



Agenda Item #: _____

Staff Report

City of Manhattan Beach

TO: Honorable Mayor Aldinger and Members of the City Council

THROUGH: Geoff Dolan, City Manager

FROM: Richard Thompson, Director of Community Development
Laurie B. Jester, Senior Planner

DATE: December 4, 2007

SUBJECT: Consideration of Status Report Regarding the Implementation of the City's Tree Ordinance

RECOMMENDATION:

Staff recommends that the City Council **RECEIVE AND FILE** the report and **ADOPT RESOLUTION NO. 6117** increasing fees and fines for violations.

FISCAL IMPLICATION:

Since the adoption of the revisions to the Tree Preservation regulations, additional staff time and resources, approximately 10 hours a week, have been devoted to update all of the forms, handouts, procedures, and website, as well as staff training and education. There has also been a much higher volume of calls and inquiries about tree regulations. Additionally, the volume of Tree Permits has almost doubled. Staff has improved follow-up on Tree Permits to ensure replacement trees are planted, which requires additional time. With increased education and knowledge about the tree regulations, the Tree Committee and other residents have been very active with reporting potential code violations, which has had an impact on Code Enforcement staff time. Staff anticipates that the Tree Preservation revisions will continue to require additional staff time and resources, up to 12 hours a week. Increased use of the City arborist has resulted in increased contract costs two to three times greater than in previous years, as well as staff time to coordinate permit review and processing. At this time staff is able to absorb the additional cost within the budget, however in the future additional funds may be required.

BACKGROUND:

At the March 21, 2006 City Council meeting, Ordinance No. 2082 was adopted amending the Tree Preservation regulations. (Exhibit A) At that time Resolution No. 6020 was also adopted which established Fees and Fines for violations of the Tree Ordinance. (Exhibit B) Additionally, the City Council directed staff to work with a group of interested residents to form a Tree Committee. On April 18, 2006 the City Council approved the formation of the Tree Committee and established their mission statement, roles and responsibilities. Since the formation of the Committee staff has met formally with the group twice and informally with individuals on an on-going basis.

going basis.

On September 18, 2007 the City Council held a special study session to discuss the Tree Ordinance. At that meeting staff provided Council with overviews of the Tree Permit activity, tracking of tree permits and violations, pending violations, the Residential Construction Officer program, results of the Tree Committee meeting in August 2007, and the challenges of the Tree Ordinance. The four main outcomes of the session were that the Council requested that staff return with an agenda item to further discuss the City's Tree Preservation regulations, focusing on: 1) The Tree Committees mission statement, role and relationship with staff, 2) City outreach and educational efforts, 3) Utilizing the City arborist more and clarifying their role, and 4) Establishing larger fees and fines for violation of the ordinance. This item is before the Council tonight based on that direction.

DISCUSSION:

Tree Preservation Ordinance

The City's Tree Preservation regulations protect most private property trees with a 12" or larger trunk diameter located in the front yard, and streetside yard on corner lots, in all residential areas except the Beach Area. Required replacement trees are also protected, even if they are less than 12" trunk diameter. A Tree Permit is required to request removal and replacement of a protected tree, and there needs to be a compelling reason for removal. The intent of the Ordinance is the retention and preservation of trees while permitting the reasonable enjoyment of private property. Generally, replacement trees are required when a tree is removed unless there is no room on the property. Pruning guidelines are also provided within the regulations, but a permit is not required for pruning. If a property has no protected trees then at least one is required with new construction. All trees in the public right-of-way are protected and are regulated by the Public Works Code.

Tree Committee role

When the City Council approved the formation of the Tree Committee in April 2006, the primary goal that was established for the Committee was to work with City staff to educate the public on the Tree Preservation Ordinance and promote the protection and enhancement of the Manhattan Beach Tree Canopy. More specifically the roles of the Committee as approved by the City Council include:

1. Education-

- Promote public awareness of the Tree Preservation Ordinance through participation in educational meetings, events, and other public outreach.
- Develop and distribute public educational material regarding tree care, pruning, urban forestry, benefits of trees in an urban environment, potential of long-term damage during construction, etc.

2. Community resource and referral-

- Provide information to the community on replacement trees, types and sources, tree care services, and certified arborists.

3. Staff input-

- Review and comment periodically on the Tree Preservation Ordinance.
 - Develop an expanded list of replacement trees for use on private property, using the street tree list as a base.
4. Grants/Awards-
- Research and apply for grants and/or awards related to trees such as Tree City USA.
 - Recognize outstanding contributions to preserving and enhancing the City's tree canopy.

The Committee will provide a brief presentation and a copy of their presentation material is attached. (Exhibit F)

Tree Committee meeting-October 2006

The first meeting with the Committee was in October 2006 and staff discussed the City's efforts toward implementing the new Tree Ordinance. Staff provided the Committee with an overview of our current practice to protect trees on properties under construction. Details of the status of current reported violations of the Ordinance, and the procedures for handling violations were discussed. The role of the Residential Code Enforcement Officer, who works closely with contractors to strive to protect trees on construction sites, was discussed. The Building Inspectors and Code Enforcement Officer also work with builders helping to ensure trees are being maintained by conducting routine site inspections. Large green Tree Preservation signs are posted on all construction sites advising of the tree protection requirements.

Staff and the Committee discussed ways to improve our process and opportunities to educate homeowners and builders. We all agreed that most people are interested in how best to maintain their trees during construction but are not certain how to, which is where the Tree Committee will concentrate their efforts. The Committee committed to preparing a series of handouts explaining how best to protect and maintain trees during construction. Since that time the Committee has developed six public handouts (Exhibit C). Staff feels that it was a valuable meeting which illustrated the progress we have made in protecting the City's canopy in less than one year.

Tree Committee meeting-August 2007

The second meeting with the Committee was held in August 2007. A summary of the Tree Permit activity from January 2006 through August 2007 was provided to the Committee, and the Residential Code Enforcement Officer discussed his role in inspecting and monitoring trees on construction sites, and providing information to contractors and residents prior to the start of construction. The role of the City contract arborist was discussed, as well as the balanced approach to implementation of the regulations, which is to try to reasonably preserve and protect trees whenever feasible.

The Committee discussed a number of revisions to the Tree Preservation regulations and procedures that they would like to be considered. These include establishing landscape and hardscape requirements into the Code, publishing tree protection information in local papers and

and the City Newsletter, providing door hangers and street banners with tree preservation information through private donations, greater penalties for violations, having a member of the Tree Committee who is a certified arborist attend contractor meetings, and hiring a City full-time arborist.

After the City Council Study session in September the Tree Committee also expressed concerns that the tree ordinance is too weak in that tree canopies, size of tree branches and driplines are not shown clearly on plans. Therefore they feel that trees are not watered or mulched properly around the drip line, major limbs conflict with construction, underground utilities conflict with tree roots, compaction occurs around the root within the dripline, and trees are sustaining irreparable damage during construction.

Tree Committee role-Staff recommendation

Staff believes that the goals established by the City Council when the Committee was formed in April 2006 are meeting the City's needs. The educational efforts are working well, and the Residential Code Enforcement Officer has established a good working rapport with contractors and builders. Staff believes that the part-time City arborist is able to handle the City's needs and provides flexibility as discussed further below. Minor refinements to Tree Permit procedures such as requiring that driplines be shown on the plans could be implemented by staff. Staff feels that it would be appropriate to address any revisions to the tree preservation regulations through the Green Team efforts, such as increased landscaping percentages and number of replacement trees and permeable pavement.

City outreach efforts

Staff has been working to educate the public on the tree preservation regulations. The Tree Committee developed six handouts on various topics including; 1) Preventing Tree Injury During Construction, 2) Protective Construction Fencing, 3) Watering During Construction, 4) Pruning, 5) Topping, and 6) Staking. These handouts are all posted on the City's website. The Residential Construction Officer provides these handouts to all contractors at the pre-construction meeting and discusses the importance of tree protection. The Building Inspectors, Code Enforcement Officer and Public Works staffs have all been provided copies of the handouts, and refer to them and distribute them as needed. Large green signs with the tree preservation requirements are posted on the construction fence on all sites with protected trees.

