuts are prohibited on City-owned trees.
- All trees should be examined for hazards before commencing with line clearance work.

- Hangers and dead wood should be removed.
- Where possible, the tree should be allowed to attain normal height, with crown development maturing away from high voltage conductors.
- Pruning should be restricted to removal of branches at crotches within the tree's crown.
- When the pruning of a branch will result in the loss of more than one half (1/2) of the foliage on the branch, it should be removed to the parent stem.
- Precautions shall be taken to pre-cut large limbs to avoid stripping or tearing the bark, and to minimize unnecessary wounding.
- Heavy limbs should be lowered on ropes to avoid damaging bark on limbs and trunks below.
- The placement of pruning cuts shall be determined by anatomy, structure and branching habit.
- Final drop-crotch cuts should be made outside the branch bark ridge on the main stem or lateral branch. The remaining branch shall be no smaller than one third (1/3) the diameter of the portion being removed. The removed portion should be pruned out to direct the remaining growth away from conductors.
- The use of multiple, small-diameter shaping cuts to create an artificially uniform crown form, commonly known as a "round over", or a hedged side-wall effect, is not cost effective nor consistent with proper pruning practice. Both round overs and the topping of trees for line clearance shall be prohibited in the City of Claremont.

Root Pruning. The root system of a tree is one of its most important physiological components. Roots are the main source of water and mineral absorption for the tree, they provide anchorage and stability, and they act as one of the principal storage areas for food. The proper pruning of a tree's roots is as important as the proper pruning of a tree's crown.

Whenever possible, the City shall avoid removing any of a tree's root system. In instances where there exists a need to install subsurface structures or utilities, such as irrigation lines or block wall footings, every effort shall be made to avoid encroachment within the drip line of a tree. If it becomes necessary to excavate within a tree's drip line, every effort shall be made to tunnel under or through the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots.

Note: Any root over two (2) inches in diameter must be pre-approved for removal by the City's Arborist.

Hardscape. When root removal becomes necessary for the installation or repair of hardscape, such as sidewalks, driveway approaches or curb and gutters, two methods shall be employed by the City to address invasive or encroaching roots. These two methods are specified below and are detailed in the Selective Root Pruning and Shaving Standards detailed in the Appendix D, Maintenance Guideline Standards..

- **Selective Root Pruning** is the removal of specific offending roots which are directly interfering with a work area. When pruning out selective roots, great care shall be given to retain as much root surface as possible, including sufficient buttress root dispersal around the radius of the tree. No more than one third (1/3) of a tree's root system shall be removed. Roots shall be cut back at least four (4) inches away from new hardscape to the nearest node. Pruning cuts shall be made clean and smooth with no crushing or tearing of the remaining root.
- Root Shaving is the removal of a small portion of a nonessential buttress root or general root with a diameter of four (4) inches or greater. Roots will be shaved down to allow for at least two (2) inches of clearance between the root and the new hardscape. No more than one third (1/3) of a root's diameter shall be shaved off. Shaving cuts shall be made clean and smooth with no crushing or tearing of the remaining root.

Soil shall be backfilled immediately following pruning or shaving activity to minimize drying of the roots. Any root pruning or shaving on roots greater than two inches (2") in diameter shall be approved by the City's arborist.

Certified Arborist. Any City-contracted tree company shall be required to have in their employment a full-time permanent Certified Arborist, as accredited by the International Society of Arboriculture (ISA). This person shall be responsible for ensuring that the contractor's crews are performing work according to City specifications. The City strongly recommends that Claremont residents only use a firm that employs a Certified Arborist for any work performed on privately owned trees.

Certified Tree Worker. All crew leaders performing tree work on City trees should be trained according to tree care standards accepted by the International Society of Arboriculture and certified by this same organization.

Contractor Qualifications. All contractors shall be required to have a State Contractor's license for tree work and provide Worker's Compensation benefits to their employees. They should also provide equal opportunity employment and have appropriate liability insurance. Contractors shall provide all services in compliance with City specifications. Specifications are written based on the policies outlined in this manual. It is recommended that property owners utilizing contracted tree workers

require proof of proper licensing/insurance and obtain several references before employing them.

Every contractor hired by the City to do tree work shall

- Agree to perform all tree work according to the City Arborist's specifications and to follow the guidelines established in this Tree Policy Manual.
- Provide the City Arborist with the name and on-site phone number of each of its designated Crew Leaders for each day of work.
- Ensure that its Crew Leaders remain on site to supervise all work while it is being performed.
- Ensure that each Crew Leader has in his or her possession a complete and current copy of the City's Tree Policy Manual at all times while the contractor is performing work on City Trees.
- Ensure that all Crew Leaders are fully familiar with the contents and requirements of the Tree Policy Manual, to the extent that it impacts their work.
- Recycle green waste as directed in their contract.
- Have a valid State Contractor's license for tree work.
- Provide Worker's Compensation to their employees
- Provide equal opportunity employment.
- Have appropriate liability insurance.

Preventing the Spread of Disease. Any pruning of diseased trees shall follow the best horticultural practices, including sterilizing pruning tools after each cut. Green waste infected with disease shall not be comingled with clean green waste and shall be heated to kill pathogens.

Site Cleanup. Work areas shall be left in a condition equal to or better than that which existed prior to the commencement of forestry operations. All debris shall be cleaned up each day before the work crew leaves the site, unless permission is given by the City to do otherwise. All lawn areas shall be raked, all street and sidewalks shall be swept, and all brush, branches, rocks or other debris shall be removed from the site.

Private Contracting. For any work performed on privately owned trees, the City recommends that residents

- hire only tree companies that employ an ISA-Certified Arborist
- require proof of proper licensing and insurance
- obtain several references before employing any company, and
- consult the ISA website (<u>www.treesaregood.org</u>) and inform themselves of ISA-recommended procedures for pruning young or mature trees, as applicable.

Pest and Disease Management

The best way to prevent pest problems is to use Best Management Practices for planting, pruning, and care of trees. Trees have a built-in system to withstand a certain amount of pest and disease infestations. However, when they become detrimental to the tree, control procedures may be used. Claremont follows generally accepted Integrated Pest Management (IPM) techniques.

IPM is a process used to solve pest problems while minimizing risks to people and the environment. Approaches for managing pests are often grouped in the following categories:

- **Biological Control** Biological control is the use of *natural enemies*—predators, parasites, pathogens, and competitors—to control pests and their damage.
- **Cultural Controls** Cultural controls are practices that reduce pest establishment, reproduction, dispersal, and survival.
- Mechanical and Physical Controls Mechanical and physical controls kill a pest directly or make the environment unsuitable for it. Physical controls include mulches for weed management, steam sterilization of the soil for disease management, or barriers such as screens to keep birds or insects out.
- Chemical Control Chemical control is the use of pesticides. In IPM, pesticides are used only when needed and in combination with other approaches for more effective, long-term control. Pesticides are selected and applied in a way that minimizes their possible harm to people and the environment. Claremont will use the most selective pesticides that will do the job and be safe for other organisms and for air, soil, and water quality. Chemicals labeled by the Environmental Protection Agency as "DANGER" or "WARNING" shall not be utilized for urban forest management. Products labeled "CAUTION" may be utilized on a selective basis.

Removal

It is the City's policy to protect and preserve healthy trees that provide valuable benefits to our environment and to the quality of life in Claremont whenever possible. Section 12.26.090 of the Claremont Municipal Code (Appendix B) defines the custody and protections established for all City trees.

The Community Services Department shall be responsible for all removals of City trees. The division shall have the authority to remove a City tree based upon the following conditions:

Hazardous Trees. The Community Services Department shall identify hazardous trees based on the severity of the following signs of decline:

- Large dead branches in the tree
- Cavities or rotten wood along the truck or in major branches
- Mushrooms present at the base of the tree
- Cracks or splits in the trunk or where branches are attached
- Strong lean at the trunk
- Many major branches arise from one point on the trunk
- Damaged, broken or injured roots
- Tree has been topped or otherwise heavily pruned

Dead Trees. Street and park trees that are dead or have been determined by an ISA Certified Arborist to be in a state of severe decline, although perhaps not an immediate hazard, shall be removed. Due to their wildlife habitat value, dead and dying trees located in City-owned open space or natural areas shall not be removed unless they pose an immediate hazard or other reasons warrant their removal.

