



# City of Cambridge

Committee Report #1

**IN CITY COUNCIL**

May 8, 2000

COUNCILLOR DAVIS

ORDERED: That the City Manager be and hereby is requested to convene a group that includes citizens, institutions, the business community and staff to follow up on the meeting of the Health and Environment Committee to discuss tree ordinance proposals; said follow-up meeting be scheduled prior to the summer recess.

In City Council May 8, 2000.

Adopted by the affirmative vote of nine members.

Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in black ink that reads "D. Margaret Drury".

D. Margaret Drury  
City Clerk



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Lail,

This is the order for the Committee Report

Councilman Davis

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UUG.

# City of Cambridge

## COMMITTEE REPORTS FOR THE CITY COUNCIL MEETING OF MONDAY, MAY 8, 2000

1. A communication was received from Donna P. Lopez, Deputy City Clerk, transmitting a report from Councillor Henrietta Davis, Chair of the Health and Environment Committee, for a public meeting held on April 26, 2000 to discuss informally the proposed tree ordinance.

HD Motion: CM Carvone a group that includes citizens, institutions ~~the~~ the business community + staff to follow up on this meeting and Nat group prior to the summer recess.

should commence to meet

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**Karen Carmean***ATTACHMENT A.*

**From:** Karen Carmean <carmean@mediaone.net>  
**To:** Larry Acosta <lacosta@ci.cambridge.ma.us>  
**Sent:** Tuesday, April 25, 2000 12:24 PM  
**Subject:** tree ordinance from previous web page

Draft Cambridge Tree Ordinance October 11, 1999  
 Return to Cambridge Tree Project Homepage.  
 Return to Other Ordinance page  
 Return to Massachusetts Ordinances page.  
 Return to previous draft of May 1999  
 Return to previous draft of Sept 16, 1999

- I. Title: Cambridge Tree Ordinance
- II. Statement of Purpose:
- III. Definitions:
- IV. Applicability
- V. Permits for Development/Construction
- VI. Replacement Tree Policy
- VII. Appeals
- VIII. Fines
- IX. Enforcement
- X. Severability
- XI. Advice and Assistance
- XII. Comprehensive Plan
- XIII. Responsibilities of Owners
- XIV. Public Hazard and Abatement
- XV. Protected Tree Program and Tree Hearings
- XVI. Fees

I. Title: Cambridge Tree Ordinance

II. Statement of Purpose:

The Cambridge City Council hereby finds that the preservation of existing trees and promotion of new tree planting is a public purpose that protects the public health, general welfare, environment and aesthetics of City of Cambridge and all its citizens.

III. Definitions:

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section:

A. The "Arborist" means the City of Cambridge employee of that same title having the primary responsibilities of administration and enforcement of the Tree Protection Ordinance.

B. "Caliper" means the diameter of a tree trunk that is taken six (6) inches above the ground for up to and including four-inch caliper size, and twelve (12) inches above the-ground for larger sizes.

C. "Cambridge Tree Preservation Account" is an account established by the City to accept monies to be used for tree maintenance and tree planting only.

D. "Critical Root Zone" means an area of root space that is within a circle circumscribed around the trunk of a healthy tree using a radius of 1 foot per inch DBH.

E. "DBH" (Diameter at breast height) means the diameter of a tree trunk measured in inches at a height of 4 feet above the ground. If a tree splits into multiple trunks below 4 1/2 feet, then the trunk is measured at its most narrow point beneath the split.

F. "Development Permit" means any official authorization issued by the Department of Public Works or other City agency, under which defoliation or alteration of the roots and drainage system of trees may occur, before the alteration of the site or the commencement of construction activities, e.g. a building permit, parking lot permit, and other permits.

G. "Dripline" means a vertical line running through the outermost portion of the crown of a tree and extending to the ground.

H. "Person" means any governmental entity, individual, partnership, firm, corporation or other legal entity.

4/26/00

- I. "Planting Area" means the area between the sidewalk and the street on which trees are planted.
- J. "Protected Zone" means all areas of a parcel required to remain in open space, including all areas required as yard areas buffers, transitional buffer zones or landscaped areas according to provisions of the Cambridge Zoning Ordinance or by conditions of zoning or variance approval.
- K. "Protected Tree" means a tree as defined in Article XVI.
- L. "Public Tree" means all trees now or hereafter in any public street, park, right-of-way or easement, or other public place within the City limits.
- M. "Significant Tree" means any existing, healthy, living tree eight (8) inches DBH or greater in size, and that are planted by the City of Cambridge in honor of the anniversary of the founding of Cambridge in the different neighborhoods of Cambridge.
- N. "Specimen Tree" means any tree which has been determined to meet the criteria within this Chapter for the determination of specimen trees.
- O. "Tree" means any living, self-supporting, woody perennial plant which has a minimum trunk caliper of two (2) inches measured at a point six (6) inches above the ground and which normally attains a height of at least ten (10) feet at maturity, usually with one (1) main stem or trunk and many branches.
- P. "Tree Protection Plan" is submitted with other permit drawings required to be submitted as part of the Development Permit process. It includes definition of spatial limits, detailed drawings of tree protection measures and their location, and an inspection plan and is described in Article V.
- Q. "Tree Save Area" means the boundaries of the area or areas surrounding trees wherein it is essential that they remain undisturbed in order to prevent damage and loss of trees which are to be retained on site during the development and building process, as determined in an approved Tree Protection Plan.
- R. "Tree Value Formula" means the formula developed by the Council of Tree and Landscape Appraisers:  $V=B \times S \times L \times C$  where V= estimated value, B= basic value in dollars per square inch of basal area (subject to change with inflation), S= species value in percent, L= location value in percent (street trees valued at 70%) and C+ condition value in percent (good=80%, fair = 50%, poor = 30%, dead = 10%.)
- S. "Urban Forestry Management Plan" means a plan as defined in Chapter XII.

#### IV. Applicability

- A. The terms and provisions of the Tree Protection Ordinance shall further apply to any Public Tree and also to any new residential or non-residential development which has the potential to adversely impact Trees or Tree Save Areas and requires the issuance of a Development Permit or building permit that would allow land disturbance, except as otherwise provided herein.
- B. This ordinance further applies to Protected trees located on public and private properties.
- C. This ordinance is intended to supplement Chapter 87 of the Massachusetts General Laws.

#### V. Permits for Development/Construction

##### Procedures: Application Requirements

- A. Pre-Application Conference or Seminar. Prior to submission of an application for a development permit, the applicant is encouraged to view a Tree Protection Video, attend a Tree Protection Seminar or meet with the Arborist to discuss the Tree Protection Ordinance as it relates to the applicant's property.
- B. Tree Survey. Except as Provided elsewhere in this Section, a tree survey shall be required as part of any application for a Development Permit. All trees shall be identified. Specimen trees shall be identified by size, species and location.
- C. Tree Protection Plan
1. A Tree Protection Plan shall be submitted with other permit drawings as part of the Development Permit process. This plan may either be a separate drawing, or part of a landscape plan, and shall include the following information:-
    - a) Definition of spatial limits: Limits of land disturbance, clearing, grading, and trenching; Tree Save Areas; Specimen Trees; and areas of revegetation.
    - b) Detailed drawings of tree protection measures and their location: location, species and size DBH of existing Significant Trees and an indication of which Significant Trees would remain on the site; tree fences; erosion control fences; tree protection signs; tree wells; aeration and irrigation systems; transplanting specifications; staking specifications; and other applicable drawings as determined by the Arborist.
    - c) The Tree Protection Plan shall show all utility lines existing and proposed, including irrigation and electric lighting lines. The owner shall coordinate the location of

these utility lines with the utility companies in order to prevent root damage within the Critical Root Zones of Protected Trees, and to minimize damage to trees located in Protected Zones.

d) Procedures and schedules for the implementation, installation, and maintenance of tree protection measures, including taking into consideration seasonal planting requirements.

e) Calculations of tree density proposed on site per Article VI herein.

2. The owner will further be required to assign an individual on site whose responsibility is to assure that barriers are maintained and the Plan adhered to.

3. The Arborist may issue a stop work order at any point of unauthorized departure from the Plan and a system of fines will be developed to cover costs of soil enhancement and tree replacement, if "damage" (soil compaction, root severance, decline in vigor, etc.) occurs.

D. Tree Protection Inspection. Following the receipt of a complete application, the Arborist shall schedule and conduct an inspection of the proposed development site. The applicant or applicant's designee shall be advised as to the date and time of the inspection and given an opportunity to participate.

1. Following inspection said plans shall be reviewed by the Arborist and the Building Inspector for conformance with applicable zoning conditions, the Tree Protection Ordinance, and any applicable administrative guidelines, and will either be approved or denied. Reasons for denial shall be noted on the Tree Protection Plan or otherwise stated in writing.

2. No development or building permit shall be issued until the Tree Protection Plan has been approved by the Arborist.

3. All tree protection measures shall be installed prior to land disturbance.

E. Issuance of a Development Permit shall be conditioned on the approved Tree Protection Plan and conformance to the provisions of this Ordinance and any regulations promulgated thereunder. Any permit may be revoked if its terms are violated.

F. Final Inspection. No certificate of occupancy shall be issued by the Building Inspector with respect to any permit subject to this Section unless and until the Arborist shall have inspected the site and confirmed that all existing trees to remain are in healthy condition and all replacement trees have been planted in accordance with this Section.

