

Programs & Services Committee Report

City of Newton In City Council

Thursday, February 2, 2023

Present: Councilors Krintzman (Chair), Humphrey, Wright, Baker, Albright, Noel, Ryan, and Greenberg

Also Present: Councilors Markiewicz, Lucas, Malakie, Leary, Norton, Oliver, and Lipof

City Staff: Marc Welch, Superintendent of Urban Forestry; Jennifer Wilson, Assistant City Solicitor; Jonathan Yeo, Chief Operating Officer; and Jaclyn Norton, Committee Clerk

For more information regarding this meeting, a video recording can be found at the following link: 02-02-23 Programs & Services Committee Meeting

Referred to Programs & Services and Finance Committees

#411-22 Request for Amendment to Chapter 21, Art III Trees to extend tree protection and update permits

COUNCILORS MALAKIE, NORTON, LEARY, RYAN, WRIGHT, LUCAS, HUMPHREY, BOWMAN, MARKIEWICZ, OLIVER, DOWNS, LAREDO, AND GROSSMAN requesting revisions and amendments to Chapter 21, Art. III Trees (sec. 21-60 through 21-89) to extend tree protection to all trees 6 inches DBH (diameter at breast height) and greater within the City (with no exempt lots); to update tree removal permits, fees, and compensation; and to strengthen protection for existing and replacement trees.

Action: Programs & Services Held 8-0

Note: After discussion on items #411-22 and #412-22, the Committee voted to hold the item. An amended report reflecting the discussion will be available on February 17, 2023.

Referred to Programs & Services and Finance Committees

#412-22 Request for Review and Amendments to Chapter 21, Art. III, Division 3

<u>HER HONOR THE MAYOR</u> requesting review and amendments to Chapter 21, Art. III, Division 3, Tree Preservation to increase replacement requirements for larger trees, add protections for smaller trees, limit removal of trees without replacement, enhance procedures for protecting trees, increasing payment required for trees cut without replacement, protect trees on lots adjacent to construction, provide Tree Warden with additional professional input on trees on private properties.

Action: <u>Programs & Services Held 8-0</u>

Note: This item was discussed concurrently with item #411-22. A written report can be found with item #411-22.

The meeting adjourned at 10:33 pm.

Respectfully Submitted,

Josh Krintzman, Chair

Tree Preservation Ordinance Version Comparison - Current | Councilor Proposal | City Proposal

Sec. 21-80 Findings, intent, and purpose.

The city council has determined that many 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 city council 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 city council has further determined that the city has insufficient legal vehicles to assure that such development adequately preserves, protects and provides for replacement of trees.

The preservation of the private tree canopy and the planting of replacement trees is intended to enhance the quality of life and the environment of the city; to preserve the character of the wooded and natural areas; to reduce energy consumption; to protect air quality; to baffle noise; to preserve and enhance habitat for wildlife; to reduce topsoil erosion and storm water runoff; to protect and increase property values; and to enhance the overall appearance of the city. (Ord. No. A-38, 05-05-14)

Proposed change - difference in versions Councilor Proposal

The city council has determined that **Newton has lost** and continues to lose trees at an alarming rate. Tree loss contributes significantly to the climate emergency that the US Centers for Disease Control creates a public health crisis by producing extreme heat; air pollution; increased allergens; diseases carried by mosquitos, ticks, and rodents; flooding; and more. many trees are being lost without replacement incident to demolition of existing buildings in order to construct new buildings and lotclearing in connection with the construction of newbuildings on previously undeveloped land. The citycouncil 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 city council has further determined that the cityhas insufficient legal vehicles to assure that suchdevelopment adequately preserves, protects and provides for replacement of trees.

Healthy mature trees provide immense public services that cannot be replaced, even by planting saplings. According to Newton's tree warden, an AVERAGE mature street tree (17" DBH) removes 2600 lbs of carbon per year, conserves 1300 kWh per year, intercepts 1900 lbs of stormwater per year.

Moreover, it takes 90 new trees to sequester as much carbon as one mature tree. The city council has determined that replacement alone is not enough.

The city council has further determined that the city has insufficient legal vehicles to assure the adequately preservation and protection of mature

City Proposal

No Change Proposed

trees and the provision for mitigating costs to the city of tree loss, both by replacement of trees and by an environmental mitigation payment.

The preservation of Newton's the private tree canopy and the planting of replacement trees is intended to preserve public health, mitigate climate impacts, and thereby enhance the quality of life and the environment of the city; to preserve. A mature healthy tree canopy preserves the character of the wooded and natural areas; to reduces energy consumption; to protects air quality; to baffles noise; to preserves and enhances habitat for wildlife; to reduces topsoil erosion and storm water runoff; to protects and increases property values; and to enhances the overall appearance of the city. (Ord. No. A-38,05-05-14)

Sec. 21-81. 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.

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

Certified arborist: An arborist certified by the Massachusetts Arborists Association or International Society of Arboriculture, 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.

