

Vista Prune Assessment, Feasibility and Recommendations Report

Prepared for

James and Holly Rader

5 Merrill Street

Hingham, Mass.

November 5, 2024

PREPARED BY:

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Table of Contents

Introduction3

Limitations3

Assignment3

Methods4

Site Illustration.....4

Tree Inventory Data Header and Key5

Tree Inventory and Assessment Data6

Assessment Summary and Recommendations7

Woodland Trees on the Bank7

Shrubs and Small Trees at the Top of the Slope9

Viewshed Photographs9

Photographs – Individual Trees..... 11

Disclaimer 15

Certification 16

Introduction

James and Holly Rader of 5 Merrill Street, Hingham have expressed a desire to expand the view from that property to the north towards Hingham Bay. This view is obstructed by trees on a slope past their property line in approximately 2800 square feet of woodland. This land area is owned by Hingham Yacht Club and is also in a coastal bank/wetland area which will require a permit to proceed from the Hingham Conservation Commission. I was retained to assess the site, and count, identify, assess the trees obstructing the view and provide an opinion on the feasibility and/or methods needed to provide the view of the bay. I met with Mr. Rader and Don Bracken from Bracken Engineering at 5 Merrill Street on October 24, 2024, at which we identified the subject area, located property boundaries, and discussed the scope of the viewshed clearing.

Limitations

All observations, opinions, and recommendations in this report are based on the information provided to me including survey plans for the property and subject area provided by Bracken Engineering, photographs provided by Mr. Rader and discussions with both. Pruning recommendations are intended to comply with industry standards and best management practices but are general in nature. Actual pruning scope will be decided by the arborists performing the work.

Assignment

After discussion with Mr. Rader, it was determined that this assignment will involve the following:

- Review site plans and surveys of the property and subject area.
- Meet with Mr. Rader, Don Bracken, and inspect approximately 2800 square feet of trees and vegetation hindering the view to Hingham Bay.
- Identify and record trees and vegetation, distinguish invasive versus native species, and pruning scope and feasibility.
- Provide pruning recommendations for the trees and vegetation obstructing the view. These recommendations will follow industry standards and best management practices for tree and vegetation maintenance.
- Submit a written report with assessment results, with pruning and removal recommendations.

Methods

All trees within the 2800 square foot area on the bank north of the Rader property were assessed, tallied and entered on a spreadsheet (see Inventory Data on page 6 & 7). The inventory started in the northwest corner of the subject area and proceeded in a south easterly direction along the bank. Each tree was tagged with a numbered orange tag which corresponds with the inventory data, identified by species, measured at 4.5 feet high on the trunk, estimated for height, assessed for health, structure, identified as invasive or native, and defined according to its general location. The shrubs and small trees on the top of the slope just north of the pool area are identified and noted in the Assessment Summary and Recommendations portion of this report (page 9).

Site Illustration – Approximate Tree Locations



Tree Inventory Data Header and Key.

No.	Species	DBH	Est. Ht.	Cond.	Invas.	Site Loc	Notes
1	Norway Maple (<i>Acer platanoides</i>)	8	40	Fair to Good	Yes	NW corner of site. Bottom of slope	3 leaders at 8 feet. Prune 2 west leads

No. Order of when the tree was assessed

Species. Common name with scientific name displayed once per species

DBH Diameter measured 4.5 feet high or where it best represents the tree's trunk diameter. Multiple leaders joined near the base were measured separately

Estimated Hgt. Height was estimated in five-foot increments.

Invas. Invasive species and listed on the Prohibited Plant List by the Mass. Dept. of Agriculture Resources (MDAR)

Health. Assessed for health, vigor, structure and form. Rated Good, Fair, Poor or a combination of each.

Site Location: General description of the trees' location in relation to the work area, slope and nearby trees (see Site Illustration on previous page for visual)

Notes: Further description of the tree with recommendations.

