



**To:** Programs & Services Committee

**From:** Councilors Malakie & Norton

**Date:** Sept 16, 2022

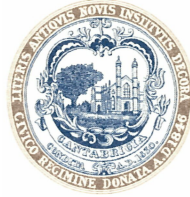
**RE:** Explanation of Attached Tree Ordinance Items #405-22 and #411-22 for Programs & Services Committee 9/21/22 meeting

Attached you will find several items related to Docket Items #405-22 and #411-22, offered by city councilors for strengthening Newton's current tree ordinance:

1. Letter of support from Quinton Zondervan who led the Cambridge City Council's successful 2021 effort to enact tree protection reforms
2. Letter of support from some environmentally-minded organizations and individuals
3. Proposed language for a temporary moratorium on tree removal (#405-22) offered by Councilors Malakie, Norton, Lucas, Humphrey, and Oliver
4. A five-page chart comparing major provisions of the current ordinance, Mayor Fuller's docket item on the ordinance, the Council's docket item (# 411-22), and the tree protections in the current City of Cambridge ordinance
5. Proposed language for docket item (#411-22) offered by Councilors Malakie, Norton, Leary, Ryan, Wright, Lucas, Humphrey, Bowman, Markiewicz, Oliver, Downs, Laredo, and Grossman
6. A two-page document, "Why Newton Needs a New Tree Ordinance," with links to the pertinent scientific data behind our draft ordinance.

**Please also note that at this morning's meeting, the Newton Urban Tree Commission voted to endorse the temporary moratorium.**

We appreciate Mayor Fuller expressing her agreement with us that the current tree ordinance needs strengthening, by virtue of her docketed item. The one filed by councilors goes further, however, and contains crucial provisions to protect our tree canopy. We look forward to the committee discussion.



# CAMBRIDGE CITY COUNCIL

Quinton Y. Zondervan  
*City Councillor*

To the Honorable, the City Council of Newton:

As you consider updating your tree protection ordinance, I offer you some of my thoughts, having helped successfully lead such an effort in Cambridge, in the hope that you find this information helpful.

Starting in 2016, community members determined that our tree canopy in Cambridge was shrinking. Street trees, particularly newly planted saplings, were being visibly impacted by what was then a severe drought. At the same time, people were noticing lots of trees being cut down on private properties. Cambridge already had a tree protection ordinance in place at that time, which regulated large projects, but it did not prevent any trees from being cut down. It only required developers of large projects to replace trees that were removed, or pay into a tree replacement fund.

In early 2019 the problem became so dire that the Council amended the ordinance to require a permit for the removal of any tree over 8" in diameter (outside of large projects) and that no such permits would be issued, except in emergency situations, for the next year, to give the Council time to make permanent modifications to the ordinance. A key consideration in creating this so-called temporary "moratorium" on tree cutting is that we did not want to create a situation where people would start cutting down trees in anticipation of future restrictions.

The regulations for large projects remained in effect, and so the moratorium did not interfere with approved or planned large developments in the city. Of course in 2020 the COVID pandemic hit and we ended up extending the moratorium twice, and adopting more permanent amendments to the ordinance in 2021. During that time the Urban Forest Master Plan was completed, which also helped inform the final ordinance, as well as tree planting and management practices overall.

Trees are essential infrastructure and I wish you much success in your efforts to protect them for the health and safety of your residents.

Sincerely,

Quinton Zondervan  
Cambridge City Councillor

September 16, 2022

To the Newton City Council:

We, the undersigned environmental groups and individuals, are writing to urge the Newton City Council to enact the strongest protections for the most trees in Newton. We urge you, as a best-practice approach, to enact a temporary moratorium while the ordinance changes are being discussed and finalized. And we support the City-Council-proposed ordinance because it will strengthen protections for *all* trees 6-inches DBH (in diameter at breast height) and larger across *all* properties in Newton and it will also include an environmental mitigation payment for cutting healthy, mature trees that are not dangerous.

Cutting healthy, mature trees negatively impacts the local neighborhood, the city, and the region, as well as the global climate emergency. Cutting even a few trees affects the local heat index; neighborhood air pollution, storm water drainage, and road quality; and local public health. A few trees cut on many lots year after year adds up to treeless blocks that become heat islands with less-manageable water run-off and faster deterioration of roads.

