



City known as the Town of
GREENFIELD, MASSACHUSETTS

OFFICE of the TOWN CLERK/TOWN COUNCIL

William F. Martin
Mayor

DEBORAH TUTTLE, CMC
Town Clerk

Town Hall • 14 Court Square • Greenfield, MA 01301
Phone 413-772-1555 • Fax 413-772-1542
DeborahT@greenfield-ma.gov • www.greenfield-ma.gov

Replace the existing Chapter 172 on trees of the General Code of Greenfield with the following new Chapter 172:

Chapter 172. TREES

Table of Contents:

STATUTORY AUTHORITY- MGLc.40, §21

GENERAL REFERENCES- Destruction of public lands-- See Ch.136.

Article 1. PURPOSE & DEFINITIONS

Article 2. GENERAL PROVISIONS

Article 3. TREE PLANTING

Article 4. TREE REMOVAL

Article I. PURPOSE & DEFINITIONS

§172-1.1 Purpose

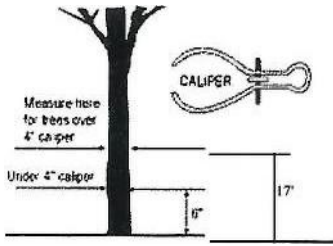
It is the purpose of these regulations to provide standards for the protection, preservation, resilience and improvement of Greenfield's urban forest; provide for the health, safety and general welfare of the residents by allowing appropriate shade and ornamental trees to be planted within the public right-of-way; and to provide guidance to the City and its residents in planting, caring for, and removing trees.

§172-1.2 Definitions

As used in this chapter, the following words shall have the following meanings:

AMERICAN NATIONAL STANDARD/ ANSI A300 STANDARDS - ANSI A300 standards are the generally accepted industry standards for tree care practices. They are voluntary industry consensus standards developed by TCIA and written by a committee called the Accredited Standards Committee (ASC) A300, whose mission is to develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.

CALIPER- Diameter of a tree trunk (in inches). For trees up to and including four (4) inches in diameter, the caliper is measured six (6) inches above the existing grade at the base of the tree. For trees larger than four (4) inches in diameter, the caliper is measured twelve (12) inches above the existing grade at the base of the tree.



CERTIFIED ARBORIST --A professional arborist possessing current certification issued by the International Society of Arboriculture (I.S.A.) and/or the Massachusetts Arborist Association (M.A.A.).

CITY-- The City of Greenfield.

DIAMETER AT BREAST HEIGHT (DBH) -The average diameter of the trunk of a tree measured 4½ feet above mean ground level at the base of the trunk. If the tree splits into multiple trunks above ground, but below 4½ feet, the DBH is the average diameter of the narrowest point beneath the split. If the tree has excessive swelling at 4½ feet, the DBH is the average diameter of the narrowest point beneath the swelling.

HAZARDOUS TREE- A tree with a structural defect or disease, or which impedes safe sight distance or traffic flow, or otherwise currently poses a threat to life or property.

PLANNED SOLAR COLLECTION SYSTEM – a solar collection system in which a permitting process has been initiated or notice given to Building Inspector that permitting process will be initiated within a specified timeline.

PUBLIC SHADE TREE-- As defined in Massachusetts General Laws Chapter 87,§1, a public shade tree is a tree within or on the boundaries of a public way other than a state highway, such as a road, street, bike path, or walkway.

TREE- Any self-supporting woody perennial plant which has a trunk diameter of 1.5 inches or greater measured at a point 12 inches above the ground level and which normally obtains a height of at least 10 feet at maturity.

TREE BELT - The portion of the public way available for tree planting. It is typically the area between the sidewalk and the edge of pavement

TREE PIT – the cut out in pavement on municipal walkways in which trees are planted.

TREE PLANTING PERMIT- A permit issued to a resident by the Director of the Department of Public Works or Tree Warden that authorizes the planting of trees on City property.

TREE REMOVAL- Cutting down and taking away a tree

TREE REPLACEMENT COSTS- The costs of tree replacement include the cost of a 2.5-3" caliper tree, planting, and soil as needed, set by the DPW.