Notices were placed in all of the individual water bills Citywide in 2006, and an article was published in the Recreation and Parks Spring 2006 Newsletter and Recreation Guide. Several publications of the 2006 and 2007 Building and Safety Construction Newsletter, that is distributed to hundreds of contractors and architects, included tree preservation articles. Contractors and architects are also informed at the Quarterly Construction meetings presented by staff, and were invited to a workshop in May 2007 that VOICE conducted on tree protection. Information is provided at the public counter. All Residential Property Reports, which are required whenever a property is sold, have a notice on the tree preservation regulations. Staff ordered numerous public education materials regarding tree pruning and care that were distributed to the public by VOICE at Earth Day, April 2007 as well as the Hometown Fair, October 2007. Staff also provided VOICE with 100's of color copies of the tree handouts developed by the Committee for Earth Day. Staff also made a presentation to a group of about 60 local realtors in 2006 regarding the tree preservation regulations as well as other City issues,

local realtors in 2006 regarding the tree preservation regulations as well as other City issues, and is available to continue this outreach.

The Winter 2007 City Newsletter provides a broad article on the City's tree preservation requirements on the front page (Exhibit D). The Green Team publication includes information on the City's tree preservation regulations and the importance of maintaining the City's tree canopy from an environmental standpoint for shade, erosion control, air purification, as well as the aesthetics benefits of trees in the urban environment.

The City's website was updated to provide more comprehensive information on the City tree preservation requirements, the tree permit process, tree permit application, and the handouts. Additionally, a number of links to other organizations are provided including the International Society of Arboriculture, the Tree Committee, the City of Los Angeles Street Tree list which has comprehensive information on possible replacement trees, and the American National Standards Institute (ANSI) which has the pruning standards required in the Code. Cross references and links to the Public Works requirements for street trees are also provided.

City outreach efforts- Staff recommendation

Staff would suggest that we continue on the existing path of educating contractors and the general public on tree preservation. Staff feels that the education that contractors have been receiving has proved beneficial and that there is an opportunity for more education to the general public. The Committee had suggested door hangers and street banners and they were looking into private financing for these items to educate the general public. It was also suggested that information be published in local papers. Ads in the local paper are several hundred dollars and with limited resources staff has been focusing on providing the public with information through City newsletters and the website. Again, future Green Team efforts can address public education opportunities.

City Arborist role

The role of the City contract arborist has been discussed with the Tree Committee on several occasions. When a tree permit application is submitted, staff reviews the application and then generally forwards it to the City arborist for a review and recommendation. The City arborist reviews most tree removal requests. Since staff has been utilizing the City arborist more based on the City Council direction in September, more trees have been removed and replaced. Occasionally a site inspected by staff clearly reveals that the tree is not healthy or that it is not feasible to develop a site due to the tree(s) location, then staff will approve removal and replacement without first forwarding the application to the arborist. Public Works staff also reviews requests if there is public right-of-way damage or safety concerns. If the Public Works Department determines that the private tree is public nuisance as defined by the Public Works Code, then staff will approve removal and replacement. Public Works staff also uses the services of the City arborist when determining if a tree is healthy, or is a public nuisance and whether or not it should be removed and replaced.

Often the applicant will submit an arborist report, which is also forwarded to the City arborist with the tree permit application. Staff discusses options with the arborist as the goal is to take a balanced approach to implementation of the tree preservation regulations, which is to try to reasonably preserve

reasonably preserve and protect trees whenever feasible. If a tree is not healthy, or is not anticipated to survive construction due to site constraints that can not be reasonably mitigated, then staff will approve removal. If a tree is healthy but significantly limits or impacts development of a property due to its location, then generally staff will allow removal. Or if the tree is causing significant damage to the house or the public right-of-way, or is a safety issue staff will approve removal. Staff has found that many trees in the City are compromised due to the urban environment.

City Arborist role- Staff recommendation

The City arborist is reviewing almost all tree removal requests. The outcome of this is that more arborist reports are being submitted by applicants, more time is spent to review and make a decision on tree permits, and more trees are being removed and replaced. Staff believes that the part-time contract arborist is able to handle the City's needs and provides flexibility.

New Fines and Penalties for Violation of the Ordinance

In March 2006 Resolution No. 6020 was adopted, which established new fees for the illegal removal or damage of private property protected trees. The Commission and Council felt that fines needed to be very high to discourage developers and others from illegally removing trees, and that there should be different fines for the intentional removal of trees or other violations of the Ordinance by people that are aware of the regulations versus unintentional removal by those who are not familiar with the requirements. According to the City Attorney, the fines need to have a relationship to the violation and therefore the fine established at that time was the appraised or replacement value of the tree that is illegally removed or damaged, whichever value is higher.

The proposed Resolution (Exhibit E) established fines based on the appraised value of the tree, plus a multiplication factor that increases based on the number of times that the violator has repeatedly offended the ordinance. The City arborist would establish the appraised value of the tree. For example, a first offense would be up to the appraised value of the tree, a second offense within a 2-year period would be up to two times the appraised value and the penalties would progress upward from that point related to the number of offenses. In addition a mature replacement tree(s) would be required. The value of individual large trees can be well over \$20,000 each. Each violation will be reviewed individually and the City Attorney will have the ability to take legal action in cases where it is deemed appropriate. The City Attorney will be available to answer any questions related to the Resolution.

New Fines and Penalties for Violation of the Ordinance- Staff recommendation

Staff recommends that the City Council adopt the attached Resolution revising the fees and fines for violation of the Tree Ordinance.

CONCLUSION:

Staff requests that the City Council review the four items, 1) the Tree Committees mission statement, role and relationship with staff, 2) City outreach and educational efforts, 3) Utilizing the City arborist more and clarifying their role, and 4) Establishing larger fines and penalties for violation of the ordinance, and provide direction. Staff also requests that the City Council adopt the attached Resolution revising the fees and fines for violation of the Tree Ordinance.

ATTACHMENTS:

- A. Ordinance No. 2082- Tree Preservation
- B. Resolution No. 6020- Fines and Penalties for Violations of the City Tree Ordinance
- C. Educational handouts on Tree Preservation
- D. Winter 2007 City Newsletter
- E. Draft Resolution No. 6117- New Fines and Penalties for Violations of the City Tree Ordinance
- F. Copy of Tree Committee presentation

ORDINANCE NO. 2082

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH APPROVING AMENDMENTS TO THE CITY ZONING CODE (SECTION 10.52.120) TO REVISE THE TREE PRESERVATION REGULATIONS

THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. The City Council of the City of Manhattan Beach, California, does hereby find, determine and declare as follows:

WHEREAS, the City's Tree Preservation Ordinance was originally adopted August 19, 1993 (Ordinance No. 1884), and is included as Section 10.52.120 of the Zoning Code, and the Ordinance originally applied only to the Tree Section, generally bounded by Rosecrans Avenue, Blanche Road, Valley Drive and Sepulveda Boulevard, and;

WHEREAS, on May 6, 2003, the Ordinance was expanded (Ordinance No. 2045) to apply to all of the residential zones in Area Districts I and II; the Beach Area is not covered by the Tree Ordinance, and;

WHEREAS, on June 24, 2005, the City Council held a special session and developed the 2005-2007 Work Plan, which included an item to study possible revisions to the Tree Ordinance, and;

WHEREAS, on July 5, 2005, the City Council amended and formally adopted the 2005-2007 Work Plan, and;

WHEREAS, on July 26, 2005 the City Council and Planning Commission held a joint Work Plan meeting, and provided direction to revise the Tree Ordinance as one of the top priorities for the Community Development Department, and;

WHEREAS, pursuant to applicable law, the Planning Commission of the City of Manhattan Beach conducted a public hearing on August 24, 2005, on the proposed Code Amendments related to revisions to the Tree Preservation regulation, and adopted Resolution No. PC 05-11 recommending to the City Council revisions to the Tree Ordinance, and;

WHEREAS, the public hearing was advertised pursuant to applicable law, testimony was invited and received, and;

WHEREAS, public noticing included a one-quarter page display ad published on August 11, 2005 in a newspaper of general circulation (Beach Reporter), and;

WHEREAS, pursuant to applicable law, the City Council conducted a duly noticed public hearing on September 20, 2005 regarding the Planning Commission's recommendation regarding the proposed Code Amendments (Resolution No. PC 05-11) related to revisions to the tree preservation regulations, and public testimony was invited and received, and the Council directed staff and the Planning Commission to revisit portions of the proposed Ordinance, and;

WHEREAS, the public hearing held by the City Council was advertised by a one-quarter page display ad published on September 1, 2005 in The Beach Reporter, a newspaper of general circulation in Manhattan Beach and notice was mailed to interested parties of record, and;

WHEREAS, pursuant to applicable law, the Planning Commission of the City of Manhattan Beach conducted a public hearing on October 26, 2005, on the proposed Code Amendments related to revisions to the Tree Preservation regulation, and after accepting public input and discussing the item, provided direction to staff for revisions to the Ordinance and continued the public hearing to December 14, 2005, and adopted Resolution No. PC 05-20, recommending to the City Council revisions to the Tree Preservation regulations, and;