These effects cost the City of Newton money and thus the City's taxpayers—not just property owners but also people who rent, work, shop, dine, and do business in Newton. If individual property owners seek to cut mature, healthy, not-dangerous trees on their land, they should have to make a climate mitigation payment to offset the monetary, environmental, and health costs to the community.

Like air and water, whether trees are properly stewarded will make or break a community and the region. We applaud the plan to notify local residents when owners of nearby properties apply to cut healthy, not-dangerous trees and to include their voices in the tree permitting process. 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. Every mature, healthy tree preserved contributes significantly to carbon capture and energy savings, stormwater and flooding mitigation, cleansing the air, reducing heat, and improving public health—not only for Newton but also for Massachusetts and beyond.

We urge the Newton City Council to enact first a temporary moratorium and then the City-Council-proposed ordinance changes to require an environmental mitigation payment for cutting healthy, not-dangerous trees, to protect trees 6-inch-DBH and larger on all lots, and to give voice to the local people most impacted by tree cutting.

Respectfully,

Climate Crisis Working Group, Our Revolution Massachusetts

Anita Roy Dobbs

Elders Climate Action, Massachusetts Chapter

The Enviro Show (WXO/WMCB/WMNB)

Friends of Melnea Cass Boulevard

Pat Irwin (Newton resident)

Mass Call2Action

Claire A. Novola (Newton resident)

Our Revolution Newton-Waltham-Watertown

Sierra Club, Massachusetts Chapter

Speak for the Trees, Boston

Tree Advocacy Group of Lexington (LexTrees.org)

Trees for Watertown

TreesMedford

Trees-as-a-Public-Good Network

DRAFT: Tree Removal “Moratorium”

INSERT after Sec. 21-90 the following section:

Sec. 21-91 Temporary Limitation of Tree Removals

- (a) Effective [date], no tree having a diameter of six (6) inches or greater shall be removed on land identified in Sec. 21-82(a) nor on any exempt lot for a period of one year unless sooner repealed or amended by the City Council. This limitation shall not apply to tree removal permits issued prior to its effective date, nor to removal of any tree determined by the tree warden to be dead, diseased, in danger of falling, dangerously close to existing structures, causing disruption of public utility service, causing drainage problems or passage problems upon rights-of-way, or posing a threat to pedestrian or vehicular safety. Documentation shall be provided by a Certified Arborist utilizing industry-approved Risk Tree Evaluation method along with any additional forms or documentation required by the Tree Warden. The procedures of Sec. 21-84 shall apply to emergency removal of hazardous trees.
- (b) Regulations for projects with special permits remain in effect.
- (c) Any violation of the provisions of Sec. 21-91 (a) shall be subject to the penalties set forth in Sec. 21-89 and shall be subject to the provisions of Sec. 21-85 and Sec. 21-86.

## Compare and Contrast of Proposed Changes to the Newton Tree Ordinance (Chap 21, Art. III, Div. 3) September 12, 2022

	Current Ordinance	Administration Docket Item	City Council Docket Item	Cambridge, MA Ordinance (2021)
<b>Which Trees Are Protected?</b>	<p>Only trees 8" DBH or larger <i>that are not on an exempt lot</i> (most 1-4 family lots are exempt, depending on occupancy) <i>and that do not require a special permit</i></p> <p>See Sec. 21-81, Protected Tree; Sec. 21-82; Sec. 21-90b</p>	<p>Legacy Trees, which are 4 feet, 7 inches in diameter at breast height (55" DBH) or larger, on all lots</p> <p>Protected Trees 6" DBH and larger <i>that are on 3-family or larger residential lots and commercial lots that do not require a special permit</i></p> <p>Protected Trees 6" DBH and larger that are on 1-2 family lots <i>ONLY IF construction is planned within 24 months</i></p> <p>No trees on lots with special permits are protected.</p> <p>See Sec. 21-81, Protected Tree; Sec. 21-82; Sec. 21-90b</p>	<p>All trees 6" DBH or larger on all lots</p> <p>See Sec. 21-81, Protected Tree; Sec. 21-82</p>	<p>Applies to trees 6" DBH or greater on all lots except projects of the Affordable Housing Trust</p> <p>See Sec. 8.66.030, Significant Tree; Sec. 8.66.040</p>
<b>Are there exemptions allowing unregulated cutting of Protected Trees?</b>	<p><b>Yes</b></p> <p>A "certificate of exemption" issued if owner occupancy requirements met</p> <p>See Sec. 21-82c</p>	<p><b>Yes</b></p> <p>An "exemption permit" issued for cutting all trees under 55" (4 feet 7 inches) DBH on 1-2 family residential lots if no construction is planned for 24 months</p> <p>See Sec. 21-82a</p>	<p><b>No</b></p> <p>See Sec. 21-82a</p>	<p><b>Yes</b></p> <p>Affordable Housing Projects are exempt</p> <p>See Sec. 8.66.040</p>