TREE WARDEN --The agent of the City having primary enforcement responsibilities under this chapter and MGL c.87, and charged with the responsibility for approvals required pursuant to this chapter.

Article 2.GENERAL PROVISIONS

§ 172-2.1. Applicability

The terms and provisions of this chapter shall apply to any activity on City property and any activity that requires the issuance of a Tree Planting Permit. No Tree Planting Permit shall be issued by the City without it being determined that the proposed activity is in conformance with the provisions of these regulations and approved by the Tree Warden.

§ 172-2.2.Powers of Tree Warden

This chapter shall not abridge the powers of the Tree Warden as provided by MGL c.87. The tree warden shall have the care and control of all public shade trees, shrubs and growths in the City, except those within a state highway, and shall enforce all the provisions of law for the preservation of such trees, shrubs and growths. The tree warden shall expend all money appropriated for the setting out and maintenance of such trees, shrubs and growths, and no tree shall be planted within a public way without the approval of the tree warden. The tree warden may make regulations for the care and preservation of public shade trees; which, when posted in one or more public places, shall have the effect of City ordinances.

§172-2.3. Determination of Trees on City or Private Property

The City, through the DPW Director or designee, will determine if a tree is on city or private property.

§172-2.4.Damage to Trees: Cutting, Mutilation, or Posting Posters Prohibited

No person shall in any manner cut, girdle, mutilate, break off limbs, or deface any tree on city land, including posting notices, except as permitted herein.

§172-2.5. Attachment of Wires, Ropes, and Fixtures

No electric wires, decorative lights, cables, guys, ropes, poles, cross arms, brackets, insulators, or other wires or electrical fixtures shall be attached to or come into contact with any tree on public property without the written consent of the Tree Warden. Upon consent, the Tree Warden will provide guidelines for proper installation of decorative lights that will allow for tree growth.

Installations will be inspected regularly for safety of people and trees.

§172-2.6. Interference with Light and Solar Systems

The tree warden and DPW director shall not allow a tree to be planted on town property or on private property where the town is paying for the tree that will negatively impact an active or planned solar collection system, public lighting, street lamps or privately illuminated free standing commercial signage without consent of the sign owner.



§172-2.7. Enforcement

It shall be the duty of the Tree Warden to enforce this chapter. The Tree Warden or the Director of Public Works shall have the authority to revoke, suspend or void the Tree Planting Permit and shall have the authority to suspend all work on a site or any portion thereof and levy fines as provided by § 172-10.

§ 172-2.8. Violation and penalties

Any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor and subject to cost of repair or replacement and a fine of \$100 for the first offense, \$200 for the second offense and \$300 for the third or subsequent offenses. Any fines collected pursuant to this chapter shall be used to replace or maintain City trees.

Article 3; TREE PLANTING & MAINTENANCE

§ 172-3.1. Tree Planting Guide.

All trees on public property will be planted as specified in the ANSI A300 Standard. Trees planted on private property, paid for by the town, shall also be planted per the ANSI A300 Standard. Tree species will be chosen from Appendix C.

§ 172-3.2. Tree Planting and Protection of Trees in the Tree Belt

- A. Planting of trees within the tree belt may be conducted by Greenfield's Department of Public Works where the tree will not interfere with buried or above ground utilities; will not obstruct visibility for cars making turns; will not cause major damage to streets and sidewalks; and will not become a nuisance, e.g. trees that shed branches or are short-lived.
- B. Businesses that are hired by the City of Greenfield to plant trees must sign a contract that clearly states that they are responsible for replacement of the tree if it dies within 12 months. And work will be performed in a good and workmanlike manner and in accordance with §172-3.1.
- C. Planting of trees by citizen's is allowed in the tree belt after securing a Tree Planting Permit.

Following are guidelines to a successful Tree Planting Permit application.