Emergency Removals. Healthy trees may be removed if the City of Claremont decides an emergency condition exists, and tree removal is determined to be the only option available.

Public Safety. Health trees may be removed if the Community Services Department decides that a public safety concern exists, and the tree removal is determined to be the only option available.

Other Removals. Other examples where a condition shall warrant removal include

- Diseased/Insect Infested Trees. The tree is diseased, has lost its productive capacity, and is not likely to recover despite the application of available remedies. Trees that acquire an infectious disease or are infested with an insect that is declared to be a serious pest threat to other nearby trees shall be removed, if removal is determined to be the best pest control solution. Examples of this include trees infested with the Eucalyptus Longhorn Borer or infected with Dutch Elm Disease.
- **Building damage.** If a tree is causing structural damage to a building, and the condition cannot be corrected without removing the tree.
- Surface Roots. In situations where tree roots have developed above the surface, an ISA Certified Arborist shall evaluate the roots and determine if root pruning can occur without jeopardizing the health and stability of the tree. Should the arborist decide that roots cannot be pruned without jeopardizing the tree, and those same roots pose a safety concern, the tree shall be removed.

 Hardscape Damage. If hardscape repairs cannot be completed without severe root pruning which would jeopardize the health and stability of the tree, the tree may be removed.

Hardscape Installation Guidelines on Public Property. The general policy that shall be observed when repairing or replacing hardscape adjacent to a City tree is that the health and integrity of the tree take precedent over the installation of concrete or asphalt. Every effort shall be made to protect the tree from root or trunk damage.

Several alternatives are available for accommodating the installation of new hardscape without severely infringing upon a tree's root system. Any hardscape installation that may involve the removal of an extensive portion of a tree's root system, or may require the removal of one or more roots that are of a diameter greater than two (2) inches, shall first be evaluated by the ISA Certified Arborist. If it is determined by the ISA Certified Arborist that the removal of the offending roots might jeopardize the health or integrity of the tree, then one of the following alternatives should be considered:

Off-set. An off-set is the tapering or reduction of a sidewalk's size down to a width no less than forty-two (42) inches.

Ramping. A sidewalk may be constructed to ramp over offending roots, as long as the 'slope of the grade does not exceed one (1) foot of elevation change within a span of twelve (12) linear feet.

Reconfiguration. Sidewalks do not need to be constructed in a straight line. If the public easement can accommodate it, a sidewalk may be reconfigured to curve around a tree in a suitable manner. In some cases, the property owner may wish to extend the easement over their property to accommodate the installation of sidewalk without removing a tree.

Any root removal that occurs while completing hardscape installation shall conform with the Root Pruning specifications detailed in this manual.

Programmed Tree Removal and Replacement Program: In an effort to minimize deforestation, a programmed removal and replacement program may be proposed by the Community Director or his/her designee. When considering a Tree Removal and Replacement Program, the severity of the following shall be evaluated:

- Neighborhood impacts
- Grow space
- Species
- Age of trees
- Condition of trees

- Cost to repair hardscape damage
- Severity and frequency of reoccurring hardscape damage.

This programmed removal may, wherever possible, be scheduled on a multiple year schedule, removing alternative/intermittent trees so as to avoid neighborhood deforestation. Any plan proposed for phased removal of trees in a defined area must be specifically crafted to meet the needs of the particular area. Such a proposal must be presented to affected residents at a noticed workshop. In addition, programmed Tree Removal and Replacement Programs must be reviewed by the Tree Committee and Community and Human Services Commission and approved by the City Council prior to implementation.

Reasons that are NOT Valid for Tree Removal:

- Leaves getting into gutters or a nuisance to remove.
- Messy fruit.
- Roots getting into the sewer lines as a result of deteriorating infrastructure.
- Hardscape damage if a feasible, economic solution exists to save the tree.

City tree is blocking solar panels. The City complies with existing solar access regulations in the State of California, including The Solar Rights Act (AB3250) and The Solar Shade Act (AB2321). The Solar Shade Act prohibits shading of solar collectors that result from tree growth occurring after a solar collector is installed. It states that no plant may be placed or allowed to grow such that it shades a collector more than 10% from 10 am to 2 pm. It does not apply to plants already in place or replacement of plants that die after the installation of the solar collectors.

Unauthorized Trimming and Removal. According to section 12.26.090 of the Claremont Municipal Code, it is unlawful for any person to injure, cut, damage, carve, transplant, prune, root prune, or remove any public tree. Procedures for addressing violations are outlined in section 12.26.110 of the Claremont Municipal Code.

Property Owner Request for Removals. Periodically, property owners approach the City with requests to remove a City tree that is located within the public easement on their property. Community Services staff and the City arborist have the authority to approve these requests only if the tree is dead, diseased, hazardous, or an emergency condition exists, as referenced above; otherwise staff will deny the request. Property owners may appeal the staff denial by written request, which shall be brought before the Tree Committee and Community and Human Services Commission. Per Municipal Code Section 12.26.020 (B) "the Commission may grant an appeal if it finds that the staff decision would result in a burden on the property owner that substantially outweighs the benefit to the public. The Commission's decision may be appealed to the

City Council if a written appeal, setting forth the grounds, is filed with the City Clerk within ten days of the Commission decision. If no timely appeal is filed, the decision shall be final."

Community Services staff shall provide all interested parties with information on the committee and commission review process. Any tree removal requests brought forth to the Tree Committee and Commission shall be evaluated by staff and a certified arborist. The Community and Human Services Commission will evaluate tree removal requests individually, considering any of these factors listed below to determine if tree's removal represents a greater loss to the public that the burden placed on the property owner by its continued existence:

- Species of the tree. Does the tree's species further the City's urban forest management goals or has it been removed from the planting pallet?
- Size of the tree. Does the tree's size provide significant value in terms of shade, tree canopy, and neighborhood character?
- Approximate age of the tree. Whether the tree is young, mature, or near the end of its life cycle may be considered.
- Health of the tree. Is the tree in excellent health or it is showing signs of decline or approaching the end of its life cycle?
- Physical characteristics of the tree. Does the tree have appropriate structure and form or is it growing in a manner that will produce a strong, stable tree?
- Environmental productivity of the tree. Is the tree believed to be environmentally productive or has productivity likely declined due to age, condition, or poor health?
- Safety of the property owner and general public will be considered. The Commission may consider health and safety impacts for the residents, adjacent property owners, and public at large when evaluating a removal requests.
- Asset value of the tree. The value of the tree as listed in the City's inventory shall be included in the information presented to the Commission.
- Utility conflicts, both above and below ground, may be considered when evaluating a removal request. Anticipated utility conflicts may also be considered.
- Species and age diversification may be considered to determine if the street would benefit from having a more diverse street tree population to reduce threats of deforestation.
- Consistent with previous sections of the Tree Policies, trees may not be approved for removal based on leaves getting into gutters or a nuisance to remove, messy fruit or tree debris, roots getting into the sewer lines as a result of deteriorating infrastructure, hardscape damage if a feasible, economic solution exists to save the tree, or if a City tree is blocking solar panels.

If a property owner requests a tree removal and the request is approved by the Community and Human Services Commission, the property owner will be required to pay for the subsequent removal and the replanting of two replacement City trees. This practice is intended to contribute to the growth of the City's urban forest. Information regarding this requirement will be made available to the property owner prior to the commission process. Costs will be determined based upon the City's current contract rates for removal and planting. A viable planting site for the replacement tree will be determined by the City's arborist. The accepted planting site may or may not be adjacent to the removed tree or on the same property. Property owners may appeal the requirement to pay for the requested removal and replanting two replacement trees if they are able to demonstrate financial hardship.