WHEREAS, the public hearing was advertised pursuant to applicable law, testimony was invited and received, and;

WHEREAS, public noticing included a one-quarter page display ad published on October 13, 2005 in a newspaper of general circulation (Beach Reporter), and;

WHEREAS, pursuant to applicable law, the City Council of the City of Manhattan Beach conducted a public hearing on February 7, 2006, on the proposed Code Amendments related to revisions to the Tree Preservation regulation, and after accepting public input and discussing the item, provided direction to staff for further revisions to Draft Ordinance No. 2082, and;

WHEREAS, the public hearing was advertised pursuant to applicable law, testimony was invited and received, and;

WHEREAS, the public hearing held by the City Council was advertised by an ad published on January 26, 2006 in The Beach Reporter, a newspaper of general circulation in Manhattan Beach and notice was mailed to interested parties of record, and;

WHEREAS, pursuant to applicable law, the City Council of the City of Manhattan Beach conducted a public hearing on March 7, 2006, on the proposed Code Amendments related to revisions to the Tree Preservation regulation, and after accepting public input and discussing the item, introduced Ordinance No. 2082, for revisions to the Tree Preservation regulations, and;

WHEREAS, the public hearing was advertised pursuant to applicable law, testimony was invited and received, and;

WHEREAS, the public hearing held by the City Council was advertised by a 1/4 page ad published on February 24, 2006 in The Beach Reporter, a newspaper of general circulation in Manhattan Beach and notice was mailed to interested parties of record, and;

WHEREAS, the applicant for the subject project is the City of Manhattan Beach; and,

WHEREAS, pursuant to the California Environmental Quality Act (CEQA) and the Manhattan Beach CEQA Guidelines, the subject Amendments are exempt in that they are covered by the general rule that CEQA [Section 15061 (3)] only applies to projects which have the potential for causing a significant effect on the environment, and since it can be seen with certainty that there is no possibility that the activity will have a significant effect on the environment, the activity is not subject to CEQA; and,

WHEREAS, the proposed amendments have been prepared in accordance with the provisions of Title 7, Division 1, Chapter 4, Section No. 65853, et seq., of the State of California Government Code, and;

WHEREAS, the City Council finds that the project will not individually nor cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code; and,

WHEREAS, the City Council made the following findings with regard to the proposed changes:

1. The proposed amendments are consistent with the City of Manhattan Beach General Plan as follows:

Goal LU-2: Encourage the provision and retention of private landscaped open space.

Policy LU-2.3: Protect existing mature trees throughout the City, and encourage their replacement with specimen trees whenever they are lost or removed.

Goal LU-3: Achieve a strong, positive community aesthetic.

Goal CR-4: Preserve the existing landscape resources in the City, and encourage the provision of additional landscaping.

Policy CR-4.1: Protect existing mature trees throughout the City and encourage their replacement with specimen trees whenever they are lost or removed.

Policy CR-4.3: Recognize that landscaping, and particularly trees, provide valuable protection against air pollution, noise, soil erosion, excessive heat, and water runoff, and that they promote a healthy environment.

Policy CR-4.4: Review the tree ordinance to consider its application citywide and to determine the need to strengthen tree preservation criteria.

Policy CR-4.5: Discourage the reduction of landscaped open space and especially the removal of trees from public and private land.

- 2. The purpose of the proposed amendments include, but are not limited to, the following:
 - A. Continue to encourage the retention and preservation of trees while permitting the reasonable enjoyment of private property;
 - B. Provide internal consistency within the existing Tree Preservation regulations;
 - C. Ensure that the purpose as stated within the regulations is met;
 - D. Preservation and retention of trees for future generations;
 - E. Adequate size replacement trees in relationship to the size of trees that are removed; and,
 - F. Consistency with other Code provisions and current practices, including but not limited to street tree provisions.

- 3. The City Council also finds as follows:
 - A. Removal of trees in certain zones requires a permit to be issued by the Director of Community Development;
 - B. An exemption to this requirement is provided for when an "emergency" exists;
 - C. Because this section is vague as to what constitutes an "emergency" it is susceptible to abuse by those wishing to rid themselves of unwanted trees who cannot otherwise obtain a permit.
 - D. It is therefore in the best interests of the general public health, safety and welfare with regard to the preservation of trees to amend this exemption to clarify when a tree may be removed for "emergency" reasons and to insure that public safety is the real reason.

SECTION 2. The City Council of the City of Manhattan Beach hereby amends Section 10.52.120 of Title 10, of the Manhattan Beach Municipal Code, entitled Tree preservation and restoration in residential zones, Area Districts I and II as follows:

***10.52.120 Tree Preservation and Restoration In Residential Zones Area Districts I and II**

"A. **Purpose.** Tree preservation is necessary for the health and welfare of the citizens of the City of Manhattan Beach in order to provide cooling shade and beauty, increase property values, minimize spread of disease to healthy trees, conserve scenic beauty, prevent erosion of topsoil, protect against flood hazards, counteract pollutants in the air, and generally maintain the climatic and ecological balance of the area. These regulations strive to preserve and enhance the existing tree canopies on individual residential properties as well as the overall neighborhood, in order to maintain the neighborhood character. The design of residences, including grading, driveways, walkways, patios, utilities and right-of-way improvements, shall consider and accommodate existing protected trees. The intent of this section is the retention and preservation of trees while permitting the reasonable enjoyment of private property.

B. General Requirements.

1. Except as provided in subsection G (Exemptions), no person shall directly or indirectly remove or cause to be removed, or relocate any protected tree as herein defined, from

residentially zoned properties within Area Districts I and II, without first obtaining a permit to do so in accordance with the procedures set forth in this section.

2. No person shall directly or indirectly neglect, abuse, damage, mutilate, injure or harm any protected tree as herein defined, from residentially zoned properties within Area Districts I and II.

C. Definitions.

1. "Protected tree" shall include: any species of tree, (excluding deciduous fruit-bearing trees and Washingtonia species palms) the trunk of which is located at least partially within the required front yard or streetside yard (on corner lots) of a site, with a trunk diameter of twelve inches (12") or greater or multiple trunks totaling twelve inches (12") in diameter or greater at a height of four and one-half feet (4.5') from existing grade; and any replacement tree required pursuant to this section.

2. A "tree permit" is a permit required for the removal, relocation or replacement of a protected tree.

3. A "tree plan" shall mean a plot plan (scale 1/8 inch = 1 foot, minimally) with all trees on the subject property identified by location, size and species, including:

- a. footprint of all existing and proposed buildings and/or additions to buildings on the property
- b. location of all trees within the front and streetside yards, in the adjacent public right-of-way and on adjacent properties within 10 feet of the subject property adjacent to the front and streetside yards
- c. size (diameter and height) and species of each tree
- d. location of drip line for each tree
- e. designation of tree(s) to be removed, saved, relocated and/or replaced
- f. proposed location, size and type of replacement tree(s)
- g. photos of all trees in front and streetside yards.

D. Preservation of Trees During Grading and Construction Operations.

1. All protected trees, as defined above, shall be preserved and protected, and may be only be removed or relocated with prior approval of a tree permit provided they are replaced or relocated in accordance with the provisions of this Section.

2. Trees required to be retained shall be protected during demolition, grading, and construction operations by methods subject to the approval of the Community Development Director.

3. Care shall be exercised for trees to be preserved so that no damage occurs to said trees. Advisory sign(s) that identify the tree protection requirements shall be clearly posted on the site. All construction shall preserve and protect the health of trees:

- a. Remaining in place
- b. Being relocated
- c. Planted to replace those removed
- d. Adjacent to the subject property.

5. Any tree which is adjacent to the subject property and may be potentially impacted by construction activity on the subject property shall be protected pursuant to the provisions of this chapter.

6. No grading or construction, including structures, paving, and walls, that disrupts the root system on private as well as public property, shall be permitted without prior approval by the Community Development Director. As a guideline, no cutting of roots over 2 inches in diameter should occur within the drip line of the tree as measured at ground level. Where some root removal is necessary as approved by the City the tree crown may require thinning to prevent wind damage.

7. Residential buildings shall take priority over tree preservation, however alternative designs and materials, shall be considered and implemented, as feasible, with the proposed overall design of the project.

8. Required public right-of-way improvements shall take priority over tree preservation, however alternative designs and materials, including but not limited to permeable surfaces and planter areas with irrigation, shall be considered and implemented, as feasible.

9. Relocation of protected trees shall only be allowed if the Community Development Director determines that the relocation will not be detrimental to the health of the tree or to other protected trees.

