# **Prospect Hill Elm Tree Removal**

Goodbye Prospect Hill Elm Tree. We love this tree too, but it is dying.

The majestic American Elm (Ulmus americana) tree at Prospect Hill Park has Dutch Elm Disease (Ophiostoma novo-ulmi) and a canker fungus (Sphaeropsis ulmicola). It has been treated for both and has had biostimulants added to the soil to help it stay strong. Sadly, despite all these efforts, it continues to decline.



Because this tree has Dutch Elm Disease, keeping it in the

landscape is a threat to other Elm trees in the area. Also, the large dead branches make the tree dangerous. Thus, it is being scheduled for removal at the end of 2020 or early 2021.

Please take the time to say your goodbye to this beloved tree by writing it a love letter. You can leave your letter in the plastic box located near the tree, and/or you can send your love letter to <a href="mailto:trees@somervillema.gov">trees@somervillema.gov</a>.

In order to best manage the Dutch Elm Disease, we will need to remove all parts of the tree. We will plant a new tree, but due to the large size of this tree we will not be able to replant in the same spot. We will do our best to plant a new tree nearby. We plan to plant the new tree during the Spring 2021 planting season.

For more information about Dutch Elm Disease, see: <a href="https://ag.umass.edu/landscape/fact-sheets/dutch-elm-disease">https://ag.umass.edu/landscape/fact-sheets/dutch-elm-disease</a>.



# Prospect Hill Elm Tree Virtual Community Meeting

Mayor Joseph A. Curtatone and Ward 3 Councilor Ben Ewen-Campen invite you discuss the necessary removal of the majestic Prospect Hill Elm Tree, and the replacement tree that will be planted. The elm tree has Dutch Elm Disease and is dying, despite all of the efforts the City has made to save it. We will discuss why the tree needs to be removed, options for commemorating the tree, and replanting ideas.

# November 5<sup>th</sup> - Thursday - 5:30–6:30 p.m.

Please join this meeting from your computer, tablet or smartphone:

To register at any time, simply enter the Registration URL below into your Browser. After registering, you will receive a confirmation email containing information about joining the webinar.

# **Registration URL:**

https://attendee.gotowebinar.com/register/4187882970480349966

Webinar ID: 867-623-291

Attendee Access Code: 696-629-484

You can also dial in using your phone: United States: +1 (213) 929-4212

Interpretation in Portuguese, Haitian Creole and Spanish will be available upon request by contacting <a href="mailto:somerviva@somervillema.gov">somerviva@somervillema.gov</a>, or by phone: 617-625-6600 x 2323.

Questions? Contact Vanessa Boukili: VBoukili@somervillema.gov

# Timeline of Activity taken to preserve Elm tree

(see attached documentation for more details)

#### **AUGUST 2018**

1. Community reports that tree appears to be in poor health.

#### **SEPTEMBER 2018**

- 2. City contracts Barrett Tree East to prune off dead branches.
- 3. City suspects the tree has Dutch Elm Disease. City submits branch samples to UMass Extension Lab to test for disease. UMass Extension Lab identifies canker fungus (Botryodiplodia ulmicola) on branch samples; Dutch Elm Disease was not detected in the sample that was sent.



4. City contracts Barrett Tree East to inject tree with a systemic fungicide (Propiconazole), which is appropriate for the treatment of Canker fungus as well as Dutch Elm Disease.



#### **AUGUST 2019**

- Tree shows further decline, including additional dead branches and flagging leaves. City staff (Public Space and Urban Forestry) and Urban Forestry Committee members investigate of Elm and prepare report.
- City submits branch samples to UMass Extension Lab to check for Dutch Elm Disease. City also submits soil samples to determine if soil amendments are needed.
- UMass Extension Lab identifies Dutch Elm Disease on branch samples. Soil analysis shows reduced calcium levels, but the soil is otherwise healthy.
- 8. City contracts Barrett Tree East to inject tree with a systemic fungicide (Thiabendazole Hypophosphite) to help control disease infection.



#### **SEPTEMBER 2019**

 City contracts Barrett Tree East to prune tree to remove dead wood and declining branches to limit the spread of the infection.

#### **OCTOBER 2019**

10. City contracts Barrett Tree East to apply organic bio-stimulant to soil in the root zone to enhance soil structure, microbial activity, and nutrient availability.



#### 2019 THROUGHOUT PARK CONSTRUCTION

11. Root protection zone around tree was maintained throughout park construction, and tree received regular deep watering during summer months.