#### VI. Replacement Tree Policy

A. In developing a site, the first priority under this ordinance is to protect and preserve all trees whenever possible according to Tree Protection Plan. The trees to be saved should be protected with fences, signs, ropes, or other protective measures., to protect the Critical Root Zones as well as the tree trunks and branches.

Transplantable trees not in the Protected Zone should be moved into the Protected Zone either permanently or during the construction period for later moving to their permanent sites within the construction area.

B. All Protected Trees removed in accordance with this Ordinance shall be replaced using the Tree Value Formula. The Arborist shall list the replacement standards on the permit.

C. Any Tree removed without a permit must be replaced with trees (not necessarily the same species) according to the Tree Value Formula. As a general rule all replacement trees shall be at least 1 1/2" caliper and shall be no more than 3" caliper unless the approved plan indicates. Such trees shall be required as part of a Tree Protection Plan. As many trees as possible shall be replaced. The tree(s) must be placed in approximately the same location as where the tree(s) was removed or as otherwise approved by the Arborist and be maintained in good health for the length of time determined by the Arborist.

D. When replacement of trees is not possible under the approved Tree Protection Plan, the equivalent value of the tree as well as projected costs for installation and maintenance will be assessed by the Arborist and cash received from the property owner will be placed in the City of Cambridge Tree Preservation Account for planting and maintenance of trees on public property.

#### VII. Appeals

A person aggrieved by the administration of this chapter may have thirty (30) days to appeal by petitioning the Arborist in writing. The Arborist will have ten (10) days to consult with and make recommendations to the City Manager, who shall issue a decision in ten (ten)

days thereafter.

#### VIII. Fines

Any Person who violates any provision of this chapter may be subject to a civil penalty not to exceed three hundred dollars for each violation. Any builder, contractor, or agent who intentionally assisted in the commission of any such violation, shall be liable for a separate violation. All such violations which are of a continuing nature shall constitute a separate offense for each day of such continuance, and each tree removed shall constitute a separate violation.

#### IX. Enforcement

The Arborist is hereby charged with the responsibility for the enforcement of this ordinance and may serve notice to any person in violation thereof or institute legal proceedings as may be required, and the City Solicitor is hereby authorized to institute appropriate proceedings to that end.

#### X. Severability

Should any part or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the Ordinance as a whole or any part thereof other than the part held to be invalid.

#### XI. Advice and Assistance

A. The Arborist shall call on the following persons and committees for advice and assistance: the Public Works Commissioner or his or her designee, the Community Development Department, the City's Open Space Committee, members of the Committee on Public Planting, the Arts Council, the Conservation Commission and the Historical Commission. On projects which fall within the jurisdiction of those departments, the Arborist shall seek their advice.

B. The Arborist shall offer advice and assistance on proper care and maintenance of trees to property owners, developers, and other members of the public, via the City Web pages and documents to be kept on file at all branch libraries.

#### XII. Comprehensive Plan

A. Within three years of the adoption of this Ordinance, the Arborist with the advice and participation of the Committee on Public Planting and the entities listed in Article XI above, shall adopt an urban forest management plan. Throughout the entire management plan process, public input and public education shall be given high priority. The Arborist thereafter shall use his or her best efforts to insure that activities of the Arborist are guided by such plan. The plan shall incorporate the following elements: A statement of policies and objectives; an inventory of trees and any other information necessary or usable in the long-range planning or day-to-day planting and maintenance of the City's urban forest; a street-tree renewal plan; and a set of standards.

B. The Arborist shall conduct a tree protection seminar, which shall be videotaped and made available in all the public libraries in the city. The purpose of this tree protection seminar and video is to clarify the provisions and procedures of the Tree Ordinance and review applicable standards and guidelines for the submittal of documents, and required tree protection, replacement and maintenance measures.

#### XIII. Responsibilities of Owners

A. Property owners shall be responsible for watering mature Public Trees in the Planting Area whenever landscaping of the property is changed by the owner in such a manner as to deprive the Tree of its normal source of moisture. Such watering shall be continued during dry weather until the Public Tree becomes acclimated to the new environment, but need not exceed five years. All watering requirements shall be waived to the extent they are inconsistent with governmental restrictions on water use.

B. Every owner of any tree overhanging any street or right-of-way within the City shall prune the branches so that such branches shall not obstruct the light from any street intersection and so that there shall be a clear space of eight (8) feet above the surface of the street or sidewalk. Said owners shall remove all dead, diseased or dangerous trees, or broken or decayed limbs, which poses a threat to the safety of the public or other trees. The City shall have the right to prune any tree or shrub on private property when it interferes with the proper spread of light along the street from a street light or interferes with visibility of any traffic control device or sign.

C. If any person owning real property bordering on any public street fails to comply as herein above provided, the Arborist shall order the owner to take corrective

action within fifteen (15) days after receipt of written notice. The order required herein shall be served by mailing a copy of it to the last known address of the property owner.

D. If a person to whom an order is directed fails to comply within the specified time, it shall be lawful for the city to prune such trees or to pay for such pruning, and the cost thereof shall be assessed to the owner.

#### XIV. Public Hazard and Abatement

A. Upon a determination by the Arborist that a private tree constitutes a public hazard, either as in Section B below, or otherwise, he shall give written notice to the owner of the property upon which said hazard exists to remove, or otherwise control such tree in such a manner as will abate such hazard. Failure to comply with such written notice within fifteen (15) days thereafter is a violation of this section, and the Arborist may then remove or trim such tree and assess the cost thereof against the property.

B. The following shall be presumed to constitute a public hazard: Any living or standing elm tree or part thereof infected to any degree with the Dutch Elm Disease fungus, *Ceratocystis ulmi* (Buisman) Moreau; or which harbors any of the elm bark beetles, *Scolytus multistriatus* (Marsh.) or *Hylurgopinus rufipes* (Eich.); Any dead elm tree or dead part of any elm tree, including logs, branches, stumps, firewood or other elm material from which the bark has not been removed.

#### XV. Protected Tree Program and Tree Hearings

A. The City hereby declares that the following are Protected Trees:

Any beech, elm, white oak, and sycamore trees larger than 8" DBH or greater.

B. Any resident may nominate additional Trees to be Protected as follows:

1. A resident may nominate any Tree of unique historical, ecological, or aesthetic value, which therefore constitutes an important community resource by filing a written petition with the arborist.

2. The Arborist shall hold a hearing on the petition. Notice of the time and place of the hearing shall be posted in a conspicuous place on the real property upon which the proposed Protected Tree is located, placed in two newspapers of local circulation, and mailed to the applicant and all owners of real property within a five hundred (500) foot radius of the real property upon which the Protected Tree is located, by the applicant. Written objections must be received before the close of the hearing. The Arborist will write a letter of recommendation to the City Manager. The City Manager shall issue a written decision. Appeal can be made to the City Council.

3. Removal of a Public Tree or Protected Tree or adverse impacts to their Critical Root Zone or Dripline shall follow the procedures set forth above.

#### C. Protected Specimen Trees

1. Specimen trees shall be identified by the Arborist, and shall be located on the Tree Protection Plan described in Article V.

2. Standards for the identification, preservation, and protection of specimen trees shall be as follows:

a) Any tree in fair or better condition which equals or exceeds the following diameter sizes: (1) large hardwoods, i.e. oaks, hickories, yellow poplars, etc.: 30 inches DBH. (2) Large softwoods, e.g. pines, evergreens, etc.: 30 inches DBH. (3) Small trees, e.g. dogwoods, redbuds, etc.: 10 inches DBH; and

b) A tree in fair or better condition should meet the following minimum standards: (1) A life expectancy of greater than 15 years; (2) A relatively sound and solid trunk with no extensive decay or hollow, and less than 20 percent radial trunk dieback; and (3) No major insect or pathological problem; or

c) A lesser-sized tree can be considered a Specimen if: (1) It is a rare or unusual species. (2) It is specifically used by a builder, developer, or design professional as a focal point in a project or landscape. (3) It is a tree with exceptional aesthetic quality.

3. The Arborist may identify and require the preservation of a tree stand if it contains one or more Specimen Trees and the Specimen Trees are interlocked with other members of the stand in such a way as to imperil the Specimen tree if other members of the stand were to be removed.

4. It shall be prohibited to cut Specimen Trees existing on a tract of land that is the subject of a Development Permit without a special exception granted by the Zoning Board of Appeals if removal of the Specimen tree has not been approved by the Arborist.

5. Any Specimen Tree removed from a parcel shall be replaced on or as close to the original site as possible

by 1.5 times the equivalent tree density using species with potentials for comparable size and quality at maturity.

#### XVI. Fees

##### Descriptions Fee

All new construction or alteration that involves removal of any trees Minimum fee \$20 plus \$7 per sq. ft of development

Inspection of site \$35 per inspection

We have drafts of regulations, statements about the value of trees, etc. which accompany the tree ordinance but are not part of it. We also propose a reduction in property tax of \$100 per protected tree which might be used to offset maintenance costs of the tree in exchange for the good the tree does for the public. We would also like to consider a neighborhood voluntary embellishment tax which could be used to prune and care for street trees and Protected trees. And perhaps used for planting of flowers. We value your thoughts.

#### Chapter 9.04 Offenses against Property

Chapter 9.04 is hereby amended by adding a new section 9.04.010.A.9 as follows:

"Abuse, destroy or mutilate any tree in a public place or any endangered or threatened species, or any tree otherwise designated as Protected pursuant to the Cambridge Tree Ordinance at Chapter\_ or to attach or place any rope, wire (other than one used to support a young or broken tree), sign poster, handbill or other things to or on any tree growing in a public place, or to cause or; permit any wire charged with electricity to be placed or attached to any such tree, or allow any gaseous, liquid or solid substance which is harmful to such trees to come in contact with their roots, trunks, or leaves."