<b>What Conditions Remove Properties from Tree Regulation?</b>	If own & occupy 18 months before & after (or 90 days before & 21 months after) cutting trees  If require a special permit for construction  Sec. 21-82c; Sec. 21-90b	If own 1-2 family lots, no construction planned for 24 months after cutting trees, and cutting trees <i>less than 4 feet 7 inches in diameter at breast height</i> (55" DBH, so-called Legacy Trees)  If require a special permit for construction  Sec. 21-82a; Sec. 21-90b	Nothing  All property owners in Newton must apply for a permit to cut trees  Sec. 21-82a; Sec. 21-90b	If building 100% affordable housing  Sec. 8.66.040
<b>What protections are there for trees to remain during construction?</b>	Limited  Protects area only under the dripline of trees; allows damage to roots extending beyond dripline that can kill trees  Sec. 21-83e	Very good  Creates a Tree Save Area that protects area under dripline or within radius of 1.5 ft for every inch of DBH, whichever is greater.  Sec. 21-81	Very good  Creates a Tree Save Area that protects area under dripline or within radius of 1.5 ft for every inch of DBH, whichever is greater.  Sec. 21-81	Unclear  Creates a Tree Save Area (dimensions not specified in ordinance)  Sec. 8.66.030
<b>Are there protections for abutters' trees?</b>	No	Yes  Tree Save Area applies to trees on lots abutting construction  Sec. 21-81	Yes  Tree Save Area applies to trees on lots abutting construction  Sec. 21-81	Unclear

<p><b>Can trees be cut or removed on private property, even if they are not dead or dangerous to people, structures, roadways, or utility projects?</b></p>	<p>Yes</p> <p><u>On exempt lots:</u> any and all trees without replacement, fee, or mitigation payment</p> <p><u>On non-exempt lots:</u> any and all trees with replacement or payment of fee in lieu of replacement for cutting trees that are healthy and not dangerous</p> <p><u>On special permit lots:</u> any and all trees with no stated requirements</p> <p>Sec. 21-83c; 21-90b</p>	<p>Yes</p> <p><u>With exemption permit:</u> any and all trees less than 4 feet 7 inches (55") DBH <i>without</i> replacement, fee, or mitigation payment</p> <p><u>With tree permit:</u> any and all trees with permit fee and with replacement or payment in lieu of replacement for cutting trees that are healthy and not dangerous</p> <p><u>On special permit lots:</u> any and all trees with no stated requirements</p> <p>Sec. 21-83b &amp; d; Sec. 21-90b</p>	<p>Yes</p> <p><u>With tree permit:</u> any and all trees but <i>only with</i> permit fee, environmental mitigation payment, and replacement (or higher mitigation payment in lieu of replacement) for cutting trees that are healthy and not dangerous</p> <p>All lots are subject to same requirements</p> <p>Sec. 21-83b &amp; d; Sec. 21-90b</p>	<p>Yes</p> <p><u>With tree permit:</u> any and all trees but only with a mitigation payment and/or replacement for cutting trees that are healthy and not dangerous</p> <p>Large (special permit) lots always pay and pay more than regular lots</p> <p>Sec. 8.66.050; Sec. 8.66.060; Sec. 8.66.070</p>
<p><b>Is notice to abutters about tree cutting required?</b></p>	<p>No</p>	<p>No</p>	<p>Yes, for all permits</p> <p>Requires notifying abutters of tree permit applications and posting tree permits in public view on site.</p> <p>Sec. 21-83c &amp; e</p>	<p>Yes, for Large projects</p> <p>8.66.060a &amp; b</p>