1. If the person seeking the Permit is not the property owner immediately behind the proposed tree planting location, they must provide written permission from the property owner to plant the tree.
2. Citizens shall select a native species, as identified in appendix C, appropriately sized and suited for the location that will not interfere with buried or above ground utilities; will minimize root damage to streets and sidewalks; and will not become a nuisance, e.g., trees that shed branches or are short-lived.

3. All costs incurred shall be the responsibility of the citizen planting the tree and work will be performed in a good and workmanlike manner and in accordance with § 172-3.1.

D. Notice of planting of a tree: The immediate abutting owners' right to object shall be given to the immediately abutting property owner either in person or by first class mail to the address registered with the Treasurer /Collector's office no less than 14 days in advance of the planting. If the abutting owner objects in person or in writing three or more days prior to the planting, the tree shall not be planted.

§172-3.3.Town Planting of Trees on Private Property.

If a resident's property cannot accommodate tree plantings in the tree belt, and if the property owner wishes to plant a tree in their front yard, they can apply to the DPW front yard tree-planting program. As funds allow, the DPW may work with the property owner to select an appropriate location (a distance not exceeding 20 feet from the layout of such public way) and tree, order dig-safe; and install the tree at no cost to the resident. The Town shall have no responsibility for maintenance of the tree after planting is complete.

§172-3.4.Tree Protection and Maintenance

- A. Businesses that are hired by the City of Greenfield to mow around trees must sign a contract that clearly states that they are responsible for protecting the trees. If trees are damaged and subsequently die due to poor maintenance practices such as scarring trees with mowers and weed whips, the business shall pay the replacement cost of the tree including dead tree removal, purchase, planting and watering for three years as specified in the ANSI A300 Standard. (See Tree Replacement Table § 172-4.2. C)
- B. Businesses or resident who hire someone to mow around trees in the tree belt shall be responsible for the tree replacement cost (see definition) of trees that die due to poor maintenance practices such as scarring trees with mowers and weed whips.

Article4: TREE REMOVAL

§ 172-4.1.City Rights/Emergency Removal

Nothing in this chapter shall preclude the City, or a public utility, from removing a tree on city property without prior notice if the tree represents an immediate threat to the public way or public safety (e.g. tree seriously damaged by storm, uprooted.). In such cases the City shall remove the portion of the tree that poses an immediate threat (e.g. a hanging limb).

§ 172-4.2.Removal of Hazardous Trees within the Tree Belt and Other Publicly-Owned Land.

- A. Nothing in this chapter shall abridge the powers of the Tree Warden to act in the interest of public safety regarding the removal of hazardous trees. The Tree Warden may remove a tree, which, because of its condition and location, is deemed to endanger the health and/or safety of the general public, as outlined in the ISA Tree Assessment Form (Appendix A).

- B. Requests/petitions for removal of hazardous trees shall be made to the Department of Public Works. The discretion and sound judgment of the Tree Warden alone determines whether a tree shall be removed after such request for removal has been made.
- C. With the goal of improving Greenfield's tree canopy, each tree removed which is replaced, will be replaced as outlined in following Tree Replacement Requirements Table:

Tree Replacement Requirements Table

Size of Tree Removed	Replacement Required	Replacement Schedule
Less than 12" DBH	1 tree with a minimum of 3" caliper if in a Tree Pit, 1.5 – 2 in all other locations	During the same calendar year's growing season or, if removed in winter, the following spring or fall
Greater than 12" DBH	2 trees with a minimum of 3" caliper if in a Tree Pit, 1.5 – 2 in all other locations	During the same calendar year's growing season or, if removed in winter, the following spring or fall