#### 2. Chapter 12.16 Street and Sidewalk Use Regulations

Chapter 12.16.030 is hereby amended to read as follows:

"No person shall climb a tree in any street or fasten or tie a horse or other animal or bicycle, or post a bill upon, any such tree, or allow any horse or other animal owned by him, or under his control to stand so near any such tree, that such a tree may be gnawed or otherwise injured by such horse or other animal or bicycle."

#### 3. Chapter 12.20 Commons and Public Grounds

Chapter 12.20 is hereby amended by adding a new section 12.20.065 as follows:

"Harming of trees. Upon application for and receipt of written permission from the Arborist, a person or city agency may (1) undertake any construction or development activity, including but not limited to the excavation of any ditches, tunnels, or trenches or the laying of pavement, within the dripline of any city tree and (2) move or park vehicles associated with any construction or development activity that may affect any tree on city property and (3) plant, spray, fertilized, prune, remove, replace, or otherwise disturb any tree on any public street, park or other city-owned property. When roots of a tree planted within the planting area between the sidewalk and the street damage city curbs, gutters and sidewalks, including driveway ramps, the city shall take appropriate corrective measures which are least damaging to the tree. Where sidewalk or curb damage due to tree roots occurs, every effort shall be made to correct the problem without removing or damaging the tree. The Arborist shall be responsible for developing or approving corrective measures in consultation with the city engineer. All trees shall be planted in good condition and meet "American Standard for Nursery Stock".

#### 4. Chapter 13.12 Water Reservoirs

Chapter 13.12.080 is hereby amended to read as follows:

"No person shall climb a tree on the land connected with, and appurtenant to Fresh Pond, Stony Brook or Hobbs Brook, or other reservoir of the water works, or tie a horse or other animal or bicycle to a tree or fence on such land."

Chapter 13.12 is further amended by adding a new section 13.12.85 as follows:

"No tree located in a 100 year flood plain or other flood prone area shall be removed except with approval of the Arborist as provided in Article VI of the Cambridge Tree Ordinance as necessary for construction, repair or maintenance of public roads, utilities or drainage structures or as part of an approved wetland mitigation plan."

Preface: This draft ordinance is an attempt to be comprehensive of tree protection strategies that we in Cambridge may want to consider. We may not choose to adopt every section below. And we may choose to add additional sections. Some sections may become regulations, standards or guidelines rather than part of the ordinance itself. List of Sections:

#### I. Preamble: Statement of Purpose

A. The purpose of these standards is to facilitate the preservation and/or replacement of trees as a part of land development in Cambridge

B. The Cambridge City Council hereby finds that the preservation of existing trees and promotion of new tree planting is a public purpose that protects the public health, general welfare, environment and aesthetics of City of Cambridge and all its citizens.

C. The citizens of the City and their many communities enjoy many benefits that can be directly attributed to our trees.

1. Trees produce oxygen, which is essential to the well being of all animal life, including humans.
2. Trees help to reduce the amounts of airborne pollutants, including removal of carbon dioxide, that are of a major environmental concern due to current high levels.
3. Trees and their foliage intercept dust and particulate matter, thereby helping to purify our air and limit health risks.
4. Trees and their root systems reduce soil erosion and storm water runoff. This decreases sedimentation problems and improves water quality. Trees minimize the cost of construction and maintenance of drainage systems necessitated by the increased flow and diversion of surface waters.
5. Trees provide food and shelter for desirable urban wildlife. Trees can provide a haven for birds which, in turn, assist in the control of insects.
6. Trees provide screening, which in turns aids in the reduction of noise and glare.
7. Trees help moderate our air temperature to provide us with a comfortable environment.
8. Trees provide scenic amenities to soften the harshness of city buildings and streets. They are aesthetically pleasing to all that view them.
9. Trees may affect property values and can have a positive impact upon the economy of an area.
10. Trees can enhance the natural functions of streams and related buffers.
11. Trees provide a protective physical and psychological barrier between pedestrians and traffic.
12. Trees create special places that are inviting.
13. Trees create a civic identity.
14. Treed landscapes decrease physiological stress. Viewing trees decreases hospital stays and use of pain medication by patients.
15. Landscaping is economically beneficial in attracting new residents, visitors and industry.
16. In one year a mature tree can absorb as much carbon as is produced by a car driven 26,000 miles.

D. Urban trees are a fragile public resource and may be damaged or destroyed through malicious, careless, or even well intentioned actions. Therefore this Ordinance will help to educate citizens and developers about the importance of trees including best management practices for maintaining trees.

1. Encourage the proliferation and replacement of trees on public and private property;
2. Allow trees to attain their natural shape and size while growing to maturity,
3. Provide standards for the preservation of trees as part of the land development process;
4. Prevent clear-cutting and mass grading of land that results in the loss of mature trees, and to ensure appropriate replanting when tree loss does occur;
5. Protect trees during construction to enhance the quality of life in Cambridge;
6. Protect trees during construction of public facilities and utilities;and
7. Establish and maintain appropriate diversity in tree species and age classes to provide a stable and sustainable urban forest.

#### II. Findings:

A. Street tree inventory includes 11,118 trees. Parks, schools and tot lots, when surveyed will add 800 –1000 trees. Most of our urban forest is on private property.,

B. number of street elms,

C. Street trees live an average of 7-11 years

#### III. For Regulations:

##### A. Policies regarding trees

1. The City encourages promotion of the urban forest and maximization of the tree canopy where such canopy can grow without physical obstructions.
2. It is the policy of the city to conduct a consistent and adequate program and budget for maintaining, watering

and preserving these trees.

3. New tree planting on public and private property is encouraged to cultivate a flourishing urban forest.

4. The city enlists the assistance of citizens and businesses in the maintenance and watering of the tree wells in the public way and in the identification of possible hazards.

5. It is the policy of the city to consider placement of the trees in relation with all federal and state regulations, including the needs of the disabled, utilities, emergency vehicles and trucks.

6. It is the policy of the city to promote the diversity of the urban forest to avoid devastation of an individual species.

7. It is the policy of the city to plant trees only in the appropriate season and that when a owner would normally want to plant but the season is inappropriate, that money be put aside for both the tree purchase and the tree planting in the appropriate season.

8. It is the policy of the city that money is dedicated for both the tree purchase and the tree planting.

9. It is the policy of the City to install autonomic irrigation systems particularly where watering is likely to be difficult.

10. Plantings are designed for the entire year and not just summer.

11. Utilize strategies to encourage long street tree life and to maintain those that live longer.

12. Trees should be planted in a manner to maximize adequate growth, by structural soils, treeways for root growth, etc.

13. Encourage the development of innovative strategies in places where there is limited space either for the roots or for the canopy and provide guidelines for root pruning, etc.

14. In areas where there is little room for trees to root, it is the policy of the city to build sidewalks that allow roots to grow under the sidewalks so they can have trees.

15. It is the policy of the City that no tree located in a 100 year flood plain or other flood prone area shall be removed except with approval of the Arborist as otherwise provided in the Cambridge Tree Ordinance as necessary for construction, repair or maintenance of public roads, utilities or drainage structures or as part of an approved wetland mitigation plan.

16. It shall be the policy of the City to maximize the planting of trees alongside the streets of the city.

17. Street tree plantings shall first be considered from the standpoint of the people using or passing along the streets and in terms of the broader community benefit.

#### B. Comprehensive Plan

1. Within three years of the adoption of this Ordinance, the Arborist with the advice and participation of the Committee on Public Planting and the entities listed in the Cambridge Tree Ordinance, shall adopt an urban forest management plan. Throughout the entire management plan process, public input and public education shall be given high priority. The Arborist thereafter shall use his or her best efforts to insure that activities of the Arborist are guided by such plan. The plan shall incorporate the following elements:

2. A clear, concise, and comprehensive Statement of Policies and Objectives for urban forestry management in the City, which statement is to be developed by the Arborist with the advice and participation of the Committee on Public Planting through a process of at least three public hearings;

3. An inventory of every street tree and any other trees deemed necessary by the Arborist including Significant trees, Commemorative trees, Client tree and other protected or landmarked trees, which inventory shall include, as appropriate, species, age, condition, maintenance records, record of fees and fines, and any other information necessary or usable in the long-range planning or day-to-day planting and maintenance of the City's urban forest;

4. A Street-Tree Renewal Plan, [and gateway tree plan? A sidewalk and sewer replacement plan? And major road tree plan? A traffic slowdown plan?] based on an evaluation of species characteristics and performance as recorded in the inventory; providing for rotational reforestation of diseased or declining trees and break-up of potentially problematic monocultures;

5. A set of Standards for the Arborist and the public for street tree installation, landscape-tree installation, pruning and maintenance, acceptable tree species and any other standards, criteria, or administrative procedures deemed necessary to carry out the purposes of this Ordinance and the Urban Forest Management Plan. Such

Standards shall include consideration of ANSI 800 pruning specification [insert ISA language & MA standards]  
 6. The following additional elements: identification of planting sites; prioritized planting plan; standards for tree selection, siting, planting, and pruning; -scheduled maintenance for new and established trees; watering, inspection program for tree-related problems and hazards; guidelines for protecting existing trees from construction-related damage; integrated disease and pest management strategies; -reforestation plans that allow for phased removal and replacement as trees become a liability; plans for utilization of wastewood. In developing these Standards the Arborist shall reference the Draft Cambridge Tree and Park Maintenance Plan.