Tree Inventory and Assessment Data

No.	Species	DBH	Est. Ht.	Cond.	Invas.	Site Loc	Notes
1	Norway Maple (<i>Acer platanoides</i>)	8	40	Fair to Good	Yes	NW corner of site. Bottom of slope	3 leaders at 8 feet. Prune 2 west leads
2	Norway Maple	8	45	Good	Yes	NW corner of site. Bottom of slope	2 leads at 8 feet. Prune both
3	Norway Maple	8	40	Good	Yes	NW corner of site. Bottom of slope	2 leads at 8 feet. Prune both
4	Norway Maple	16	45	Fair	Yes	10' SE of #3	3 leaders at 8 feet. Significant decay on lower trunk. Failure likely. Remove or prune
5	Norway Maple	7	30	Fair to Good	Yes	2' SE of #4	Suppressed by #4. Minor pruning needed
6	Swamp White Oak (<i>Quercus bicolor</i>)	9	40	Good	No	Mid site. Bottom of slope next to dock. 8' E of #7	Lean and weight over docks. Minor pruning needed.
7	Norway Maple	4	25	Fair to Good	Yes	15' SE of #5	Suppressed by #4. Minor pruning
8	Norway Maple	5	30	Good	Yes	6' E of #7	Some lower trunk decay. Lean to east. Prune
9	Norway Maple	6	25	Fair to Good	Yes	Mid site; Mid slope. 6' W of #8	Multi-leads joined near the base. Prune largest leaders
10	Norway Maple	6	35	Good	Yes	Mid site. 8' E of #7	Single stem. Prune
11	Norway Maple	4	30	Fair to Poor	Yes	Next to base of #10	Dead or dying. Significant decay at base. Remove or minor prune
12	Norway Maple	6,8	50	Good	Yes	Mid slope; Mid site. 8' S of #11	Two leads joined at base. Possible weak branch union (WBU). Heavy pruning needed or thin crown for view
13	Norway Maple	8,6	45	8" Good; 6" Poor	Yes	Mid slope; Mid site. 4' S of #12	Two leaders joined at 24". WBU. North lead dead or dying with trunk decay. Remove one lead; prune remaining.
14	Norway Maple	8	40	Good	Yes	SE section of site. Bottom of slope	In a group of 4 trees. Lean and weight over dock. Prune
15	Norway Maple	6	45	Good	Yes	SE section of site. Bottom of slope	In a group of 4 trees. Single stem. Prune
16	Norway Maple	7	35	Good	Yes	SE section of site. Bottom of slope	In a group of 4 trees. Lean and weight over dock. Prune

No.	Species	DBH	Est. Ht.	Cond.	Invas.	Site Loc	Notes
17	Norway Maple	6	25	Fair to Good	Yes	SE section of site. Bottom of slope	In a group of 4 trees. Heavy lean and weight over dock. Minor pruning needed
18	Black Cherry (Prunus serotina)	9	30	Fair	No	SE section of site. 3' E of 20	30 to 40 degrees lean over dock and building. No pruning needed. Consider removal.
19	Norway Maple	6,6	40	Good	Yes	SE section of site. 3' W of #19	Two leaders at 15". Prune both
20	Norway Maple	7	35	Good	Yes	SE edge of site. Mid slope	Wide crown. Heavy prune and thin for view.
21	Norway Maple	6	40	Good	Yes	SE edge of site. Mid slope	Wide crown. Heavy prune and thin for view.
22	Norway Maple	12	50	Good	Yes	SE edge of site. Mid slope	Wide crown. Heavy prune and thin for view.

Assessment Summary and Recommendations

Woodland Trees on the Bank

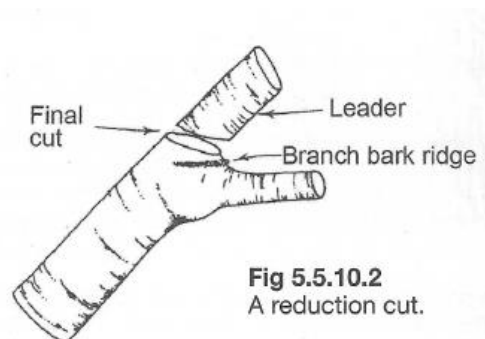
Twenty-two trees were tallied on the wooded bank that are obstructing the view to the north and Hingham Bay. Twenty are Norway maple trees, one is a swamp white oak, and one is a black cherry. Both the oak and cherry are located at the base of the slope and next to and over the dock area and existing barn. The oak needs minimal pruning to enhance the view. The cherry does not need pruning but should be removed as it is at risk of falling onto the barn due to an excessive lean.