10. No fill material shall be placed within the drip line of any tree.

11. The Community Development Department may impose special measures determined necessary to preserve and protect the health of trees to remain on site.

E. Tree Permit Applications - without Building Permit.

1. Any person desiring to remove or relocate one or more protected trees shall

obtain a Tree Permit from the Community Development Department. A fee, as specified in the City's Fee Resolution, shall be required for a Tree Permit.

2. Tree Permit applications shall include a Tree Plan, and written proof of neighbor notification pursuant to applicable permit instructions and may also include of an arborist's report.

3. A bond, cash deposit or other financial security, may be required to ensure required replacement trees are planted and/or that existing protected trees are properly protected, as determined to be appropriate by the Community Development Director.

4. The Community Development Director, when approving tree permits, shall determine the adequacy and appropriateness of the submitted plan, neighbor input, and other related information.

F. Tree Permit - with Building Permit.

1. Application for a Building Permit shall require a Tree Permit/Acknowledgement and Plan as defined above, if protected trees are located on the property.

2. A Tree Permit shall be required if the proposed project may impact existing trees in the front or streetside yard of the subject property even though removal is not planned.

3. A fee, as specified in the City's Fee Resolution, shall be required for a Tree Permit.

4. A bond, cash deposit or other financial security, may be required to ensure required replacement trees are planted and/or that existing protected trees are properly protected, as determined to be appropriate by the Community Development Director.

5. Any new residential construction project in Area Districts I and II which exceeds fifty-percent (50%) valuation (total estimated cost of reconstructing the entire structure as defined by Section 10.68.030 of the Manhattan Beach Municipal Code) shall be required to plant a minimum of one new thirty-six inch (36") box tree, unless the Director of Community Development determines that it is inappropriate to require additional tree(s) on the property.

G. Replacement Trees. Required replacement trees shall be minimum thirty-six inch (36") box trees for each protected tree removed of an appropriate species and must be planted prior to final inspection. Actual sizes, species, location, and quantities of replacement trees are subject to Community Development Director approval. The City street tree list may be used as a guideline by the Director in determining appropriate replacement tree(s). A combination of protected and replacement tree quantities shall not result in less than one protected tree per lot or thirty feet (30') of site frontage. If the Director of Community Development determines that there is not adequate room on the property for replacement tree(s) due to the number of existing trees to remain, then the requirement for replacement trees may be modified or waived.

H. Exemptions. Tree removals and alterations exempt from the requirements of this section are as follows:

1. Removal in case of imminent emergency caused by the hazardous or dangerous condition of a tree, requiring immediate action for the safety of life or property (e.g., a tree about to topple onto a dwelling due to heavy wind velocities) with the prior approval of the Director of Community Development or his or her designee if a subsequent application for a Tree Permit is filed within five (5) working days.

2. Removal of any tree that is determined to be a public nuisance in accordance with Section 7.32.070, with prior approval of the Directors of Community Development and Public Works or his or her designee if a subsequent application for a Tree Permit is filed within five (5) working days.

2. Removal of deciduous, fruit-bearing trees, *Washingtonia robusta*, or *Washingtonia filifera*.

3. Public Utility actions, under the jurisdiction of the Public Utilities Commission of the State of California, as may be necessary to comply with their safety regulations, or to maintain the safe operation of the facilities.

4. Cutting of tree branches and roots extending across property lines into adjacent property, to the extent that the pruning complies with the American National Standards Institute (ANSI A300) standards and does not damage or potentially damage the health and structure of the tree(s).

5. Cutting of tree branches and roots to the extent that the pruning complies with the American National Standards Institute (ANSI A300) requirements and does not damage or potentially damage the health and structure of the tree(s).

I. Non-Liability of City. Nothing in this Ordinance shall be deemed to impose any liability for damages or a duty of care and maintenance upon the City or upon any of its officers or employees. The person in possession of any private property shall have a duty to keep the trees upon the property and under his control in a safe and healthy condition.

J. **Violation/Penalties.** Violation of this chapter shall be punishable as a misdemeanor or an infraction subject to the discretion of the City Prosecutor with the following additional penalties:

1. **Suspension, Revocation, and Restoration:** In addition to any other penalties allowed by this Code, the Director of Community Development may suspend any Tree Permit. The Planning Commission or City Council may suspend the Tree Permit for a Discretionary Project upon a finding at a public hearing that a violation of conditions of approval has occurred.

2. **Stop Work Orders:** Whenever any construction or work is being performed contrary to the provisions of this section or condition of approval of the applicable discretionary project the Director of Community Development may issue a written notice to the responsible party to stop work on the project on which the violation has occurred or upon which the danger exists. The notice shall state the nature of the violation and the risk to the trees. No work shall be allowed until the violation has been rectified and approved by the Director of Community Development.

3. **After-the-Fact Permit Fees:** The standard permit fee shall be doubled for tree removals or other work requiring a tree permit pursuant to this section when commenced prior to issuance of said permit."

K. **Administrative Fines.** The Director of Community Development may impose a fine against any person who is in violation of any provision of this section. Such fine shall be a range as specified in the City fee Resolution. The proceeds of all administrative fines imposed under this section shall be placed in a "Tree Canopy Restoration Fund" to be used solely for the replacement and maintenance of trees in the public right of way or on public property within the City.

1. Any person upon whom a fine is considered to be imposed pursuant to this section shall be entitled to a written notice of the pending decision of the imposition of the fine within ten (10) calendar days of the decision of the imposition of the fine. The notice shall state the amount of the fine, the reason for the proposed imposition of the fine and the authority for imposing the fine. The notice shall also state that the person upon whom the fine is proposed to be imposed has a right to request a hearing to protest the proposed decision of imposition of the fine and the time and method by which a hearing may be requested.

2. Any person upon whom a fine authorized by this section is proposed to be imposed may request, in writing, a hearing to protest the proposed fine. The request must be filed with the City Clerk within ten (10) calendar days from the mailing date of the notice of the proposed fine. The failure to timely file a written request for a hearing shall constitute a waiver of the right to a hearing.

3. Upon timely receipt of a request for a hearing the City shall, within ten (10) calendar days of receipt of such a request hold a hearing to be presided over by the Director of Community Development or his or her designee. This presiding officer shall determine the procedure and rules for the conduct of the hearing. The ruling of the presiding officer, notwithstanding any other provision of this code shall be final.

4. If the Director determines that a fine is due, and the fine imposed by this section is not paid within fifteen (15) calendar days of its becoming due and payable the City may file a lien in the amount of the fine plus interest at the legal rate, which may be recorded on any property owned by the individual subject to the fine which is located in the City of Manhattan Beach.

5. In the event that a civil action is filed regarding any provision of this subsection "K" the City shall be entitled to attorney fees if it prevails.

SECTION 3. All other provisions of the City of Manhattan Beach Municipal Code shall remain unchanged and continue in full force and effect.

SECTION 4. Any provisions of the City of Manhattan Beach Municipal Code, or appendices thereto, or any other ordinances of the City, to the extent that they are inconsistent with this ordinance, and no further, are hereby repealed.

SECTION 5. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases or portions be declared invalid or unconstitutional.

SECTION 6. A staff review of the proposed amendments per Section 2 of this Ordinance is hereby directed to occur approximately twelve (12) months after the effective date of this

Ordinance.

SECTION 7. This ordinance shall go into effect and be in full force and operation from and after thirty days after its final passage and adoption.

SECTION 8. The City Clerk shall certify to the passage and adoption of this ordinance shall enter the same in the book of original ordinances of said City; shall make a minute of the passage and adoption thereof in the records of the proceedings of the City Council of said City in the minutes of the meeting of said Council at which the same is passed and adopted; and shall within fifteen (15) days after the passage and adoption thereof cause the same to be published once in a weekly newspaper of general circulation, printed, published and circulated within the City of Manhattan Beach, California and which is hereby designated for that purpose.

PASSED, APPROVED AND ADOPTED this 21st day of March, 2006.

