



To: City Council

From: Councilors Malakie and Norton

Subj: Materials for Tree Ordinance Discussion on Wed Oct 19

Date: Oct 14, 2022

Attached please find documents to inform the discussion about the proposed changes to the Tree Protection Ordinance.

We worked jointly with Marc Welch to produce several documents. We reached agreement on the following:

- Redline Version of the Ordinance
- Comparison Chart

There are also several additional items of our own that we think will aid the discussion.

- Frequently Asked Questions about the Councilor-Proposed Changes to Newton's Tree Ordinance
- Spreadsheet of Tree Valuations in Ordinances, Proposals, and Lost Benefits from Cut Trees
- Letter of support for the Councilor's Version from Newton's Urban Tree Commission

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	City Proposal
<p>The city council has determined that <u>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.</u> 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.</p> <p><u>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</u></p>	<p>No Change Proposed</p>

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 or tree removal as well as trees adjacent to the lot that may be impacted by the construction or tree removal 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
<p>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: $(DBH)^2 \times 0.785 \times \text{base value}$, where the base value is not less than [AMOUNT].</p>	<p>not part of City Proposal</p>

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 protected tree(s) located on an exempt lot pursuant to paragraphs (c) and (d) below.~~

(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.~~ **except on single or two family residential occupied lots where no exterior construction is presently underway or planned to take place during the 24 months following the removal of trees, the trees to be removed do not 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 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)~~

<i>Proposed change - difference in versions</i>	
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 any proposed 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 - 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 - 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
<p>(8) Large projects, which require a special permit, must also include a Tree Protection Plan that shall be submitted to the Tree Warden not less than 21 days prior to submission of the application for a special permit. The Tree Warden shall certify that s/he has reviewed it, indicating whether it is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The Tree Warden shall refer the Tree Protection Plan with his/her certification and recommendations to the Land Use Committee to guide the establishment of any conditions that may be required as a result of findings of the Tree Protection Plan in connection with the issuance of a special permit.</p>	<p>not part of City Proposal</p>

Proposed change - difference in versions	
Councilor Proposal	City Proposal
<p>not part of Councilor proposal</p>	<p>(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.</p>

Proposed change - difference in versions	
Councilor Proposal	City Proposal
<p>(b) Fee: The application for a tree permit shall be accompanied by a fee in the amount(s) listed below.</p> <p>(1) The fee for a tree permit for the removal of a dead or significantly compromised tree that a Certified Arborist has attested to on forms required by the City and that the Tree Warden determines is accurate shall be \$0.</p> <p>(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.</p>	<p>(b) Fee: The application for a tree permit shall be accompanied by a fee in the amount(s) listed below.</p> <p>(1) The fee for an <u>exemption permit or tree permit</u> 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 <u>the lot</u>.</p> <p>(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.</p>

(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 permit without 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

(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

(d) 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-of-way, 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.

(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

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.**

(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 until all tree protective measures 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 measures are in place. Once the Tree Warden has made a determination that the tree protection measures are in place, the Tree Warden will provide written documentation to the property owner and commissioner of Inspectional Services that Exterior Work may commence

No Exterior Work, site disturbance, or tree removal work shall take place on a lot until all tree protective measures 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 measures are in place. Once the Tree Warden has made a determination that the tree protection measures 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 permit-related activities

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 permit-related 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 - difference 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 stop-work 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 ~~his~~ **the 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 ~~his~~ **their** 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)

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

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.**

(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 a Significant Tree, will not be eligible for any reductions in the new environmental mitigation payment, and must reimburse the replacement reduction for the removed tree(s).

(4) No replacement tree shall be removed without a Tree Permit. Tree Permit applicant will be required to meet the replacement requirements of a Significant Tree any time a replacement tree is to be removed.

(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

v 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 cross-sectional 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

Councilor Proposal	City Proposal
<p>(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 be determined by the tree warden based on the City’s current cost to purchase and install trees.</p>	<p>(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.</p>

(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 exterior work permit that might affect such protected tree while a stop work order is pending.

no change in City Proposal

(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 dollars (\$300.00). **Each day until a Permit Application is filed shall constitute a separate offense.**

no change in City Proposal

(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 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.

no change in City Proposal

(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)

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 - difference 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), with regard to tree removal and replacement.** ~~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)

no change in City Proposal

10/14/2022	Administration Docket Item					Councilor Docket Item
	3+ family & private non-residential (inc. commercial) lots (with or without construction)	1-2 family: no construction disclosed	1-2 family: disclosure of construction (within 24 months)	Special Permit lots (disagreement on special permits)**	All lots	
Which trees are protected?	Trees 6" DBH or larger	None under 55" DBH	Legacy Trees (55" DBH or larger)	Trees 6" DBH or larger	if conflict, Tree Ord not valid	Trees 6" DBH or larger
What are the new tree categories for replacement purposes?	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1	NA	3:1	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1	NA	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1
Are there exemptions for cutting protected trees?	40B Projects exempt	All exempt*	No	No	NA	40B Projects exempt
What are the replacement/mitigation requirements?	Replacement trees OR Payment in Lieu	None	Replacement trees OR Payment in Lieu	Replacement trees OR Payment in Lieu	Not specified	Mitigation payment with DEDUCTION for replacement trees
Is a Certified Arborist required?	Yes	No	Yes	Yes	No	Yes
When is a Certified Arborist required?	nos. 1 - 7 below	NA	nos. 1 - 7 below	nos. 1 - 7 below	NA	nos. 1 - 7 below
Protection of abutter trees during construction and tree removal?	Yes	NA	NA	Yes	Not specified	Yes
Notification given to abutters?	No	No	No	No	No	Yes
Notes	(1) relocation of trees; (2) (a) dead, (b) diseased, (c) injured, (d) in danger of falling, (e) dangerously close to existing structures, (f) disrupting public utility services, (g) causing drainage or (h) passage problems on rights of way, or (i) posing a threat to public safety; (3) grade changes w/in Tree Save Area; (4) Exterior work or tree removal; (5) health of other trees; (6) confirm tree protections in place; (7) confirm replacement trees in place					
	* Any and all trees under 55" DBH will be granted an exemption permit.					
	** Admin version of Sec. 21-90 says, "to the extent that any provision hereof conflicts with said special permit procedures, such provision shall not be valid."					