§ 172-4.3. Removal of Non-Hazardous Trees within the Tree Belt or Tree Pit

- A. Trees on public property belong to all residents of Greenfield and provide many benefits. It is a priority of the City to preserve and protect all trees on City property. If on the rare occasion the Tree Warden determines that a non-hazardous tree must be removed, as funds allow it will be replaced by planting as required in Tree Replacement Table § 172-4.2. C.
- B. Following is the procedure for requesting the removal of a non-hazardous tree.
 1. Requests for the removal of a tree shall be filed with the Tree Warden and acted upon by the Tree Warden and the Planning Board in a public hearing as provided by MGLc.87.
 2. Replacement trees that die within the first year will be replaced, subject to appropriation.
 3. The Tree Warden will select the appropriate trees and locations that will not interfere with buried or above ground utilities; will minimize root damage to streets and sidewalks; and will not become a nuisance. A replacement tree is not required to be located on the section of public right-of-way from which it was removed. It may be planted on an approved location as follows: a) on public property, b) on their own property next to a public right-of-way, or c) on other private property that is next to a public right-of-way with permission of the property owner. The petitioner shall provide the



Planning Board and the Tree Warden with a suitable guarantee that the replacement trees will be provided prior to the removal of the live tree in question.

4. All costs incurred, including related work, regardless of contractor, shall be the responsibility of the citizen making the non-hazardous tree removal request, unless otherwise stated in a written agreement with the City.
5. All work related to tree removal must be done by the DPW, or contractor hired or approved by the Town.
6. All work in a public right-of-way shall be conducted to the specifications of the Director of the Department of Public Works and the Tree Warden.

§ 172-4.4. Tree Warden Responsibility over Trees on Private Property

If the Tree Warden assesses that a tree on private property may pose a hazard to the public right of way in the near future, they will contact the owner of the tree about the condition of the tree with a request that the owner remedy the situation by pruning or removing the tree.

§172-4.5. Appeals Process

If a tree is deemed unhealthy, but does not fit the definition of a tree in need of emergency removal as defined in §172-4.1, below is the tree removal decision process. If, during the process, the tree poses an immediate threat to the public way or public safety, the DPW may exercise its emergency removal responsibilities. If a tree has been posted for removal, anyone may file an appeal of the Tree Warden's decision with the DPW Director, within 20 days after the notice has been posted. If an objection to removing a tree is made in writing at or before a public hearing, the Tree warden shall not cut down, or grant a permit for cutting down a public shade tree. Such objection, however, may be overruled by the Mayor.

Appendices/Links

- A. ANSI Tree Assessment Form
- B. ANSI A300 Standard
- C. Approved Tree Species list



ISA Basic Tree Risk Assessment Form

Client _____ Date _____ Time _____
 Address/Tree location _____ Tree no. _____ Sheet _____ of _____
 Tree species _____ dbh _____ Height _____ Crown spread dia. _____
 Assessor(s) _____ Time frame _____ Tools used _____

Target Assessment

Target number	Target description	Target zone			Occupancy rate 1 – rare 2 – occasional 3 – frequent 4 – constant	Practical to move target?	Restriction practical?
		target within drip line	Target within 1x Ht.	Target within 1.5x Ht.			
1							
2							
3							
4							

Site Factors

History of failures _____ Topography Flat Slope _____ % Aspect _____

Site changes None Grade change Site clearing Changed soil hydrology Root cuts Describe _____

Soil conditions Limited volume Saturated Shallow Compacted Pavement over roots _____ % Describe _____

Prevailing wind direction _____ Common weather Strong winds Ice Snow Heavy rain Describe _____

Tree Health and Species Profile

Vigor Low Normal High Foliage None (seasonal) None (dead) Normal _____ % Chlorotic _____ % Necrotic _____ %

Pests _____ Abiotic _____

Species failure profile Branches Trunk Roots Describe _____

Load Factors

Wind exposure Protected Partial Full Wind funneling _____ Relative crown size Small Medium Large

Crown density Sparse Normal Dense Interior branches Few Normal Dense Vines/Mistletoe/Moss _____

Recent or planned change in load factors _____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown LCR _____ % Cracks _____ Lightning damage

Dead twigs/branches _____ % overall Max. dia. _____ Codominant _____ Included bark

Broken/Hangers Number _____ Max. dia. _____ Weak attachments _____ Cavity/Nest hole _____ % circ.