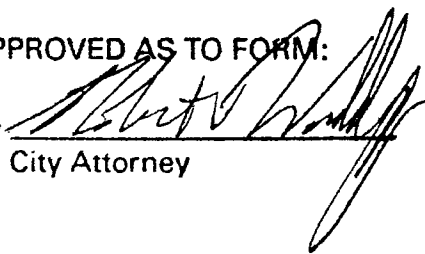
AYES:
NOES:
ABSENT:
ABSTAIN:

Mayor of the City of Manhattan Beach, California

ATTEST:

City Clerk

APPROVED AS TO FORM:

By 

City Attorney

RESOLUTION NO. 6020

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH, CALIFORNIA, AMENDING THE SCHEDULE OF FEES TO ADD FINES AND PENALTIES FOR VIOLATIONS OF THE CITY TREE ORDINANCE

WHEREAS, the Community Development Department of the City has reviewed the fee schedule and made certain recommendations to the City Council; and

WHEREAS, the schedule of fees for permits and services represents reimbursement for cost incurred by the City in providing direct services to particular individuals or groups rather than to the general populace of the City of Manhattan Beach; and

WHEREAS, it is equitable that the City of Manhattan Beach be compensated for providing such direct services.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH, CALIFORNIA, DOES HEREBY DECLARE, FIND, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. The City Council hereby resolves as follows:

Resolution No. 5904, the City's Resolution of Fees is hereby amended to add the following provision:

"COMMUNITY DEVELOPMENT"

TASK	DESCRIPTION	DEPT	REFERENCE	CURRENT FEE
Tree removal or damaging tree on private property	Penalty for illegal removal or damage of private property trees	Community Development	MBMC 10.52.120	Appraised value or replacement value of removed or damaged tree, whichever is higher

SECTION 2. All other provisions of Resolution No. 5904 shall remain in full force and effect.

SECTION 3. The City Manager shall have the authority to interpret the provisions of this resolution for purposes of resolving ambiguities. The City Manager shall have the authority to authorize and require reasonable compensation for the temporary use of City property or receipt of City services not otherwise provided for by City resolution or ordinance.

SECTION 4. This resolution shall take effect immediately upon adoption.

SECTION 5. The City Clerk shall certify to the passage and adoption of this resolution; shall cause the same to be Councilmembers voting for and against this Resolution and shall post in the office of the City Clerk a certified copy of the full text of this Resolution along with the names of those City Councilmembers voting for and against the Resolution.

SECTION 6. Staff will maintain the year the fee was last increased and accumulate CPI changes.

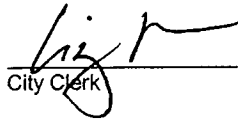
PASSED, APPROVED AND ADOPTED this 7th day of March, 2006.

Ayes: Aldinger, Montgomery, Fahey, Tell and Mayor Ward.
Noes: None.
Absent: None.
Abstain: None.

 3.15.06

Mayor, City of Manhattan Beach, California

ATTEST:



City Clerk

WATERING

WATERING YOUR TREE DURING CONSTRUCTION



90% of the fine, absorbing roots critical to the tree's survival are in the upper 6 to 12 inches of soil and extend much farther than the drip line.

WHY IS IT IMPORTANT TO WATER DURING CONSTRUCTION?

Construction activities alter the amounts of water normally used by trees. It is important to know where tree roots are located. Trees should be watered to a depth of 8-10 inches at the dripline and beyond every month until seasonal rains are adequate. Thoroughly water trees before and immediately after they receive any kind of direct damage (e.g., severed roots). The best way to do this is with a soaker hose available at most nurseries or hardware stores. These hoses weep water at a slow rate and may need to be left on for 24 hours depending on the soil, to reach the depth needed. Two to four inches of mulch (wood chips or bark) spread over as much of the root system as practical will help the tree retain water and stimulate root regeneration. Don't pile mulch around the tree's trunk.

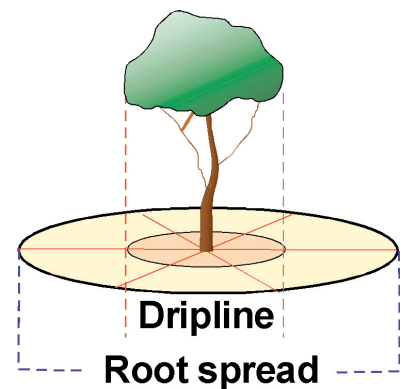


Mulch



SOAKER HOSE

Soaker Hose in Concentric Circles Around a New Tree



Dripline

Root spread

graphic courtesy of CAES

Wrap the soaker hose in concentric circles starting just inside the dripline and outward toward the end and outside of the canopy.

for more information visit
gardenmagiccompany.com

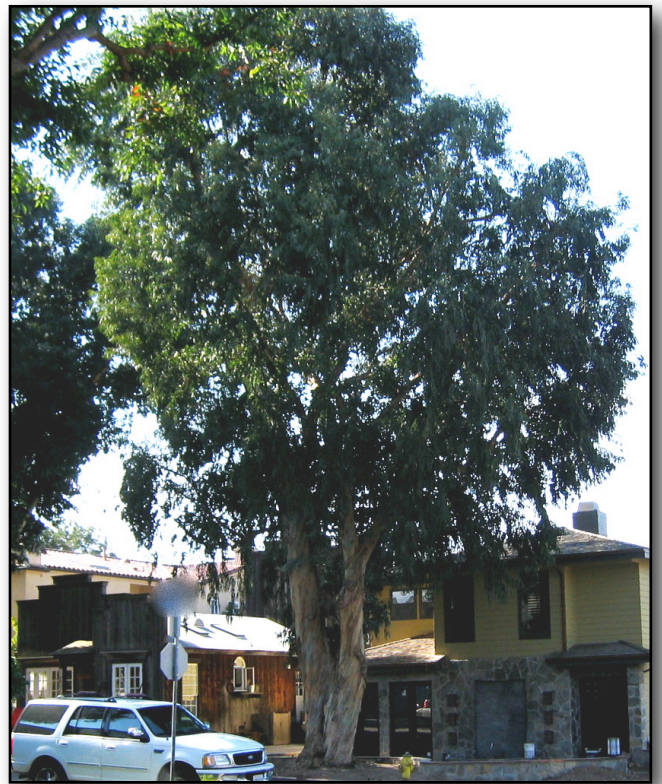


handout courtesy of The Manhattan Canopy Tree Committee
manhattancanopy@aol.com

CAN YOU PRUNE YOUR TREE TO DEATH?



Over pruning and topping trees causes stress, decay, and even death. The survival mechanism of an over pruned tree will cause rapid growth of weakly attached shoots, in turn creating an increased future hazard. The rapid growth will need more pruning which in the trade is known as "being married to your tree trimmer." The trees below left have since died. Trees need leaves for food. Removing too many leaves can eventually starve the tree (literally to death).



for more information visit
gardenmagiccompany.com



handout courtesy of The Manhattan Canopy Tree Committee
manhattancanopy@aol.com

TREE INJURY

TREE INJURY DURING CONSTRUCTION



90% of the fine, absorbing roots critical to the tree's survival are in the upper 6 to 12 inches of soil and extend much farther than the dripline.

HOW IS YOUR TREE INJURED DURING CONSTRUCTION?

First, the roots are injured and the site microclimate is altered by clearing and shutting off water sources. More changes occur during grading and trenching to install utilities. Any heavy equipment used or building materials piled against the trees compact the soil around the tree. Materials and equipment against the trunk cause physical damage, and resulting wounds are susceptible to pathogens entering the tree and causing decay. New construction itself causes another series of harm to the root zone or branch canopy. Finally, finish grading, hardscaping, and landscaping may encroach into the root area and alter a tree's microsite environment. These cumulative injuries will cause the decline or death of a tree and sometimes will not be evident for many years after project completion.

Heavy equipment compacting soil and depleting oxygen to the tree

Roots severed by installation of retaining wall and home foundation



Foot traffic to and from restroom compacts soil

Building materials compacting the soil and causing physical damage to the trunk

No irrigation available for this tree

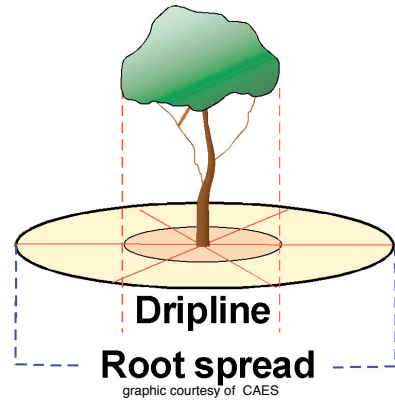
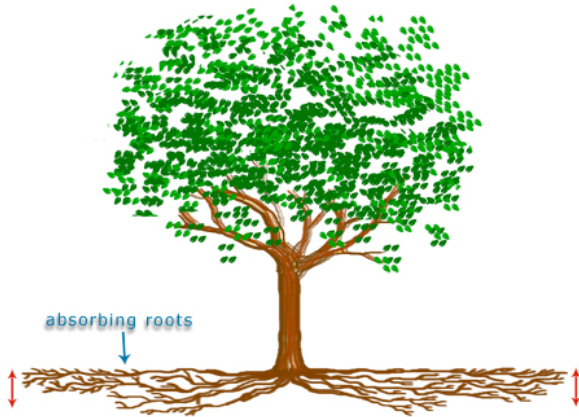
for more information visit gardenmagiccompany.com



handout courtesy of The Manhattan Canopy Tree Committee
manhattancanopy@aol.com

FENCING

TREE FENCING DURING CONSTRUCTION



90% of the fine, absorbing roots critical to the tree's survival are in the upper 6 to 12 inches of soil and extend much farther than the drip line.