Resident/Merchant Notification. In an effort to encourage public participation, residents/merchants immediately surrounding the affected property shall be notified by mail of any property owner appeals/requests for a tree removal. A minimum of three properties adjacent to either side of the affected property shall be notified, as well as the closest three properties across the street. Staff will take into consideration unique geographic factors when sending notification letters and may exceed the three property minimum as deemed necessary. In addition, City staff will post a notice on the affected tree no less than 10 days prior to review by the Tree Committee and Community and Human Services Commission. The notice will include information on the proposed removal/property owner appeal and meeting dates, times, and locations. Agendas for Tree Committee and Community and Human Services Commission meetings will be posted a minimum of 72 hours prior to the meeting date for public review. Interested residents/merchants are invited to make public comment at the meetings or submit written comments for consideration.

The Community Services Department may or may not be able to notify the public of emergency and hazardous tree removals due to the degree of urgency during these events. A list of newly planted and removed trees will be brought to the Community and Human Services Commission on a monthly basis as a receive and file item for information purposes.



CLAIMS

In keeping with the City's policies for protecting and preserving the health and wellbeing of our community forest while providing for the safety of our citizens, the following guidelines have been established for correcting potentially hazardous situations that result from tree roots disturbing nearby hardscape.

Hardscape Damage Response Procedures

There are several factors that must be considered in determining the course of action necessary for addressing hardscape damage concerns that involve City trees. These actions are driven by the extent of the damages, and whether the damages are located on private or public property.

The Community Services Department shall delegate the initial inspection of all hardscape damage to appropriate staff. If the hardscape concerns include potential damage to private property, the matter shall be referred to the Community Services Department's claim representative for evaluation. A Community Services Department Tree Report is to be used by the claim representative for such tree assessments and is included as Appendix E of this Manual.

Upon initial inspection of the area, staff must determine what course of action is necessary to respond to the problem. The following are the most commonly occurring hardscape problems, and the courses of action that shall be employed to rectify them:

Public Property

Hardscape damage on sidewalks shall require a temporary asphalt ramp, followed by permanent repair of the area at a later date.

Hardscape damage is on public property other than sidewalks, but the nature of the damages cannot be rectified by temporary measures. Thus, areas in need of permanent repair shall be immediately placed on the repair schedule based upon the potential the damages have for creating a public safety hazard.

Private Property

 Hardscape damage is on private property and thereby cannot be addressed by City crews. However, there are clear-cut indications that at least some of the damage has occurred as a direct result of a City tree. Thus, the property owner may have reason to file a claim for damages with the City Clerk.

If the property owner does elect to file a claim, the Community Services Department and/or an ISA Certified Arborist shall be responsible for evaluating the damaged area and submitting a Tree Assessment Report to the City Clerk for inclusion with the claim file.

 Hardscape damage is on private property and thereby cannot be addressed by City crews. When no clear-cut indications exist that a City tree is the source of the damages, the property owner shall be responsible for excavation of the damaged area for the purpose of exposing any invasive roots, should they wish to file a claim for damages with the City.

Upon excavation of the area, it is the property owner's responsibility to contact the Community Services Department and schedule an evaluation and assessment of the damage. The Community Services Department shall be responsible for submitting this assessment report to the City Clerk for inclusion with the property owner's claim.

 Hardscape damage is on private property and is clearly not caused by a Cityowned street tree; therefore, the City is not responsible for damages or repairs.

Once a course of action has been determined, staff shall be responsible for providing written notification to the City Clerk's office informing them of the findings and the measures needed to rectify the problem.

TREE DONATIONS

The Community Services Division shall make available to interested property owners, residents and others the City's Gift Policy to encourage the donation of funds or trees to enhance the community forest. All donations of trees to the City must meet certain qualifications and restrictions set by the Community Services Division. Likewise, the division must follow certain procedures in the receiving of such gifts.

All tree donations shall be accepted only under the terms stated in Administrative Policy 10-12.

Trees may be donated to the City for planting in City parks or within City right-of-ways. The City shall make every effort to have the tree planted where the donor wishes but may not always be able to plant a certain tree in a certain place.

Standard Tree Donations

Standard tree donations may be in the form of monetary gifts funded specifically for the purchase and planting of a tree, or the donation may be a tree itself pending approval by the Community Services Division.

The general amount necessary for a monetary tree donation gift must cover the current average cost for a twenty-four (24) inch box-sized tree, all necessary planting materials, as well as the labor costs involved in planting the tree. The current average cost for tree planting shall be determined by the ISA Certified Arborist and approved by the Director of Community.

All donated trees shall be approved by the ISA Certified Arborist only after the proposed tree and location have been reviewed in light of the Designated Street Tree List and the Nursery Stock Standards described in this manual.

Tree donations valued at less than \$500 shall be approved by the Director of Community. Tree donations valued at more than \$500 are subject to review by the Community and Human Services Commission, unless specifically waived by the City Manager. The City Manager shall make the final determination.

It is the responsibility of the Community Services Division to complete a proposed "Gift to the City" form for all tree donations, including acquiring necessary donor information and signatures. The completed original form shall be forwarded to the City's Finance Department. One copy of the completed form shall be returned to the donor, and one copy shall be retained by the Community Services Division.

Acceptance of donations implies no reciprocal agreement or obligation to the donor by the City other than designation of donated funds for specific tree gifts. Any tree accepted by the City becomes the property of the City and shall be subject to all the policies described in this manual.

It shall be the responsibility of the Director of Community to convey acceptance or non-acceptance of tree gifts to the donor within two weeks. If a donation requires lengthy review and approval, the donor shall be notified of such proceedings.

Recognition may be made to the donor through media coverage or other appropriate activities only with the consent of the donor.

Oak Park Cemetery Memorial Tree Program

The Oak Park Cemetery Memorial Tree Program is a donation program limited to the planting of trees on the grounds of the City's Oak Park Cemetery. Interested donors will be given a Memorial Tree Program application form informing them of the procedures, prices, species of trees, and locations available for their donation. Memorial tree donations shall be subject to the same conditions as standard tree donations, with the following amendments.

Memorial tree donations should generally be made through the Friends of Oak Park Cemetery. Location and species of donated trees will be selected by the donor from the list detailed on the reverse side of the application form. The tree list is subject to revision depending upon the availability of space in each cemetery quadrant. The donor's selections shall be reviewed by the Cemetery Attendant, prior to approval.

The Friends of Oak Park Cemetery shall be responsible for providing to the donor a certificate acknowledging the gift.

The Oak Park Cemetery Memorial Tree Program is temporarily suspended pending future development.

<u>Plaques</u>

The City does not allow the permanent installation of plaques for donated trees. However, the City Council may approve permanent plaques in situations where it is determined that the plaque would be of benefit to the community.

PERMITS

Section 12.26.070 of the Claremont Municipal Code (Appendix B) sets the conditions for the acquisition of a permit for any work involving City trees. No person shall plant or otherwise disturb any City tree without first obtaining a permit from the Community Services Division.

Applications for permits must be made to the Community Services Division on forms provided by the division and shall include such information as the Director of Community deems necessary to review the application. The tree permit form is included in the Appendix of this manual.

Any business wishing to acquire a permit for tree planting must provide an official copy of a current City of Claremont Business License at the time of application.

The Community Services Division shall issue the permit if the proposed work is desirable and the proposed method and workmanship are performed to the standards defined under the Maintenance Guidelines described in this manual. Any permit granted shall contain a date of expiration and the work shall be completed in the time allowed on the permit and in the manner described in it. A permit shall be null and void if its terms are violated.

In addition to the permit, permittees shall be required to sign a Maintenance Guidelines form as proof of their understanding of the City's tree care specifications. Other information provided to permittees shall include a copy of this permit policy, a copy of Claremont Municipal Code Section 12.26.070 (Appendix B), as well as any other details or standard plans related to the work that is to be completed.

Permittees shall be required to have a copy of the permit, and of a current Claremont Business License (if applicable), present at all times at the work site. Work undertaken by the permittee or their agents may be stopped immediately and the permittee's permit may be revoked by oral or written order of Director of Community if it is determined that the program of work or conditions outlined in the permit are not being complied with.

