



PUBLIC NOTICE Notice is hereby given as required by M.G.L. Chapter 87 § 3 that the Tree Warden of the Town of Greenfield will hold a Public Hearing on May 12, 2015 at 10:00 a.m. in the Town Hall Meeting Room (2nd Floor), 14 Court Square, Greenfield, Massachusetts for the removal of trees from the following locations: 1 21 Pierce Street 23 Holley Avenue 18 Linden Avenue 4 Spring Terrace South Side of Wright Avenue 5 next to utility pole 278/1 6 24 Wildwood Avenue 160 School Street William F. Martin Mayor, Town of Greenfield 3326896

1. 21 Pierce St: American Elm (Ulmus Americana)DBH: 42"Ht: 65'Dead Branches: N

Sidewalk issues: Y OH Utilities: N Annual Benefit Value: **\$449** Notes: Tree is fully leafed out w no sign of hazard to the public, except for the sidewalk

2. 23 Holly Street: Norway Maple (Acer platanoides)

DBH: 19"Ht: 25'Dead Branches: Y, severalSidewalk issues: NOH Utilities: YAnnual Benefit Value: \$179Notes: Tree has poor form, several dead branches

3. 18 Linden Ave: White Ash (Fraxinus Americana) DBH: 36" Ht: 55' Dead B

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Remove? No Signs of Disease: N

Remove? Probably Signs of Disease: Minor

Remove? No Signs of Disease: some

Notes: Tree fully leafed out, no crown die back or signs of stress; excellent condition; conflict w sidewalk

4. 4 Spring Terrace: Norway Maple (Acer platanoides)

 DBH: 30" (approx.)
 Ht: 50'
 Dead Branches: N

 Sidewalk issues: Y
 OH Utilities: N
 Annual Benefit Value: \$299

 Notas: Trace has some decay in trunk <10%: fully loafed out, no crown die</td>



Notes: Tree has some decay in trunk <10%; fully leafed out, no crown die back or signs of stress

5. Wright Avenue: Norway Maple (Acer platanoides)

DBH: 18" (approx.)Ht: 35'Dead Branches: YSidewalk issues: NOH Utilities: YAnnual Benefit Value: \$127Notes: Tree leaning on utility w wire entangled; half dead

Remove? Yes Signs of Disease:

Remove? No

6. 24 Wildwood Ave: Norway Maple (Acer platanoides)

DBH: 24" (approx.)Ht: 35'Dead Branches: YSigns of Disease: NSidewalk issues: MinorOH Utilities: NAnnual Benefit Value: \$232Notes: An average declining Norway Maple—probably could live several more years w/ pruning

7. 160 School Street: Sugar Maple (Acer saccharum)

DBH: 36"Ht: 45'Dead Branches: MinorSidewalk issues: YOH Utilities: NAnnual Benefit Value: \$299

Notes: Tree was topped at some point, maybe in a storm. Well leafed out. Minor bark loss at trunk; Does not show signs of decline or hazard



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From Christian Marks at the Nature Conservancy:

Remove? No

"there is no reason to cut down a beautiful healthy mature American elm like this one, especially because such elms have become so rare. Such elms were once the classic street trees of New England towns and this specimen is a way to connect us with that heritage. Perhaps there is an alternative, such as moving the sidewalk over by a couple of feet over into the lawn to avoid the trees roots."

"interested in such exceptionally large surviving American elms if there is reason to believe that the tree has a higher than usual tolerance to the disease. My research partners and I try to propagate such survivor elms"

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Remove? Probably Signs of Disease: Minor



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5/6/15

Lisa McLoughlin, Civil Engineer

Comments and resources for the Tree Warden and DPW of Greenfield

RE: Trees and Sidewalks

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Including:
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21 Pierce St. Elm 18 Linden Ave. Ash

Trees are good for our community. They work for free in the following areas:

* Clean air and water--filtering

* Water management--reduce storm runoff, flooding, and erosion

* Cooling--shade and water evaporation

* Real Estate Value--increases "The sales price of residential property has been shown to increase 1% for each large front yard tree and up to 10% for large specimen trees."

* Wildlife---habitat

* Quality of Life--reduce stress, make neighborhoods more walkable, reduce speeding, increase commerce, and reduce crime

(Source: http://www.sactree.com/learn)

There are options available to save the trees and still repair the sidewalks.

Proposed Solutions for Trees Threatening Sidewalks:

If a tree threatens a sidewalk with its roots, the easiest solution is to go around the roots, saving both the tree and the sidewalk. This solution requires the least amount of disruption to the neighborhood, and the least amount of engineering.

There is a precedent in Greenfield for going around roots: an Oak on Allen St. was saved by doing this.

Additional solutions include:

* going over roots involves a gradual ramping up of the sidewalk. http://www.bartlett.com/resources/Sidewalk-Repair-Near-Trees.pdf

* shaving down the concrete so it remains level on the surface http://www.bartlett.com/resources/Sidewalk-Repair-Near-Trees.pdf

* lifting up the slabs of concrete to level them, "slab-jacking" http://treecasemanagement.com/uploaded_files/userfiles/files/Tree%20root% 20and%20Infrastructure%20damage(1).pdf

* adding large expansion joints between concrete sections so that only one section at a time needs to be leveled or replaced, not the entire sidewalk (source: http://www.ipm.iastate.edu/ipm/hortnews/1995/3-31-1995/sidetree.html)

* installing sidewalks that are flexible and don't break up when placed over roots. Information about flexible sidewalks can be found at: http://terrecon.com/wp-content/uploads/2012/08/ PRESERVING-TREES_v2.pdf

* strengthening the concrete of the sidewalk so it is less affected by roots http://treecasemanagement.com/uploaded_files/userfiles/files/Tree% 20root%20and%20Infrastructure%20damage(1).pdf

Less desirable, and more risky for the tree, are solutions that manipulate roots:

* gravel and/or geotextiles to prevent further root growth http://treecasemanagement.com/uploaded_files/userfiles/files/Tree%20root%20and% 20Infrastructure%20damage(1).pdf

* root manipulation including pruning, shaving, or excavation underneath roots in the area under the sidewalk. Information about root pruning and shaving can be found at: http://www.ipm.iastate.edu/ipm/hortnews/1995/3-31-1995/sidetree.html and http://www.bartlett.com/resources/Sidewalk-Repair-Near-Trees.pdf

excavation under roots is suggested at http://treecasemanagement.com/uploaded_files/userfiles/files/Tree%20root%20and%20Infrastructure% 20damage(1).pdf

Concluding Remarks:

Prevention of the tree/sidewalk conflict in future can be obtained by following planting guidelines to provide enough space for the species you want to plant. The U-Mass extension service can tell you how much room each tree needs. For example they suggest that you "keep large-growing trees in tree lawns 10' wide or greater, medium trees in lawns 6-10' wide, and small trees in 4-6' lawns. Avoid planting trees in lawns under 4' wide." (source: http://www.umass.edu/urbantree/factsheets/22treesandsidewalks.html)

Budgeting and **Planning** go hand in hand. Planting trees in such a way that they have enough room to grow and are suited to their immediate environment (that is, they are sized and located so that they do not grow into wires and sidewalks) will ensure more trees survive into maturity and continue to provide their many benefits while requiring the least amount of maintenance over time.