#### **MAY 2020**

12. City contracts Barrett Tree East to apply organic bio-stimulant to soil in the root zone to enhance soil structure, microbial activity, and nutrient availability. Lime was also applied to soil to improve Calcium levels.

#### **SUMMER THROUGH FALL 2020**

- 13. Tree continues to decline. Increasing branch dieback. No further action can save the tree it is being overcome by Dutch Elm Disease.
- 14. Removal notice sign posted on tree (November 2<sup>nd</sup>, 2020), to give community time to say goodbye to the tree and write love letters to tree.
- 15. Prospect Hill Elm Tree Virtual Community Meeting (November 5<sup>th</sup>, 5:30pm 6:30pm).

#### End of 2020/ Early 2021

16. Tree to be removed. All parts of tree need to be removed to prevent Dutch Elm Disease from lingering in the landscape.

#### Spring 2021

17. Plant a new tree near the old tree. Species to be determined in conjunction with Urban Forestry Committee.





City of Somerville Home: Office: 617-625-6600

93 Highland Ave Mobile:

Somerville, MA 02143 e-mail: <u>purchasing@somervillema.gov</u>

Alt e-mail:

September 6, 2018 Proposal #: 30217

Job Site: Phone: 617-571-3004

George Ackerson Email: horttecinc@comcast.net

Prospect Hill Park Alt Phone:

Corner of Prospect Hill Ave & Munroe St

Somerville, MA 02143

#### Tree and Shrub Care Recommendations on 9/6/2018

**Description of Services** 

-39" diameter Elm at the corner of the Park, near the corner of Prospect Hill Ave & Munroe St:

**Crown Cleaning** - Selective pruning within canopy to remove declining, dead and broken branches 1.5" in diameter and larger. Includes the approximately 18" diameter limb growing towards the monument, and possibly the limb above it (also 18" diameter) depending on the condition of that limb at the time of the pruning.

- Price assumes the City of Somerville will obtain the required permits and fees associated with the municipality. For this project, we will need the first 5 spots along the park from the corner of Prospect Hill Ave & Munroe St going towards the monument. We can apply for and post these signs, it would be an additional \$300 for that.

Price also assumes we can put a bucket truck, on matting, into the park to do the pruning.

#### - Site Preparation:

Please have working areas free of objects (birdbaths, benches, toys, pet waste, etc.) day of scheduled work. We are not responsible for damage to items we need to move out of work areas.

Total:
Deposit Required: Deposit Received:



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).

All work performed in accordance with ANSI A300 Standards.

Payment due upon completion of work. 1  $\frac{1}{2}$ % per month, 18% per year on unpaid balances.



Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Trumbull Barrett Certified Arborist



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).

All work performed in accordance with ANSI A300 Standards.

Payment due upon completion of work. 1  $\frac{1}{2}$ % per month, 18% per year on unpaid balances.





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Vanessa Boukili City of Somerville 93 Highland Ave

Submitter:

Somerville MA 02143

617-625-6600 ext. 25 vboukili@somervillema.gov

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Sample#	201800936
Field ID	2018-0905
Host	American Elm
Received Date	9/18/2018
County	Middlesex
State	MA

#### Diagnosis and Recommendations

Host/Habitat American Elm (Ulmus americana)			
List of Diagnosis/ID(s)			
Canker (Sphaeropsis ulmicola)			

#### Final Report

Diagnosis: Botryodiplodia ulmicola (previously Sphaeropsis ulmicola). The Dutch elm disease pathogen, Ophiostoma novo*ulmi*, was not detected from the submitted sample.

Description: Botryodiplodia is widespread in North America and has been known to cause a severe dieback of twigs and branches on elm for decades. Severe damage by this pathogen is often linked to stress, reducing the tree's ability to resist infection and compartmentalize cankers once they form. The pathogen primarily attacks small, young stems that don't have fully developed bark tissue. Symptoms appear as water-soaked lesions on the stem and reddish-brown staining of the vascular tissue beneath the bark. The fungus typically does not attack branches larger than 4" in diameter, but it spreads prolifically, attacking numerous small branches. Over time, the damage becomes severe and compounds whatever predisposing stress facilitated the infection.