<p><b>What are the replacement requirements for cutting health, non-dangerous trees?</b></p>	<p><u>On exempt lots:</u> none</p> <p><u>On non-exempt lots:</u> inch-for-inch replacement <i>or</i> payment in lieu of replacement</p> <p><u>On special permit lots:</u> none stated</p> <p>Sec. 21-85b; Sec. 21-86b; Sec. 21-90b</p>	<p><u>With exemption permit:</u> none</p> <p><u>With tree permit:</u> either replacement or payment in lieu of replacement</p> <p>Replacement ratio varies by DBH of cut trees</p> <ul style="list-style-type: none"> <li>- for 6-24" (Protected), 1 to 1</li> <li>- for 25-39" (Significant), 1.5 to 1</li> <li>- for 40-54" (Landmark), 2 to 1</li> <li>- for 55"+ (Legacy), 3 to 1</li> </ul> <p><u>With special permit:</u> none stated</p> <p>Sec. 21-85b; 21-86b; 21-90b</p>	<p><u>With tree permit:</u> replacement (or higher mitigation payment in lieu of replacement)</p> <p>Replacement ratio varies by DBH of cut trees</p> <ul style="list-style-type: none"> <li>- for 6-24" (Protected), 1 to 1</li> <li>- for 25-39" (Significant), 1.5 to 1</li> <li>- for 40-54" (Landmark), 2 to 1</li> <li>- for 55"+ (Legacy), 3 to 1</li> </ul> <p>All lots are subject to the same requirements</p> <p>Sec. 21-85b; 21-86b &amp; c; 21-90b</p>	<p><u>With tree permit:</u> replacement (or mitigation payment in lieu of replacement)</p> <p>Replacement ratio varies by DBH of cut trees</p> <ul style="list-style-type: none"> <li>- 6-29", 1 to 1</li> <li>- 30" +, 1.5 to 1</li> </ul> <p>All lots have same requirements</p> <p>Sec. 8.66.060; Sec. 8.66.070</p>
<p><b>What are the costs to property owners for cutting healthy, non-dangerous trees?</b></p>	<p><u>On exempt lots:</u> none</p> <p><u>On non-exempt lots:</u> application fee, permit fee, and payment based on cost of buying &amp; installing new trees (where is unspecified)</p> <p><u>On special permit lots:</u> none stated</p> <p>Sec. 21-82c; 21-83a; 21-86b; Sec. 21-90b</p>	<p><u>With exemption permit:</u> none</p> <p><u>With tree permit:</u> application fee and payment based on cost of buying, installing &amp; maintaining new trees for five years (where is unspecified)</p> <p><u>With special permit:</u> none stated</p> <p>Sec. 21-83b; 21-86b; 21-90b</p>	<p><u>With tree permit:</u> application fee and environmental mitigation payment based on costs to City from tree loss: damages to public health, loss of climate mitigation services, increased energy usage, increased drainage and infrastructure costs</p> <p>All lots are subject to the same requirements</p> <p>Sec. 21-81; 21-83d; 21-86b &amp; c; 21-90b</p>	<p><u>With tree permit:</u> permit fee and sometimes mitigation payment</p> <p>Large projects must pay at least \$5,000</p> <p>Sec. 8.66.050b; 8.66.060d; 8.66.070; 8.66.150</p>

<b>Are replacement trees given special protection?</b>	Required to survive 18 months  Sec. 21-85b3	Considered a Significant Tree (only relevant if property owner applies to cut it; no longer required to survive any specified time)  Sec. 21-85d	Considered a Significant Tree and protected for 10 years (if owner applies to cut, requires mitigation payment without reduction and higher replacement levels)  Sec. 21-85d & e	Protected for 10 years (if owner applies to cut, requires mitigation payment without reduction)  Sec. 8.66.050c
<b>Who decides appeals of tree permit decisions and on what basis?</b>	Appeals go to mayor, who must notify the councilors from the ward of appeals  No guidance on basis for deciding appeals  Sec. 21-83g	Appeals go to mayor, who shall seek input and consult with the Ward Councilor (not at-large councilors from the ward)  No guidance on basis for deciding appeals  Sec. 21-83h	Appeals go to mayor and all councilors of the ward, who jointly decide  Decisions to be guided by reasonable safety and tree wellbeing provisions  Sec. 21-83h	None mentioned
<b>Can violations result in an ISD stop-work order?</b>	Yes Tree warden can <i>request</i> that the agency that approved external work stop external work  Sec. 21-88b2	Yes  Tree warden can <i>request</i> that the agency that approved external work stop external work  Sec. 21-88b2	Yes  Tree warden can direct ISD to issue a stop work order  Sec. 21-83g; Sec. 21-88b2	Yes  City arborist can direct ISD to issue a stop work order  Sec. 8.66.120b