Frequently Asked Questions about the Councilor-Proposed Changes to Newton's Tree Ordinance

Send questions to ProtectNewtonTrees@gmail.com

last updated 10/14/2022

Click [here](#) to see Councilor Malakie and Councilor Norton's Sept 28 Presentation Slides.

Q: How will the Councilor-proposed changes affect the people of Newton?

A: The most important effects for Newton neighborhoods will be cleaner air, fewer heat islands, reduced flooding, and improved public health. There will also be fewer tax dollars spent on heating and cooling, resurfacing roads, and other climate-related problems.

We had many days over 90 degrees F this summer, and [we know it's going to get worse](#). Whether we actually stop destruction of tree canopies (both urban and forest) will influence how much worse it's going to get for all of us as a community.

For individual homeowners, their own trees will be protected from damage from construction on abutting lots. Higher mitigation requirements will encourage developers to preserve more boundary trees that do not affect the footprint of new construction.

Q: What if I want to expand my house or add an accessible ramp and there is a healthy tree in the way?

A: You can still apply to remove it; you will pay higher costs than before to better reflect the neighborhood's and City's lost environmental benefits from that tree. (Both the Councilor proposal *and* the Mayor's proposal will have higher costs.) The goal of the higher costs is to encourage property owners to adopt the best practices of Green Housing (see below).

Q: What if I need to remove a dangerous or diseased tree?

A: You would file an application for a Tree Removal Permit, including a form signed by a Certified Arborist confirming that the tree is diseased or dangerous. There will be no environmental mitigation payment required for removing diseased or dangerous trees.

Q: Does preserving more trees serve Newton’s Green Housing goals?

A: Yes. The best practices of Green Housing—called “low-impact development” and recommended in a 2018 City report—include planning construction on any individual site around existing Green Infrastructure, notably trees. (See the City of Newton’s 2018 [“Climate Vulnerability Assessment and Adaptation and Resiliency Action Plan,”](#) pp. 58-59.)

Q: Which proposal will preserve more trees?

A: The Councilor-proposed changes will preserve more trees because *all* lots in Newton will be subject to the *same* ordinance requirements.

By contrast, both the current ordinance and the mayor’s proposed changes allow the exemption of about 60 percent of Newton’s properties from the requirement to replace healthy trees that are cut down.

The mayor’s proposed changes may result in a higher loss of trees than under the current ordinance because the new standard for exemption—no “planned” construction for 24 months—cannot possibly be enforced. How could the City ever prove false an owner’s claim that there were no plans for construction at the time of tree removal, even if construction occurs within 24 months?

Q: How high are the costs? I heard \$850 as a base value times (x) the cross-sectional area in inches.

A: There has been no recommendation or decision on base value. As an example, it was noted that the City of Cambridge uses \$850 as a base value and reduces the required payment for low-income residents. Once there is agreement that an environmental mitigation payment is needed *for removing healthy trees*, then there should be discussion on how to calculate the required payment. The Newton City Council may choose whatever base value and whatever reductions for low-income residents make sense for the residents of Newton.

It is proposed that there be no mitigation payment required for dead, diseased, or dangerous trees.

Planting a specified amount of replacement trees will reduce the required environmental mitigation payment.

Q: What minimum size healthy, not-dangerous tree will always require mitigation (whether in the form of replacement trees or payment)?

A. Under the Councilor-proposed changes, healthy not-dangerous trees will require mitigation (and notification of abutters) if they are at least 6 inches in diameter at breast height (DBH, 4.5 feet off the ground), slightly smaller than the tree pictured below on the left.



7-inch DBH tree



47-inch DBH tree

Under the Mayor-proposed changes, only a tree that is 55 inches DBH can never be issued a tree exemption permit—that’s 8 inches *larger than* the tree pictured on the right above (the beech at Newton Centre Green). In other words, a 54-inch DBH tree, on a 1- or 2-family lot with no construction intention *disclosed*, would be exempt and could be cut down without even requiring replacement trees.

10/14/2022	Administration Docket Item					Councilor Docket Item
	3+ family & private non-residential (inc. commercial) lots (with or without construction)	1-2 family: no construction disclosed		1-2 family: disclosure of construction (within 24 months)	Special Permit lots (disagreement on special permits)**	All lots
Which trees are protected?	Trees 6" DBH or larger	None under 55" DBH	Legacy Trees (55" DBH or larger)	Trees 6" DBH or larger	if conflict, Tree Ord not valid	Trees 6" DBH or larger
What are the new tree categories for replacement purposes?	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1	NA	3:1	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1	NA	Protected Tree = 1:1 Significant Tree = 1.5:1 Landmark Tree = 2:1 Legacy Tree = 3:1
Are there exemptions for cutting protected trees?	40B Projects exempt	All exempt*	No	No	NA	40B Projects exempt
What are the replacement/mitigation requirements?	Replacement trees OR Payment in Lieu	None	Replacement trees OR Payment in Lieu	Replacement trees OR Payment in Lieu	Not specified	Mitigation payment with DEDUCTION for replacement trees
Is a Certified Arborist required?	Yes	No	Yes	Yes	No	Yes
When is a Certified Arborist required?	nos. 1 - 7 below	NA	nos. 1 - 7 below	nos. 1 - 7 below	NA	nos. 1 - 7 below
Protection of abutter trees during construction and tree removal?	Yes	NA	NA	Yes	Not specified	Yes
Notification given to abutters?	No	No	No	No	No	Yes
Notes	(1) relocation of trees; (2) (a) dead, (b) diseased, (c) injured, (d) in danger of falling, (e) dangerously close to existing structures, (f) disrupting public utility services, (g) causing drainage or (h) passage problems on rights of way, or (i) posing a threat to public safety; (3) grade changes w/in Tree Save Area; (4) Exterior work or tree removal; (5) health of other trees; (6) confirm tree protections in place; (7) confirm replacement trees in place					
	* Any and all trees under 55" DBH will be granted an exemption permit.					
	** Admin version of Sec. 21-90 says, "to the extent that any provision hereof conflicts with said special permit procedures, such provision shall not be valid."					