Management: Because small twigs and branches are infected, pruning out these infected plant parts on a large, mature tree can be difficult. Botryodiplodia is very closely related to Diplodia, so fungicides registered for use against the latter pathogen should be effective against the former. Spring is when most cankering fungi are producing spores in abundance, but Botryodiplodia can produce spores and initiate new infections over the entire growing season. This is likely one reason why trees that become severely infected do not recover. Chemical treatment would have to occur on a regular schedule throughout the growing season, although the pathogen is most active when temperatures are between 60-85 F. Fungicides registered for use against this pathogen include: azoxystrobin, azoxystrobin+propinconazole, copper salts of fatty and rosin acids, copper hydroxide, mancozeb, myclobutanil, propiconazole, Phosphorous acid, thiophanate-methyl and trifloxystrobin.

UMass Extension Plant Diagnostic Clinic

#3 French Hall 230 Stockbridge Road Amherst MA 01003

Telephone: (413)545-2826 Fax: (413)545-4385 Diagnosed By:

NicholasBrazee (nbrazee@umass.edu)

Completed Date: 9/27/2018



City of Somerville Home: Office: 617-625-6600

93 Highland Ave Mobile:

Somerville, MA 02143 e-mail: <u>purchasing@somervillema.gov</u>

Alt e-mail:

September 6, 2018 Proposal #: 30216

Job Site: Phone: 617-571-3004

George Ackerson Email: horttecinc@comcast.net

Prospect Hill Park Alt Phone:

Corner of Prospect Hill Ave & Munroe St

Somerville, MA 02143

#### Plant Health Care Recommendations on 9/6/2018

Description of Services

- **Dutch Elm Disease Control** - Inject an systemic fungicide into the flare around the base of the tree to help control disease infection on the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park). Note this treatment will use Propiconazole as its active ingredient, the intent is to address the active infection and then in 2019 treat again with Thiabendazole Hypophosphite if the tree is responding well to the treatment.

Total:

Deposit Required: Deposit Received:

Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Trumbull Barrett Certified Arborist



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).

All work performed in accordance with ANSI A300 Standards.



#### Notes for American Elm Prospect Hill Park, Somerville MA August 6, 2019

#### **Background**

The American elm is located at the southeast corner of Prospect Hill Park. The exact age of the tree is unknown. It was planted after 1902 and estimated age ranges from experts fall between 70-100 years.

Tree was first reported to have general symptoms of decline, with symptoms resembling Dutch Elm Disease (DED), in 2018. It is unknown as to when the first symptoms of decline, dieback, or other disease problems appeared.

*Botryodiplodia* species was identified from a branch sample in September 2018. It is a fungus that grows in the vascular tissue causes cankers to form on elm. In Sept 2018 one large branch (approximately 10 inches in diameter) on the north side of the tree (facing monument), as well as many smaller branches throughout the canopy (5 inches in diameter or less) were pruned. An injection of propiconazole, a broad-spectrum fungicide, was administered in Sept 2018.

In spring of 2019, it was observed that buds on the north side of the tree formed, but leaves failed to emerge.

#### **Observations**

Severity of decline on the north side of the tree is  $\sim$ 20-25%. It has at least 2, maybe 3, full branches in decline/dieback (Figure 1). This is also the side where last pruning was done in 2018 (one full branch). The branches in this sector do not appear to be classic DED symptoms. A diagonal cut on one small branch collected from this area was difficult to evaluate; there may be some vascular browning along the edge, but it is very faint (Figure 2).



Figure 1. Branches of American elm in decline (lacking leaves) on north side of tree.



**Figure 2.** Cut through a branch collected from the north side of the tree shows some faint vascular staining.

There are chlorotic (yellowing) leaves scattered throughout the north/northeast sector of the tree, but no evidence of leaf wilt or lesions. Chlorosis of leaves is uniform and occurring between veins (leaf veins remain green...this is common) and occurs scattered throughout on individual branches in general proximity of the larger branches in decline.

Classic DED symptoms appear more toward the southern sector of the tree (facing intersection of Munroe St and Prospect Hill Ave). There are several single branches with brown, flagging leaves (Figure 3). Two entire branches and some smaller branches scattered. Disease severity is estimated at  $\sim$ 20%. We observed that some of the sprouts growing from the tree base or from the bottom of the trunk also exhibit these same symptoms.



**Figure 3.** Branches located on south side of an American elm tree that have DED symptoms. Samples were taken on August 6, 2019 from area shown in photo on right.

From branches and leaves that we were able to see from the ground, or through binoculars, there is no visual evidence of fungal growth, insect pest damage, cankers, or holes.