PROPOSED AMENDMENT TO NEWTON ORDINANCES — PARKS, RECREATION AND CULTURE, PUBLIC GROUNDS AND TREES Chapter 21, Article III, Division 3 Tree Preservation



DIVISION 3. TREE PRESERVATION

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

The city council has determined that Newton has lost and continues to lose trees at an alarming rate. Tree loss contributes significantly to the climate emergency that the US Centers for Disease Control creates a public health crisis by producing extreme heat; air pollution; increased allergens; diseases carried by mosquitos, ticks, and rodents; flooding; and more.

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

The preservation of Newton’s tree canopy is intended to preserve public health, mitigate climate impacts, and thereby enhance the quality of life and the environment of the city. A mature healthy tree canopy preserves the character of the wooded and natural areas; reduces energy consumption; protects air quality; baffles noise; preserves and enhances habitat for wildlife; reduces topsoil erosion and storm water runoff; protects and increases property values; and 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.

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

*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].

*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, non-applicability, 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.

*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.

*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 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 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.

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

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

*Tree Plan:* A plan showing (1) the location, type, and size of each tree 5" DBH and larger; (2) which tree(s) are to be removed; and (3) the location, type, and size of replacement trees. The tree plan should also show the location,

estimated size, and tree type of any trees that were removed from the lot within the prior 24 months leading up to the application date.

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

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

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

### **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 commonwealth, or any independent authority of the commonwealth, or by the federal government.

(b) *Permit:* No person shall remove a protected tree on a 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 from the tree warden. Applications shall be made in writing on forms specified by the tree warden.

### **Sec. 21-83. Permit application.**

(a) *Contents:* An application for a tree permit shall be submitted to the tree warden and shall include, but not be limited to, the following:

- (1) A plan showing 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, and showing the limit of work;
- (2) A Tree Plan;
- (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 within the Tree Save Area of any Protected Tree with a statement prepared by a Certified Arborist explaining how each such Protected Tree shall be protected and maintained;
- (6) The proposed method of protecting the remaining Protected Trees during the course of the construction.

(7) For any activity requiring an Exterior Work Permit or involving tree removal, where Protected Trees are to remain on the lot, a Tree Protection Plan must be completed by a Certified Arborist following the most current version of the ANSI A300 standards including Part 5, management standards for site planning and development. This plan shall set out measures for protecting all trees on the lot during construction as well as trees adjacent to the lot that may be impacted by the construction activity on the applicant's lot. No Exterior Work or tree removal work shall take place on a lot until all tree protective measures are approved and in place. Tree Permit holder must notify the Tree Warden once all protective measures are in place, at which time the Tree Warden will provide written documentation that Exterior Work may start. This written documentation may also include additional parameters and requirements related to the protection of trees to remain on the lot and trees within a reasonable distance from the lot.


(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.


(b) Fee: The application for a tree permit shall be accompanied by a fee in the amount(s) listed below.

(1) The fee for a tree permit for the removal of a dead or significantly compromised tree(s) that a Certified Arborist has attested to on forms required by the City shall be \$0 if there is no pending or planned Exterior Work on the lot.

(2) The administrative fee for processing a tree permit for all tree removal work or Exterior Work with the exception of (b) (1) shall be \$200.

(c) *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. 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.

 (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:

(1) The Protected Tree will be relocated or replaced on site as 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. Documentation of the interference and damage being currently caused shall be provided at the request of the Tree Warden.
- (4) The Protected Tree is dead, diseased, in danger of falling, dangerously close to existing structures, causing disruption of public utility service, causing drainage or passage problems upon rights-of way, or posing 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 approved Tree Protection measures will be in place where necessary as determined by the tree warden.