The chart above shows the multiple categories of lots and conditions with different degrees of protection for different size trees.

Q: Do I have to get a Certified Arborist before I remove any tree 6 inches DBH or larger?

A: Yes. The Tree Removal Permit application will require a Certified Arborist to sign a City form stating whether each tree proposed for removal is dead, diseased, or dangerous. This requirement is in both the Councilors' and the Mayor's proposals.

Q: How will the Councilors' proposed ordinance impact affordable housing and special-permit projects?

A: Preserving trees will have less impact on **affordable housing** than the electrification and other requirements in the City's proposed [2022 Building Emissions Reduction and Disclosure Ordinance](#).

No changes are proposed for 40B projects (with 20 % or more affordable housing). The state gives the Zoning Board of Appeals, which reviews and approves 40 B projects, the ability to waive any local regulations, and this will continue.

Special permit projects, which may or may not include affordable housing, are proposed to be subject to the same requirements as all property owners: For removal of any healthy, not-dangerous tree, there will be a required environmental mitigation payment, which can be reduced by planting a specified amount of replacement trees.

Current practice has been that the City Council routinely makes compliance with the Tree Preservation Ordinance a condition of special permits. The Councilors' proposal would make this practice a formal requirement.

In the September 21 Programs and Services Committee meeting, some individual Councilors expressed the view that large developers should have a higher mitigation payment. The Newton City Council may choose to add such a requirement (as Cambridge has done), but the Councilor-proposed ordinance changes do *not* include a higher payment for special-permit projects.

No one is suggesting that dense housing be torn down or prevented.

Q: What about Norway Maples or other invasive species?

A: Neither the Councilor-proposed changes nor the Mayor-proposed changes give any reductions or exemptions for removing trees that are invasive species.

Existing tree ordinances have never distinguished between species or treated invasive species differently because they're doing the same climate work that non-invasive trees do: carbon sequestration, providing shade, absorbing storm water, cooling the air, filtering particulate pollution, and so on. Sometimes the only screening for privacy or from sound that people have is Norway Maples.

Q: What about tree damage from gas leaks?

A: Gas Utilities are regulated by the Mass. Department of Public Utilities, not by City ordinance.

Several years ago the City declined to join other municipalities in a lawsuit against National Grid but negotiated a settlement for approximately 10% of damages.

Q: Will this ordinance allow me to stop my neighbors from removing healthy trees?

A: No. But Councilors' proposal will require that you be notified, in the same way that the City currently notifies neighbors when there is a special permit application or a Traffic Council docket item affecting their street. We hope that neighbors can discuss tree removals at the edges of properties, since removal affects both properties.

Neighbors and abutters already have the right to appeal the decision on a tree-removal permit (within five business days of the decision) under the current ordinance. However, without notification that a permit has been applied for, abutters are often unaware a permit has been issued until they see the trees being cut.

Q: Are other communities in Massachusetts moving to preserve their tree canopy?

A: Yes. Cambridge and Boston have taken the lead in acting to preserve and protect their existing tree canopy in addition to planting new trees to expand their canopy. Other communities are also discussing the issue.

Senator Cindy Creem has introduced [state legislation to help fund municipalities](#) seeking to preserve and expand their tree canopies, with a goal of achieving 60% tree cover in each municipality. According to a 2018 City report, Newton's tree canopy covers

48% of total land, and 55.5% of that tree canopy is on residential property ([Climate Vulnerability Assessment and Adaptation and Resiliency Action Plan](#),” pp. 29-30).

Q: What are the monetary costs when a mature, healthy tree is cut down?

A: There are two types of costs. We can currently only calculate one type, but we do need to remember that there are substantial additional costs.

TYPE 1: LOST BENEFITS

There are costs from the lost environmental and public-health services that the tree would have provided during the time that it takes a “replacement” tree to grow to maturity and thus actually come close to providing the same services.

There are publicly available means of estimating some of these lost benefits. The Arbor Day Foundation estimates the annual monetary benefits of a tree for

- draining stormwater
- increasing property value
- saving energy (by reducing heat)
- improving air quality
- reducing atmospheric carbon

The first step is to get an estimate of the annual benefit of a tree. Anyone can calculate this estimate using the Arbor Day Foundation’s National Tree Benefit Calculator:

<https://www.arborday.org/calculator/index.cfm>

Necessary information:

Zip code

All Newton zip codes give the same estimate.

Land-use type

Because benefits here are tied to the assumed property value of different types of lots, I suggest using “single family residential” for all calculations to avoid inequality.

Tree species

Tree DBH

For the example below, I use a 30-inch DBH Northern Red Oak.

annual benefit from Arbor Day calculator = \$275

The second step is to calculate how the annual benefits would accrue over the period of time until a “replacement” tree is large enough to provide the same benefits.

Two assumptions are required to make this calculation:

- annual benefits compound at 5%
basis of assumption: an American Forestry Association book, quoted here:
<https://forestry.usu.edu/trees-cities-towns/urban-forestry/what-is-a-tree-worth>
- it takes about 30 years for a Newton tree to grown to maturity
basis: Newton City Forester, public presentation

Anyone can make this calculation by using a a compound interest calculator, such as this one: <https://www.moneygeek.com/compound-interest-calculator/>

Necessary information to input for the 30-inch DBH Northern Red Oak example:

- initial amount: \$275 (the annual benefit in the first year)
- contributions: \$275 (the assumed annual benefit in each subsequent year)
select annual contributions (not monthly)
- rate of return: 5%
- years of growth: 30 (years to replacement tree maturity)

Result = \$19,459

The estimated \$19,459 cost of the lost benefits of cutting down a healthy 30-inch Northern Red Oak is an UNDERestimate of the lost benefits.

For example, this estimate is for only the property owner; it does not take into account similar losses to abutters. It also assumes that, once mature, the replacement tree provides as much benefit as a 30-inch tree. But since a newly mature tree is likely to be smaller than 30 inches, it would provide fewer annual benefits.

Still an estimate of \$19,459 in losses from cutting a healthy 30-inch oak is substantial, and far more than most people realize when they cut a tree.