Exempt lot: A lot which meets all of the following criteria:

- (1) The lot is occupied and used primarily as a dwelling for up to four families at the time any protected tree(s) are removed.
- (2) The lot owner at the time of protected tree removal has owned the lot continuously for a minimum of ninety (90) days prior to the removal of any protected tree(s).
- (3)The existing structure on the lot remains occupied as a dwelling with a person or persons living in it for eighteen consecutive months from the date any protected tree(s) are removed.
- (4) The lot remains owned by the same person for eighteen consecutive months from the date any protected tree(s) are removed.

Proposed change - same in both versions

Exempt lot: A lot which meets all of the following criteria:

(1)The lot is occupied and used primarily as a dwelling for up to four families at the time any protected tree(s) are removed.

(2)The lot owner at the time of protected tree removal has owned the lot continuously for a minimum of ninety (90) days prior to the removal of any protected tree(s).

- (3)The existing structure on the lot remains occupied as a dwelling with a person or persons living in it for eighteen consecutive months from the date any protected tree(s) are removed.
- (4)The lot remains owned by the same person for eighteen consecutive months from the date any protected tree(s) are removed.

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 review of an alteration of contour of land if required pursuant to section 30-5(c)(1); 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.

Occupied Lot: A lot containing a legally constructed, permanent structure, used primarily as a dwelling that is currently being legally occupied and lived in and used as a residence by a person or persons. The dwelling must have a functioning, legally permitted, permanent water service, permanent sanitary service, and permanent electrical service.

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.

Protected tree: Any tree having a diameter of 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 21-82.

Proposed change - same in both versions

Protected tree: Any tree having a diameter of 8" DBH or larger or having an aggregate diameter of fifteen-inches (15") 6" DBH or larger and which is located on land subject to the provisions of section 21-82.

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.

Proposed change - same in both versions

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. most current American National Standard Institute (ANSI) A300 Pruning Standards and as defined by the Tree Warden.

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 Manual: The City of Newton Tree Management Manual, 1995, and any future amendments and revisions to the same. (Ord. No. V-275, 12-6-99)

Proposed change - same in both versions

Tree Manual: The City of Newton Tree Management Manual, 1995, and any future amendments and revisions to the same. (Ord. No. V 275, 12 6-99)

Tree Warden: The commissioner of parks, recreation and culture or his designee. (Rev. Ord. 2007, § 20-31; Ord. No. A-38, 05-05-14; Ord. No. B-53, 03-02-20)

Proposed change - new definitions added - same in both versions

Landmark Tree: Any tree having a diameter of 40" DBH to 54" and which is located on land subject to the provisions of section 21-82.

Legacy Tree: Any tree having a diameter of 55" DBH or larger and which is located on land subject to the provisions of section 21-82.

Lot: The real property contained within front, rear and side lot lines, as established by a plan filed in the registry of deeds, which divide the property from adjoining properties.

Risk Tree Evaluation: The process by which a tree is evaluated to determine the level of risk it poses to the existing property and public at the time of inspection. All risk tree evaluations shall be conducted by a qualified Certified Arborist using a systematic process that identifies, analyzes, and evaluates risk. All tree risk evaluations are to follow the most current ANSI A300 Part 9 Tree Risk Assessment protocol. All tree risk assessments are to be done utilizing industry accepted protocols, forms, and other documentation required by the Tree Warden.

Significant Tree: Any tree having a diameter of 25" DBH to 39" DBH and which is located on land subject to the provisions of section 21-82. Or is a replacement tree as described in 21-85 (e).

Tree Plan: A plan showing (1) the location, type, and size of each tree 5" DBH and larger; (2) which tree(s) are to be removed; and (3) the location, type, and size of replacement trees. The tree plan should also show the location, estimated size, and tree type of any trees that were removed from the lot within the prior 24 months leading up to the application date.

Tree Protection Plan: A plan developed by a Certified Arborist, following the most current version of the ANSI A300 standards including Part 5, management standards for site planning and development. This plan shall set out measures for protecting all trees on the lot during construction as well as trees adjacent to the lot that may be impacted by the construction activity on the applicant's lot.

Tree Save Area: Area within the dripline of a tree or the area within a radius around the tree trunk of 1.5 feet for every inch of DBH, whichever is greater.

Proposed change - difference in versions	
Councilor Proposal	City Proposal
Environmental Mitigation Payment: A payment that takes into account damages to community public health (including increased pests), loss of carbon sequestration and other climate mitigation services, costs of increased energy usage, loss of stormwater drainage services, and increased city infrastructure costs by utilizing a cross-sectional area valuation of each tree to be removed: (DBH) 2 x 0.785 x base value, where the base value is not less than [AMOUNT].	not part of City Proposal

Tree Preservation Ordinance Version Comparison - Current | Councilor Proposal | City Proposal

Sec. 21-82. Applicability,

(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 pursuant to paragraphs (c) and (d) below.

Proposed change - difference in versions Councilor Proposal City Proposal (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 (a) Applicability: The terms and provisions of this protected tree(s) located on an exempt lot pursuant to article shall apply to any protected tree located on paragraphs (c) and (d) below. except on single or two land within the city not owned by the city, the family residential occupied lots where no exterior commonwealth, or any independent authority of the construction is presently underway or planned to commonwealth, or by the federal government except take place during the 24 months following the protected tree(s) located on an exempt lot pursuant to removal of trees, the trees to be removed do not paragraphs (c) and (d) below. meet the Legacy tree designation, and the owner obtains an exemption permit from the tree warden.