WHY IS A TREE PROTECTIVE FENCE IMPORTANT?

Tree fencing keeps heavy equipment and building materials off of the critical root zone preventing compaction and oxygen deprivation. It also prevents damage to the branches of the tree by keeping large equipment at a distance. The optimum Tree Protection Zone is calculated at one foot radius for each inch diameter of the trunk measured at breast height (ie 12" diameter trunk = 12' radius tree protection zone). Tree fencing should cover as large an area as possible while leaving room for construction equipment and materials.

Roots extend much further than the outer canopy of the tree



This fence only provides protection to the trunk and invites trash dumping

Fenced area is Too Small to Protect the Root Zone

The old concrete driveway remains in place throughout construction to prevent compaction in root zone and access for equipment. A thick layer of mulch can also be used



Fenced Area Large As Possible to Protect the Root Zone

for more information visit gardenmagiccompany.com



handout courtesy of The Manhattan Canopy Tree Committee
manhattancanopy@aol.com

STAKING TREES

Staking Trees Improperly When They Are Young can Damage the Trunk and Branches and Prevent Healthy, Strong Roots and Trunk Development



This stake is the nursery stake that should have been removed once it was planted. It is too rigid, can scar the trunk and does not prevent the tree from falling over. Rigid staking prevents the trunk and roots from developing strength.



This loosely staked tree can move in the wind strengthening the trunk and roots system. Remove stakes when it can support itself (6-months to 1-year). Because of the distance from the trunk, these stakes won't damage the trunk.



Multi-trunk and low branched trees such as this olive rarely need staking and this stake could cut into the trunk on windy days if left too long.

This information is courtesy of the Manhattan Canopy Tree Committee
manhattancanopy@aol.com

PRUNING

ARE YOU PRUNING YOUR TREE CORRECTLY?

Pick The Olive Tree That You Think Is Pruned Correctly



Did you choose #1? Even though this is neatly pruned there is too much removed from the inside of the canopy and none of the crossing over branches were removed. No consideration was made to improve the form and strength of this tree.

Did you choose #2? These trees have been topped. This type of pruning is perhaps the most harmful to trees and unattractive. Large wounds and sunburn promote decay. The tree is starving from loss of leaves. The excessive sprouting that will result will need to be pruned more often, referred to as "being married to your tree trimmer."

Did you choose #3? This tree is young enough to survive over 50% of the canopy being removed but why stress it when you don't need to? Remember the leaves are its food factories.

Did you choose #4? This tree is the correctly pruned one. Less than 25% of the canopy was removed and the structure and form of the tree is strong. It won't need to be pruned again for 3 to 5 years.

for more information visit
gardenmagiccompany.com



handout courtesy of The Manhattan Canopy Tree Committee
manhattancanopy@aol.com

ANCHORS AWAY

Trees – Ours to Protect and Preserve



Trees in the urban environment are one of the greatest resources a community can possess; they increase property values and add to a community's charm. The City's Tree Ordinance initiated in 1993 and last revised by City Council in 2006 provides regulations to

preserve and enhance the existing tree canopies on individual properties as well as overall neighborhoods. Ordinance mandates require that property owners:

- *protect trees in the front and street side yards throughout the City, excluding the beach area.*
- *follow specific pruning guidelines.*
- *plant new trees with new construction projects.*

If a property owner is planning a remodel or new construction that requires the removal or relocation of a tree in the 20 foot front yard or street side yard you need to pull a Tree Permit.

Tree Permits are available in the Community Development Department or on the City's website at www.citymb.info.

Trees must be protected appropriately to ensure their health during the construction process, go to www.citymb.info for a list of protective guidelines.

Trees proposed to be removed may require a report from an arborist and neighbors must acknowledge in writing that they are aware of any proposed removal.

Information on certified arborist is available from the International Society of Arboriculture at www.isa-arbor.com.

If you have questions about our Tree Protection Ordinance you may:

- contact the Community Development Department at 310-802-5503
- visit the City's website at www.citymb.info
- see Section 10.52.120 of the Manhattan Beach Municipal Code
- contact the City's Tree Committee at manhattancanopy@aol.com



Proper staking.

RESOLUTION NO. 6117

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
MANHATTAN BEACH, CALIFORNIA, ADOPTING FINES AND
PENALTIES FOR VIOLATION OF THE CITY TREE ORDINANCE

THE CITY COUNCIL OF THE CITY OF MANHATTAN BEACH, CALIFORNIA, DOES
HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The City Council hereby makes the following finding:

(a). Removal of trees in violation of the City's tree ordinance damages the urban forest and hurts the environment as well as damaging the aesthetics and neighborhood character of areas from which trees have been removed;

(b). It is impossible to assign a value to the loss of a mature, established tree which can never be truly replaced;

(c). The purpose of the fines imposed by Manhattan Beach Municipal Code section 10.52.120 is to serve as a disincentive for illegal removal of trees rather than simply to ensure that illegally removed trees are replaced;

(d). It is therefore appropriate to implement Manhattan Beach Municipal Code section 10.52.120 by adopting a fee schedule for penalties to be imposed administratively for illegal removal of trees.

SECTION 2. The City Council hereby adopts the following schedule of fines for tree ordinance violations:

(a). For the first violation within any consecutive twenty-four month period the fine imposed (in addition to the actual cost of replacing the tree) shall not exceed the appraised value of the illegally removed tree;

(b). For the second violation within any consecutive twenty-four month period the fine imposed (in addition to the actual cost of replacing the tree) shall not exceed two (2) times the appraised value of the illegally removed tree;

(c). For the third violation within any consecutive twenty-four month period the fine imposed (in addition to the actual cost of replacing the tree) shall not exceed three (3) times the appraised value of the illegally removed tree;

For purposes of interpreting this Resolution the "appraised value" of the illegally removed tree shall be determined by the estimate of the City Arborist as supported by photographs, stump remains, testimony of neighbors or other witnesses, the size of the remaining hole or other circumstantial evidence regarding the size, age and species of the tree removed as well as evidence of the market value of the specific specimen removed.

SECTION 3. The City Clerk shall make this Resolution reasonably available for public inspection within thirty (30) days of the date this Resolution is adopted.

SECTION 4. This resolution shall take effect immediately.

SECTION 5. The City Clerk shall certify to the adoption of this Resolution and thenceforth and thereafter the same shall be in full force and effect

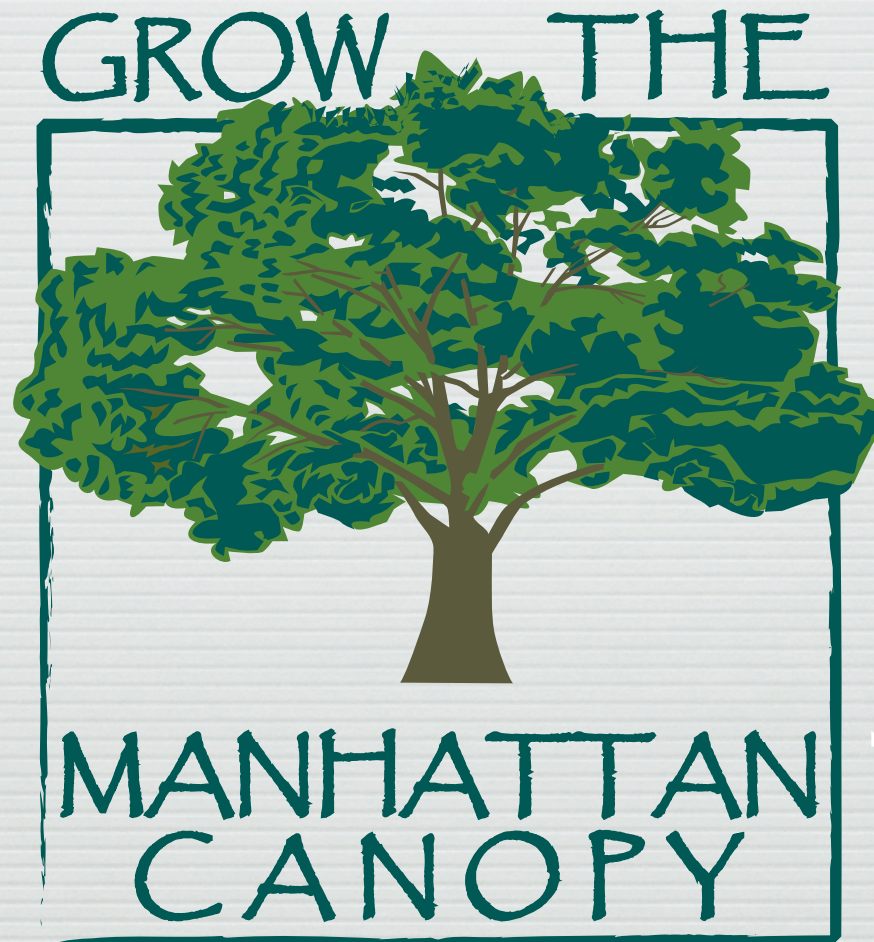
PASSED, APPROVED, and ADOPTED this 4th day of December, 2007.