TYPE 2: DISPOSAL COSTS

There are environmental and public-health costs of cutting and disposing of the mature, healthy tree. These costs include

- the release of all the carbon sequestered in that tree into the atmosphere

- the contribution to worse air quality and increased energy usage by machines to cut, chip, and probably burn the tree (as [woody pellet biomass, which pollutes worse than burning coal](#))
- the use of technology to drain stormwater (as required by federal law) and mitigate soil erosion without the tree
- the reduction in property value

Unfortunately, there is not yet any publicly accessible means to calculate these costs. Just because we cannot currently estimate them does not mean that these costs are not substantial. [City Green, for example, estimates it at \\$150,000.](#)

It may be these costs that the *City of Cambridge* is capturing in its required environmental mitigation payment for a 30-inch DBH tree: \$38,250.

		Current ordinance	Administration proposal			Cambridge			City councilors' proposal			ANNUAL benefits example (Northern red oak) Arbor Day Foundation National Tree Benefit Calculator https://www.arborday.org/calculator/index.cfm For multistep calculation of the cost of lost benefits, see the last Answer in the FAQs on the Councilors' Proposal				
		\$200 x DBH	\$200 x Category Factor x DBH			\$850 x Category Factor x DBH			Mitigation Payment = Base Value (TBD) x cross sectional area = Base Value x .785 x DBH squared			CO2 reduction (Lbs)	Stormwater intercepted (gallons)	Energy (kW/h)	Cost of Lost Benefits until Replacement Tree Matures	
Size (DBH)		Payment in Lieu	Category	Factor	Payment in Lieu	Category	Factor	Payment in Lieu	If Base Value=\$13	If Base Value=\$25	If Base Value=\$50					
(Replacement tree size & planting credit)	2	\$400			\$400				\$41	\$79	\$157	26	106	5	\$2,618	
	3	\$600			\$600				\$92	\$177	\$353	54	221	11	\$3,184	
	4	\$800			\$800				\$163	\$314	\$628	82	335	17	\$3,750	
	5	\$1,000			\$1,000				\$255	\$491	\$981	116	461	24	\$4,387	
	6	\$1,200		Protected	1	\$1,200	Significant	1	\$5,100	\$367	\$707	\$1,413	157	597	33	\$5,095
	8	\$1,600		Protected	1	\$1,600	Significant	1	\$6,800	\$653	\$1,256	\$2,512	239	869	51	\$6,581
	10	\$2,000		Protected	1	\$2,000	Significant	1	\$8,500	\$1,021	\$1,963	\$3,925	333	1,164	70	\$7,996
	12	\$2,400		Protected	1	\$2,400	Significant	1	\$10,200	\$1,470	\$2,826	\$5,652	439	1,482	93	\$9,411
	14	\$2,800		Protected	1	\$2,800	Significant	1	\$11,900	\$2,000	\$3,847	\$7,693	544	1,799	115	\$10,826
	16	\$3,200		Protected	1	\$3,200	Significant	1	\$13,600	\$2,612	\$5,024	\$10,048	634	2,135	131	\$12,100
	17	\$3,400		Protected	1	\$3,400	Significant	1	\$14,450	\$2,949	\$5,672	\$11,343	671	2,312	136	\$12,595
	18	\$3,600		Protected	1	\$3,600	Significant	1	\$15,300	\$3,306	\$6,359	\$12,717	709	2,490	140	\$13,161
	20	\$4,000		Protected	1	\$4,000	Significant	1	\$17,000	\$4,082	\$7,850	\$15,700	784	2,844	150	\$14,294
	22	\$4,400		Protected	1	\$4,400	Significant	1	\$18,700	\$4,939	\$9,499	\$18,997	869	3,214	162	\$15,355
	24	\$4,800		Protected	1	\$4,800	Significant	1	\$20,400	\$5,878	\$11,304	\$22,608	963	3,599	175	\$16,417
	25	\$5,000		Significant	1.5	\$7,500	Significant	1	\$21,250	\$6,378	\$12,266	\$24,531	1,010	3,791	182	\$16,983
	27	\$5,400		Significant	1.5	\$8,100	Significant	1	\$22,950	\$7,439	\$14,307	\$28,613	1,104	4,176	196	\$18,040
	29	\$5,800		Significant	1.5	\$8,700	Significant	1	\$24,650	\$8,582	\$16,505	\$33,009	1,200	4,587	208	\$18,964
	30	\$6,000		Significant	1.5	\$9,000	Exceptional	1.5	\$38,250	\$9,185	\$17,663	\$35,325	1,249	4,793	215	\$19,459
	31	\$6,200		Significant	1.5	\$9,300	Exceptional	1.5	\$39,525	\$9,807	\$18,860	\$37,719	1,297	4,999	221	\$19,955
	33	\$6,600		Significant	1.5	\$9,900	Exceptional	1.5	\$42,075	\$11,113	\$21,372	\$42,743	1,393	5,410	233	\$20,874
	35	\$7,000		Significant	1.5	\$10,500	Exceptional	1.5	\$44,625	\$12,501	\$24,041	\$48,081	1,489	5,847	244	\$21,794
	37	\$7,400		Significant	1.5	\$11,100	Exceptional	1.5	\$47,175	\$13,971	\$26,867	\$53,733	1,586	6,285	255	\$22,643
	39	\$7,800		Significant	1.5	\$11,700	Exceptional	1.5	\$49,725	\$15,522	\$29,850	\$59,699	1,682	6,723	266	\$23,563
	40	\$8,000		Landmark	2	\$16,000	Exceptional	1.5	\$51,000	\$16,328	\$31,400	\$62,800	1,731	6,953	271	\$23,988
	42	\$8,400		Landmark	2	\$16,800	Exceptional	1.5	\$53,550	\$18,002	\$34,619	\$69,237	1,830	7,415	281	\$24,837
	44	\$8,800		Landmark	2	\$17,600	Exceptional	1.5	\$56,100	\$19,757	\$37,994	\$75,988	1,929	7,876	291	\$25,615
	45	\$9,000		Landmark	2	\$18,000	Exceptional	1.5	\$57,375	\$20,665	\$39,741	\$79,481	1,977	8,105	296	\$26,040
	46	\$9,200		Landmark	2	\$18,400	Exceptional	1.5	\$58,650	\$21,594	\$41,527	\$83,053	The Arbor Day Foundation's National Tree Benefit Calculator only provides information for trees up to 45 DBH			
	48	\$9,600		Landmark	2	\$19,200	Exceptional	1.5	\$61,200	\$23,512	\$45,216	\$90,432				
	50	\$10,000		Landmark	2	\$20,000	Exceptional	1.5	\$63,750	\$25,513	\$49,063	\$98,125				
	52	\$10,400		Landmark	2	\$20,800	Exceptional	1.5	\$66,300	\$27,594	\$53,066	\$106,132				
	54	\$10,800		Landmark	2	\$21,600	Exceptional	1.5	\$68,850	\$29,758	\$57,227	\$114,453				
	55	\$11,000		Legacy	3	\$33,000	Exceptional	1.5	\$70,125	\$30,870	\$59,366	\$118,731				
	57	\$11,400		Legacy	3	\$34,200	Exceptional	1.5	\$72,675	\$33,156	\$63,762	\$127,523				
	59	\$11,800		Legacy	3	\$35,400	Exceptional	1.5	\$75,225	\$35,524	\$68,315	\$136,629				
	61	\$12,200		Legacy	3	\$36,600	Exceptional	1.5	\$77,775	\$37,973	\$73,025	\$146,049				
	63	\$12,600		Legacy	3	\$37,800	Exceptional	1.5	\$80,325	\$40,504	\$77,892	\$155,783				
	65	\$13,000		Legacy	3	\$39,000	Exceptional	1.5	\$82,875	\$43,116	\$82,916	\$165,831				