7. In an effort to improve public awareness and attitudes regarding the importance of trees and their environment to this community, the Arborist will enlist public participation in identifying those trees which, by virtue of their size, age, historic significance, or other uniqueness, can be recognized as being the most noteworthy representatives of their kind in Cambridge. It is further expected that the recognition and attendant honor will provide for the enhanced protection of these, and ultimately other, trees in our community.

8. The Arborist shall make a Tree Protection Seminar which will be videotaped which shall be available in all the public libraries in the city. The purpose of this Tree Protection Seminar and video is to clarify the provisions and procedures of the Tree Protection Ordinance and review applicable standards and guidelines for the submittal of documents and required tree protection, replacement and maintenance measures.

A. Planting and Maintenance Requirements

B. Persons or city agencies conducting regular maintenance work on trees or shrubs may be granted general permits to cover their work on a yearly basis.

C. No person or city agency shall plant, spray, fertilize, prune, remove, replace or otherwise disturb any tree on any public street, park or other city-owned property without first submitting a written request therefor and obtaining written permission from the Arborist or in accordance with an existing approved maintenance plan.

Requests for written permission shall be acted on within five (5) business days of filing the written request with the Arborist. All work for which such permission is given shall be done in accordance with this Ordinance, the Urban Forest Management Plan, and the Department of Public Works rules and regulations.

D. It is the responsibility of the Arborist to determine if trees on city-owned property are hazardous to persons, property and other trees and to remove dead or hazardous trees from city-owned property. If replacement is recommended by the Arborist, the city shall replace the tree within one (1) year of removal.

E. Wherever it is necessary to remove a tree from a public right-of-way in connection with the paving of a sidewalk or the paving or widening of a street, the city or responsible agency or person shall replant such tree or replace it with a similar tree according to Cambridge Tree Ordinance. If conditions prevent planting in the right-of-way, this requirement may be satisfied by planting on the adjoining private property if the property owner agrees.

F. Requests from private citizens that new street trees be planted near their property shall be accommodated in accordance with planting priorities set by the Arborist in consultation with the Public Planting Committee

G. Specifications governing tree species, size, spacing, method, and location of planting, and a maintenance plan, including watering and irrigation, shall be approved by the Arborist. Inspection of the trees by the Arborist shall be carried out, whenever possible, prior to planting in order to ensure tree health and quality. Whenever any person is required to replace a tree pursuant to this chapter, he or she shall guarantee the health of such replacement trees for one year.

H. When roots of a tree planted within the Planting Area damage city curbs, gutters and sidewalks (including driveway ramps), the city shall be take appropriate corrective measures which are least damaging to the tree. Where sidewalk or curb damage due to tree roots occurs, every effort shall be made to correct the problem without removing or damaging the tree. The Arborist shall be responsible for developing or approving corrective measures in consultation with the city engineer. All trees shall be planted in good condition and meet "American Standard for Nursery Stock" (1990), ANSI Z60.1-1990, as may be amended.

I. The owner shall plant, or install, as appropriate, grass, tree grates, porous pavers, or similar pervious

surfaces, which shall extend to twice the initial drip line of the newly planted tree. Minimum tree grate size shall be twenty-five square feet.

#### J. Buffers

1. Stream Buffers: Undisturbed, natural buffers not less than 25 feet in width shall be provided and maintained unless a buffer of greater width is otherwise required in this Chapter. {Check the Massachusetts Rivers Law.}

2. Land Use Transition Buffers: Buffers shall be provided between dissimilar districts or uses in accordance with the provisions of the Zoning ordinance or as a condition of zoning, special land use permit or variance approval.

3. Buffer planting shall meet the minimum width requirements contained in of Ordinances, except as authorized to be reduced by a condition of zoning, special land use permit or variance approval. }

#### 4. Disturbance or Encroachments

a) Ditches, swales, stormwater conveyance facilities, stormwater detention ponds, sanitary sewer conveyance facilities, and any associated easements, shall not encroach into a buffer except that necessary access and utility crossings (e.g. stormwater or sanitary sewer pipes) may encroach into the buffer as near to perpendicular as practical.

b) Supplemental plantings or replantings of vegetation or authorized non-vegetative screening devices shall be authorized to encroach into a buffer provided there is minimal disturbance of any existing vegetation.

c) Dying, diseased or dead vegetation may be removed from a buffer provided minimal disturbance occurs. Vegetation thus removed shall be replaced where necessary to meet the screening requirements contained herein.

#### 5. Protection during Land Disturbing Activities

a) During authorized land disturbing activities, buffers shall be clearly delineated and protected prior to commencement of, and during, construction.

b) The method of demarcation and protection utilized shall be in accordance with best management practices or as required by the Arborist.

K. It shall be unlawful as a normal practice for any person, firm, or town department to top any Street Tree, Park Tree, or other tree on public property. Topping is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. However, trees severely damaged by storms, other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this ordinance at the determination of the Arborist

CITY OF NEWTON

IN BOARD OF ALDERMEN

ORDINANCE V-275

December 6, 1999

BE IT ORDAINED BY THE BOARD OF ALDERMEN  
OF THE CITY OF NEWTON AS FOLLOWS:

That the Revised Ordinances of the City of Newton, 1995, be and are hereby amended as follows:

Add the following Article IV to **Section 20** of the Revised Ordinances:

Article IV, Tree preservation ordinance §§ 20-30 through 20-39.

**Section 20-30. Findings, intent and purpose.**

The board of aldermen has determined that many valuable trees are being lost without replacement incident to demolition of existing buildings in order to construct new buildings and lot clearing in connection with the construction of new buildings on previously undeveloped land. The Board has further determined that trees have been lost, severely damaged or disfigured through excessive or improper pruning or other than natural causes. The result is a net loss of the tree population in the city. The board has further determined that the city has insufficient legal vehicles to assure that such development adequately preserves, protects and provides for replacement of trees.

Therefore, the board of aldermen deems it necessary and desirable in the interest of public health, safety and welfare to enact an ordinance for the preservation and replacement of trees while allowing for reasonable improvement of land within the city. It is the public policy of the city to add to the tree population within the city, where possible, and to maintain, to the greatest extent possible, existing trees within the city while allowing for reasonable development of land within the city. The planting of additional trees and the preservation of existing trees in the city is intended to accomplish, where possible, the following objectives:

- (a) To preserve trees as an important public resource enhancing the quality of life and the general welfare of the city and enhancing its unique character and physical, historical, and aesthetic environment;

- (b) To preserve the essential character of those areas throughout the city which are heavily wooded and in a more natural state;
- (c) To enhance and preserve the air quality of the city through the filtering effect of trees on air pollutants;
- (d) To reduce noise within the city through the baffle and barrier effect of trees on the spread of noise;
- (e) To reduce topsoil erosion through the soil retention effect of tree roots;
- (f) To reduce energy consumption through the wind break and shade effects of trees when they are properly placed;
- (g) To preserve and enhance nesting areas for birds and other wildlife which in turn assist control of insects;
- (h) To reduce storm water runoff and the costs associated therewith and replenish ground water supplies;
- (i) To protect and increase property values;
- (j) To protect and enhance the visual quality of the city.

**Section 20-31. Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Aggregate diameter*: The combined diameter of a multiple trunk tree measured at breast height.

*Article*: The term phrase "this article" shall mean section 20-30 through and including section 20-39.

*Building*: The term "building" shall be as defined in section 30-1.

*Certified arborist*: An arborist certified by the Massachusetts Arborists Association, or any successor organization.

*Diameter breast height (DBH)*: The diameter of the trunk of a tree 4½ feet above the existing grade at the base of the tree.

*Drip line*: A vertical line running through the outermost portion of the crown of a tree and extending to the ground.

*Exempt lot:* A lot which meets either of the following criteria at the time that the tree removal permit application is filed or an exterior work permit is sought or at the time that trees are being removed:

(a) the lot is occupied and used primarily as a dwelling for up to four (4) families;  
or

(b) the lot is vacant and is adjacent to a lot used solely as an owner occupied dwelling for up to four (4) families and owned by the same person and the owner of such vacant lot wishes to remove trees from such vacant lot in order to construct a dwelling for up to four (4) families which said owner will occupy.

*Exterior work permit:* A permit or approval which is required in order to perform work on a vacant lot or to the exterior of a building on a lot, including, but not limited to the following: a building permit; a special permit for grade change of more than three (3) feet pursuant to section 30-5(b)(4); curb cut and street opening permits; an order of conditions; certificates of appropriateness, nonapplicability, or hardship; a demolition permit pursuant to section 22-44; site plan approval pursuant to section 30-23; subdivision approval; a special permit pursuant to section 30-24; a comprehensive permit.

*Lot clearing:* The removal of three (3) or more protected trees located on land within the provisions of section 20-32.

*Owner:* The term "owner" shall be as defined in section 1-3.

*Person:* Any person, firm, partnership, association, corporation, company or organization of any kind including, but not limited to, the person removing a protected tree as well as the owner of the real property from which the tree is removed. The definition of "person" shall not include the city of Newton.

*Pruning standards:* Standards for pruning as defined in *the City of Newton Tree Management Manual, 1995* and any future amendments or revisions to the same.