The ground beneath the tree is uniform without very little leaf litter. There are exposed roots that have likely sustained some mowing damage (not recent) and there appears to be some rotting areas. The soil was quite wet, so evidence of compaction was not apparent. Soil around the tree was sampled and submitted separately.



# DIAGNOSTIC REPORT

Vanessa Boukili City of Somerville 93 Highland Ave

Somerville MA 02143

617-625-6600 ext. 25 vboukili@somervillema.gov

Sample#	201900725
Field ID	2019-0719
Host	American Elm
Received Date	8/8/2019
County	Middlesex
State	MA

# Diagnosis and Recommendations

Host/Habitat American Elm (Ulmus americana)			
List of Diagnosis/ID(s)			
Dutch elm disease (Ophiostoma novo-ulmi)			

#### **Final Report**

Diagnosis: Dutch elm disease caused by Ophiostoma novo-ulmi.

Disease Description: The submitted branch segments had evidence of vascular staining and after incubation and culturing of the symptomatic material, the Dutch elm disease (DED) pathogen (Ophiostoma) was clearly visible. DED is transmitted by elm bark beetles and physical root connections (grafts) between nearby trees. The overland spread of DED depends on the activity of its insect vectors, the native elm bark beetle (Hylurgopinus rufipes) and the less abundant European elm bark beetle (Scolytus multistriatus). Elm bark beetles breed under the bark of dead or dying elms. When their eggs hatch, the larvae feed on the inner bark and sapwood, forming a network of galleries. When the pathogen is present, it develops sticky spore masses that grow within the beetle galleries. The spores coat the bodies of adult beetles and when they emerge from standing trees or cut logs they carry the fungus to a new host. As active adults, the native elm bark beetles chew through the bark of healthy elm branches to feed in the inner bark or to create nesting sites where they will spend the winter. The adults of the lesser abundant European elm bark beetle feed in twig crotches of healthy elms. Both beetles carry DED spores into or near severed wood vessels as they feed, where the spores germinate and infect the tree. The second mode of disease transmission occurs when the fungus spreads from an infected tree to an adjacent healthy tree via root grafts, which are very common in forest and landscape settings. Once established in the tree, *Ophiostoma* spreads within the vascular system. As the xylem vessels are damaged by the fungus and blocked by the tree as a natural defense response to prevent further spread of the pathogen, water starvation leads to leaf yellowing (or browning), wilting and the eventual death of the branch or stem beyond the vascular blockage. DED may progress rapidly, killing the infected elm that season or it may gradually cause branch dieback for several years in trees with some level of resistance.

Management: Scouting for the characteristic flagging symptoms should take place from mid-June to mid-August. At times, branch cankering and elm anthracnose can create symptoms that mimic DED. Remove branches showing very early wilt symptoms (<5% of the crown). Confirm that leaf yellowing is not the result of elm anthracnose (black spot). To eliminate DED from infected trees, prune the flagging branch so that 8-10 feet of symptomless sapwood exists between the portion of the branch with wilt symptoms and the cut that removed the branch. Protect specimen trees from infection with preventative injections of fungicides at 1-2 year intervals. Fungicides labeled for use against *Ophiostoma* include: propiconazole (Alamo), tebuconazole (Tebuject) and thiabendazole hypophosphite (Arbotect 20S). Chlorpyrifos is an insecticide labeled for use to control elm bark beetles before they can introduce the fungus into healthy trees.

UMass Extension Plant Diagnostic Clinic

#3 French Hall 230 Stockbridge Road Amherst MA 01003

Telephone: (413)545-2826 Fax: (413)545-4385 Diagnosed By:

Nicholas Brazee (nbrazee@umass.edu)

Completed Date: 8/14/2019



# Soil Test Report

#### **Prepared For:**

Vanessa Boukili City of Somerville 93 Highland Ave Somerville, MA 02145

vboukili@somervillema.gov 617-625-6600 x2516

#### Soil and Plant Nutrient Testing Laboratory

203 Paige Laboratory 161 Holdsworth Way University of Massachusetts Amherst, MA 01003 Phone: (413) 545-2311

e-mail: soiltest@umass.edu website: soiltest.umass.edu

#### **Sample Information:**

Sample ID: PHP\_2019\_1

Order Number: 46253

Lab Number: \$190807-117 Area Sampled: 2000 sq ft Received: 8/7/2019 Reported: 8/12/2019

