7/20/2021

To whom it may concern,

I am assisting Mr. Brad Fuster in resolving the issues with respect to the removal of 14 dead or dying ash trees in a deed-restricted area on his property located at 3663 Summit Vw, Canandaigua, NY 14424.

My qualifications include a Bachelors of Science in Environmental Science. I have studied a broad range of ecosystems and ecological relationships with a focus on conservation practices. I have held professional positions in the field for over three years and volunteered in the field for over six years. Highlights of my work include working on a NYS Department of Environmental Conservation ongoing grant project *Trees for Tribs*, through which I assisted in planning, planting, and caring for approximately 500 saplings in multiple riparian ecosystems. My current professional experience is as a Utility Forester for Davey Resource Group, a subsidiary of the Davey Tree Company.

I have surveyed the deed-restricted parcel and documented the infected ash trees that were removed. Attached to this document is a data set of the trees removed and the size of the stumps left behind.

According to the New York State Department of Conservation (NYS DEC) website, ash trees will die off within 2 to 4 years of infestation of the Emerald Ash Borer (EAB). There are times that an ash tree will have leaves still sprout, however from the evidence I observed on the logs, all trees on site that were removed were in serious decline. This can be determined by the "blonding", "s-shaped" feeding trenches, and blown out bark. I have attached a photo of a very good example of what "blonding" looks like that was taken on site.

The dying ash is most certainly a safety hazard. As discussed in the provided articles from Purdue University and the Chicago Tribune, Dying Ash can break off and cause damage to humans or property even with 30% of its canopy alive. Both articles, and numerous authoritative sources, clearly urge the immediate removal of dead or dying ash trees.

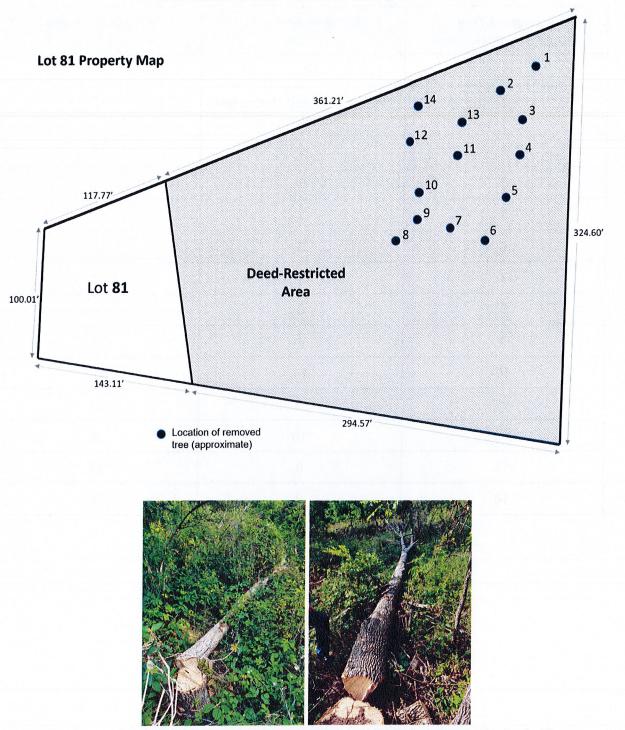
As an example, the ash tree shown below was found on the property and had been previously blown over due to high wind and a dead root system, resulting from EAB damage.



Trunk sizes and stump heights of the 14 removed ash trees

Assigned Tree Identification Number	Diameter of Stump (inches)	Height of Stump (inches)
1	6	10
2	Tri-Trunked Ash, Averaged Diameter - 18	10
3	4	10
4	6	12
5	3	12
6	10	10
7	8	14
8	6	8
9	3	10
10	14	20
11	6	8
12	16	16
13	8	13
14	6	10

The plot map below denotes the stump locations of the 14 EAB infested/dead ash trees that were removed.



Tree 1 and Tree 12: Had extensive evidence blonding and EAB damage on the bark. These trees were not going to survive and were hazardous if left standing.



Tree 2, Tree 7, Tree 3: Had extensive evidence blonding and EAB damage on the bark. These trees were either dead or not going to survive and were hazardous if left standing.



Trees 4,5,6, Tree 10, Trees 11, 13, 14: Had extensive evidence blonding and EAB damage on the bark. These trees were dead and were hazardous if left standing. The stump of tree 10 has the clearest emblematic example of blonding left by the Emerald Ash Borer (EAB).