Ayes:
Noes:
Absent:
Abstain:

Mayor, City of Manhattan Beach, California

ATTEST:

City Clerk



Tree Ordinance Review
December 4, 2007



Manhattan Canopy Tree Committee

- Educating the Community for Two Years
- Quarterly Meetings with Staff
- Monthly Public Committee Meetings
- Handouts for Contractors and Community
- Earth Day and Hometown Fair Booth Participation
- Established manhattancanopy@aol.com e-mail

FENCING TREE FENCING DURING CONSTRUCTION

WHY IS A TREE PROTECTIVE FENCE IMPORTANT?

Tree fencing keeps heavy equipment and building materials off of the critical root zone preventing compaction and oxygen deprivation. It also prevents damage to the branches of the tree by keeping large equipment at a distance. The optimum Tree Protection Zone is calculated at one foot radius for each inch diameter of the trunk measured at breast height (i.e. 12" diameter trunk = 12' radius tree protection zone). Tree fencing should cover as large an area as possible while leaving room for construction equipment and materials.

Final area is the Shell to Protect the Root Zone

The soil concrete driveway systems is placed throughout construction to prevent compaction in root zone and access for maintenance at this level of construction.

For more information visit getmanhattancanopy.com

TREE INJURY TREE INJURY DURING CONSTRUCTION

WHY IS YOUR TREE INJURED DURING CONSTRUCTION?

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STAKING TREES

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This stake in the nursery stake that should have been removed once it was planted. It is too tight, can scar the trunk and does not prevent the tree from falling over. Tight staking prevents the trunk and roots from developing strength.

Multi-trunk and low branched trees such as this olive rarely need staking and the stake could get into the trunk in windy days if left too long.

The loosely staked tree can move in the wind strengthening the trunk and roots system. Remove stakes when it can support itself (6-months to 1-year). Because of the distance from the trunk, these stakes won't damage the trunk.

This information is courtesy of The Manhattan Canopy Tree Committee getmanhattancanopy.com

PRUNING ARE YOU PRUNING YOUR TREE CORRECTLY? PICK THE OLIVE TREE THAT YOU THINK IS PRUNED CORRECTLY

PLEASE STOP TOPPING

Over pruning and topping trees causes stress, decay, and even death. The survival mechanism of an over-pruned tree will cause rapid growth of weakly attached shoots, in turn creating an increased future hazard. The rapid growth will need more pruning which in the trunk's tissue is "being normal to your tree's biology". The trees below left have since died. These trees need space for food. Removing too many leaves can eventually starve the tree (literally to death).

PLEASE STOP TOPPING

A Possibly Pruned Tree With Only 25% OF THE LEAVES REMOVED

For more information visit getmanhattancanopy.com

CAN YOU PRUNE YOUR TREE TO DEATH?

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WATERING WATERING YOUR TREE DURING CONSTRUCTION

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Soaker Hoses are Available at Nurseries and Hardware Stores

For more information visit getmanhattancanopy.com

Presented by

Ann Barklow

Consulting Certified Arborist

and the

Manhattan Canopy Tree Committee



Mimi Andersen

Pat Baras

Portia Cohen (prior to election)

Mike Garcia

Steve Kahan

Bridget Kimball

Gerry O'Connor

Mark Quigley

Jan Rhees

Kaye Sherbak

David White

manhattancanopy@aol.com

gardenmagiccompany.com

Most Common Violations

- Inadequate Protective Fencing
- Severed and Exposed Roots
- Inadequate Irrigation
- Oxygen deprivation from soil compaction in root zone



Protective Fencing Needs to be Larger

- Protects root zone from compaction and oxygen deprivation
- Protects trunk and branches from injury from equipment

Compaction from weight of debris in root zone. Fence is too small and only around the trunk.



Cumulative Stresses Can Cause Premature Death

- Water Deprivation
- Soil Compaction
- Root Loss
- Excessive and Improper pruning



Dead Tree As a Result of Cumulative Stress

- Water Deprivation
- Soil Compaction
- Inadequate Fencing



Stability and Decay Concerns

- Improper Root Cutting
- Exposed to decay organisms and dehydration
- Tree can fall from severing of stabilizing roots and decay



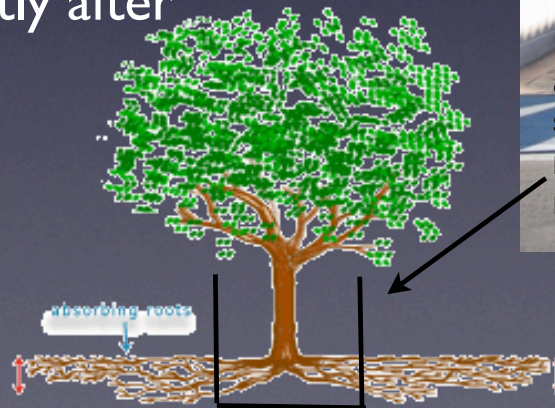
Tree Stability

- Root severance removes trees anchoring ability
- Root severance promotes decay
- Top heavy trees with lower branches removed creates a sail and a risk of falling in a storm



A Trees Anchor and Survival

- Development of large homes compete with a healthy trees root system
- Roots are needed to hold the tree upright
- Roots supply the crown with water and mineral elements (this tree died shortly after construction)



Planter built around tree severing most of the roots

Myths About Trees

- **Myth:** Trees have large taproots that anchor them into the ground.
- **Reality:** Few mature trees possess a significant taproot.



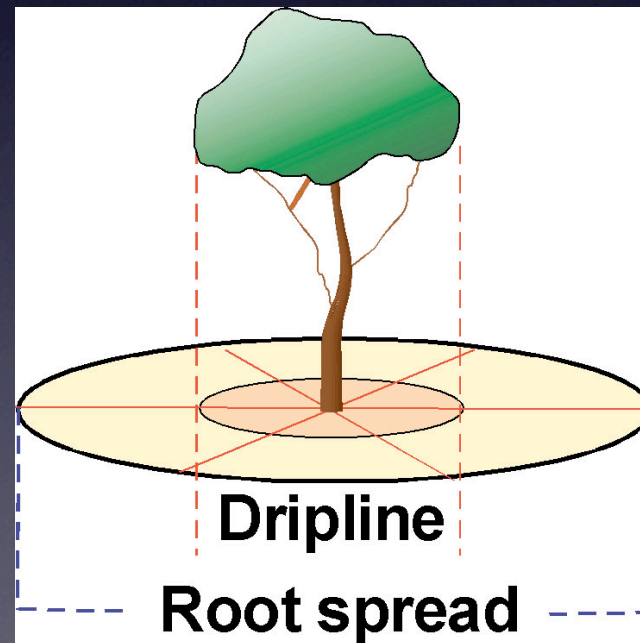
Myths About Trees

- **Myth:** Tree roots can grow as deeply as the crown is tall.
- **Reality:** Most tree roots grow within 3-feet of the soil surface. Most fine roots are within the top 18-inches of the soil surface.



Myths About Trees

- **Myth:** A tree's root zone extends only as far as the edge of the canopy.
- **Reality:** Tree roots extend far beyond the crown and occupy from two to ten times the area beneath the canopy.



graphic courtesy of CAES

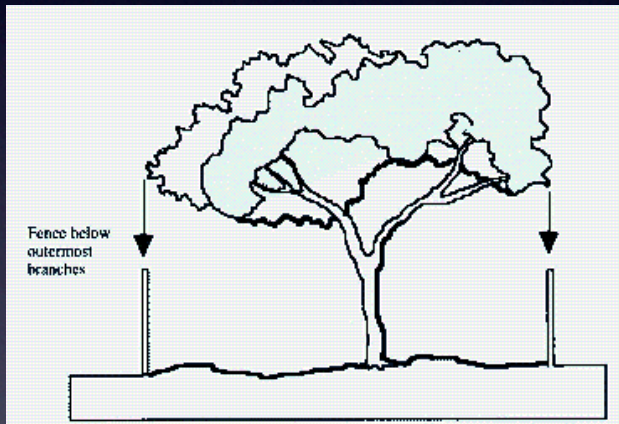
Myths About Trees

- **Myth:** Trees are like lampposts, beneficial objects that have always been there, requiring little or no attention.
- **Reality:** Trees are living organisms, requiring an environment without adverse factors that could affect them. They need water and nutrients necessary for growth and they need room for expansion.