As described in Section 12.26.080 of the Claremont Municipal Code, any fees for permits shall be established by resolution of the City Council.

CONSTRUCTION MANAGEMENT

Section 12.26.090 of the Claremont Municipal Code (Appendix B) and Section 435 of the Land Use and Development Code prescribe protections for pre-existing or native trees that may be impacted by new development in the City.

Construction damage associated with new development taking place around existing trees can be detrimental to those trees in a number of ways. The following construction specifications shall be observed to preserve and protect existing or native trees located on a site that is planned for development.

General Site Evaluation. As part of the environmental review for a location planned for development, the Community Development Department shall consult the Community Services Division on the appropriate measures to take regarding trees existing on the project site. Community Services and Community Development staff are to identify which trees to remove and develop an appropriate mitigation plan. In addition, staff shall develop a plan to protect all trees that are to remain. Division staff shall also examine site access and traffic route considerations, excavation limitations, appropriate locations for the piling of soil and debris, and the storage of equipment and vehicles as each of these activities pertain to trees on the project site.

Protective Fencing. Temporary, protective fencing shall be installed around any existing tree that is to be preserved on a project site. This fencing must be made of a material that has high visibility, such as fluorescent-colored, and must be posted at regular intervals around the tree. This fencing shall be placed at a minimum distance of fifteen (15) feet from the trunk of the tree or five (5) feet outside the drip line of the tree, whichever distance is greater. No activity shall take place within this fenced in area.

<u>Construction Mulching.</u> If division staff determines that traffic encroachment within the drip line of a preserved tree is unavoidable, then a six (6) to twelve (12) inch layer of temporary mulch shall be placed over the affected area to disperse the weight of traffic and equipment. Additional weight dispersal and mobility may require the placement of large plywood sheets over the mulched area. Construction mulching and plywood must be removed carefully, so as not to damage the tree, as soon as the required activity within the drip line of the tree has been completed.

Excavation Requirements. Whenever possible, services such as water lines and utilities shall be routed around the drip line of trees that are being preserved on a site. If division staff determines that excavation within the drip line of a preserved tree is unavoidable, then every effort shall be made to tunnel under or through the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots.

All root pruning shall be in accordance with the Maintenance Guidelines established for such activity in this manual.

Grade Changes. A change of grade around a tree, even well outside of a tree's root zone, can have serious impact on the tree due to reduced aeration or poor drainage.

Division staff shall recommend that development specifications include requirements for mitigating such impacts to trees that are to be preserved on a project site based upon the type of grade changes that are to be implemented, tree species, drainage patterns, soil conditions and future irrigation and maintenance plans.

Division staff shall employ the following mitigation measures whenever feasible:

Raised Grades. If a grade around an existing tree is to be raised with a backfill less than six (6) inches in depth, then division staff should consider vertical mulching as a mitigation measure. If a grade around an existing tree is to be raised more than six (6) inches, then division staff should consider specifying the construction of a tree well as a mitigation measure.

Lowered Grades. If a grade around an existing tree is to be lowered along the side of its root zone, then division staff should consider specifying the construction of a terraced dry wall as a mitigation measure. If a grade around an existing tree is to be lowered along all sides of its root zone, then division staff should consider specifying the construction of a tree island as a mitigation measure.

Diagrams and specifications for each of these mitigation measures are included in the Appendix of this manual.

GLOSSARY

ANSI Z133.1: The Section of American National Standards which defines safety requirements for pruning, trimming, repairing, maintaining, and removing trees; for cutting brush; and for the use of equipment in such operations.

Arborist: An individual engaged in the profession or arboriculture who, through experience, education and related training, possesses the competence to provide for or supervise the management or trees and other woody plants.

Branch Collar: Trunk tissue that forms around the base of a branch between the main stem and the branch or a branch and a lateral. As a branch decreases in vigor or begins to die, the collar usually becomes more pronounced and more completely encircles the branch.

Branch Bark Ridge: A ridge of bark in a branch that marks where branch and trunk tissues meet and often extend down the trunk.

Callus: Undifferentiated tissue initially formed by the cambium around and over the wound.

Co-dominant Stem: Branches or stems arising from a common junction, having nearly the same size diameter.

Crotch: The angle formed at the attachment between a branch and another branch, leader or trunk of a woody plant.

Crown: The leaves and branches of a tree or shrub; the upper portion of a tree from the lowest branches on the trunk to the top.

DBH: The Diameter at Breast Height as measured at 54 inches above the ground is the standard measurement of tree size used by arborists.

Disturbance: All of the various activities from construction or development that may damage trees.

Drip Line Area: The suggested minimum area within X distance from the trunk of a tree in a typical location, measured from the perimeter of the trunk of the tree at 54 inches above natural grade, where X equals a distance ten times the diameter of the trunk at 54 inches above natural grade, or the distance to the outermost edge of the tree canopy, whichever is the lesser distance.



Excessive Pruning: Removing in excess of 25 percent of the functioning leaves and stems. Excessive pruning may include the cutting of any root two inches or greater in diameter. Exceptions are when clearance from overhead utilities or public improvements is required, or to abate a hazardous condition or a public nuisance.

Heading Back: See Topping

Injury: A wound resulting from any activity, including but not limited to excessive pruning, cutting, trenching, excavating, altering the grade, paving or compaction. Injury shall include bruising, scarring, tearing or breaking of roots, bark, trunk, branches or foliage, herbicide or poisoning, or any other action leading to the death or permanent damage to tree health.

ISA: The International Society of Arboriculture is a professional association of arborists and tree workers recognized internationally as one of the leading agencies in the research and establishment of high standards for all aspects of tree care.

ISA-Certified Arborist: A person who has demonstrated knowledge and competence obtaining the International Society of Arboriculture (ISA) "Certified Arborist" certification.

Lateral: A branch or twig growing from a parent branch or stem.

Leader: A dominant upright stem, usually the main trunk.

Lion-tailing: Lion-tailing is the over-pruning of a tree by removing a large number of the inner branches. The resulting tree limbs will appear "long and slender" with a "puff" of foliage at the end like a lion's tail. Lion-tailing increases the risk of branch failure by weakening the tree's root system and eliminating the dampening effect which interior limbs provide when branches flex and bend during storms.

Neighborhood Deforestation: The rapid removal of trees from a street of neighborhood which changes the character of the street of neighborhood.

Parent Branch or Stem: The tree trunk, or a larger limb from which lateral branches are growing.

Pollarding: A destructive pruning technique in which the upper branches of a tree are removed to create a dense head of branches and foliage. This is common in European urban areas to maintain trees at a predetermined height, rather than allowing them to assume their normal and natural size and shape.

Root Ball: The mass of roots growing from the trunk of a tree, including the surrounding soil.

Root Collar: The junction between the root of a plant and its stem, often indicated by a trunk flare.



Rounding Over: See Topping

Stubbing: See Topping

TCIA: The Tree Care Industry Association, formerly the National Arborist Association, is a professional trade association whose chief purpose is to raise the standards of the tree care industry and provide useful service to the public.

Topping: Topping is perhaps the most harmful tree pruning practice. Topping is the indiscriminate cutting of tree branches to stubs or lateral branches that are not large enough to assume the terminal role. Topping is detrimental to the tree's overall health and stability and to its appearance. Other names for topping include "heading", "heading back", "stubbing", "tipping", "hat-racking", and "rounding over".

Trenching: Any excavation to provide irrigation, install foundations, utility lines, services, pipe, drainage or other property improvements below grade.

UAA: The Utility Arborist Association is a professional trade association whose chief purpose is to raise the standards of utility line clearance, while providing the safest conditions possible for line-clearance workers.

Wound: An opening that is created when the tree's protective bark is penetrated, cut, or removed, injuring or destroying living tissue. Pruning a live branch creates a wound, even when the cut is properly made.

Wound Wood: Differentiated woody tissue, also referred to as a callus roll, which forms after callus has formed around the margins of a wound. Wounds are closed primarily by wound wood.