The twenty Norway maples range in trunk diameter from 4 to 16 inches and are about 25 to 50 feet in height. Eight of the maples have multiple leaders indicating they have been previously pruned back to the area (and height) where the leaders originate. There is also evidence of prior pruning/topping cuts in the upper crown in some of the larger trees. It is also important to note that Norway maples are listed as an invasive species in Massachusetts and on the Prohibited Plant list which prohibits the import, sale or trade in Massachusetts.¹ This status stems from the fact that they are fast growers and prolific reproducers that can displace a native forest because they tolerate a wide range of conditions, leaf out first in the spring and are the last to drop in the fall which shades

¹ Mass. Dept. of Agricultural Resources (MDAR)

most natural understory growth throughout the growing season. In the case of the ‘bank’ trees, moving to, and displacing native woodlands is not an issue because these are isolated to the subject area. However, the second trait of repressing undergrowth is apparent with very little understory growth visible. Over time as the trees grow in size and mature, the slope could become unstable due to its steepness, exposed soil and minimal undergrowth which can predispose the trees to uprooting – especially those with crown weight and lead to the north and/or during severe weather events.

Because Norway maples are fast, aggressive growers, they can be pruned more aggressively than some other trees – especially our native oaks and maples. If pruning is to be done to expose the view, I would recommend reducing the crowns by up to 40 percent and done in such a way as to encourage more lateral growth as opposed to vertical growth. This is termed ‘Reduction Pruning’ and done by cutting back the upright branches to lateral branches large enough to sustain the remaining branch (usually about 1/3 the thickness of the cut branch). Pruning cuts should be limited to 4 inches in diameter or less, which shouldn’t be an issue since these are relatively small, young trees with few upper branches larger than that. The diagram below illustrates the reduction pruning method.²



Reducing the Norway maples by ~40 percent with this pruning method should achieve the desired results while exposing the slope to more sunlight which will stimulate undergrowth. However, this will not be a one-time pruning event. There will be new branch sprouts growing vertically from the reduction cuts that will, over time, start to obscure the view. These can be pruned back to the original cut location on an estimated 3-to-5-year pruning cycle. The photographs on page 9 show the existing conditions with the recommended pruning height outlined. Note, actual pruning locations and scope should be determined by the arborist performing the work.³

² ANSI A300 2023 Tree Care Standards – Pruning. Section 5.5.10.

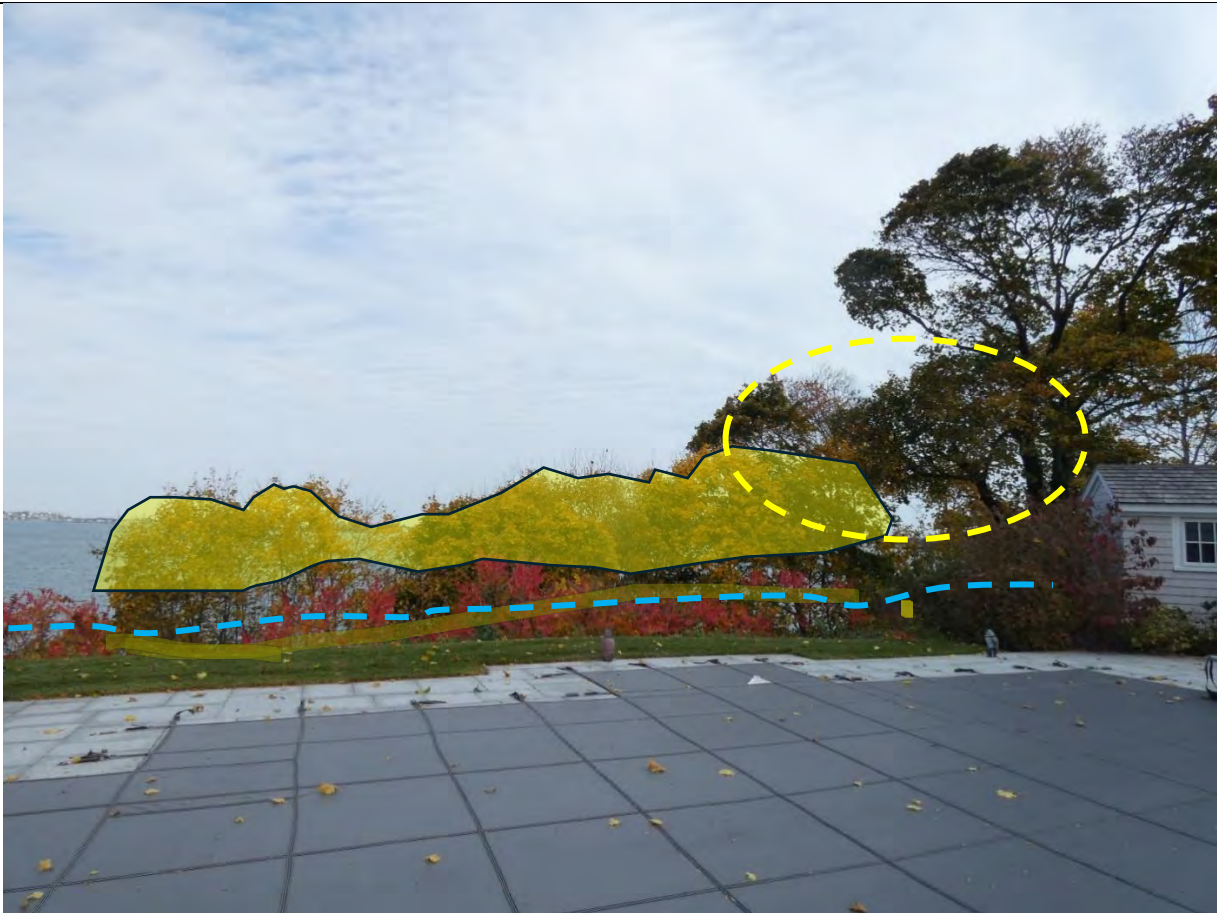
Best Management Practices – Tree Pruning. International Society of Arboriculture. Page 23.