Inadequate Canopy and Root Protection Solutions

- Include tree canopy to scale in the construction drawings



- Bring protective fence out to the dripline of the tree when possible



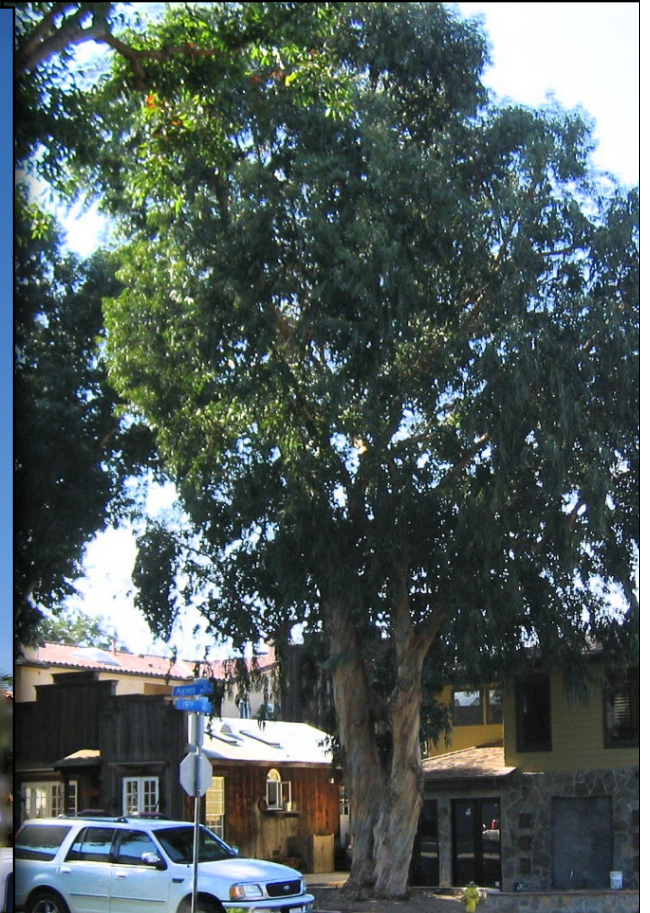
Large Branch Removed to Make Room for Wall

Proper Pruning Solutions

- Meet ANSI A300 standards
- No more than 25% of the tree's live foliage removed in one season
- No topping
- More educational materials



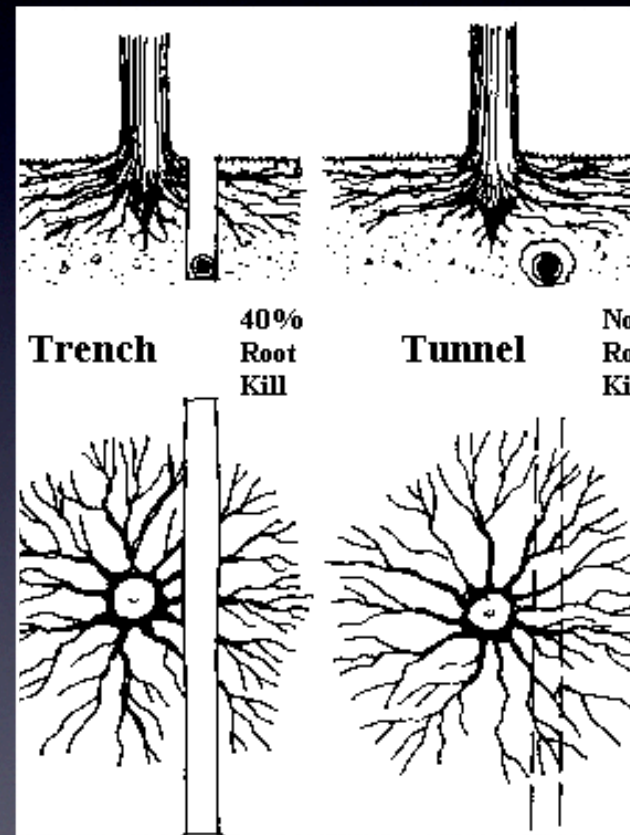
Harmful Pruning



Healthy Pruning

Use Tunneling in Root Zone instead of Trenching

- Eliminates unnecessary root damage
- Prevents stability and decay issues



Good Tree Management

- Professionally relocated by tree movers
- Large fencing installed during construction
- Arborist hired to supervise tree during construction
- No landscape planted around tree
- Room to grow with large planting area



Conclusion

- The Large Trees that have been Damaged through Construction and Pruning Practices could be at a Risk of Falling or Death in the Years to come. (Some trees decline for 5 to 10 years after injury before dying)
- Professional Review of the Present Ordinance is Required
- Focusing on Tree Management, rather than Regulation is Important.
- Educational Efforts Need to be Intensified (residents, construction community, tree service industry, staff, and council)

Potential Budget Items For Cultural Change

\$1,500	Website www.41ltrees.com (\$500 recurring)
1,775	Sepulveda Street Banner “ <i>Please Stop Topping Trees.</i> ” (\$775 recurring)
6,000	Beach Reporter Educational Advertising
7,500	Door Hangers “ <i>Proper Tree Trimming</i> ”
15,000	Tree Care Postcards (watering, pruning, ordinance education, etc)
3,000	Public Tree Seminars/Speaker Fees
<u>5,000</u>	Displays and Outreach Materials for Community Events
38,775	Total

Funding Source: Tree Canopy Restoration Fund (Fines and Permit Fees)

Proposed City Council Action

- Invite City of Palo Alto Planning Department Arborist for study session with MB City Council, Planning Commission, and Staff to review:
 1. Ordinance Performance and Approach
 2. Role and Benefits of Staff Arborist
- Develop plan for improved compliance with the current ordinance requirements-New Construction, Pruning, Removal.
- Add Tree Protection Requirements and any Applicable Arborist Reports on all Construction, Demolition, Grading, Utilities, and Landscaping plans to promote effective management of our trees.
- Approve Budget for Continuing Education (\$39K)

Glossary of Terms

ANSI A300 Standards	Professional committee in the field of arboriculture working under the auspices of the American National Standards Institute (ANSI) developed the best management practices for tree pruning in this publication
Arborist	A professional in the practice of arboriculture, the management and maintenance of trees
Canopy	The live foliage bearing part of the tree
Crown	The leaves and branches of a tree measured from the lowest branch on the trunk to the top of the tree
Dripline	The width of the crown, as measured by the lateral extent of the foliage
Excessive Pruning	As a general rule, remove no more than 25% of a tree's foliage or branches in one season. Severe pruning can seriously weaken or kill trees by removing too much foliage. Trees pruned in this manner, respond with profuse sprouting along the remaining, bare branches. This is an attempt to restore lost foliage. For this to occur, the tree must shift resources from other essential functions, e.g., root growth and defense, etc., to repair "damage" and restore "balance". This may result in energy depletion, dieback, increased susceptibility to secondary pests, or decline. Depending on severity, excessive pruning can also lead to sunburn injury to the bark.

Glossary of Terms

Soil Compaction

Compression of the soil resulting in a reduction of the total pore space. This can be devastating to trees. When pore space between soil particles is reduced, it reduces oxygen availability to roots and causes accumulation of carbon dioxide and other gases. Root growth may be diminished, and the ability to absorb water and minerals decreased. Soil compaction reduces water infiltration and movement and impairs drainage. The ability of roots to grow and expand into compacted soils is also reduced.

Topping

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 perhaps the most harmful tree pruning practice known. Yet, despite more than 25 years of literature and seminars explaining its harmful effects, topping remains a common practice.

Glossary of Terms

Trenching

Digging to install utilities; of concern due to root damage. Trenching near a tree can kill as much as 40 to 50 percent of the tree's roots. This will lead to stress, poor health, lack of strength against wind, or death.

Tunneling

Tunneling is an increasingly common tool used by electric, gas, telephone, cable TV and other industries to install and maintain pipes and transmission lines. The highly mobile equipment can produce hole diameters of 2 to 47 inches. Terminology varies, but boring, moling, and trenchless technology are some of the other names used for tunneling.