APPENDICES

Appendix A - City Right-of-Way (Easement Illustration)

Appendix B - Chapter 12.26 of the Claremont Municipal Code

Appendix C - Designated Street Tree List (January 2015)

Appendix D - Maintenance Guideline Standards

Appendix E - Community Services Division Tree Report

Appendix F - Tree Permit Form

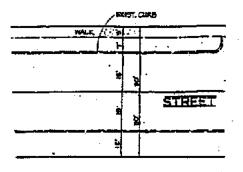
Appendix G - Heritage Tree and Historic Grove List

Appendix H - Grade Change Mitigation Standard

Appendix I - Pruning Mature Trees

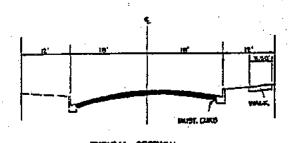
Appendix A

City Right-of-Way (Easement Illustration)



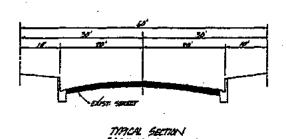


Overview of easement with seven foot planting strip.



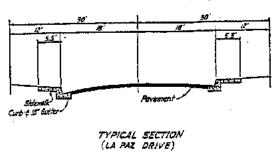
(TENTH STREET)

Profile of easement with seven foot planting strip.



(OLIVE STREET)

Profile of ten foot easement with no sidewalk.



Profile of seven foot easement with sidewalk adjacent to curb.

Appendix B Chapter 12.26 of the Claremont Municipal Code

Chapter 12.26

CITY TREES

Sections:

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12.26.010	Definitions.
12.26.020	Duties of Community and Human Services Commission.
12.26.030	Duties of Director of Community Services.
12.26.040	Duties of private property owners.
12.26.050	Street trees.
12.26.060	Tree planting in subdivisions.
12.26.070	Permits.
12.26.080	Fees.
12.26.090	Protection of City trees.
12.26.100	Interference with Director of Community Services.
12.26.110	Violation-Penalty.

12.26.010 **Definitions.**

The following definitions shall apply to this chapter.

- A. "Compaction" is the compression of the soil structure or texture by any means that creates an upper layer that is impermeable.
- B. "Designated Street Tree List" means a list of specific tree species which have been designated by the Community and Human Services Commission for each City street, or part of it, as the species of tree to be planted and maintained within the City easement of that street.
- C. "Director" means the Director of the Community Services Department or his/her designee.
- D. "Drip Line Area" means the suggested minimum area within X distance from the trunk of a tree in a typical location, measured from the perimeter of the trunk of the tree at 54 inches above natural grade, where X equals a distance ten times the diameter of the trunk at 54 inches above natural grade, or the distance to the outermost edge of the tree canopy, whichever is the lesser distance.
- E. "Easement," "Parkway" or "Right-of-Way" means land owned by another over which the City has an easement or right-of-way for street and related purposes. "Parkway" refers to that portion of a street right-of-way, which is available for landscaping, and not for curb, gutter or pavement.
- F. "Heritage Trees" are any trees within the City's easement or on City-owned property which have been found to be of significance to the community or of notable historic interest and are so designated by action of the Community and Human Services Commission.
- G. "Maintain" or "Maintenance" means and includes root pruning, trimming, spraying, watering, fertilizing, mulching, treating for disease or injury, or any other similar act, which promotes growth, health, beauty and life of any tree.
- H. "Pruning," "Trimming" or "Thinning" means to reduce the size of a tree using professionally accepted standards, as established by the International Society of

Arboriculture (ISA), Tree Care Industry Association (TCIA) or American National Standards Institute (ANSI) Section A300, to control the height and spread of a tree, lessen the wind resistance, preserve its health and natural appearance, produce fuller branching and shaping, aid in disease prevention by allowing more light and air passage within the branches, or make adjustments which will increase its longevity in an urban environment.

- I. "Public Tree" or "City Tree" means any tree which is located within any public park, City easement, or on any other City-owned property.
- J. "Topping," "Heading Back," "Stubbing" or "Pollarding" means a severe type of pruning which usually produces less desirable results than more moderate pruning with respect to the tree's natural form and which is generally hazardous to the overall health and stability of the tree.
- K. "Tree Policy Manual" means a document prepared by the Community Services Division which states policies (approved by the City Council), procedures and other relevant information regarding the selection, planting, maintenance and removal of all City trees.
- L. "Urban Forest" or "Urban Forestry" means the ecology of native and nonindigenous plantings creating a forest in the human living environment, and emphasizing the practice of wise, professional, planned management of all tree resources within an urban area for multiple use and benefit of the entire community. (07-04)

12.26.020 Duties of Community and Human Services Commission.

The Community and Human Services Commission serves as the City's tree advisory board. The commission shall:

- A. Study the problems and determine the needs of the City in connection with its tree planting and maintenance programs; establish and revise the designated street tree list; and hold discussions of tree-related issues at public meetings.
- B. Hear and determine appeals from staff decisions regarding street tree removal. The commission may grant an appeal if it finds that the staff decision would result in a burden on the property owner that substantially outweighs the benefit to the public. The commission's decision may be appealed to the City Council if a written appeal, setting forth the grounds, is filed with the City Clerk within ten days of the commission decision. If no timely appeal is filed, the decision shall be final. (07-04)

12.26.030 Duties of Director of Community Services.

The powers and duties of the Director of Community Services, or his or her designee, under this chapter are as follows:

- A. To designate a particular place within the City easement or on any City-owned property where a City tree will be planted.
- B. To recommend to the Community and Human Services Commission any changes or additions to the designated street tree list.
- C. To draft a tree policy manual that states policies and procedures concerning the selection, planting, maintenance and removal of trees in public places to promote a viable urban forest.

D. To grant or deny the issuance of permits in accordance wit the terms of this chapter. (07-04)

12.26.040 Duties of private property owners.

The duties of any owner of private property whose property has a City easement on its for street purposes are as follows:

- A. To accept, protect and provide adequate water to any City tree planted in the public easement over his or her property, and not to interfere with the City's provision of water to such trees, whether by water truck or other means;
- B. To notify the Community Services Division of any suspected tree hazards or maintenance needs of any City tree on his or her property. (07-04)
- C. To remove any vines from City street trees planted in the easement over his or her property; (09-06)
- D. To remove all fallen leaves and other deadfall from any City tree planted in the public easement over his or her property, and to properly dispose of the deadfall in an appropriate waste receptacle. (09-06)

12.26.050 Street trees.

No tree shall be planted within a parkway other than the species designated as the street tree for that particular street, or portion of a street, by the Community and Human Services Commission. No street tree shall be planted, except by the City, until a tree permit has been issued for it as provided in Chapter 12.26.070 of this chapter. (07-04)

12.26.060 Tree planting in subdivisions.

Any subdivider of land shall install City trees in accordance with the requirements of Title 16 of this code and any related resolutions. (07-04)

12.26.070 Permits.

- A. No person shall plant or otherwise disturb any City tree without first obtaining a permit from the Director of Community Services.
- B. Applications for permits must be made to the Community Services Division on forms provided by the division, and shall include such information as the director deems necessary to review the application.
- C. Work undertaken by the permittee or his or her agents may be stopped immediately and the permittee's permit may be revoked by oral or written order of the director when the director determines that the program of work or conditions outlined in the permit are not being complied with.
- D. The director's decision may be appealed to the Community and Human Services Commission if a written appeal, setting forth the grounds, is filed with the Community Services Division within ten days of the director's decision. If no timely appeal is filed, the decision shall be final. (07-04)

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12.26.080 Fees.