(b) Permit, certificate of exemption: No person shall remove a protected tree on a non-exempt lot located on land subject to the provisions of this article, or commence legally permitted exterior work on any lot without first obtaining a tree permit or a certificate of exemption from the tree warden. Applications shall be made in writing on forms specified by the tree warden.

Proposed change - same in both versions

(b) Permit, certificate of exemption: No person shall remove a protected tree on a non-exempt lot located on land subject to the provisions of this article, or commence legally permitted exterior work on any lot without first obtaining a tree permit or a certificate of exemption from the tree warden. Applications shall be made in writing on forms specified by the tree warden.

(c)Exempt lot, certificate of exemption: The owner of an exempt lot shall not be required to apply for a tree permit, provided however, that an owner of an exempt lot who seeks an exterior work permit must certify to the tree warden on form(s) provided by the tree warden, that as of the date on the form(s) the lot qualifies as an exempt lot and will remain an exempt lot for eighteen months following tree removal. There shall be no fee for filing a certificate of exemption.

(1) The tree warden shall determine whether a property is an occupied lot for the purposes of establishing exempt lot status. The property owner shall, if requested by the tree warden provide proof of ownership as well as a written statement confirming ownership and that a person or persons are living in the property.

(2)If lot ownership changes during the eighteen consecutive months following the removal of any protected tree(s) on an exempt lot, the new owner must apply for a tree permit and shall be required to replace any protected tree(s) that were removed. If, however, a change of ownership occurs on a lot for which an extension of exempt lot status for non-occupancy during construction has been issued within the eighteen months prior to the change in ownership, the person issued such extension shall apply for a tree permit and shall be required to replace any protected tree(s) that were removed.

(d)Extension of exempted lot status: If at any point during the eighteen consecutive months following the removal of any protected tree(s) the property is no longer an occupied lot, the current owner of the lot must apply for a tree permit. If the non-occupancy is due to legally permitted construction, the tree warden may grant an extension of exempt lot status for the duration of the construction, provided:

(1)The owner intends to own the lot for eighteen consecutive months from the date a certificate of occupancy is issued for the construction for which the extension was issued; and

(2) The property remains an occupied lot for eighteen consecutive months from the date a certificate of occupancy is issued for the construction for which the extension was issued.

(3)Upon request of an applicant for exempt lot status extension, the tree warden may also waive the requirement that the lot be continuously owned by the same owner for ninety (90) days prior to protected tree removal provided the owner intends to own the lot for twenty-one months from the date a certificate of occupancy is issued for the construction for which the extension is granted.

(4)If at any time during the applicable eighteen or twenty-one month period the lot ownership changes or the lot is not occupied, the tree warden shall revoke the tree permit and exempt lot status extension. The person issued the extension shall file a new tree permit application and shall replace any protected trees that were removed.

(5)Any person issued an extension of exempt lot status must report to the tree warden any change of ownership and any change of occupancy status within fifteen (15) days of the change if that change takes place during the applicable eighteen (18) month or twenty-one (21) month period following the date the certificate of occupancy issued. (Ord. No. A-38, 05-05-14)

Proposed change - same in both versions

(c)Exempt lot, certificate of exemption: The owner of an exempt lot shall not be required to apply for a tree-permit, provided however, that an owner of an exempt lot who seeks an exterior work permit must certify to the tree warden on form(s) provided by the tree warden, that as of the date on the form(s) the lot qualifies as an exempt lot and will remain an exempt lot for eighteen months following tree removal. There shall be no feefor filing a certificate of exemption.

— (1)The tree warden shall determine whether a property is an occupied lot for the purposes of establishing exempt lot status. The property owner shall, if requested by the tree warden provide proof of ownership as well as a written statement confirming ownership and that a person or persons are living in the property.

— (2)If lot ownership changes during the eighteen consecutive months following the removal of any protected tree(s) on an exempt lot, the new owner must apply for a tree permit and shall be required to replace any protected tree(s) that were removed. If, however, a change of ownership occurs on a lot for which an extension of exempt lot status for non-occupancy during construction has been issued within the eighteen months prior to the change in ownership, the person issued such extension shall apply for a tree permit and shall be required to replace any protected tree(s) that were removed.