#### **Results**

Analysis	Value Found	Optimum Range	Analysis	Value Found	Optimum Range
Soil pH (1:1, H2O)	5.3		Cation Exch. Capacity, meq/100g	15.4	
Modified Morgan extractable, ppm			Exch. Acidity, meq/100g	10.7	
Macronutrients			Base Saturation, %		
Phosphorus (P)	8.8	4-14	Calcium Base Saturation	22	50-80
Potassium (K)	134	100-160	Magnesium Base Saturation	6	10-30
Calcium (Ca)	684	1000-1500	Potassium Base Saturation	2	2.0-7.0
Magnesium (Mg)	111	50-120	Scoop Density, g/cc	0.97	
Sulfur (S)	7.3	>10	Optional tests		
Micronutrients *			Soil Organic Matter (LOI), %	6.7	
Boron (B)	0.1	0.1-0.5	Soluble Salts (1:2), dS/m	0.05	< 0.6
Manganese (Mn)	5.4	1.1-6.3			
Zinc (Zn)	11.2	1.0-7.6			
Copper (Cu)	1.7	0.3-0.6			
Iron (Fe)	7.7	2.7-9.4			
Aluminum (Al)	72	<75			
Lead (Pb)	17.0	<22			

Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.

#### Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				



For current information and order forms, please visit

**UMass Extension Nutrient Management** 

#### Soil and Plant Nutrient Testing Laboratory

203 Paige Laboratory 161 Holdsworth Way University of Massachusetts Amherst, MA 01003 Phone: (413) 545-2311

e-mail: soiltest@umass.edu website: soiltest.umass.edu

#### Recommendations for Deciduous Trees, Shrubs & Vines-Maintenance

Limestone (Target pH of 6.0)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O			
15	lbs /	/ 100 sq ft	0.1			
-	.1 - ,2	0.1	0.1			
<u>Comments:</u>						
-Do not topdress with more than 5 lb limestone per 100 sq ft at one time. Split the above application between early spring and midautumn.  *To supply Nitrogen, apply EITHER 1 - 1.5 lbs. Dried Blood (12-0-0) OR 0.2 - 0.4 lbs. Urea (45-0-0) per 100 square feet.  Application should be split between early spring and mid-June.  *To supply Phosphorus, apply EITHER 0.8 lbs. Bone Meal (4-12-0) OR 0.2 lb. Triple Phosphate (0-45-0) per 100 square feet.  *To supply Potassium, apply 0.2 lbs. Potash (0-0-60) per 100 square feet.  -For instructions on converting nutrient recommendations to fertilizer applications in home gardens and landscapes, see Reference "Step-by-Step Fertilizer Guide for Home Grounds and Gardening" (listed below).						
References:						
Home Lawn and Garden Information	http://	ag.umass.edu/resources/home-lawn-garden				
Step-by-Step Fertilizer Guide for Hom Gardening	e Grounds and https://	/ag.umass.edu/SPNTL-4				
General References:						
Interpreting Your Soil Test Results	http://	soiltest.umass.edu/fact-sheets/interpreting-your-soi	il-test-results			

http://soiltest.umass.edu/

http://ag.umass.edu/agriculture-resources/nutrient-management



City of Somerville 93 Highland Ave Somerville, MA 02143 Home: Mobile:

August 20, 2019 Proposal #: 36117

Office: 617-625-6600

e-mail: purchasing@somervillema.gov

Alt e-mail:

Job Site:

Phone: 617-625-6600

Vanessa Boukili

Email: vboukili@somervillema.gov

Alt Phone:

Prospect Hill Park

Corner of Prospect Hill Ave & Munroe St

Somerville, MA 02143

#### Tree and Shrub Care Recommendations on 8/14/2019

**Description of Services** 

#### -38" diameter Elm at the corner of Prospect Park:

**Canopy Cleaning** - Selective pruning to remove declining portions on the north side of the tree (facing the monument). Includes (1) whole 18" diameter leader, an 8" diameter limb, as well as other dead and declining sections throughout the canopy.

- Disinfect pruning tools and treat cuts greater than 3" in diameter with food grade silicone to reduce risk of disease spread.
- Price assumes the City of Somerville will obtain the required permits and fees associated with the municipality. For this project, we will need the first 5 spots along the park from the corner of Prospect Hill Ave & Munroe St going towards the monument. We can apply for and post these signs, it would be an additional \$300 for that. Price also assumes we can put a bucket truck, on matting, into the park to do the pruning if necessary. (We will try to avoid this if practical)
- **Debris Disposal:** Costs include removal and disposal of brush, logs and chipped debris generated from tree care operations.