Fees for permits and appeals shall be established by resolution of the city council. Any previously adopted resolution establishing fees in relation to prohibited activities shall be repealed. (07-04)

12.26.090 Protection of City trees.

- A. It is unlawful for any person to injure, cut, damage, carve, transplant, prune, root prune or remove any public tree. (07-04)
- B. It is unlawful for any person to attach, cause to be attached or keep attached to any public tree, or to the guard or stake of a public tree, any rope, wire nails, tacks, staples, advertising posters, decorations, ornaments, flags, toys, swings, lights or any other contrivance whatsoever without first obtaining a permit or explicit approval from the City. (09-06)
- C. It is unlawful for any person to cause or allow any poison or other substance harmful to tree life to lie, leak, pour, flow or drip upon or into the soil within the drip line of any public tree; or set fire or permit any fire to burn when such fire or heat thereof will injure any portion of any public tree; or to operate any equipment, such as mechanical weeding devices, in such a manner as to cause damage to a public tree in any way. (07-04)
- D. No person shall injure any public tree located within an easement or public rightof-way on his or her private property by neglecting to provide the necessary amount of water, as determined by the Tree Policy Manual and the terms of this chapter, required for said tree's continued good health and viability. (07-04)
- E. No person shall impact the drip line area of a City tree in a way that may reasonably be expected to damage the root system, compact the soil over the roots, or impede free passage of water, air or fertilizer to the roots of any public tree. (07-04)
- F. Special consideration shall be afforded public trees determined by the Community and Human Services Commission to be heritage trees. Such trees shall be removed only when public interest served by removal outweighs the interest in preservation and heritage status. (07-04)
- G. All trees of any species or variety of the genus Ulmus which are found to be infected with Ceratocystis ulmi (Dutch Elm disease) in the city are a threat and a hazard to all trees of the genus Ulmus in Claremont. This section requires that all aboveground portions of such infected trees be destroyed or properly disposed of as provided in this chapter. (07-04)
- H. No person shall possess, store or transport into the City all or any part of the trees of the genus Ulmus infected with Ceratocystis ulmi (Dutch Elm disease); provided, however, that wood, branches and roots of such trees may be transported either to a safe place for burning or burial, under a minimum of two feet of earth, within five days following the discovery of such infection, or to such sites, and under such conditions, as are approved by the Community and Human Services Commission for the processing and subsequent elimination of the disease hazard. Infected trees may be treated in a manner approved by the county agriculture commissioner to affect a cure for the disease if and when an effective cure becomes known. (07-04)
- I. During the construction, repair, alteration, moving or removal of any building, structure of any other type of construction in the City, no person in control of such work

shall leave any public tree, shrub or plant in the vicinity of such activity without sufficient guards or protectors as identified in the tree policy manual to prevent injury to the tree, shrub or plant in connection with such construction,

repair, alteration, moving or removal. The costs of any such protection shall be borne by the person responsible for the improvement. (07-04)

Interference with director of community services.

No person shall hinder, prevent, delay or interfere with the director or any of his or her agents while engaged in carrying out the execution or enforcement of this chapter. Provided, however, that nothing in this section shall be construed as an attempt to inhibit the pursuit of any remedy, legal or equitable, in any court of competent jurisdiction for the protection of property rights by the owner of any property within the City. (07-04)

12.26.110 Violation-Penalty.

- A. Any violation of this chapter shall be a misdemeanor or infraction at the discretion of the city attorney or district attorney.
- B. Irrespective of and cumulative to any criminal conviction for a violation of this chapter, the City may, pursuant to Government Code Section 36901, impose a civil penalty in an amount not exceeding one thousand dollars on any person who commits a violation of this chapter. The City may recover the penalty either through an administrative hearing or a civil action brought either by the city attorney or a designated employee of the City.
- C. Irrespective of whether the City pursues criminal and/or civil action under this chapter, nothing in this chapter shall prevent the City from seeking restitution for damage to City property as an alternative to criminal action and/or civil action to recover a civil penalty in accordance with subsection (B) of this section. (07-04)

Appendix C Designated Street Tree List

The Designated Street Tree List was approved on January 13, 2015 and is attached to this document.

Appendix D Maintenance Guideline Standards

Tree Planting Instructions:

- Dig the planting hole in an area no less than twice as wide as the rootball. Dig the hole just deep enough to allow the top 2" of the rootball to remain above grade. =
- Scarify edges of planting pit.

ন

- Remove any stakes which comes with tree from Nursery. Replace with 2 2" X 10" lodgepole pine stakes, positioned parallel to the curb or walkway. ଳ
- Use 2 cinch ties to tie tree to the stakes. Leave ties loose enough so that the tree can sway slightly. 4
- Backfill with native soil, and build a 6" watering berm around the edge of the basin. ŝ
- Wrap one standard, plastic trunk guard around base of tree, and remove all nursery identification tags. 8
- Cover basin with a 3" to 4" layer of mulch after planting. 5

Use two epposing, fiezible tit s—when staking is

Give tree initial deep-watering. 8



STANDARD TREE PLANTING WITH STAKING



Jenthy pack beckfill, paing water to settle il several the root buil

2-to 4-inct layer of masich

Kasp raulch 1 to 2 inches treek from trunk



TREE PRUNING STANDARDS

General Procedures

Each cut should be made carefully, at the correct location, leaving a smooth surface with no jagged edges or torn bark. The correct anatomical location is just beyond the branch

Jump Cutting (Diagram 1)

Large or heavy limbs should be removed using three cuts.

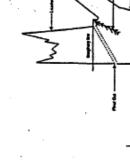
- The first undercuts the limb one or two feet out from parent branch or trunk. A properly made undercut will eliminate the chance of the branch "peeling" or tearing bank as it is removed.
- The second cut is the top cut which is made slightly further out on the limb than the undercut. This allows the limb to drop smoothly when the weight is released.
- 3. The third cut removes the stub back to just outside the branch collar.

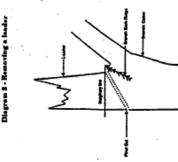
Drop Crotching Co-dominant or Dead Leaders (Diagram 2)

Removing a co-dominant or dead leader is best accomplished by cutting the limb back to a lateral that is at least 1/3 the size of the parent limb.

Pruning at Narrow Attachments (Diagram 3)

To prevent damage to the parent limb when removing a branch with a narrow attachment, the final cut should be made from the bottom of the branch up.





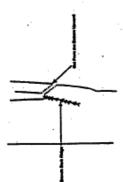
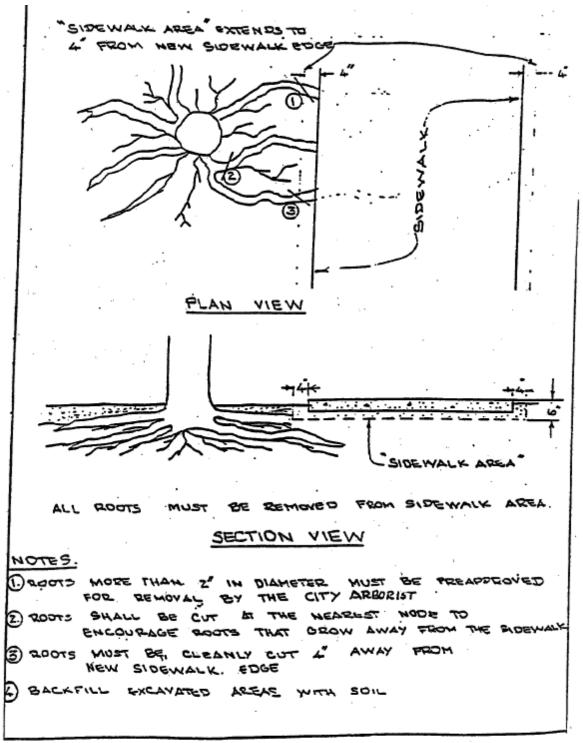
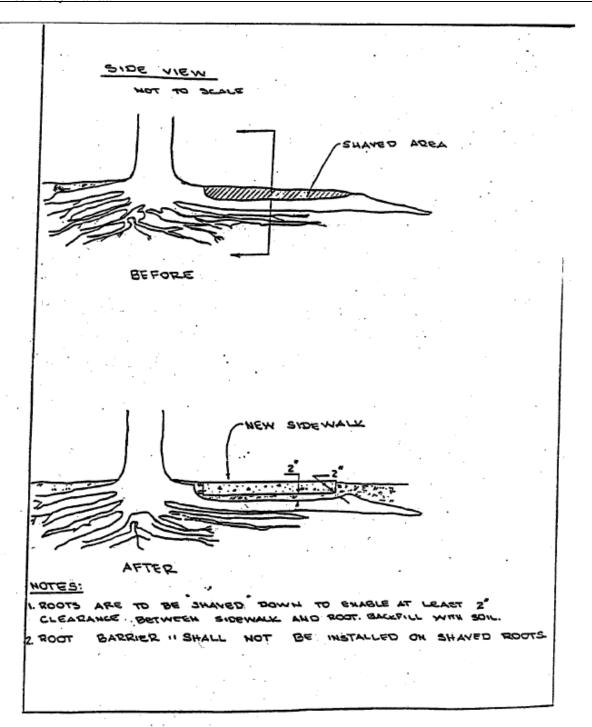