(d)Extension of exempted lot status: If at any point during the eighteen consecutive months following the removal of any protected tree(s) the property is no longer an occupied lot, the current owner of the lot must apply for a tree permit. If the non-occupancy is due to legally permitted construction, the tree warden may grant an extension of exempt lot status for the duration of the construction, provided:

7 of 22

- (1)The owner intends to own the lot for eighteen consecutive months from the date a certificate of occupancy is issued for the construction for which the extension was issued; and
- (2)The property remains an occupied lot for eighteen consecutive months from the date a certificate of occupancy is issued for the construction for which the extension was issued.
- (3)Upon request of an applicant for exempt lot status extension, the tree warden may also waive the requirement that the lot be continuously owned by the same owner for ninety (90) days prior to protected tree-removal provided the owner intends to own the lot for twenty one months from the date a certificate of occupancy is issued for the construction for which the extension is granted.
- (4)If at any time during the applicable eighteen or twenty-one month period the lot ownership changes or the lot is not occupied, the tree warden shall revoke the tree permit and exempt lot status extension. The person issued the extension shall file a new tree permit application and shall replace any protected trees that were removed.
- (5)Any person issued an extension of exempt lot status must report to the tree warden any change of ownership and any change of occupancy status within fifteen (15) days of the change if that change takes placeduring the applicable eighteen (18) month or twenty one (21) month period following the date the certificate of occupancy issued. (Ord. No. A 38, 05 05 14)

Proposed change - difference in versions	
Councilor Proposal	City Proposal
not part of Councilor proposal	(c)In the case where tree(s) were removed from a single or two family residential occupied lot where no exterior construction was planned but construction did take place within the 24 months following the removal of tree(s) the current property owner will be required to file for a tree permit and will be required to comply with the replacement requirements of sec. 21-85

Sec. 21-83. Permit application.

(a) Contents, fee: An application for a tree permit shall be submitted to the tree warden. The application for a tree permit shall be accompanied by a fee in the amount of one hundred fifty dollars (\$150.00) and shall include, but not be limited to, the following:

Proposed change - same in both versions

- (a) Contents, fee: An application for a tree permit shall be submitted to the tree warden. The application for a tree permit shall be accompanied by a fee in the amount of one hundred fifty dollars (\$150.00) 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;

Proposed change - same in both versions

(1) A plan showing The shape and dimensions of the parcel of real property, together with the existing and proposed locations of structures and improvements, if any, and showing the limit of work;

(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;

Proposed change - same in both versions

(2) A tree plan showing the location, type and size of each protected tree 5" in DBH and larger indicating which protected tree(s) are to be removed, and the location, type and size of replacement trees. The tree plan should also show the location, estimated size, and tree type of any trees that were removed from the lot within the prior 24 months leading up to the application date;

Proposed change - new definitions added - same in both versions

(new #) Documentation from a Certified Arborist if any trees are dead, diseased, injured, in danger of falling, dangerously close to existing structures, disrupting public utility services, causing drainage or passage problems on rights-of-way, or posing a threat to public safety

- (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;

Proposed change - same in both versions

- (5) Any proposed grade changes which might adversely affect or endanger any Protected Tree or is within the Tree Save Area of any protected tree on the applicant's lot or any abutting lot requires 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.

Proposed change - same in both versions

(6) The proposed method of protecting the remaining protected trees on the applicant's lot and any abutting lots during the course of construction or tree removal shall be prepared by a Certified Arborist;

Proposed change - new definitions added - same in both versions

(7) For any activity requiring Exterior Work Permit or involving tree removal, where Protected Trees are to remain on the lot or where the Tree Save Area of Protected Trees on adjacent lots comes onto the applicant's lot, a Tree Protection Plan must be completed by Certified Arborist (as specified in 21-81).

Proposed change - difference in versions	
Councilor Proposal	City Proposal
not part of Councilor proposal	(8?) The Tree Warden may waive the above listed requirements when an applicant is seeking to remove a protected tree but no exterior work is planned. The Tree Warden shall still require a tree permit application be filed and supporting documentation provided.

Proposed change - o	difference in versions
Councilor Proposal	City Proposal
(b) Fee: The application for a tree permit shall be	(b) Fee: The application for a tree permit shall be
accompanied by a fee in the amount(s) listed below.	accompanied by a fee in the amount(s) listed below.
(1) The fee for a tree permit for the removal of a dead or significantly compromised tree(s) that a certified arborist has attested to on forms required by the City shall be \$0	(1) The fee for an exemption permit or tree permit for the removal of a dead or significantly compromised tree(s) that a certified arborist has attested to on forms required by the City shall be \$0 if there is no pending or planned Exterior Work on the lot.
(2) The administrative fee for processing a tree permit for all tree removal work or Exterior work with the exception of (b) (1) shall be \$200.	(2) The administrative fee for processing a tree permit for all tree removal work or Exterior work with the exception of (b) (1) shall be \$200.

(b) Review of permit applications: The tree warden shall review applications for tree 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 permit. The tree warden shall complete the review of each tree 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 permit application submitted in connection with a building permit as to whether said tree 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.

Proposed change - difference in versions

Councilor Proposal

(c b) Review of permit applications: The tree warden shall review applications for tree 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 permit. The tree warden shall complete the review of each tree permit application no later than **twenty (20)** business days after the submission of a completed application to the tree warden and shall report to the commissioner of inspectional services within **twenty (20)** business days of a request with respect to any tree permit application submitted in connection with a building permit as to whether said tree 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 permitwithout receipt of such report. The commissioner of inspectional services shall not accept an application for a building permit without confirmation of an approved tree permit.

The City shall use the online permitting system to automatically generate notifications of Tree Permit applications to abutters and neighbors within 500 feet of the lot on which the Protected Tree is located.