³ There should be at least one Mass. Certified or International Society of Arboriculture Certified Arborist either performing or overseeing the pruning operation.

Shrubs and Small Trees at the Top of the Slope

These consist of primarily staghorn sumac (*Rhus typhina*) and honeysuckle (*Lonicera spp.*) on the top of the slope and Norway maple saplings further down the slope in the west portion of the subject area (see photograph below) The sumac and honeysuckle can be cut down to a height of 12 to 24 inches and maintained at that height. The Norway maple saplings can be reduced to below the viewshed height but should be cut back to appropriate lateral branches. These can also be maintained at that height.

Viewshed Photographs

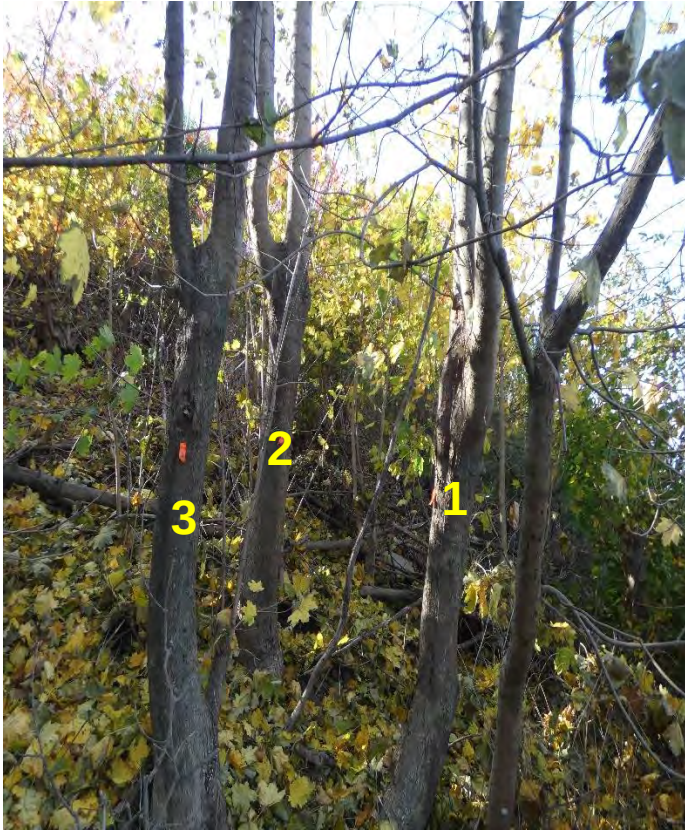


North view from the pool area with the estimated recommended reduction pruning scope (shaded yellow for the trees and a blue line for the shrubs on top of the slope). The circled area can be thinned for a view through the trees.



North view towards Hingham Bay from the second story window with the estimated pruning heights highlighted. The circled area can be thinned to expand the view east.