September 23, 2022

To the Newton City Council:

As a designated Tree City USA, Newton has valued and served as a proud steward of its trees. Yet much has changed since Newton passed its groundbreaking Tree Ordinance in 1999, particularly the accelerating global climate crisis which has underscored the great value of trees to the population and businesses of Newton. It is time for Newton to update and strengthen existing protections and investment in our trees. Thus, we, the Newton Urban Tree Commission, urge the Newton City Council to enact the strongest protections for trees in Newton.

As an initial, interim measure, while proposed ordinance changes are discussed and finalized, we urge you to enact a temporary moratorium on tree removals and take action as soon as possible. Further, we support the City-Council-proposed ordinance (Docket #411-22) because it greatly strengthens protections for *all* trees 6-inches DBH (in diameter at breast height) and larger across *all* properties in Newton.

We share the concerns expressed at the Programs and Services Committee meeting on September 21 about the rush to remove trees that would happen in the absence of the moratorium during the discussion of the ordinance changes.

Cutting healthy, mature trees has harmful impacts on every local neighborhood, the city, and the region, as well as the global climate emergency for so many reasons, including adverse consequences from:

- neighborhood air pollution and heat indices
- storm water drainage
- road quality
- local public health
- the cost of healthcare to individuals and businesses

Each of these negative impacts leads to many direct and indirect costs for the City of Newton and thus the City's taxpayers.

We also applaud Newton's leadership in recognizing the urgent need to mitigate the impacts of climate change by protecting and preserving mature, healthy trees and investing in new street and community trees. Every mature, healthy tree that is preserved contributes meaningfully to carbon capture and energy savings, stormwater and flooding mitigation, cleansing the air, reducing heat, and improving public health and reducing health care costs - for Newton.

We strongly urge the Newton City Council to enact first a temporary moratorium and then the City-Council-proposed ordinance changes. Following the recent actions of Cambridge and Boston to preserve their trees, this would allow Newton to remain in the forefront of communities to preserve their tree canopy.

Respectfully,

The Newton Urban Tree Commission

Strategies for determining a Tree's Monetary Value

- ~~Landscape Appraisal Method~~ – Not suitable for this application
- Environmental Mitigation
- Replacement Method

For comparison purposes over the next several slides we are using averages based on the value based on most common trees removed from private properties. These include:

Norway maple
Red maple
Cherry
Red oak

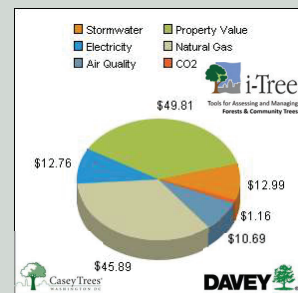
White oak
Elm
White pine
Spruce

Strategies for determining a Tree's Monetary Value

- Environmental Mitigation

USDA Forest Service developed a data set that places dollar value on key environmental measures.

- Atmospheric Carbon Avoided
- Stormwater Runoff Prevention
- Reduced Electric Consumption (kWh)
- Reduced Therms of energy (natural gas & oil)
- Air Quality Improvement



Values vary by species by size. The following slide are several examples:

Strategies for determining a Tree's Monetary Value

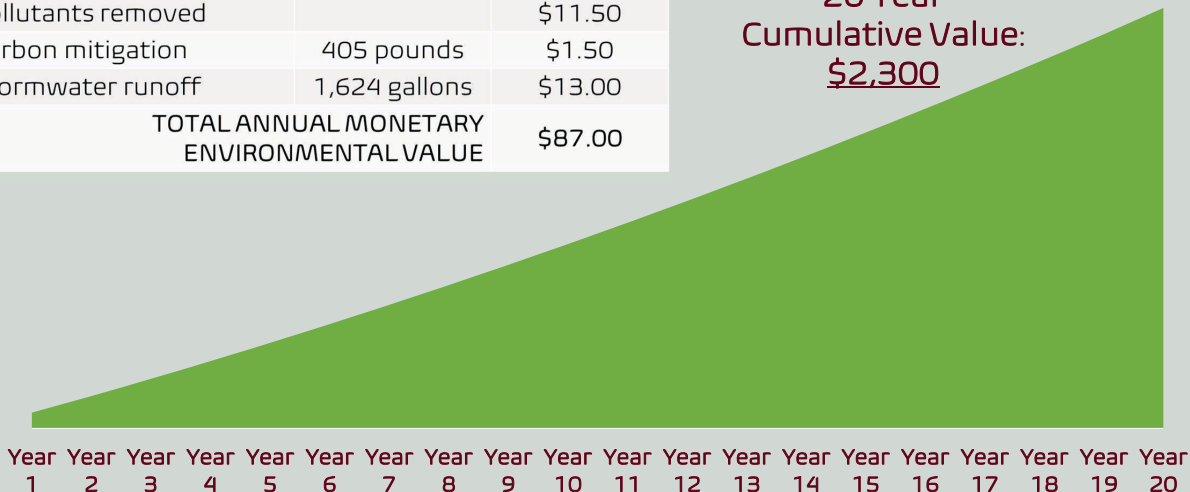
Average size tree removed from private property = 14" DBH