City Proposal

(c b) Review of permit applications: The tree warden shall review applications for tree 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 permit. The tree warden shall complete the review of each tree 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 permit application submitted in connection with a building permit as to whether said tree permit has been granted or denied. If no such report is received by the commissioner within the above-stated time period, he the commissioner shall accept an application for a building permit without receipt of such report.

not part of City Proposal

11 of 22

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

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(de) Standards for grant or denial: No tree permit shall be issued unless an Environmental Mitigation Payment is made (as outlined in section 21-86) and one of the following conditions exists:	(de) Standards for grant or denial: No tree permit shall be issued unless one of the following conditions exists:

(1) The protected tree will be relocated or replaced on site.

Proposed change - same in both versions

- (1) The protected tree will be relocated or replaced on site per section 21-85, Tree Replacement.
- (2) The protected tree will be replaced by payment in lieu of planting replacement trees as outlined in section 21-86.
- (3) The protected tree is interfering with existing structures, utilities, streets, sidewalks or other existing improvements

Proposed change - same in both versions

- (3) The protected tree is interfering with existing structures, utilities, streets, sidewalks or other existing improvements. Documentation of the interference and damage being currently caused shall be provided to the Tree Warden as part of the permit application, per section 21-83 (a)(3).
- (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-ofway, or poses a threat to pedestrian or vehicular safety.

Proposed change - same in both versions

- (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. **Documentation shall be provided by a Certified Arborist utilizing industry approved Risk Tree Evaluation method and any additional forms or documentation required by the Tree Warden.**
- (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.
- (6) No protected tree(s) are to be removed from the site and appropriate tree protection measures will be in place where necessary as determined by the tree warden.

12 of 22

(d) Conditions: Upon the issuance of a tree 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.

Proposed change - difference in versions

Councilor Proposal

(ed) Conditions: Upon the issuance of a tree permit, the tree warden may prescribe in writing additional parameters and requirements related to the protection of trees to remain on the lot and trees within a reasonable distance from the lot.

No Exterior Work, site disturbance, or tree removal work shall take place on a lot untill all tree protective measureas are approved and in place. The tree Permit holder must provide documentation from a Certified Arborist on the form(s) provided by the Tree Warden that all protective measureas are in place. Once the Tree Warden has made a determination that the tree protection measureas are in place, the Tree Warden will provide written documentation to the property owner and commissioner of Inspectional Services that Exterior Work may commence

A copy of the Tree Permit must be displayed on site such that it is visible from the adjacent roadways and must be in place no later than the day after issuance and remain in place for the duration of the permitrelated activities

City Proposal

(ed) Conditions: Upon the issuance of a tree permit, the tree warden may prescribe in writing additional parameters and requirements related to the protection of trees to remain on the lot and trees within a reasonable distance from the lot.

No Exterior Work, site disturbance, or tree removal work shall take place on a lot untill all tree protective measureas are approved and in place. The tree Permit holder must provide documentation from a Certified Arborist on the form(s) provided by the Tree Warden that all protective measureas are in place. Once the Tree Warden has made a determination that the tree protection measureas are in place, the Tree Warden will provide written documentation to the property owner that Exterior Work may commence

A copy of the Tree Permit must be displayed on site such that it is visible from the adjacent roadways and must be in place no later than the day after issuance and remain in place for the duration of the permitrelated activities

(e) Construction: Except as provided in a tree 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.

Proposed change - same in both versions

(fe) Construction: Except as provided in a tree permit, construction activities under within the drip line Tree Save Area of a protected tree, including those on adjoining lots, are prohibited. Activities include, but are not limited to, excavation, trenching or grading, storage of materials or equipment, passage of heavy equipment within the drip line Tree Save Area and spillage of chemicals or other materials, which are damaging to trees. Tree Protection plans provided by the Certified Arborist must also include protective measures for protected trees on adjoining lots.

(f) Suspension or revocation: A tree 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 permit upon compliance, where practicable. The suspension or revocation of a tree 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 permit nor shall such suspension or revocation be cause for withholding the issuance of a certificate of occupancy.

Proposed change - o	lifference in versions
Councilor Proposal	City Proposal
(g) Suspension or revocation: A tree 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 permit upon compliance, where practicable. The suspension or revocation of a tree 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 permit nor shall such suspension or revocation and shall be cause for the commissioner of inspectional services to issue a stopwork order or to withhold the issuance of a certificate of occupancy until the tree warden confirms that the tree permit suspension or revocation is resolved.	no change in City Proposal

(g) Appeal: Any person aggrieved by a decision of the tree warden may file an appeal 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 issuance of the tree warden's decision. Upon receipt of such appeal, the mayor or his designee shall provide a copy to the clerk of the city council and to each councilor for the ward in which the trees are located. 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. The mayor or his designee shall include in the decision the rationale therefor. Upon issuance of the final decision, the mayor or his designee shall provide a copy to the clerk of the city council and to each ward councilor for the ward in which the trees are located. There shall be no further appeal of the matter decided by the mayor or his designee. No protected trees shall be removed while an appeal is pending. (Ord. No. V-275, 12-6-99; Ord. No. X-202, 04-03-06; Rev. Ord. 2007, § 20-33; Ord. No. A-38, 05-05-14)