Tree 8 and tree 9: Had extensive evidence blonding and EAB damage on the bark. These trees were dead or not going to survive and were hazardous if left standing.



The above trees show old cuts due to the grey color of the wood. These cuts were made years ago and not at the same time as the 14 trees described in detail above. After speaking with the homeowner and reviewing the aerial images included "Notice of Violation" that were dated 3/30/2021 and 4/22/2018, it is clear that the property has had additional trees, beyond the 14 dead or dying ash trees noted in the included table. According to the homeowner, the trees noted above and intimated in the aerial photos were removed by the previous property owner. The current homeowner has occupied the premises since 11/1/2019.

If it is deemed necessary by the Planning Board, I suggest a replanting protocol described in the "Optional Landscaping Plan, found appended to this document. I will work with Mr. Fuster to ensure the proper replanting of tree saplings based on the habitat, terrain, and usage of the

area. According to the Davey Tree Company, there are several different replacement species that can successfully replace the loss of the ash trees. In the Optional Replanting Plan, I have called out Black Walnut and Red Oak as suitable replacements. The conditions are hospitable to both varieties, and will create additional biodiversity. Should the planning board require the homeowner to replant, the planting of replacement saplings should take place in early Spring 2022. This is to allow the saplings to establish their root systems throughout the growing seasons of Spring and Summer, prior to the colder months of Fall and Winter. (See Attached Optional Replanting Plan).

However, I must emphasize that in my professional assessment of the remaining flora contained within the deed restricted property, the conditions remain both excellent and sustainable for wildlife, and healthy trees will establish themselves without further human intervention, which is my primary recommendation. After an additional consultation and assessment of the property, the recommendation to allow the natural order of succession, and not require the introduction of new trees has been further endorsed by Professor of Environmental Science, Timothy Sellers, Ph.D. Please do not hesitate to contact with questions or concerns.

Respectfully Submitted,

Dan Lazzaro, B.S., Env. Science Utility Forester, Davey Resource Group (516) 661-9312

APPENDIX OF ADDITIONAL RESOURCES

According to a 2019 Purdue University report,

"Emerald ash borer (EAB), the most destructive forest pest to enter North America, has left hundreds of millions of dead ash trees in its wake. Ash trees killed by emerald ash borer, become extremely brittle and break easily as they decline. Branches can fall on people and property in snowstorms, with a light breeze, or even on a calm clear day. Danger could be hanging over your head in the street, in the forest, and even in your backyard.

Unlike elms, oaks, and maples, ash trees use a thin ring of conducting tissue to supply water from the roots to the entire tree. Emerald ash borer grubs will damage these functional water pipes as they chew just beneath the bark inside trunks and branches. This causes the tree to dry quickly and the structural wood to become prone to cracking. Internal breaks in the structural wood that bear the weight of the tree are often hidden from view by tree bark. As such, limbs can break and fall at any point along the branch at any time. It is not uncommon to have sizable limbs snap 30 feet off the ground on a calm day.

The threat of falling limbs is not limited to just dead ash. A comparative study of ash trees conducted in Ohio shows that structural integrity of ash trees can begin to decline even when trees are mostly green and have two thirds of the canopy still intact. If the tree has lost more than 30% of the canopy, make plans to remove it. Delaying removal allows the tree to become more brittle and the problem more dangerous. Remember, EAB causes progressively more injury to ash trees as time goes on. The dead parts never come back to life."

It was further noted in a 2015 Chicago Tribune article,

"When an ash tree is dead or dying because it has been infested with the emerald ash borer, a saddened homeowner must confront the next step: getting it cut down. Because its wood is brittle, a dead ash must not be left standing.

"It's a safety hazard," says Beth Corrigan, Community Trees Program specialist with The Morton Arboretum in Lisle. Limbs can break, endangering people and causing property damage, or the entire tree can fall. The ash tree dies by drying out, because the borers cut off the vessels that carry moisture out to the branches, Corrigan says. The wood already has become brittle before its end.

"Some kinds of trees can stand for many years after they die, but the ash tree is not one of them," Corrigan says.

If a tree falls in the forest, "it provides a wonderful habitat for many plants and animals," she says. "But if it dies in your yard, you want it gone." A falling tree or branches could harm people or damage buildings and cars.

It can cost a property owner hundreds or even thousands of dollars to have a tree cut down, depending on its size, location and condition. But those who fail to promptly remove dead ash trees because of the trouble and expense may find the delay is costly. Many municipalities have the legal power to remove hazardous trees and bill the homeowner for the cost. They can place a lien against the property to collect.