	Enviro Impact	Monetary Value
Electric savings (kWh)	92 hours	\$15.00
Therms (natural gas/oil)	33	\$46.00
Pollutants removed		\$11.50
Carbon mitigation	405 pounds	\$1.50
Stormwater runoff	1,624 gallons	\$13.00
TOTAL ANNUAL MONETARY ENVIRONMENTAL VALUE		\$87.00

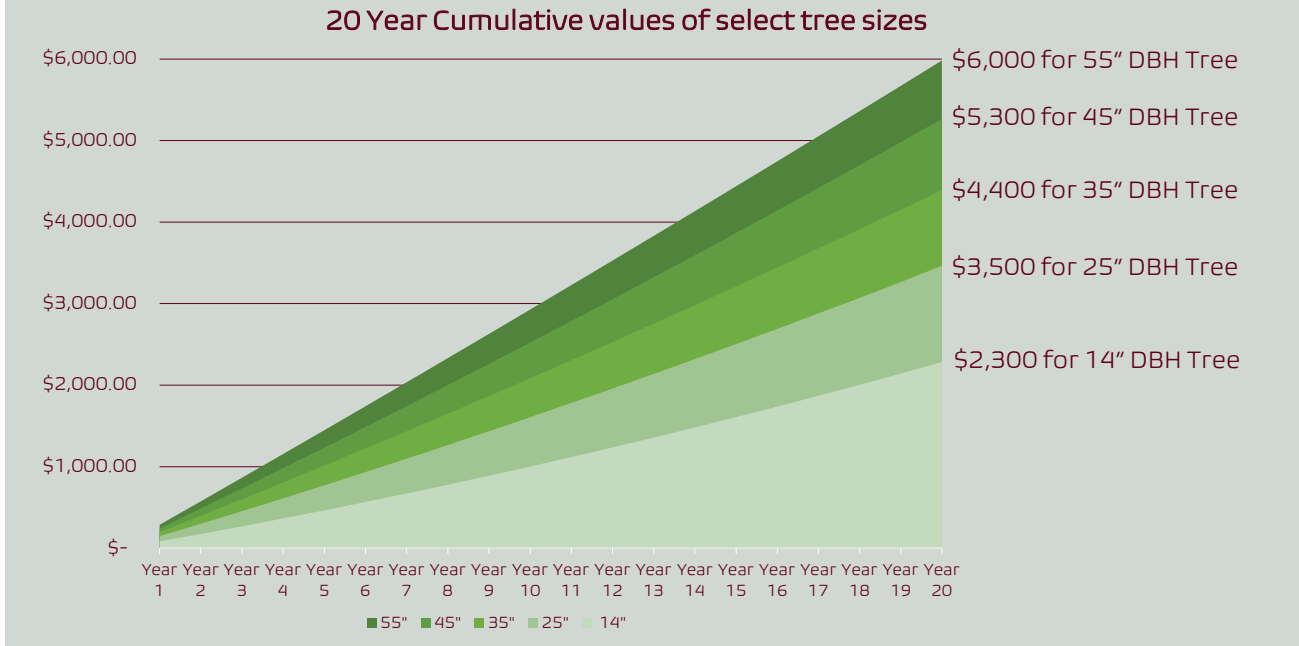
Strategies for determining a Tree's Monetary Value

	Enviro Impact	Monetary Value
Electric savings (kWh)	92 hours	\$15.00
Therms (natural gas/oil)	33	\$46.00
Pollutants removed		\$11.50
Carbon mitigation	405 pounds	\$1.50
Stormwater runoff	1,624 gallons	\$13.00
TOTAL ANNUAL MONETARY ENVIRONMENTAL VALUE		\$87.00