*Protected tree:* Any tree having a diameter of eight inches (8") DBH or larger or having an aggregate diameter of fifteen inches (15") DBH or larger and which is located on land subject to the provisions of section 20-32.

*Remove (including removing and removal):* The cutting down of any protected tree and all other acts which cause the actual removal or the effective removal through damaging, poisoning or other direct or indirect actions resulting in the death of a protected tree, including, but not limited to, excessive or improper pruning.

*Tree Warden:* The commissioner of parks and recreation or his designee.

*Tree Manual: The City of Newton Tree Management Manual, 1995*, and any future amendments and revisions to the same.

**Section 20-32. Applicability, permit or certificate of exemption required.**

(a) *Applicability*: The terms and provisions of this article shall apply to any protected tree located on land within the city not owned by the city, the commonwealth, or any independent authority of the commonwealth, or by the federal government except protected tree(s) located on an exempt lot.

(b) *Permit, Certificate of Exemption*: No person shall remove a protected tree located on land subject to the provisions of this article without first obtaining a tree removal permit or a certificate of exemption from the tree warden. Applications shall be made in writing on forms specified by the tree warden. An owner of an exempt lot shall *not* be required to apply for a tree removal permit, provided, however, that an owner of an exempt lot who seeks an exterior work permit must certify to the tree warden on forms provided by the tree warden that the owner intends to own such exempt lot for at least twelve consecutive months. There shall be no fee for filing a certificate of exemption.

**Section 20-33. Permit application.**

(a) *Contents, fee*: An application for a tree removal permit shall be submitted to the tree warden. The application for a tree removal permit shall be accompanied by a fee in the amount of fifty dollars (\$50.00) and shall include, but not be limited to, the following:

- (1) The shape and dimensions of the parcel of real property to be developed, together with the existing and proposed locations of structures and improvements, if any;
- (2) A tree plan showing the location, type and size of each protected tree indicating which protected tree(s) are to be removed, and the location, type and size of replacement trees;
- (3) The proposed relocation of any existing protected tree with a statement prepared by a certified arborist explaining how each such protected tree is to be relocated and maintained;
- (4) The location of existing and proposed underground or overhead utility services, existing and proposed roadways, bikeways, walkways and parking areas;
- (5) Any proposed grade changes which might adversely affect or endanger any protected tree with a statement prepared by a certified arborist explaining how each such protected tree shall be protected and maintained;

(6) The proposed method of protecting the remaining protected trees during the course of the construction in accordance with section 20-34, subsection(a).

(b) *Review of permit applications:* The tree warden shall review applications for tree removal permits in accordance with the provisions of this article. The tree warden shall date stamp or otherwise record the date of filing of each application for a tree removal permit. The tree warden shall complete the review of each tree removal permit application no later than ten (10) business days after the submission of a completed application to the tree warden and shall report to the commissioner of inspectional services within ten (10) business days of a request with respect to any tree removal permit application submitted in connection with a building permit as to whether said tree removal permit has been granted or denied. If no such report is received by the commissioner within the above-stated time period, he shall accept an application for a building permit without receipt of such report.

(c) *Standards for grant or denial:* No tree removal permit shall be issued unless one of the following conditions exists:

- (1) The protected tree will be relocated or replaced on site.
- (2) The protected tree will be replaced by the off-site planting of tree(s) of the same or equivalent size as measured in DBH inches. In the event that a tree of the same or equivalent size as measured in DBH inches cannot be planted, then multiple smaller replacement trees may be planted provided that, wherever practicable, as determined by the tree warden, the total DBH of the replacement trees shall, when added together, equal the total DBH of the protected tree that has been removed. Off-site plantings shall be made in accordance with written priorities established by the tree warden as stated in the Tree Manual. The tree warden may specify that replacement trees be of a minimum caliper when consistent with current accepted practice as stated in the Tree Manual.
- (3) The protected tree is interfering with existing structures, utilities, streets, sidewalks or other existing improvements and the relocation of the protected tree is not feasible as certified to the tree warden by a certified arborist.
- (4) The protected tree is dead, diseased, injured, in danger of falling, dangerously close to existing structures, is causing disruption of public utility service, is causing drainage or passage problems upon rights-of-way, or poses a threat to pedestrian or vehicular safety.
- (5) The removal of the protected tree is necessary and desirable in order to enhance or benefit the health or condition of other trees on the same site as certified to the tree warden by a certified arborist.

(d) *Conditions:* Upon the issuance of a tree removal permit, the tree warden may prescribe in writing such protective measures for existing protected trees as he deems necessary. Before site disturbance may begin, the tree warden may make a determination that the prescribed protective measures have been adequately provided.

(e) *Construction:* Except as provided in a tree removal permit, construction activities under the drip line of a protected tree are prohibited. Activities include, but are not limited to, trenching or grading, storage of materials or equipment, passage of heavy equipment within the drip line and spillage of chemicals or other materials, which are damaging to trees.

(f) *Suspension or revocation:* A tree removal permit may be suspended or revoked at any time by the tree warden upon written notice to the permit holder that the permit holder has failed to comply with either this article or the conditions of the permit. The written notice shall be sent by certified or registered mail, return receipt requested, or by hand delivery and shall provide an opportunity for the permit holder to correct the noncompliance and apply for a renewal of the tree removal permit upon compliance, where practicable. The suspension or revocation of a tree removal permit in accordance with this subsection shall not affect the validity of a building permit issued in reliance upon the issuance (granting) of such tree removal permit nor shall such suspension or revocation be cause for withholding the issuance of a certificate of occupancy.

(g) *Appeal:* If any person is dissatisfied with a decision of the tree warden adversely affecting such person involving the application of this article, such person may file appeal of the tree warden's decision with the mayor or his designee. Said appeal must be in writing and must be received by the mayor or his designee within five (5) business days of the issuance of the tree warden's decision. The mayor or his designee shall make a final decision on the matter within thirty (30) days from the date of receipt of the appeal request. There shall be no further appeal of a matter decided by the mayor or his designee. No protected tree shall be removed while an appeal is pending.

#### **Section 20-34. Activities not requiring a permit.**

(a) *Pruning:* A permit is not required for the pruning of protected trees. However, in order to prevent excessive pruning and topping of trees and to prevent pruning that will be hazardous to the health and natural appearance of the tree, compliance with approved pruning standards is required, and failure to meet these standards is a violation of this article. The tree warden shall maintain on file at all times a copy of the current edition the Tree Manual and shall make copies of the Tree Manual available for the cost of reproduction upon request.

(b) *Emergencies:* If any protected tree shall be determined to be in a hazardous condition so as to immediately endanger the public health, safety or welfare or cause an immediate disruption of public services and require immediate removal without delay, oral authorization may be given by the tree warden to remove such tree, utilizing such

professional criteria and technical assistance as he deems necessary, and the protected tree may be removed without obtaining a written permit as otherwise required by this article. The tree warden shall memorialize in writing each such oral authorization to remove a tree and keep a record of the same.

(c) *Waiver*: The requirements of this article may be waived by the tree warden during the period of an emergency such as a tornado, windstorm, flood or other act of God.

#### **Section 20-35. Tree replacement.**

(a) *Required*: A protected tree shall be replaced in the manner provided in subsection (b) hereof in each instance in which a protected tree was removed from land subject to the provisions of section 20-32 without a tree removal permit.

(b) *Standards*: A person who has removed a protected tree and is required to replace such tree pursuant to subsection (a) hereof or as a condition of granting a tree removal permit in accordance with section 20-33, shall replace such tree within one year from the date of removal and in accordance with the following standards:

(1) A replacement tree shall be of the same or similar species or such other species as deemed advisable by the tree warden in accordance with the Tree Manual and shall have the same or equivalent size as measured in DBH inches as that of the protected tree that has been removed.

(2) In the event that a tree of the same or equivalent size as measured in DBH inches cannot be planted, then multiple smaller replacement trees may be planted provided that, wherever practicable, as determined by the tree warden, the total DBH of the replacement trees shall, when added together, equal the total DBH of the protected tree that has been removed. The tree warden may specify that replacement trees be of a minimum caliper when consistent with current accepted practice as stated in the Tree Manual.

(3) A replacement tree shall be required to survive for a minimum of one (1) year from the date it is planted. The person planting the tree shall provide documentation as to the date of planting and file the same with the tree warden within fifteen (15) days of the planting of said replacement tree.

(4) A replacement tree shall be planted on the same lot from which the tree was removed or at a location determined by the tree warden in accordance with the priorities stated in the Tree Manual.

#### **Section 20-36. Tree replacement fund.**

(a) *Established*: There is hereby established a tree replacement fund which shall be held in a separate identifiable account and administered in accordance with applicable provisions of the General Laws. Any payments into the tree replacement fund required

by this article shall be deposited in the tree replacement fund and shall be used in accordance with subsection (c) hereof.

(b) *Payment in lieu of planting replacement tree(s)*: In lieu of planting a replacement tree as provided in section 20-35, a person who has been granted a tree removal permit may make a contribution to a tree replacement fund in an amount equal to the cost to replace the tree in accordance with the provisions of section 20-35, which cost shall be determined by the tree warden who shall obtain written estimates from at least two (2) tree companies.

(c) *Maintenance of tree replacement fund*: The tree replacement fund shall be maintained in a separate account in accordance with state law. All sums deposited into such fund shall be used solely for the purpose of buying, planting and maintaining trees in the city.