Diagram I - Removing a lateral branch

Diegram I - Remoring a branch with a marrow branch attachment









ROOT SHAVING STANDARDS

Appendix ECommunity Services Division Tree Report





COMMUNITY SERVICES DIVISION TREE REPORT

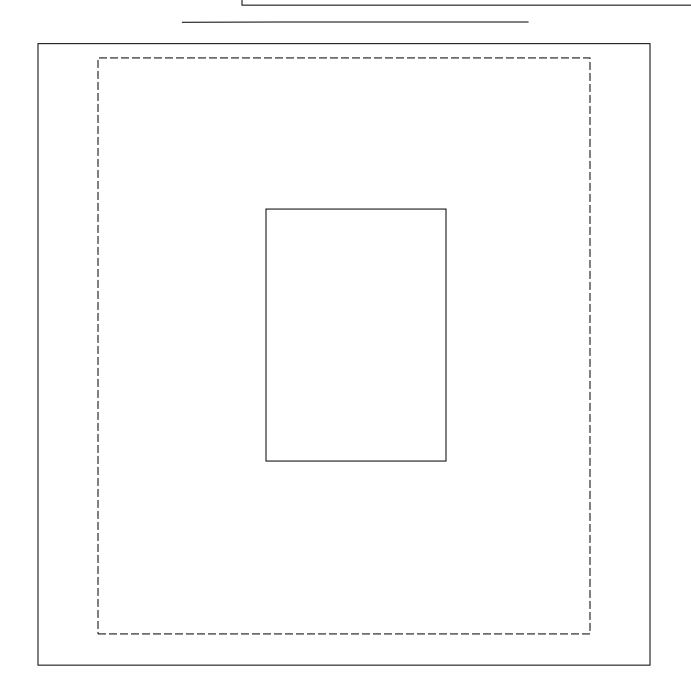
Claim for Damages, City Trees (return completed form to City Clerk's Office)

Claimant:
Name:
Address:
Telephone: Home: Other:
Claim No.
Staff Evaluation:
Inspection Date: By:
Tree Location:
Species:
DBH (diameter at breast height): Cycle:
Condition (if condition is less than "good", explain below):
Good Fair Poor Dead
Comments:
Alleged Damage:
Could damages have been caused by something other than a City tree? If so, explain.

Tree Policy Manual			
Maintenance History t	o Date:		
List any contacts or w of claim.	ork requests rece	ived between date of last	maintenance and date
Was an appeal ever l	brought before th	ne Community and Human	n Services Commission
		so, when? Was there a re	
From your evaluation,	was the damage	caused by a City tree? Ple	ease explain.
Additional Comments	:		
_			
Preparer's signature: Direct		Director of Comm	nunity:
name	date	name	date



- 1. Identify the location(s) of City trees allegedly causing damage with a circle with an X inside. Identify private trees with a circle.
- 2. Identify any damage (public or private) and the distance from the tree.
- 3. Label the street(s).



Appendix F Tree Permit Forms





CITY OF CLAREMONT

PERMIT TO PLANT STREET TREE(S)

Date:	*
, do here	by request authorization of the City
of Claremont to plant street tree(s) within	the public easement along the
property at Street name/addresses	In accordance with all City
specifications, I will, within 60 days of said request insta	Il the current, designated street tree:
Botanical Name	Common Name
I further agree to bear all costs and liabilities connected	d with the approved planting project
and that, any contractor used to complete this project is	licensed by the City of Claremont to
do approved work.	
Upon completion of the entire project, I shall relinquish	the ownership and responsibility for
said tree(s) to the City of Claremont.	
Signature of Permit Recipient	Date
Director of Community Services or their Designee	Date

* PERMIT EXPIRES 60 CALENDAR DAYS FROM ABOVE DATE

Appendix G Heritage Tree and Historic Grove List



City of Claremont Community Services Department

HERITAGE TREE LIST

ADDRESS	BOTANICAL NAME	COMMON NAME
1105 N. College Ave. (F3)	Sequoiadendron giganteum	Giant Sequoia
Mallows Park (F20)	Leptospernum laevigatum	Australian Tea Tree
201 W. Eleventh St. (F1)	Pinus halepensis	Aleppo Pine
1101 N. Indian Hill Blvd. (F1)	Cedrus deodara (private tree)	Deodar Cedar
Memorial Park (F40)	Cinnamomum camphora	Camphor Tree
1102 N. College Ave. (S3)	Eucalyptus robusta	Swamp Mahogany

HISTORIC GROVE LIST

LOCATION and NUMBER	BOTANICAL NAME	COMMON NAME
353 and 357 W. Eleventh St. (F1, F1 and 2)	Quercus agrifolia	Coast Live Oaks
N. Indian Hill Blvd. (from Harrison Ave. to Foothill Blvd.)	Ulmus americana	American Elms
N. College Ave. (from First St. to Sixth St.)	Eucalyptus spp.	various species

Appendix H Grade Change Mitigation Standard



GRADE CHANGE MITIGATION STANDARD

Vertical Mulching for grades raised less than 6 Inches

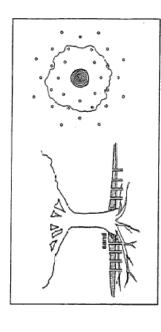
- Closr soil surface of plants and debris.
- Ensure the surface does not slope towards the tree trunk.
- Place medium grade sand around the tree frunk to just above the
- Backfill the new grade. Use a fill soil that is the same texture or coarser than the original topsoil. 4.
 - Auger 3 to 4 inch wide holes through the fill material and below the 5
- Fill auger holes with peat moss, sand, vermiculite, pea gravel or other coarse material. original grade. ė.
 - Crade the fill so that it slopes away from the tree trunk.
 - Do not cover the sand at the trunk of the tree. ۳. %

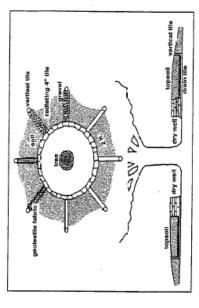
Tree well for grades raised greater than 6 inches

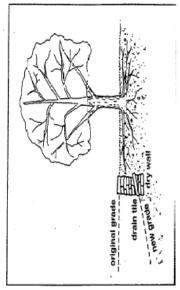
- deeper the well, or larger the species of the tree, the larger the well's The well must be a minimum of 36 inches out from the trunk. The diameter should be. ÷
 - Lay out aeration tiles (perforated tubes, 4-6 inches in diameter) in a wagon wheel pattern radiating from the tree well. i,
 - Space the tiles every 30 to 45 degrees. The open ends of the tiles should extend through the wall of the well. ń
 - Cover the ends of the tiles with geotextile fabric and cap with
 - gravel to keep out croding soil 4
- Cover the tiles with coarse, uniform sand or small, uniform gravel and a soil filter such as geotextile landscape fabric or fiberglass matting. ıc:

Grades lowered for terracing or tree islands

- Terraces are formed to lower the grade in steps. At each level, Maintain the original grade as far out from the trunk as possible 'n
- Install drainage tiles through dry wall sloped out at the level of the the roots should be severed cleanly and kept moist
- Use sand as backfill behind the walls to encourage new root growth.
 - creating a tree island are similar to those used in terracing. If the grade must be lowered completely around a tree, a tree island can be constructed. The techniques used for







Appendix I

Pruning Mature Trees

Pruning is the most common tree maintenance procedure. Although forest trees grow quite well with only nature's pruning, landscape trees require a higher level of care to maintain their safety and aesthetics. Pruning should be done with an understanding of how the tree responds to each cut.