Proposed change - difference in versions

Councilor Proposal

(hg) Appeal: Any person aggrieved by a decision of the tree warden may file an appeal with the mayor (or histhe mayor's designee) and the councilors of the ward in which the protected trees are located. Said appeal must be in writing and must be received by the mayor and councilors within five (5) business days of issuance of the tree warden's decision. Upon receipt of such appeal, the mayor or his mayor's designee shall provide a copy to the clerk of the city council and to each abutter of the property on which the trees are located. The mayor and councilors shall be guided by reasonable safety and tree wellbeing provisions in granting approval of the removal of healthy mature trees. The mayor and the councilors shall jointly make a final decision on the matter within thirty (30) days from the date of receipt of the appeal (in the case of a tie vote, the tree warden's decision stands). The mayor shall include in the decision the rationale thereof. Upon issuance of the final decision, the mayor shall provide a copy to the clerk of the city council and to each abutter. There shall be no further appeal of the matter decided by the mayor and councilors. No protected trees shall be removed while an appeal is pending. (Ord. No. V-275, 12-6-99; Ord. No. X-202, 04-03-06; Rev. Ord. 2007, § 20-33; Ord. No. A-38, 05-05-14)

City Proposal

(hg) Appeal: Any person aggrieved by a decision of the tree warden may file an appeal with the mayor or histheir designee. Said appeal must be in writing and must be received by the mayor or his their designee within five (5) business days of issuance of the tree warden's decision. Upon receipt of such appeal, the mayor or his their designee shall provide a copy to the clerk of the city council and to each councilor for the ward in which the trees are located. The mayor shall seek input and consult with the Ward councilor in which the trees are located. The mayor or their designee shall make a final decision on the matter within thirty (30) days from the date of receipt of the appeal. The mayor or his the mayor's designee shall include in the decision the rationale therefor. Upon issuance of the final decision, the mayor or his the mayor's designee shall provide a copy to the clerk of the city council and to each ward councilor for the ward in which the trees are located. There shall be no further appeal of the matter decided by the mayor or his the mayor's designee. No protected trees shall be removed while an appeal is pending. (Ord. No. V-275, 12-6-99; Ord. No. X-202, 04-03-06; Rev. Ord. 2007, § 20-33; Ord. No. A-38, 05-05-14)

15 of 22

Sec. 21-84. 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.

Proposed change - same in both versions

(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 ANSI A300 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.

Proposed change - same in both versions

- (a) 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, or designee, to remove such tree, utilizing such professional criteria and technical assistance as he the tree warden 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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-34; Ord. No. A-38, 05-05-14)

Sec. 21-85. 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 21-82 without a tree 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 permit in accordance with section 21-83, shall replace such tree within eighteen (18) months, or prior to transfer of property ownership whichever comes first from the date the tree permit is issued 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.

Proposed change - difference in versions

Councilor Proposal

(1) Replacement tree(s) 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. Trees planted as hedges shall not count as Replacement Trees.

City Proposal

(1) Replacement tree(s) 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. Trees planted as hedges shall not count as replacement trees trees unless otherwise permitted by the Tree Warden.

(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.

Proposed change - same in both versions

(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. conform to the following:

a)For every protected tree removed, that does not qualify as a Significant, Landmark, or Legacy tree, the total DBH of the replacement trees shall, when added together, equal the total DBH of the protected tree that has been removed.

b)For every protected tree removed that also meets the Significant Tree definition, but is not a Landmark or Legacy Tree, The total DBH of the replacement trees shall, when added together, equal 1.5 times the total DBH of the Significant tree that has been removed.

c)For every protected tree removed that also meets the Landmark Tree definition, but is not a Legacy Tree the total DBH of the replacement trees shall, when added together, equal 2 times the total DBH of the Landmark tree that has been removed.

d)For every protected tree removed that also meets the Legacy Tree definition, the total DBH of the replacement trees shall, when added together, equal 3 times the total DBH of the Legacy tree that has been removed.

(3) A replacement tree shall be required to survive for a minimum of eighteen (18) months 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.

Proposed change - same in both versions

(3) A replacement tree shall be considered a Significant Trees regardless of trunk diameter, health or condition required to survive for a minimum of eighteen (18) months from the date it is planted. The Tree Permit holder person 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. Documentation shall be provided by a Certified Arborist on form(s) provided by the Tree Warden that the trees are in place.

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(4) No Replacement Tree shall be removed without a	
Tree Permit. Replacement Tree should survive at	
least ten years. If a Replacement Tree is to be	
removed during this time, Tree Permit applicants will	
be required to meet the replacement requirements of	(4) No replacement tree shall be removed without a
a Significant Tree, will not be eligible for any	Tree Permit. Tree Permit applicant will be required to
reductions in the new environmental mitigation	meet the replacement requirements of a Significant
payment, and must reimburse the replacement	Tree any time a replacement tree is to be removed.
reduction for the removed tree(s).	

(45) A replacement tree shall be planted on the same lot from which the tree was removed.. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-35, Ord. No. A-38, 05-05-14)

Sec. 21-86. 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.