**14" DBH Tree
20 Year
Cumulative Value:
\$2,300**



Strategies for determining a Tree's Monetary Value

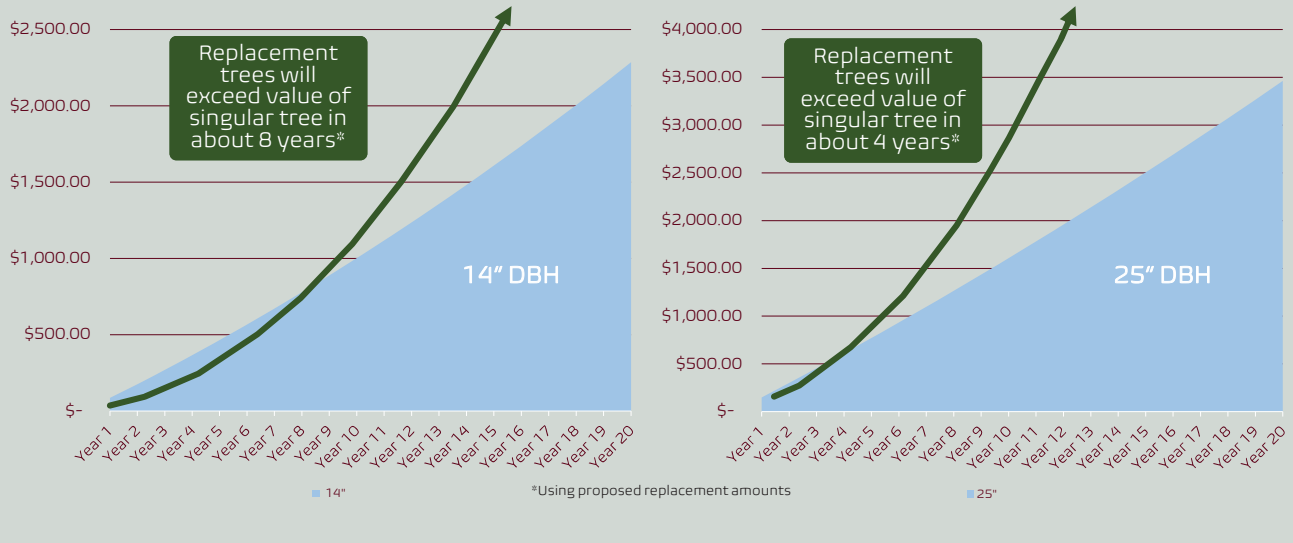


Strategies for determining a Tree's Monetary Value

Per Inch Tree Value				
Size of tree	Annual Value		20 Year Value	
	Per tree	Per DBH inch	Per tree	Per DBH inch
14" DBH	\$87	\$6.21	\$2,300	\$164.29
25" DBH	\$150	\$6.00	\$3,500	\$140.00
35" DBH	\$200	\$5.71	\$4,400	\$125.71
45" DBH	\$243	\$5.40	\$5,300	\$117.78
55" DBH	\$287	\$5.22	\$6,000	\$109.09

Strategies for determining a Tree's Monetary Value

Challenge with using Environmental Monetary Value



Strategies for determining a Tree's Monetary Value

Challenge with using Environmental Monetary Value

Arbor Day Foundation

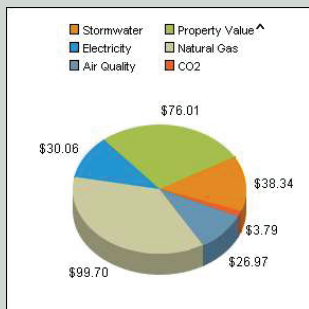
Overall Benefit | Stormwater | Property Value | Energy | Air Quality | CO2 | About

A 30 inch Northern red oak provides overall benefits of **\$275 every year**.

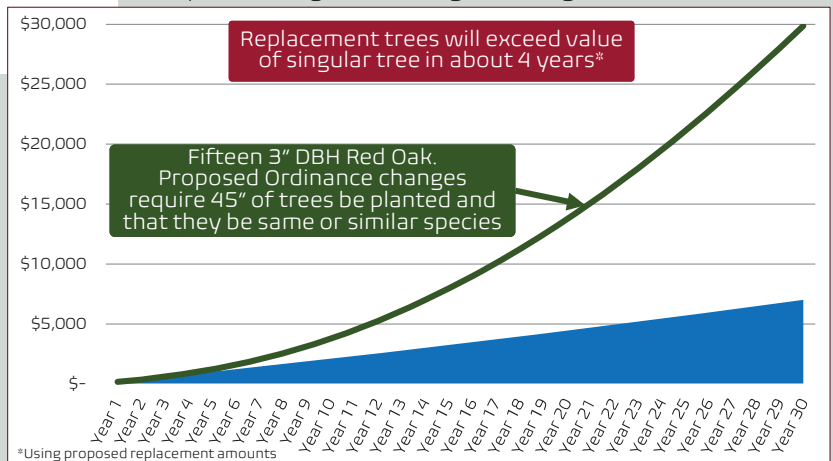
If this tree is cared for and grows to 35 inches, it will provide **\$308 in annual benefits**.

Northern red oak
Quercus rubra

- The use of Environmental Monetary Value introduces variables.
- Looking years into the future requires assumption about growth and survivability.
- May introduce grounds of legal challenges.



^ Property Value not included in figures on this graph. It is not an Environmental Benefit figure. Also introduces concept of property value which can be highly variable when developing a site.



Strategies for determining a Tree's Monetary Value

- Replacement Method

The cost to the City to purchase, install, water, and provide establishment care.

Tree Purchase (incl. supplies)	\$130
Installation	\$40
Weekly watering (2yrs)	\$185
Establishment care	\$65
Total City Cost to Plant Tree	\$420
Per inch cost	<u>\$280</u>

costs as of 10/1/2022

Strategies for determining a Tree's Monetary Value

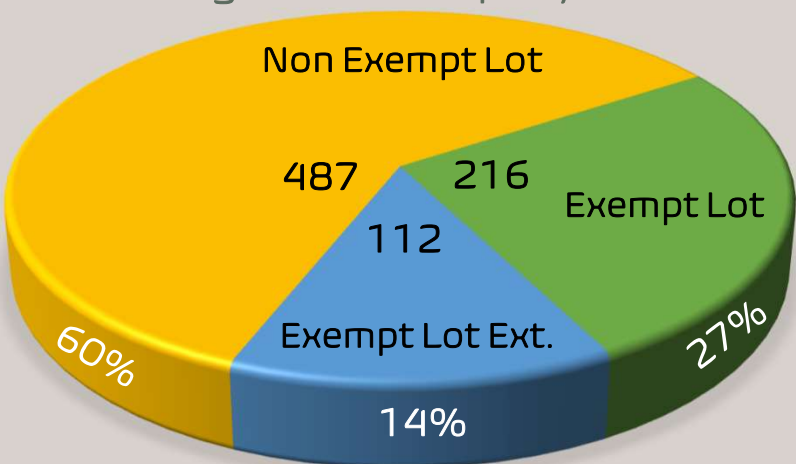
- Environmental Mitigation – Per inch value = \$165
- Replacement Method – Per inch value = \$280

Using these values what would a mitigation payment be?