Improper pruning can cause damage that will last for the life of the tree, or worse, shorten the tree's life.

I. Reasons for Pruning

Because each cut has the potential to change the growth of the tree, no branch should be removed without a reason. Common reasons for pruning are to remove dead branches, to remove crowded or rubbing limbs, and to eliminate hazards. Trees may also be pruned to increase light and air penetration to the inside of the tree's crown or to the landscape below. In most cases, mature trees are pruned as a corrective or preventive measure.

Routine thinning does not necessarily improve the health of a tree. Trees produce a dense crown of leaves to manufacture the sugar used as energy for growth and development. Removal of foliage through pruning reduces growth and stored energy reserves. Heavy pruning can be a significant health stress for the tree.

Yet if people and trees are to coexist in an urban or suburban environment, then we sometimes have to modify the trees. City environments do not mimic natural forest conditions. Safety is a concern. Also, we want trees to complement other landscape plantings and lawns. Proper pruning, with an understanding of tree biology, can maintain good tree health and structure while enhancing the aesthetic and economic values of our landscapes.

II. When to Prune

Most pruning to remove weak, diseased, or dead limbs can be accomplished at almost any time during the year with little effect on the tree. (See NOTE below.) As a rule, growth is maximized and wound closure is fastest if pruning takes place *before* the spring growth flush, during the tree's dormant period. Some trees, such as maples and birches, tend to "bleed" if pruned early in the spring. It may be unsightly, but it is of little consequence to the tree.

A few tree diseases, such as oak wilt, can be spread when pruning wounds allow spores access into the tree. Susceptible trees should not be pruned during active transmission periods.

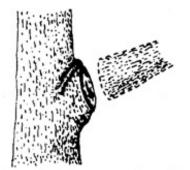
NOTE: Pruning should never be done just after the spring growth flush. At that time, trees have just expended a great deal of energy to produce foliage and early shoot growth. Removal of any significant percentage of foliage at that time can stress the tree.

For **deciduous** trees, all non-emergency pruning will be accomplished during the tree's dormant period.

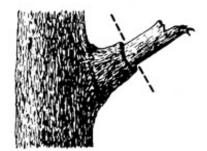
For **evergreen** trees, an urban forester or certified arborist shall be consulted to determine the proper time of year to prune. In any case, the annual peak heat season — July through September — shall always be avoided.

III. Proper Pruning Cuts

When removing a <u>live</u> branch, pruning cuts should be made just outside the branch collar. The branch collar contains trunk or parent branch tissue and should not be damaged or removed. If the trunk collar has grown out on a dead limb to be removed, make the cut just beyond the collar. Do not cut the collar.



Pruning cuts should be made just outside the branch collar.



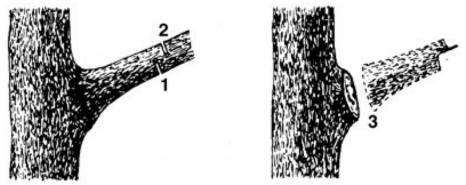
On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar

If no collar is visible, the angle of the cut should approximate the angle formed by the branch collar and trunk.

NOTE: Flush cuts made inside the branch collar should always be avoided, because they result in a larger wound and expose trunk tissues to the possibility of decay.

When removing a dead branch, the final cut should be made just outside the branch collar of live callus or wound wood tissue. If the collar has grown out along the branch stub, only the dead stub should be removed; the live collar should remain intact.

If a large limb is to be removed, its weight should first be reduced. This is done by making an undercut about 12 to 18 inches from the limb's point of attachment. Make a second cut from the top, directly above or a few inches farther out on the limb. Doing so removes the limb, leaving the 12- to 18-inch stub. Remove the stub by cutting back to the branch collar. This technique reduces the possibility of tearing the bark.



Use the three-cut method to remove a large limb.

If it is necessary to reduce the length of a branch, the final cut should be made just beyond (and without violating) the branch collar of the branch being cut to. The remaining branch should be no less than one third (1/3) the diameter of the branch being removed, and with enough foliage to assume the terminal role.

Pruning cuts should be clean and smooth, leaving the bark at the edge of the cut firmly attached to the wood.

IV. Whole-tree Care — Pruning Techniques

Specific types of pruning may be necessary to maintain a mature tree in a healthy, safe, and attractive condition. Nevertheless, the exact type and extent of pruning of any City tree will always be described in detail in the Pruning Assessment. The following terminology may be used:

Cleaning. Cleaning is the removal of dead, dying, diseased, crowded, weakly attached, and low-vigor branches from the crown of a tree.

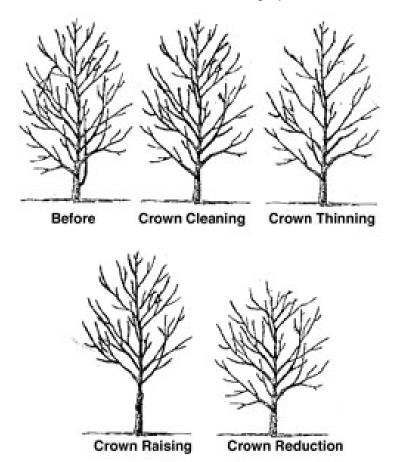
Thinning. Thinning is the selective removal of branches from the crown of a tree to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the tree's natural shape.

In slower growing, or particularly sensitive species (such as native live oaks), no more than five percent (5%) of live growth should ever be removed. Trees shall always be thinned to their natural form, and should retain a proper and natural

population of inner lateral branches with foliage. Trees and branches so pruned will have mechanical stresses more evenly distributed along the branch and throughout the tree.

Raising. Raising removes lower branches from a tree in order to provide clearance for buildings, vehicles, pedestrians, and vistas.

Reduction. Reduction reduces the size of a tree, sometimes 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.



Crown Restoration. Crown restoration is intended to improve structure and appearance of trees that have sprouted vigorously after being broken, topped or severely pruned using heading cuts. Crown restoration may require several prunings over a number of years.

One to three sprouts, on main branch stubs, should be selected to form a natural appearing crown. The more vigorous sprouts may need to be thinned or cut to a

lateral to control length growth or ensure adequate attachment for the size of the sprout.

V. How Much Should Be Pruned

The amount of live tissue that should be removed depends on the tree size, species, and age, as well as the pruning objectives. Younger trees tolerate the removal of a higher percentage of living tissue better than mature trees do. An important principle to remember is that a tree can recover from several small pruning wounds faster than from one large wound.

NOTE: A common mistake is to remove too much inner foliage and small branches. It is important to maintain an even distribution of foliage *along* large limbs and in the *lower* portion of the crown. Over-thinning reduces the tree's sugar production capacity and creates tip-heavy limbs that are prone to failure.

Mature trees should require little routine pruning. A widely accepted rule of thumb is never to remove more than one-quarter (1/4) of a tree's leaf-bearing crown. In a mature tree, pruning even that much could have negative effects. Removing even a single, large-diameter limb can create a wound that the tree may not be able to close. The older and larger a tree becomes, the less energy it has in reserve to close wounds and defend against decay or insect attack.

NOTE: The pruning of large, mature trees will almost always be limited only to the removal of dead, diseased, broken or potentially hazardous limbs.

VI. Wound Dressings

Wound dressings were once thought to accelerate wound closure, protect against insects and diseases, and reduce decay. However, research has shown that dressings do not reduce decay or speed closure and rarely prevent insect or disease infestations. Most experts recommend that wound dressings not be used. If a dressing must be used for cosmetic purposes, then only a thin coating of a nontoxic material should be applied.

Editor's note: The above information is adapted from a brochure developed by the International Society of Arboriculture, a non-profit organization, as part of its Consumer Information Program.

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