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(b) Environmental Mitigation Payment: This payment	
will be required for all Protected Trees removed. The	
Environmental Mitigation Payment will be waived if	
Protected Trees are removed because of	

ii significant utility infrastructure projects undertaken pursuant to State or Federal regulations or programs,

iii where a tree poses significant negative impact to an adjacent structure,

iv for dead or dangerous trees, or

where a Lot is of such density with existing trees
that the removal of certain Protected Trees is
considered beneficial to the health of the tree canopy
on the Lot.

The required Environmental Mitigation Payment

(DBH2 x 0.785 x base value, where the base value is
not less than [AMOUNT]) will be reduced by the crosssectional valuation of each Replacement Tree.

not part of City Proposal

(b) Payment in lieu of planting replacement tree(s): In lieu of planting a replacement tree as provided in section 21-85, a person who has been granted a tree 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 21-85, which cost shall be determined by the tree warden based on the City's current cost to purchase and install trees.

Proposed change - difference in versions

(c) Payment in lieu of planting Replacement Tree(s): In lieu of planting Replacement Trees as provided in section 21-85, a person who has been granted a Tree Permit may choose to pay the Environmental Mitigation Payment in full, without taking the allowed Replacement Tree deduction. 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 21-85, which cost shall

current cost to purchase and install trees.

be determined by the tree warden based on the City's

Councilor Proposal

City Proposal

(c) Payment in lieu of planting replacement tree(s): In lieu of planting a replacement tree as provided in section 21-85, a person who has been granted a tree 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 21-85, which cost shall be determined by the tree warden based on the City's current cost to purchase, install, and maintain trees for the first five years. The Tree Warden will update this cost annually.

(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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-36; Ord. No. A-38, 0505-14)

Sec. 21-87. Rule and regulations.

The tree warden is authorized to promulgate reasonable rules and regulations to implement administration of sections 21-80 through 21-90. (Ord. No. A-38, 05-05-14)

Sec. 21-88. 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 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 21-86), 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 in section 21-89.

(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.

Proposed change - same in both versions

(1) Upon notice from the tree warden that work on any protected tree, or lot, **or abutting 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.

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(2) The tree warden is also authorized to direct	
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	no change in City Proposal
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.

Proposed change - same in both versions

(3) Any person who shall continue any work in or about the protected tree or lot on which a protected tree is located, **or an abutting lot**, 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 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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-37; Ord. No. A-38, 05-05-14)

Sec. 21-89. 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).

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(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	no change in City Proposal
dollars (\$300.00). Each day until a Permit Application	
is filed shall constitute a seprate offense.	

(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.

Proposed change - difference in versions	
Councilor Proposal	City Proposal
(b) Failure to replace trees or make payment: Each	
failure to replace a tree or make an Environmental	
Mitigation payment into the tree replacement fund	
shall constitute a separate violation of this article	no change in City Proposal
which shall be subject to a fine in the amount of three	no change in City Proposal
hundred dollars (\$300.00). Each day such violation	
continues shall constitute a separate offense.	
·	

- (c) Failure to comply with a condition contained in a tree permit or stop work order: Each instance where there is a failure to comply with a condition contained in a tree permit or stop work order shall constitute a 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.
- (d) 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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-38; Ord. No. A-38, 05-0514)

Tree Preservation Ordinance Version Comparison - Current | Councilor Proposal | City Proposal

Sec. 21-90. 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.

(a) 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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-39; Ord, No. A-38, 05-05-14)

Proposed change - d	ifference in versions
Councilor Proposal	City Proposal
(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. This ordinance shall guide	
requirements for special permits (Chapter 30, Zoning),	no change in City Proposal
with regard to tree removal and replacement.	no change in city i roposar
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. (Ord. No. V-275, 12-6-99; Rev. Ord.	
2007, § 20-39; Ord, No. A-38, 05-05-14)	