#### **Section 20-37. Enforcement.**

(a) *Notice of violation*: Any person who violates any of the provisions of this article shall be notified by the tree warden of the specific violation by certified or registered mail, return receipt requested, or by hand delivery. The notice shall set forth the nature of the violation and a reasonable time period within which compliance must be had. The tree warden shall send notice of violation of section 20-36, subsection (c) which notice shall include the date by which trees were to be replaced or payment was to be made for purposes of computing the "per day" violation fine, as provided section 20-38, subsection (c).

(b) *Stop work order* :

(1) Upon notice from the tree warden that work on any protected tree, or lot on which a protected tree is located, is being performed contrary to the provisions of this article, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work; and shall state the conditions under which work will be permitted to resume.

(2) The tree warden is also authorized to request the agency which has granted an exterior work permit to order, to the extent permissible by law, that the owner cease any activity pursuant to the exterior work permit that might affect such protected tree while a stop work order is pending.

(3) Any person who shall continue any work in or about the protected tree or lot on which a protected tree is located after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not more than three hundred dollars (\$300.00) for each such violation. Each day during which a violation exists shall constitute a separate offense.

(c) *Injunctive relief:*

(1) Whenever there exists reasonable cause to believe that a person is violating this article or any standards adopted pursuant to this article or any term, condition or provision of an approved tree removal permit, the city may, either before or after the institution of any other action or proceeding authorized by this article, institute a civil action in the name of the city for a mandatory or prohibitory injunction and an order of abatement demanding the defendant to correct the unlawful condition upon or cease the unlawful use of the property.

(2) Upon determination of a court that an alleged violation is occurring, it shall enter such order or judgment as is necessary to abate the violation. The institution of an action for injunctive relief under this subsection shall not relieve any party to such proceedings from any civil penalty prescribed for violation of this article.

**Section 20-38. Penalties.**

(a) *Removal without a permit:* Each instance in which a protected tree is removed without a permit shall constitute a violation of this article which shall be subject to a fine in the amount of three hundred dollars (\$300.00.).

(b) *Failure to replace trees or make payment:* Each failure to replace a tree or make a payment into the tree replacement fund shall constitute a separate violation of this article which shall be subject to a fine in the amount of three hundred dollars (\$300.00). Each day such violation continues shall constitute a separate offense.

(c) *City trees:* Nothing herein shall be construed to require the city to make a payment into the tree replacement fund for any tree(s) which it removes.

**Section 20-39. Severability, effect on other laws.**

(a) *Severability:* The provisions of this article are severable. If any section, provision, or portion of this article is determined to be invalid by a court of competent jurisdiction, then the remaining provisions of this article shall continue to be valid.

(b) *Conflict of laws:* This article shall not apply to any public shade tree as that term is defined by the General Laws, Chapter 87 or any amendments thereto. Nothing herein is intended to conflict with the General Laws, Chapter 87 and to the extent that any provision hereof conflicts with said Chapter 87, such provision shall not be valid. Nothing herein is intended to conflict with existing special permit procedures as provided in section 30-24 and to the extent that any provision hereof conflicts with said special permit procedures, such provision shall not be valid.

BE IT FURTHER ORDAINED BY THE BOARD OF ALDERMEN  
OF THE CITY OF NEWTON AS FOLLOWS:

That Section 20-21 of the Revised Ordinances of the City of Newton, 1995, as most recently amended by Ordinance V-(adopted on October 5, 1998) of the Revised Ordinances of the City of Newton, 1995 be and are hereby amended as follows:

Add the following provisions to the table of ordinances subject to non-criminal disposition (ticketing) to be enforced by the Tree Warden:

	PENALTY:
( ) Warning:	\$ 0.00.
( ) Removal of a tree without a permit (Sec. 20-32) :	\$300.00.
( ) Failure to comply with a condition contained in a tree removal permit (Sec. 20-33):	\$300.00.
( ) Failure to replace a tree (Sec. 20-35):	\$300.00.
( ) Failure to make a payment into the tree replacement fund (Sec. 20-36):	\$300.00.
( ) Failure to comply with a stop work order (Sec. 20-37)	\$300.00

Approved as to legal form and character:

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DANIEL M. FUNK  
City Solicitor

Under Suspension of Rules

Readings Waived and Adopted December 6, 1999

14 yeas 9 nays (Ald. Antonellis, Bryson, Bullwinkle, Gentile, Gerst, Maguire, McGrath, O'Halloran, Salvucci) 1 absent (Ald. Tattenbaum)

Motion to reconsider filed on December 7, 1999; Reconsideration failed to carry December 20, 1999; vote of December 6, 1999 stands.

EXECUTIVE DEPARTMENT

Approved: December 22, 1999

(SGD) EDWARD G. ENGLISH  
City Clerk

(SGD) DAVID B. COHEN  
Mayor

City of Newton

## NEWTON TREE PRESERVATION ORDINANCE

Effective December 26, 1999



### FACT SHEET

Highlighting the Main Points of the Ordinance.  
See Ordinance V-275 for detailed information.

David B. Cohen  
Mayor

#### **WHAT DOES THIS ORDINANCE ACCOMPLISH?**

- Protects trees 8 inches or larger from unnecessary or wholesale cutting by developers.
- Requires that trees removed for construction be replaced on an inch-per-inch basis.
- Permits contribution to Tree Replacement Fund if trees cannot be planted on site. (Tree Replacement Fund will be used to plant and maintain trees on public property.)
- Requires that roots, trunks and canopies of trees be protected during construction.
- Requires that pruning of protected trees adhere to appropriate standards.

#### **WHAT DOES THE ORDINANCE SPECIFICALLY EXCLUDE?**

- DOES NOT apply to owner-occupied one-, two-, three- or four-family dwellings. (Also exempts rental properties up to four units.)
- DOES NOT apply to trees that are dead, diseased, injured, or dangerous.
- DOES NOT limit conditions applied through special permit or other processes.
- DOES NOT apply to trees on city-owned property—a separate process applies to specific issues pertaining to city trees.

#### **HOW DOES THE PROCESS WORK?**

- Sets up Tree Removal Permit process with 10-business-day turnaround. (A brief Certificate of Exemption form must be completed for exempt properties.)
- Sets permit application fee at \$50, intended to fully cover all administrative costs.
- Creates enforcement options including notice, stop-work order and injunctive relief.
- Sets penalty for removal of protected trees without a permit at \$300 per tree.
- Sets penalty for failure to replace protected trees at \$300 per tree per day.

#### **WHAT ARE THE PUBLIC BENEFITS OF THIS ORDINANCE?**

- Establishes trees as a valued resource that is declining from development activity.
- Recognizes that continued, uncontrolled loss of trees has broad public health, economic, environmental and quality of life implications for the entire city.
- Sets community-based procedures and incentives for retaining and protecting trees during development, whenever reasonably possible.
- Creates a model for other communities that are also seeking to proactively balance tree preservation and development.

Forms are available at Parks and Recreation, Inspectional Services, and Planning and Development Depts.  
Refer questions to Newton Parks and Recreation Department at 617-552-7120.

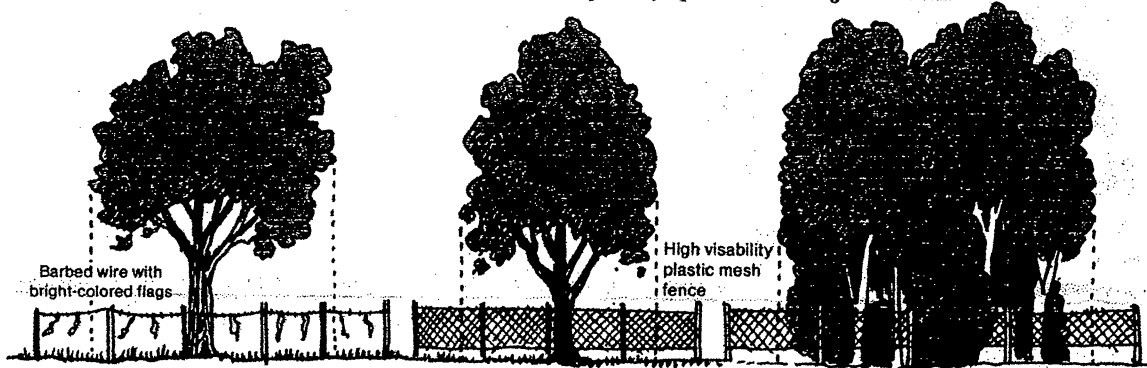
# PROTECTING TREES DURING CONSTRUCTION



David B. Cohen  
Mayor

“Construction activities under the drip line of a protected tree are prohibited. Activities include, but are not limited to, trenching or grading, storage of materials or equipment, passage of heavy equipment within the drip line and spillage of chemicals or other materials, which are damaging to trees.” City of Newton Tree Preservation Ordinance §20-33(e)

Barriers that extend beyond the dripline are a good way to protect trees during construction.



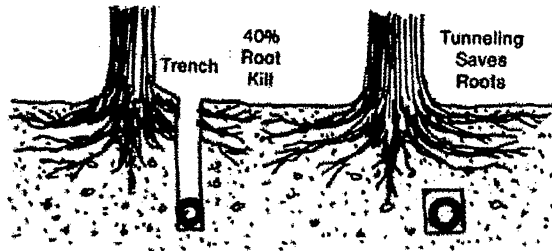
**AVOID SOIL COMPACTION** The key to tree survival in the years following construction is protection of the roots during construction. Root compaction caused by the weight of stored materials, vehicles and foot traffic cuts off air and water passages in the soil that trees depend upon for good health. Damage from compaction shows up slowly, sometimes years later. The safest and surest way to avoid compaction is to build a protective fence around the tree to keep damaging vehicles and materials away from the root zone.