Over-extended branches Pruning history Previous branch failures _____ Similar branches present

Crown cleaned Thinned Raised Dead/Missing bark Cankers/Galls/Burls Sapwood damage/decay

Reduced Topped Lion-tailed Conks Heartwood decay _____

Flush cuts Other _____ Response growth _____

Main concern(s) _____

Load on defect N/A Minor Moderate Significant _____

Likelihood of failure Improbable Possible Probable Imminent _____

— Trunk —

Dead/Missing bark Abnormal bark texture/color

Codominant stems Included bark Cracks

Sapwood damage/decay Cankers/Galls/Burls Sap ooze

Lightning damage Heartwood decay Conks/Mushrooms

Cavity/Nest hole _____ % circ. Depth _____ Poor taper

Lean _____ ° Corrected? _____

Response growth _____

Main concern(s) _____

Load on defect N/A Minor Moderate Significant

Likelihood of failure Improbable Possible Probable Imminent

— Roots and Root Collar —

Collar buried/Not visible Depth _____ Stem girdling

Dead Decay Conks/Mushrooms

Ooze Cavity _____ % circ.

Cracks Cut/Damaged roots Distance from trunk _____

Root plate lifting Soil weakness

Response growth _____

Main concern(s) _____

Load on defect N/A Minor Moderate Significant

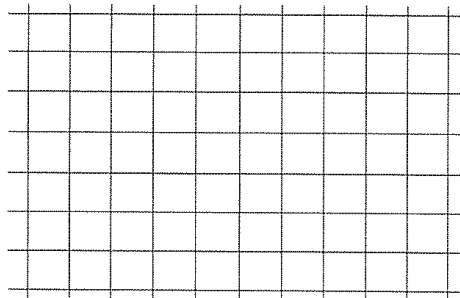
Likelihood of failure Improbable Possible Probable Imminent

Risk Categorization

Condition number	Tree part	Conditions of concern	Part size	Fall distance	Target number	Target protection	Likelihood											Consequences				Risk rating of part (from Matrix 2)	
							Failure				Impact				Failure & Impact (from Matrix 1)			Negligible	Minor	Significant	Severe		
							Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely						Very likely
1																							
2																							
3																							
4																							

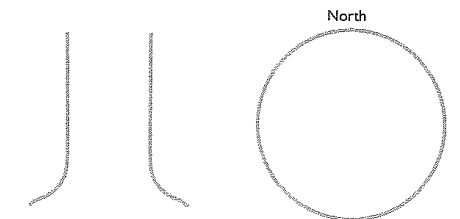
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impacting Target			
	Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely



Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low



Notes, explanations, descriptions _____

Mitigation options _____ Residual risk _____
 _____ Residual risk _____
 _____ Residual risk _____
 _____ Residual risk _____

Overall tree risk rating Low Moderate High Extreme Work priority 1 2 3 4
 Overall residual risk Low Moderate High Extreme Recommended inspection interval _____
 Data Final Preliminary Advanced assessment needed No Yes-Type/Reason _____
 Inspection limitations None Visibility Access Vines Root collar buried Describe _____

This datasheet was produced by the International Society of Arboriculture (ISA) and is intended for use by Tree Risk Assessment Qualified (TRAQ) arborists - 2013

List of approved trees for city street planting. This list is a guide and the city may add or delete species as needed. No tree identified as an “invasive-species” by Local, State or Federal agencies shall be planted under any circumstances.

Large Trees 40’-80’

- Red Maple: October Glory or Red Sunset
- European Hornbeam
- Honeylocust
- Ginkgo
- Tulip tree
- Red Oak, Pin Oak, Swamp White Oak
- American Elm(resistant)
- Zalkova
- Little leaf Linden
- London Plaintree
- Hackberry
- Black Tupelo
- Sweetgum

Medium Trees 30’-40’

- Hedge Maple
- Golden Raintree
- Honeylocust (Medium size cultivar)

Small Trees under 30’

- Serviceberry
- Crabapple
- Hawthorn
- Japanese Lilac
- Amur Maple



*The Town of Greenfield is an Affirmative Action/Equal Opportunity Employer,
a designated Green Community and a recipient of the “Leading by Example” Award*