		Current	Admini	Administration proposal	roposal		Cambridge		City	City councilors' proposal	proposal	ANNUAL	ANNUAL benefits example (Northern red oak) Arbor Day	(Northern red	oak) Arbor Day
		ordinance										H :	https://www.arborday.org/calculator/index.cfm	.org/calculator/i	ndex.cfm
		\$200 × DBH	\$280 x Ca (\$280 p	30 x Category Factor x D (\$280 per packet slides)	\$280 x Category Factor x DBH (\$280 per packet slides)	\$850 × C.	\$850 x Category Factor x DBH	for x DBH	Mitigation Payment = Base Value (TBD) x cross sectional area = Base Value x .785 x DBH squared	rment = Base V area = Base \ DBH squared	/alue (TBD) x /alue x .785 x	For multis	For multistep calculation of the cost of lost benefits, see the last Answer in the FAQs on the Councilors' Proposal	the cost of lost k	enefits, see the
												005	Stormwater		Cost of Lost Benefits until Replacement
	Size (DBH)	Payment in Lieu	Category	Factor	Payment in Lieu	Category	Factor	Payment in Lieu	If Base If Value=\$13 Va	lf Base Value=\$25	If Base Value=\$50	reduction (Lbs)		Energy (kW/h)	Tree Matures (30 years)*
(Renlacement	2	\$400			\$560				\$41	819	\$157	26			\$2,618
tree size &	m ×	\$600			\$840				\$92	\$177	\$353	42.02	221	+ 1	\$3,184
planting credit)	4 ი	\$1,000			\$1,120				\$163 \$255	\$3.14 \$491	\$626 \$981	82 116			\$4,387
	9	\$1,200	Protected	-	\$1,680	Significant	-	\$5,100	\$367	\$707	\$1,413	157			
	80	\$1,600	Protected	-	\$2,240	Significant	-	\$6,800	\$653	\$1,256	\$2,512	239			\$6,581
	10	\$2,000	Protected	-	\$2,800	Significant	-	\$8,500	\$1,021	\$1,963		333			
	12	\$2,400	Protected	-	\$3,360	Significant	-	\$10,200	\$1,470	\$2,826		439			
	14	\$2,800	Protected	_ ,	\$3,920	Significant	- ,	\$11,900	\$2,000	\$3,847		544			
	16	\$3,200	Protected		\$4,480	Significant		\$13,600	\$2,612	\$5,024	\$10,048	634	2,135	131	\$12,100
•	- 42	\$3,600	Protected		\$5.040	Significant		\$15,300	\$3.306	\$6,359	\$12,717	209			
	20	\$4,000	Protected	-	\$5,600	Significant	-	\$17,000	\$4,082	\$7,850	\$15,700	784			\$14,294
	22	\$4,400	Protected	-	\$6,160	Significant	1	\$18,700	\$4,939	\$9,499	\$18,997	869	3,214	162	\$15,355
	24	\$4,800	Protected	-	\$6,720	Significant	_	\$20,400	\$5,878	\$11,304	\$22,608	963		175	
	25	\$5,000	Significant	1.5	\$10,500	Significant	_	\$21,250	\$6,378	\$12,266	\$24,531	1,010			
	27	\$5,400	Significant	1.5	\$11,340	Significant	-	\$22,950	\$7,439	\$14,307		1,104			
	29	\$5,800	Significant	1.5	\$12,180	Significant	- !	\$24,650	\$8,582	\$16,505		1,200			
	30	\$6,000	Significant	1.5	\$12,600	Exceptional	7.5	\$38,250	\$9,185	\$17,663	\$35,325	1,249			
	33	\$6,200	Significant	υ. Γ	\$13,020	Exceptional	υ. υ.	\$39,525 \$42,025	\$9,807	\$18,800	\$37,719	1,297	4,999	1.22	\$19,955 \$20,074
	35	\$7.000	Significant	5.1	\$14,700	Exceptional		\$44,625	\$12.501	\$24,041	\$48,081	1,489			
	37	\$7,400	Significant	1.5	\$15,540	Exceptional	1.5	\$47,175	\$13,971	\$26,867	\$53,733	1,586	6,285		
	39	\$7,800	Significant	1.5	\$16,380	Exceptional	1.5	\$49,725	\$15,522	\$29,850	\$29,699	1,682			\$23,563
	40	\$8,000	Landmark	2 0	\$22,400	Exceptional	7: 7:	\$51,000	\$16,328	\$31,400	\$62,800	1,731	1 6,953 c	271	\$23,988
	4	\$8,800	Landmark	2	\$24,640	Exceptional	, r	\$56,100	\$19.757	\$37,994		1.929			\$25,615
	45	\$9,000	Landmark	2	\$25,200	Exceptional	1.5	\$57,375	\$20,665	\$39,741	\$79,481	1,977		296	\$26,040
	46	\$9,200	Landmark	2	\$25,760	Exceptional	1.5	\$58,650	\$21,594	\$41,527					
	48	\$9,600	Landmark	2	\$26,880	Exceptional	1.5	\$61,200	\$23,512	\$45,216					
	20	\$10,000	Landmark	2	\$28,000	Exceptional	1.5	\$63,750	\$25,513	\$49,063	\$98,125	*Does N	*Does NOT include costs from lost tree & its disposal:	from lost tree	& its disposal:
	52	\$10,400	Landmark	2	\$29,120	Exceptional	3. 7.	\$66,300	\$27,594	\$53,066	\$106,132	carbo	carbon emissions, air pollution, energy usage, etc.	ollution, energ	/ usage, etc.
	55	\$11,000	Legacy	3 1	\$46,200	Exceptional	1.5	\$70,125	\$30,870	\$59,366	\$118,731				
•	57	\$11,400	Legacy	3	\$47,880	Exceptional	1.5	\$72,675	\$33,156	\$63,762	\$127,523	F	The Arrest Constitution of Professional Tree Benefit		tigo Donofit
	59	\$11,800	Legacy	၉	\$49,560	Exceptional	7. 7.	\$75,225	\$35,524	\$68,315	\$136,629	Calculator	Calculator only provides information for trees ups to 45 DBH	rmation for tree:	s ups to 45 DBH
	63	\$12,200	Legacy	၁ က	\$57,920	Exceptional		\$80.325	\$40,973	\$77.892	\$155 783				
-	65	\$13,000	Legacy	3	\$54,600	Exceptional	1.5	\$82,875	\$43,116	\$82,916					