Breaks and Scrapes

**AVOID BREAKS AND SCRAPES** Special care with backhoes and other machinery is required to minimize damage to trunk, limbs and overhead branches. If work near a tree is required, wrap the trunk with protective material, such as 2x4s tied with rope or wire. Repair accidental damage immediately.

**AVOID SEVERING ROOTS** Route utility lines around tree roots or tunnel under the root zone. Trenching kills all the roots outside the trench line. Posts and pillars can be substituted for footers and walls where foundations conflict with tree roots.



**AVOID POISONING THE SOIL** Materials like concrete, sheet rock, paint thinner, motor oil and wood preservatives like pentachlorophenol change the chemistry of the soil and can kill a tree outright. Use these products away from tree roots or spread heavy plastic tarps around trees to prevent soil contamination.



**AVOID NAILS** Keep trees free of nails, screw eyes and other fastening devices. Use posts, not trees, for signs, electrical wires, pulleys, etc.

**TREES UNDER STRESS** require deep watering (12-18") once a week and fertilizer high in phosphorus. Consult a certified arborist to identify and treat insect damage or disease during and after construction.

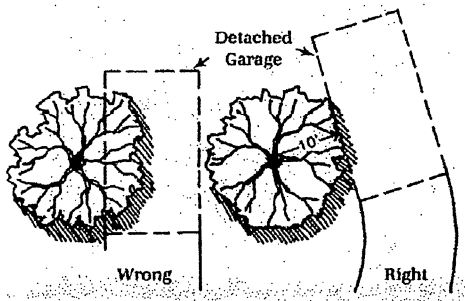


David B. Cohen  
Mayor

## DESIGNING STRUCTURES TO SAVE TREES

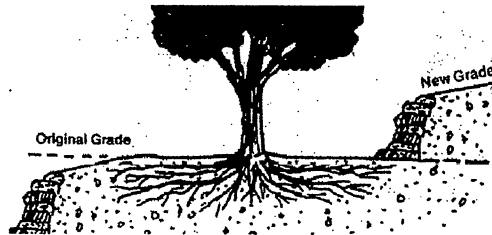
Trees contribute up to 20% of the value of your property. In addition, they moderate the temperature, quiet the noise, clean the air and add to the quality of our lives. It makes sense to save as many trees as possible during planning and construction of buildings, additions, decks, patios, sidewalks, driveways and other structures.

**CREATE AN AS-IS PLAN** Document the features of your property as they currently exist. Show trees in relation to buildings, shrubs, gardens, walkways, driveways, fences, walls, grade changes and other elements. Note which trees are particularly beneficial to the appearance and function of your property—south-facing trees that shade the house in summer, trees that break the wind in winter, create a visual screen, insulate against traffic or other sounds, and offer a cool place to sit. Also note which trees are weak—too close to existing structures, leaning dangerously or unhealthy. Decide which trees you intend to keep and which are expendable. Then design new structures to work around the trees you want to keep.



**DESIGN AROUND TREES** Locate buildings and other elements so they fall outside the root zone of trees you want to save. Take into account the size young trees will reach at maturity and allow adequate room for development. If structures within the root zone are unavoidable, use pillars and posts instead of footers and walls to minimize damage to tree roots.

**GRADE CHANGES** Protect tree roots by creating terraces with retaining walls. This will allow the original grade around the root zone to be maintained. Cutting or shaving roots or piling soil on top of roots to create a continuous new grade will slowly kill the tree. Look out for drainage changes that could mean a tree gets too much water or not enough.



**AVOID FUTURE PROBLEMS** Keep trees at least five feet from buildings. Remember that young trees will grow much larger. Prune large overhanging tree limbs. Consider removing trees that lean dangerously or locate structures well clear of them. Be aware of overhead and underground utilities to limit conflicts.

**KNOW YOUR TREES** Get the help you need to make the right decisions now about the health and placement of existing trees, the potential for transplanting desirable trees and the best sites for new trees. If you plan to remove a tree, know in advance what the impact will be on the survival of surrounding trees. Try to create a mix of trees by species, age and size. This will result in a more visually pleasing landscape and reduce the effect should a tree die in the future.

**Certified arborists** are trained to answer questions about tree health, transplantation, proper placement and long-term survival.

**Construction** is a good time to have all your trees evaluated and cared for. Pruning and fertilization will help them withstand stress.

City of Newton



David B. Cohen  
Mayor

## CERTIFICATE OF EXEMPTION TREE PRESERVATION ORDINANCE

Submit to Inspectional Services Department, Newton City Hall  
1000 Commonwealth Avenue, Newton, MA 02459

I/We, \_\_\_\_\_,  
(Please print or type name or names)

owner(s) of \_\_\_\_\_,  
(Please print or type address)

by My/Our signature(s) below hereby certify that:

1. I am/We are the record owner(s) of the lot referenced above.
2.  This lot is occupied and used primarily as a dwelling for up to four (4) families (an "exempt lot" as defined in section 20-31 of the Tree Preservation Ordinance); OR  
  
 This lot is vacant and is adjacent to an "exempt lot" and I/We wish to remove trees from this vacant lot in order to construct a dwelling for up to four (4) families on this same vacant lot and I/We intend to occupy this dwelling as our home, AND
3. I/We intend to own this exempt lot for at least twelve (12) consecutive months from the date of this certification.
4. I/We understand that if I/We do not continue to own this exempt lot for at least twelve (12) consecutive months from the date of this certification, then this lot will no longer be considered exempt, and I/We shall be required to comply with all applicable provisions of the Tree Preservation Ordinance (Sections 20-30 through 20-39 of the Revised Ordinances of the City of Newton as added by Ordinance V-275).

Signed under penalties of perjury this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Witness My/Our hand(s) and seal(s):

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name — please print)

\_\_\_\_\_  
(Name — please print)

\_\_\_\_\_  
(Mailing address)

\_\_\_\_\_  
(Mailing address)

\_\_\_\_\_  
(Telephone)

\_\_\_\_\_  
(Telephone)



David B. Cohen  
Mayor

# APPLICATION FOR TREE REMOVAL PERMIT

Submit to Tree Warden at Parks and Recreation Department  
70 Crescent Street, Auburndale, MA 02466  
617-552-7120

I/We, \_\_\_\_\_  
(Please print or type name or names)

owner(s) of \_\_\_\_\_  
(Please print or type address)

hereby apply for a permit to remove \_\_\_\_\_ trees from this property.  
(Indicate number)

I/We have attached the following documents to this application, as the Tree Preservation Ordinance requires:

- 1. A Tree Removal Plan that indicates:
  - (a) The shape and dimensions of the parcel of real property to be developed, together with the existing and proposed locations of structures and improvements, if any.
  - (b) A tree plan showing the location, type and size of each protected tree indicating which protected tree(s) are to be removed, and the location, type and size of replacement trees.
  - (c) The proposed relocation of each existing protected tree AND the statement referenced in Item 2 below.
  - (d) The location of existing and proposed underground or overhead utility services, existing and proposed roadways (including driveways), bikeways, walkways and parking areas.
  - (e) Any proposed grade changes which might adversely affect or endanger a protected tree AND the statement referenced in Item 2 below.
  - (f) The proposed method of protecting the remaining protected trees during the course construction in accordance with section 20-33 (e) of the Tree Preservation Ordinance. (Note: This section prohibits specific activities within the drip line of a protected tree except as provided in a tree removal permit.)
- 2. A Statement prepared by a Certified Arborist explaining, as applicable:
  - (a) With respect to any protected tree which is to be relocated, how each such protected tree is to be relocated and maintained.
  - (b) With respect to any proposed grade changes which might adversely affect or endanger any protected tree, how each such protected tree shall be protected and maintained.
- 3. Attachment No. 1: (Required if this application is being filed in connection with any other permit.)
  - Not applicable I/We are removing protected tree(s) only; no other changes are planned.
- 4. A check in the amount of fifty dollars (\$50.00), payable to the City of Newton Tree Preservation Fund.

By My/Our signature(s) below, I/We hereby certify that I am/We are the record owner(s) of the property referenced above. I/We understand that the City has no obligation to act on this application until it is deemed to be complete.

Witness My/Our hand(s) and seal(s):

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name — please print)

\_\_\_\_\_  
(Name — please print)

\_\_\_\_\_  
(Mailing address)

\_\_\_\_\_  
(Mailing address)

\_\_\_\_\_  
(Telephone)

\_\_\_\_\_  
(Fax)

\_\_\_\_\_  
(Telephone)

\_\_\_\_\_  
(Fax)



David B. Cohen  
Mayor

## APPLICATION FOR TREE REMOVAL PERMIT

### ATTACHMENT NO. 1

**I am /We are seeking the following other approval(s) in connection with the Tree Removal Permit: (Please check all that apply)**

- Administrative site plan approval [section 30-5(a)(2), non-profit educational or religious corporations]
- Building permit
- Certificate of appropriateness
- Certificate of hardship
- Certificate of non-applicability
- Comprehensive permit
- Curb cut
- Demolition permit [section 22-44]
- Order of conditions
- Request for determination
- Site plan approval [section 30-23]
- Special permit [section 30-24]
- Special permit for a grade change of more than three (3) feet [section 30-5(b)(4)]
- Street opening
- Variance
- Other (please specify) \_\_\_\_\_



David B. Cohen  
Mayor

## RECORD OF ACTION ON APPLICATION FOR TREE REMOVAL PERMIT

Name of applicant \_\_\_\_\_

Property named in application \_\_\_\_\_

Date application received by Tree Warden \_\_\_\_\_

**The following action has been taken on this application:**

**Application is approved as submitted.**  
Permission is hereby granted to remove, transplant and/or replace protected trees to the extent indicated in the application. Any changes from this approved plan must be submitted for review and approval before work continues.