(e) *Conditions:* Upon the issuance of a tree permit, the tree warden may prescribe in writing such protective measures for existing protected trees as she/he deems necessary. Before site disturbance may begin, the tree warden shall make a determination that the prescribed protective measures have been adequately provided. Documentation shall be provided by a Certified Arborist on form(s) provided by the Tree Warden that the tree protective measures are in place. Once the tree warden has received confirmation that the tree protection measures are in place, the tree warden will notify ISD that exterior work may commence.

The Tree Permit shall be posted on site, such that it is visible from a public way, for the duration of the permit-related activities.

(f) *Construction:* Except as provided in a Tree Permit, construction activities within the Tree Save Area of a Protected Tree, are prohibited. Activities include, but are not limited to, excavating, trenching, grading, storage of materials or equipment, passage of heavy equipment within the Tree Save Area, and spillage of chemicals or other materials, which are damaging to trees.

(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 affect the validity of a building permit issued in reliance upon the issuance (granting) of such tree permit 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.

(h) *Appeal:* Any person aggrieved by a decision of the tree warden may file an appeal with the mayor (or 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 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)

**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 ANSI A300 pruning standards is required, and failure to meet these standards is a violation of this Article.

(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 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.

(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. 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 conform to the following:

- 1) 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.
- 2) 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.
- 3) 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.
- 4) 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

(c) Replacement tree(s) shall be of the same or similar species or such other species as deemed advisable by the tree warden. Trees planted as hedges shall not count as Replacement Trees.



- (d) A Replacement Tree shall be considered a Significant Tree regardless of trunk diameter, health or condition. The Tree Permit holder 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.
- (e) 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).
- (f) A Replacement Tree shall be planted on the same lot from which the Protected 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 that 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 (d) hereof.

(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

- i emergency circumstances,
- 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 ( $DBH^2 \times 0.785 \times$  base value, where the base value is not less than [AMOUNT]) will be reduced by the cross-sectional valuation of each Replacement Tree.

(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.

(d) *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.
- (2) The tree warden is also authorized to direct the agency that has granted an exterior work permit to order, to the extent permissible by law, that the owner cease any activity pursuant to the exterior work permit that might affect such protected tree while a stop work order is pending.
- (3) Any person who shall continue any work in or about the protected tree or on the lot on which a protected tree is located after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not more than three hundred dollars (\$300.00) for each such violation. Each day during which a violation exists shall constitute a separate offense.

(c) *Injunctive relief:*

- (1) Whenever there exists reasonable cause to believe that a person is violating this article or any standards adopted pursuant to this article or any term, condition or provision of an approved tree 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). Each day until a Permit Application is filed shall constitute a separate offense.

(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.

(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.



(b) *Conflict of laws:* 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. (Ord. No. V-275, 12-6-99; Rev. Ord. 2007, § 20-39; Ord, No. A-38, 05-05-14)

## *Newton Needs a Revision to its Tree Ordinance: Here's Why*

Over last 50 years, Newton has lost 50% of its street tree canopy ([Open Space and Recreation Plan, 2020-2027, Ch 4.](#), p. 60).<sup>1</sup> This loss is attributed to disease, gas leaks, storm damage, and removal for development. The loss of trees on private lots is at least as great, but the city does not keep data on private-land tree loss. However, we know developers often clear cut lots, even residential lots on residential streets, to expedite movement of equipment. The short window of construction should be measured against the thirty years it takes for a tree to reach maturity.

*Even with Urban Forestry's current tree planting, Newton continues to lose approximately 1,000 street trees per year.*

- In 2014, the Newton City Council enacted a Tree Preservation Ordinance (A-38) to protect mature trees and replace removal of healthy trees, but it has proven insufficient.
- Right now, there are no protections on trees smaller than 8" in diameter (DBH), and on the many exempt lots in the city, there are no protections for any trees. There are also no protections for any trees due to damage caused by activities on abutting lots. For larger trees on non-exempt lots, a fee can be paid into Newton's tree fund or trees with an equivalent number of caliper inches may be planted. But a young tree and mature tree do not provide equal ecosystem benefits (Marc Welch, public presentation, April 21, 2022).<sup>2</sup>
  - A mature tree sequesters 2600 lbs of carbon vs. a young tree's 60 lbs.
  - A mature tree conserves 1300 kWh per year, a young tree, 150 kWh per year
  - A young tree uses more water for early growth than it saves in stormwater drainage for the first 3 years after planting