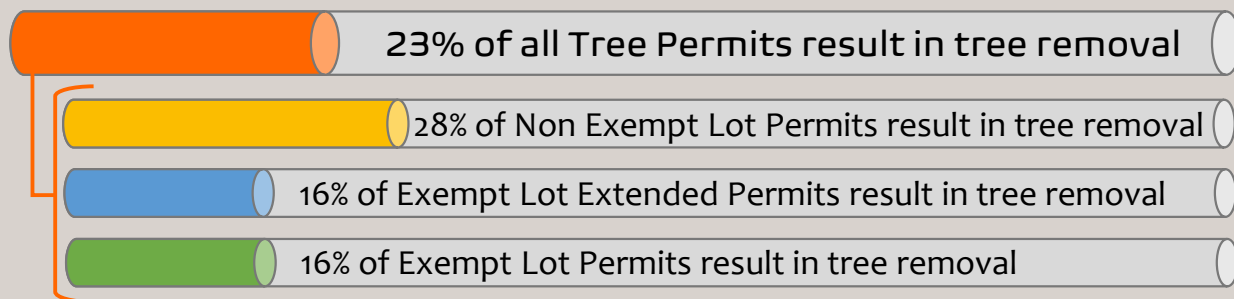
Size of tree removed	Enviro value of \$165/ inch		Rep. value of \$280/inch		Current Ordinance Payment
	Required # of inches	Total Payment	Required # of inches	Total Payment	
14" DBH	14	\$2,300	14	\$3,920	\$2,800
25" DBH	37.5	\$6,167	37.5	\$10,500	\$5,000
35" DBH	70	\$11,550	70	\$19,600	\$7,000
45" DBH	90	\$14,580	90	\$25,200	\$9,000
55" DBH	165	\$27,225	165	\$46,200	\$11,000

Tree Permit Data, Last Three Years

815 Permits Issued over 3 years
(Avg. 250 to 300 per year)



--Average size tree removed 14" DBH
 --Avg. lot w/ removals removes 6 trees
 --160 lots per year are non-exempt
 --Less than 6% Non-exempt lots choose payment in lieu of complete planting



	Lots with Trees Removed	Trees Removed	Diameter Inches Cut
Exempt Lots	35	81	1,650
Exempt Lot Extended	18	45	890
Non Exempt Lots	136	856	11,340
TOTALS	189	982	13,880



#411-22/#412-22

Newton Cemetery & Arboretum

A Beautiful Garden Cemetery Serving Greater Boston

October 14, 2022

VIA EMAIL

City of Newton, Programs & Services Committee
Attn: Councilor Jonathan Krintzman, Chair
1000 Commonwealth Avenue
Newton Centre, MA 02459

RE: Proposed Tree Preservation Ordinance Revisions
Docket Items #411-22 & #412-22

Dear Councilor Krintzman,

We have reviewed the language in the Tree Preservation Ordinance proposals and offer the following comments, concerns, and our request for an exemption.

Since 1855, Newton Cemetery & Arboretum has been a crucial community organization, partnering with and contributing value to the City of Newton. We have been granted the right to function as a burial ground, with the primary purpose to provide grave space that meets the diverse needs of our multi-cultural, multi-faith community. As a private, non-profit organization, we also serve to meet Newton's obligations under [state law](#) requiring the city "to provide one or more suitable places for the interment of persons dying within its limits". In addition to cemetery services, we provide other significant benefits to the City as an historic site that is also a public park, one that is enjoyed by hundreds of visitors every day at no charge.

We are land-constrained but have an obligation to Newton and its residents who depend on us to provide a peaceful place of final repose that is well-maintained as an environmental jewel. As an active garden-style cemetery, we strive to ensure that our ongoing operations and horticultural best practices are upheld.

While the goals of the Ordinance are invaluable in an era of climate change, the current and proposed regulations do not account for our unique situation. We strive to maintain the health of our trees to an extent few others do. This is shown by our listing as a Level II Arboretum with the International [ArbNet](#) Arboretum Accreditation Program, a distinction granted by meeting rigorous criteria such as employing a staff of professional arborists, offering public educational programs, and maintaining an arboretum plan to ensure appropriate care of the tree canopy.

All the responsible practices that we follow are not accounted for under the Ordinance and our holistic, long-term approach to land stewardship should be recognized. The current and proposed Ordinance presents a hardship in creating the burial space required to strengthen our perpetual care endowment for long-term financial stability while maintaining an appropriate density of tree plantings. Finding the right balance of land for both grave plots and trees is not easily achieved, but with careful planning both can be accomplished.

Our success since 1855 substantiates our accomplishment. For more than 165 years across our diverse landscape we have implemented our responsible practices and will continue doing so indefinitely. Our Horticultural Master Plan (HMP) provides the framework for this achievement. As part of our plan to maintain the grounds with prudent horticultural practices, the HMP includes the objectives of increasing our tree canopy, improving species diversity, and expanding native plantings to ensure ongoing tree health and protection. Trees are but one aspect of a healthy natural environment. Shrubs, perennials, annuals, and grasses are continually planted and maintained on the grounds yet are not considered under the Ordinance. The diverse collection of *all* plants attracts a variety pollinators, beneficial predators, birds, and other wildlife creating an active, balanced ecosystem.

While our HMP includes a sensible tree planting plan, the Ordinance discourages us from doing any plantings at any time unless they count towards the replacement requirements for tree removals. This disincentivizes us from following a responsible, tree planting program. Since the Ordinance is triggered only by removals, it compels us to do plantings in bulk, creating a less age-diverse canopy that is inconsistent with prudent arboretum management.

The business and mission of a non-profit cemetery also functioning as a public park and arboretum is complex. We welcome the opportunity to provide perspective and more detail on how the Newton Tree Preservation Ordinance negatively impacts our commitment to the prosperity of Newton's natural environment, so it is more clearly understood. We invite you to visit with us to discuss further.

Newton's only arboretum should be allowed to manage its canopy without being bound to a rigid Ordinance that does not consider the long-term plan for sensibly managing a living collection into perpetuity.

Therefore, we request that Newton Cemetery & Arboretum be exempt from the Tree Preservation Ordinance.

Respectfully submitted,

Newton Cemetery & Arboretum
Board of Trustees and Officers

Lalor Burdick, Chair
Peter G. Kelly, Vice Chair
Mary Ann Buras, President
Adrian S. Bresler, Treasurer
Lawrence C. Bauer, Trustee
Michelle H. Crowley, Trustee
Vincent J. Farina, Trustee
Sara Goldberg, Trustee
Timothy Kierstead, Trustee
Michael J. Rossi, Trustee
G. West Saltonstall, Trustee

Cc: Newton City Council
Mayor Ruthanne Fuller
Jonathan Yeo, Chief Operating Officer, City of Newton
Marc Welch, Director of Urban Forestry, City of Newton
Paul Walker, Director of Operations, Newton Cemetery & Arboretum