**Application is approved with conditions.**  
Permission is hereby granted to remove, transplant and/or replace protected trees to the extent indicated in the application, **except as indicated below.** Any changes from this approved plan must be submitted for review and approval before work continues.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Application is incomplete.**  
No action will be taken on the application until the following information is submitted:

\_\_\_\_\_

**Application is denied.**

Action taken by \_\_\_\_\_  
(Tree Warden or designee)

Date of action \_\_\_\_\_ For additional information, contact the Parks and Recreation Department at 617-552-7120

Copies to:  Inspectional Services Department  
 Planning and Development Department

that applicability of the ordinance would apply to city owned trees, new residential and non-residential developments and protected trees (certain size and species of trees) which warrant protection. She stated that in Section V the arborist would conduct a Tree Protection Seminar, which could be, video taped and could be watched by the applicant who could then get a permit, or the applicant could meet with the arborist. The arborist would inspect and approve the Tree Protection Plan of proposed developments. In Section VI the value of trees was established. Appeals would be made to the arborist as contained in Section VII. Section VIII contains the fines. In Section XIII, Responsibilities of Owners, only affects public trees or public spaces. Page six of the document deals with what is existing in the Municipal Code as it relates to Chapter 9.04, Offenses Against Property; Chapter 12.16 Street and Sidewalk Use Regulations; Chapter 12.20 Commons and Public Grounds and Chapter 13.12 Water Reservoirs.

Doug Dickson, Newton Urban Tree Commission, stated that there has been an increase in tree ordinances over the last 20 years dealing with both public and private trees. California, the mid-west and southeast portions of the country have tree ordinances. He distributed a copy of Newton's Ordinance (**ATTACHMENT B**) and a Fact Sheet (**ATTACHMENT C**). The focus of the ordinance was on private trees. It was too complicated to start with public trees; he said. The ordinance was to protect 8" or larger trees. A tree replacement fund was established to replace trees, he said. An inch-per-inch formula is used for tree replacement. For example if an 8" tree were removed it would need to be replaced by (4) 2" trees. Mr. Dickson further stated that the ordinance required developers and persons involved in construction to protect existing trees during the construction process. Owner-occupied one, two, three or four family dwellings are exempt from the ordinance. Homeowner exemption requires homeowners to certify that they will live in the home for at least twelve months. Enforcement, he said, is based on reports from the neighbors.

Councillor Braude asked if the \$300 fine for violation per state statute covers failure to report. Mr. Dickson replied in the affirmative. Councillor Braude stated that he supported the goal of this ordinance. He questioned the incentive to comply with the ordinance, if the fine is modest. He stated that people would pay \$300 to cut down a tree. He stated that it would be helpful to have a useful analysis of potential protected trees and the percentage of where the trees are located.

Councillor Davis opened the meeting to comments by the public.

Pat Pratt, 11 Brown Street, asked Mr. Ralph Dunphy, Commissioner of Public Works for his opinion. Mr. Dunphy stated that the city is looking at this through multiple departments. Site design process is followed and the city arborist is working with contractors to protect trees. Ms. Pratt asked about the conflict of Chapter 87 of the State Law. Ms. Carmean stated there is no conflict with Chapter 87. Mr. Dunphy requested that "hedges" be included in the ordinance. Ms. Schlomy stated that the definition of hedge is "messy". Mr. Dunphy stated that private property access is a

concern for the city. Ms. Pratt asked if Boston has a tree ordinance. Mr. Dickson responded in the negative.

Mr. Acosta, City Arborist stated that the educating and consulting aspect are budgetary and staffing concerns. He was concerned with the private property issue. Education, he said, should be done on a lot by lot basis. An assessment of the urban canopy needs to be done by the city and the age of trees can be an issue. He urged that the ordinance should be general and flexible. Tree protection fees are costly, he said.

Mr. Sam Warner, 15 Cottage Street, asked if Mr. Acosta wanted a survey. Mr. Acosta responded that a survey would help with the political question. Mr. Acosta stated that the problem is different in Cambridge than in Newton because the loss of one tree is more of an issue.

Mr. Dickson spoke on the administrative burden of the work. Newton started with a \$50.00 fee to cover expenses. Newton started low and adjustments will be made, he said.

Stuart Dash, Director of Community Planning, Community Development Department, stated that the back yard zoning was controversial about private property rights and this may be controversial also. Ms. Carmean stated that the following should be added to the existing Zoning Ordinances "removal of existing trees is an adverse factor to be considered in the granting of a variance or special permit."

Councillor Davis stated that there is a lot of interest and enthusiasm. She did not want to waste time. This is a new area of regulation, which is needed, but she could see pit falls on the issue of private property. She would like to lay the foundation for the regulations needed by the city. Bushes that overhang the sidewalk should be included. She stated that careful work that has the support from appropriate persons: the arborist, Division of the Public Works Department, the Public Planting Committee, Community Development Department and developers all should be included.

Sarah Klipfel, Cambridge Chamber of Commerce, informed the committee that the Chamber would take the ordinance and do a markup of it. She inquired as to where the institutions fit into this process; the institutions should be included. Councillor Davis asked what are the changes that the Chamber could offer. Ms. Klipfel responded that the Chamber could discuss the goals from the business community perspective, what their support is and what is their need to protect. It is nice to discuss this issue at the goal setting stage rather than at the final stage, she said.

Ms. Schlomy stated that the ordinance was tied to the permit process.

William Doebele, 68 Dana Street, stated that there is a twenty-year regulation in place in California, the mid-west, south and southeast. What is the political experience been in these regions, he asked. The city needs to get this information. Ms. Schlomy

stated that Karen Carmean's web site has links with other localities, but political experience cannot be acquired unless there is dialogue between communities.

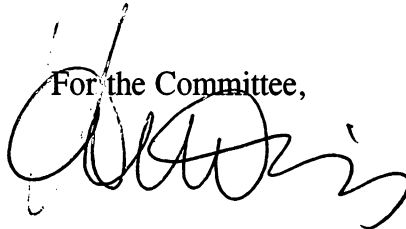
A discussion ensued regarding the establishment of a task force. Mr. Acosta stated that the Public Planting Committee might not be interested in being that task force.

Ms. Louise Weed, 109 Avon Hill Street, Public Planting Committee member, stated that the Public Planting Committee would like to be involved, but there is not staff support.

Councillor Davis stated that she would provide a follow up plan to this meeting.

The meeting adjourned at ten o'clock and fifty-five minutes a. m.

For the Committee,

A handwritten signature in black ink, appearing to read 'Henrietta Davis', written over the typed name below.

Councillor Henrietta Davis,  
Chair

# City of Cambridge

HEALTH AND ENVIRONMENT

*Councillor Henrietta Davis, Chair*

*Councillor Kathleen L. Born*

*Councillor Jim Braude*

In City Council May 8, 2000

The Health and Environment Committee conducted a public meeting on Wednesday, April 26, 2000 at nine o'clock and forty minutes a. m. in the Sullivan Chamber.

The purpose of the meeting was to discuss informally the proposed tree ordinances.

Present at the meeting were Councillor Henrietta Davis, Chair, Councillor Braude, Ralph Dunphy, Commissioner of Public Works, Larry Acosta City Arborist, Stuart Dash, Director of Community Planning, Community Development Department, and Donna P. Lopez, Deputy City Clerk.

Councillor Davis opened the meeting and outlined the agenda that would be followed. Ms. Carmean from the Cambridge Tree Project, she stated, will inform the attendees of the importance of working on a proposed tree ordinance and a description of what could be included in a proposed tree ordinance and what has taken place in the City of Newton. She stated that there is a lot of interest in a tree ordinance, but the Ordinance Committee needs to be assured that the environmental needs would be also considered.

Karen Carmean, Cambridge Tree Project, stated that there is no regulation in place governing trees and she feels that education is the most critical aspect for the information on trees. She stated that a good systematic process and a handbook on tree information are needed. The public, she stated, does not realize that the ground underneath trees is important for the growth of the tree. There should be an ordinance that has a freedom of choice that will provide economic benefit from trees. Trees, she said, have a societal, health and safety benefit for all and this should be regulated. Cambridge, she said, contains six miles and the trees in the city provide benefit for all. The city needs large trees as well as the preservation of significant trees. Developers come into the city and cut down big trees and plant exotic trees, which may not survive. People need to be educated about the choices that they make. On her web site she has a collection of tree ordinances from all over the world.

Karen Schlomy, 3 Irving Terrace, outlined various sections of the Ordinance Proposal submitted by the Cambridge Tree Project, (**ATTACHMENT A**). She stated

Committee Report #1

~~127~~ J

A report was received from  
Councillor Davis, Chair of  
Health and Environment Committee  
held on April 26, 2000 to  
discuss informally the proposed  
tree ordinance.

S-127

In City Council May 8, 2000

*Report Accepted*

**PLACED ON FILE  
ORDER ADOPTED**