Please have working areas clear (birdbaths, toys, pet waste, etc.) day of scheduled work. We are not responsible for damage to items we need to move out of work areas.

Total:
Deposit Required: Deposit Received:



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged). All work performed in accordance with ANSI A300 Standards.

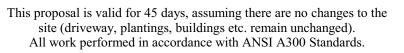
Payment due upon completion of work. 1 ½% per month, 18% per year on unpaid balances.



Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Alden Johnson Certified Arborist







Payment due upon completion of work. 1 ½% per month, 18% per year on unpaid balances.



City of Somerville 93 Highland Ave Somerville, MA 02143 Home: Mobile:

August 20, 2019 Proposal #: 36151

Office: 617-625-6600

Alt Phone:

e-mail: purchasing@somervillema.gov

Alt e-mail:

Job Site:

Phone: 617-625-6600

Vanessa Boukili Prospect Hill Park Email: <u>vboukili@somervillema.gov</u>

Corner of Prospect Hill Ave & Munroe St

Somerville, MA 02143

# Plant Health Care Recommendations on 8/20/2019

**Description of Services** 

- Elm Disease Control Inject an systemic fungicide into the flare around the base of the tree to help control disease infection on the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).

Product injected will be Thiabendazole Hypophosphite at a 3 year rate.

- Lime Application Fall 2019. Apply granular calcitic lime within the critical root zone to help adjust soil pH within desired growing range of the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).
- **Bio-stimulant Application** Late season. Inject soils within critical root zone with an organic liquid blend of humic acids, kelp extract and natural compounds to enhance soil structure, microbial activity and nutrient availability. The application area is typically within the dripline with injection sites approximately 6" deep, 24" apart. Treat the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).

Total:

Deposit Required: Deposit Received:



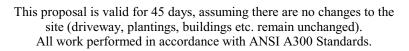
This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).
All work performed in accordance with ANSI A300 Standards.



Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Alden Johnson Certified Arborist









City of Somerville 93 Highland Ave Somerville, MA 02143 Home: Mobile:

April 14, 2020 Proposal #: 39691

Office: 617-625-6600

e-mail: sestrela@somervillema.gov

Alt e-mail: <u>SMacEachern@somervillema.gov</u>

Phone: 617-625-6600

Email: vboukili@somervillema.gov

Alt Phone:

Vanessa Boukili Prospect Hill Park

Corner of Prospect Hill Ave & Munroe St

Somerville, MA 02143

#### Plant Health Care Recommendations on 4/14/2020

Description of Services

Job Site: 3

- **Deferred treatment year** We recommend deferring the **Elm Disease Control** on the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park). If the tree's condition stabilizes the next injection of Thiabendazole Hypophosphite would be due in 2022.
- Lime Application Spring 2020. Apply granular calcitic lime within the critical root zone to help adjust soil pH within desired growing range of the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).
- **Bio-stimulant Application** Early season. Inject soils within critical root zone with an organic liquid blend of humic acids, kelp extract and natural compounds to enhance soil structure, microbial activity and nutrient availability. The application area is typically within the dripline with injection sites approximately 6" deep, 24" apart. Treat the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).
- **Bio-stimulant Application** Late season. Inject soils within critical root zone with an organic liquid blend of humic acids, kelp extract and natural compounds to enhance soil structure, microbial activity and nutrient availability. The application area is typically within the dripline with injection sites approximately 6" deep, 24" apart. Treat the 39" diameter Elm close to the corner of Prospect Hill Ave and Munroe St (tree is in the Park).



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).
All work performed in accordance with ANSI A300 Standards.



**Description of Services** 

- **Soil Test- Fall 2020 Prospect Hill Elm:** Gather and prepare core samples for analysis to determine site fertility, nutrient content levels, organic matter levels and other soil characteristics. Based on laboratory results, we may recommend subsequent soil conditioning and nutrient treatments.

Total:

Deposit Required: Deposit Received:

Thank you for considering Barrett Tree Service East, Inc. Sincerely,

Alden Johnson Certified Arborist



This proposal is valid for 45 days, assuming there are no changes to the site (driveway, plantings, buildings etc. remain unchanged).
All work performed in accordance with ANSI A300 Standards.