*Loss of mature trees has critical effects on the climate and public health.*

- Mature trees provide [significant carbon capture and energy savings](#)<sup>3</sup>
- Provide [stormwater mitigation and prevent flooding](#)<sup>4</sup>
- Save money on asphalt resurfacing, street with 20% shade saves the city 60% on resurfacing costs over 30 years ([Center for Urban Forest Research](#), p. 3)<sup>5</sup>
- Clean the air of pollutants
- Prevent heat islands
- Slow vehicular traffic and act as a sound barrier
- Protect against topsoil erosion
- Beautify neighborhoods and increase property values

*Newton needs to take action.*

Such drastic reductions in Newton's tree canopy mean even more stringent rollbacks in greenhouse gas emissions will be necessary to achieve the carbon neutrality agreed on in [the](#)

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<sup>1</sup> <https://www.newtonma.gov/home/showpublisheddocument/72128/637616961801770000>

<sup>2</sup> [https://youtu.be/MWUNFXxSK\\_w](https://youtu.be/MWUNFXxSK_w); see especially 31:15 – 33:40.

<sup>3</sup> <https://www.fs.usda.gov/ccrc/topics/urban-forests>

<sup>4</sup> <https://www.cdc.gov/climateandhealth/effects/default.htm>

<sup>5</sup> [https://www.fs.fed.us/psw/topics/urban\\_forestry/products/cufr\\_673\\_WhyShadeStreets\\_10-06.pdf](https://www.fs.fed.us/psw/topics/urban_forestry/products/cufr_673_WhyShadeStreets_10-06.pdf)

[City's Climate Action Plan](#), despite ongoing tree planting (pp. 40, 47, 64, 67, 68).<sup>6</sup>

- Climate change constitutes a public-health emergency, [according to the American Medical Association, the American Public Health Association, and over 70 major medical organizations](#).<sup>7</sup>
- Climate impacts public health via air pollution; allergens; diseases carried by mosquitos, ticks, and rodents; temperature; flooding; and more (according to [the CDC](#)).<sup>8</sup>
- The window to prevent global warming from exceeding 1.5 degrees Celsius closes in 2030 ([IPCC report](#)).<sup>9</sup>
- We need to *save* mature trees in our urban canopy because they provide [significant carbon capture and energy savings](#).<sup>10</sup>
  - Planting new trees is inadequate because it takes decades for new trees to provide the same ecosystem services.
  - See the 10-minute presentation (starting at 24:02) by Newton City Forester Marc Welch in this 2022 [webinar on Trees as a Public Good](#).<sup>11</sup>

*These public-health and climate effects are environmental justice issues, even in Newton.*

Compare [Tree Equity Scores](#)<sup>12</sup> for different parts of Newton:

- Nonantum: 53/100
- Newtonville: 59/100
- Auburndale, Newton Upper Falls & Newton Corner: 76/100
- Waban & Chestnut Hill: 100/100

*How does the ordinance need to change?*

- A protected tree's width at breast height (DBH) must be 6" instead of 8".
- There need to be no lots exempted from tree protection.
- There need to be protections for trees abutting lots with damaging activities (such as demolition or construction).
- Protections must be enacted for appropriate species of replacement trees to be planted with oversight of first three years' growth.
- Appeals for removal of healthy mature trees must be restricted to reasonable safety and wellbeing provisions.
- There must be better guidelines to retain perimeter trees during construction.
- Replacement, whether planting new trees or paying a compensation fee, should reflect the current science showing the need for a higher ratio of replacement inches and showing the expensive energy, infrastructure, public health and other costs to the City.

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<sup>6</sup> <https://www.newtonma.gov/home/showpublisheddocument/39649/637335412898900000>

<sup>7</sup> <https://climatehealthaction.org/cta/climate-health-equity-policy/>

<sup>8</sup> <https://www.cdc.gov/climateandhealth/effects/default.htm>

<sup>9</sup> <https://www.climateactionproject.org/blog/2030-or-bust-5-key-takeaways-ipcc-report>

<sup>10</sup> <https://www.fs.usda.gov/ccrc/topics/urban-forests>

<sup>11</sup> [https://youtu.be/MWUNFXxSK\\_w](https://youtu.be/MWUNFXxSK_w)

<sup>12</sup> <https://treeequityscore.org/>