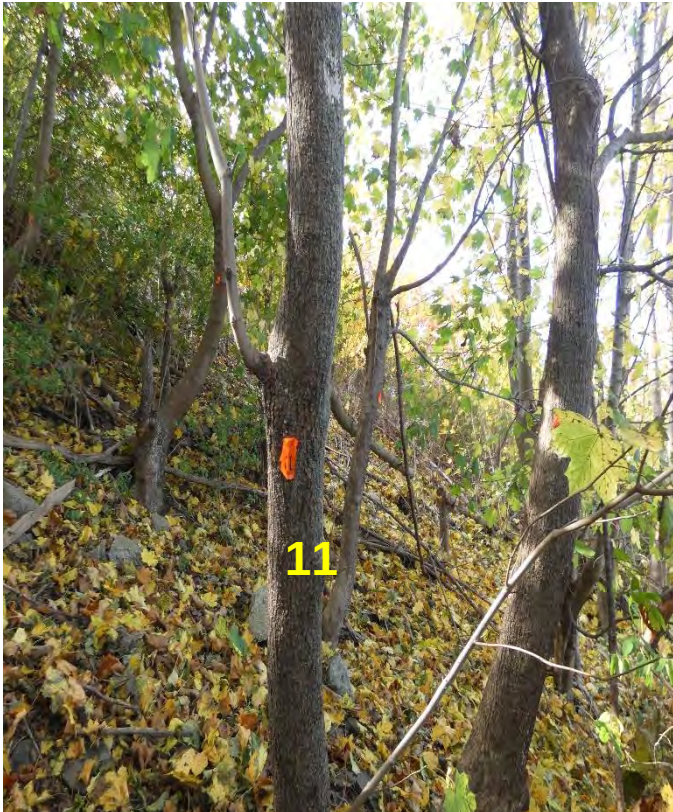
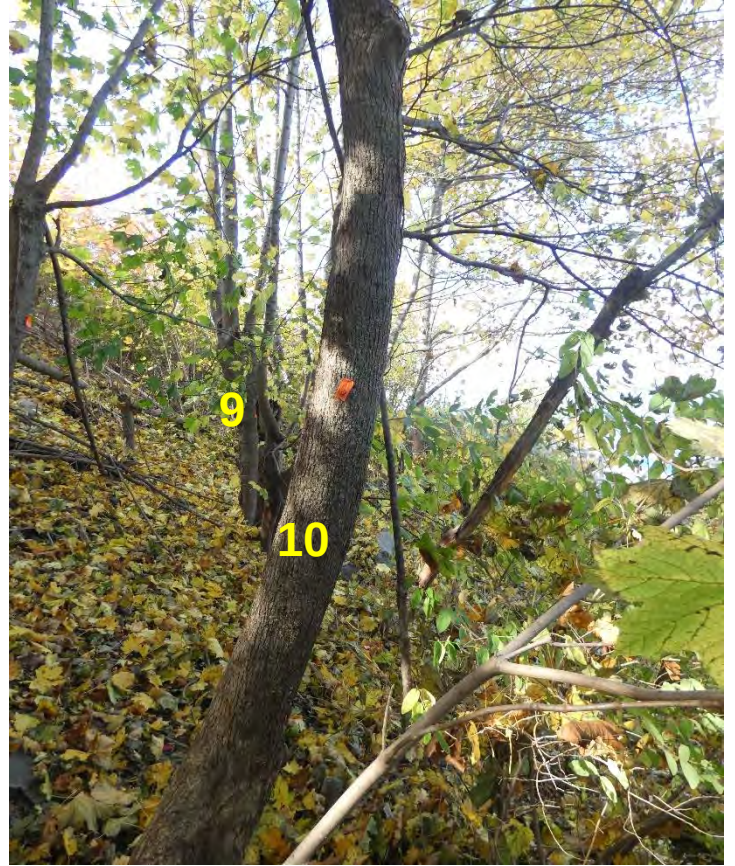
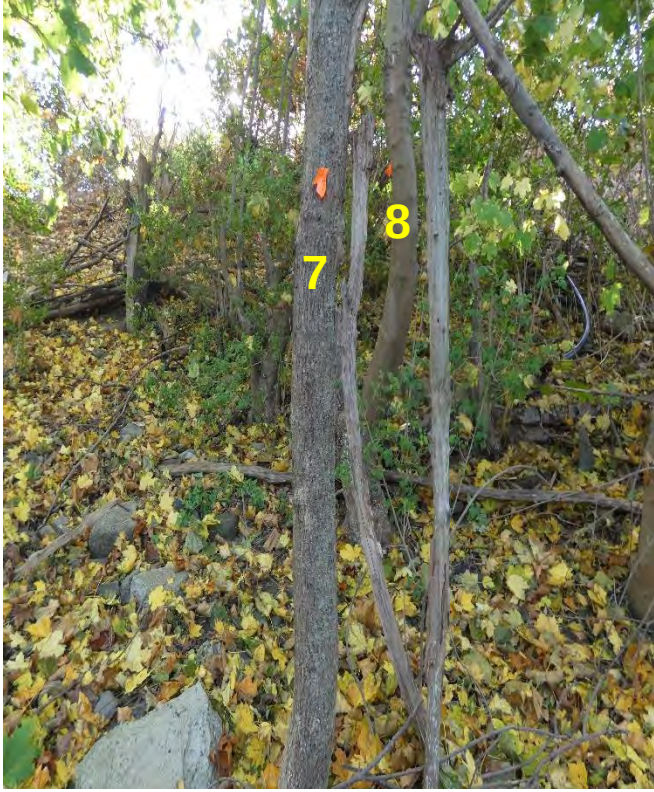
Photographs – Inventoried Trees

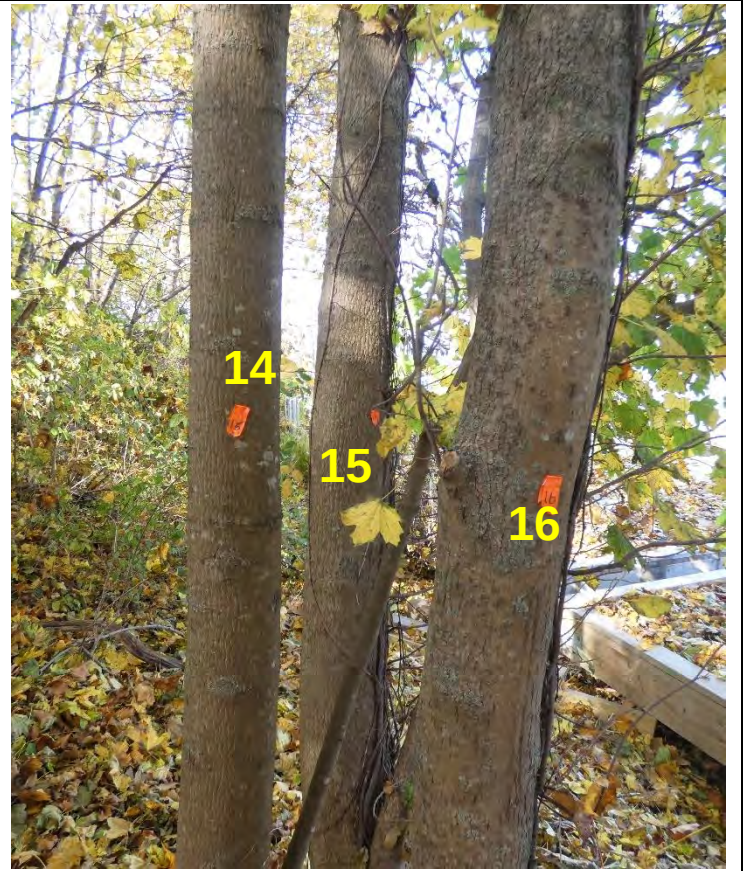


Significant decay. Recommend removal



Swamp white oak





Black Cherry



Disclaimer

By the nature or their size, weight, miscellaneous structure issues, constant exposure to the weather and the elements, and susceptibility to insect's pest and decay organisms, trees always pose an inherent degree of risk of breakage or structural failure.

Recommendations made by Urban Forestry Solutions, Inc. are intended to minimize, reduce, or eliminate hazardous conditions associated with trees. However, there is not, and can never be, any guarantee or certainty that these recommendations will totally correct unsafe conditions or prevent future failure of a tree.

The recommendations carried out as stated should reduce the risk, but they cannot completely eliminate the risk (except when the tree is removed), especially in the event of future growth, further deterioration, subsequent insect attacks, extreme weather conditions, or other eternal factors such as lightning strikes vehicular damage, or other acts of God or man.

Certification

I certify the statements in this report are, to the best of my knowledge, true, accurate and represent my professional opinion.



Date: November 5, 2024

David C. Hawkins, Consulting Arborist

ISA Board Certified Master Arborist

#NE-0541B

ISA Tree Risk Assessor Qualification

TRAQ 3/2014, Renewed 10/2018, 2/2024

Massachusetts Certified Arborist

MCA #1425

Rhode Island Licensed Arborist

License #969

Member: The Tree Care Industry

Member: American Society of Consulting Arborists

Registered Consulting Arborist

RCA #743

Member: Mass. Tree Wardens' and Foresters' Assoc.

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