Has someone advised you to wait until the tree falls, in the hope that homeowners' insurance will cover the cost of the damage and removal? That's a bad bet, Corrigan says. Increasingly, insurance companies are refusing to pay such claims on the grounds that the homeowner was negligent in not removing the dead tree.

Since the tree may already be unstable and dangerous, it's wise to hire a trained, certified, insured professional arborist to do the job. Don't delay, she says, because the more the tree dries out the more risky — and expensive — the job will become."

Works cited

https://www.purduelandscapereport.org/article/avoid-deadly-risk-of-dying-ash-trees-with-timely-tree-removal/

https://www.chicagotribune.com/lifestyles/home-and-garden/ct-sun-0215-garden-morton-20150209-story.html

https://www.dec.ny.gov/animals/7253.html

https://www.arborday.org/media/zones.cfm

https://blog.davey.com/2017/06/best-trees-to-replace-ash-ash-tree-alternatives-by-zone/

Optional Landscaping Plan

if required by the Planning Board

(NB: This plan is not the primary recommendation to remediate)

Property

Parcel Address:

3663 Summit View

Tax Parcel Number: 97.20-1-14.081

District:

Fox Ridge Phase IV - Lot #81

Owner(s):

Dr. Bradley Fuster/Dr. Lisa Hunter

Issue

A total of 14 Ash trees were cut down on the deed-restricted section of the property in June 2021. All 14 trees were infested by Emerald ash borer grubs, and the trees were already either damaged or dead.

Optional Landscaping Plan

A total of 30 tree saplings consisting of two different species could be planted in the affected area in Spring 2022.

Trees

15 Quantity: black walnut (*Juglans nigra*) saplings, sized 5" – 14"

Mature Height: 40 to 80 feet Mature Width: 30 to 60 feet Growth Rate: Medium fast

Site Requirements: sun, deep moist well drained soil

Physical Description: Deciduous tree. Often has rather short trunk and open spreading branches. Compound leaves, 12 to 24 inches long with 10 to 24 narrow leaflets. Terminal leaflet often absent. Nuts almost round, about 1 inch long covered with thick husk. Unripe nuts have green husk and are perfectly round 1 ½ inch spheres. Husk turns brown and begins to disintegrate when nuts are ripe. Bark dark brown with narrow ridges.

Wildlife Value: Rich oily nutmeats are high calorie food for squirrels who open the nuts, and also for birds who clean out the shells.

Uses: Primary use is lumber from the valuable dark brown heartwood. Prized for furniture. Nuts are used for baking. Nut husks were once an important source of brown dye. Ripe nut husks will stain hands.

Interesting Facts: Spreads very readily where there are nut-bearing trees, because squirrels bury so many of the nuts.

15 Quantity: red oak (Quercus rubra) saplings, sized 5" – 14"

Mature Height: 60 to 80 feet Mature Width: 40 to 50 feet Growth Rate: Medium to fast **Site Requirements:** Sun, moist well drained soil. Grows well on upland sites. most cold-tolerant oak species, hardy to zone 4.

Physical Description: Deciduous tree. Dense foliage, pyramidal form when young, developing long straight trunk in forest conditions, and shorter thick trunk in open situations. Rounded crown, usually more symmetrical than white oak. Leaves glossy, 5 to 8 inches long with lobes ending in sharp points. Fall color ranges from vivid red to russet brown. Big acorns, about 1 inch long, with very shallow caps like little berets. Ripen in two years, bitter taste. Bark smooth when young, becoming ridged with age.

Wildlife Value: Foliage browsed by deer. Acorns a major food source for wildlife species, especially deer, bear, turkeys, squirrels and many birds, especially jays and woodpeckers.

Uses: Very strong heavy, reddish wood, used for beams, framing, flooring and furniture.

Tolerant of urban conditions and does well in larger areas like parks.

Interesting Facts: Unusually fast growing for an oak.

Source

These tree saplings will be sourced and purchased from the New York State Department of Conservation (DEC) nursery stock (https://www.dec.ny.gov/animals/75799.html).

Assumptions

Assuming at least a 50% survival rate, the 30 saplings will provide replacement coverage for the infested trees that were removed. These two hardy hardwood species are currently growing on the property and will replace the hardwood ash trees. These trees will not be susceptible to the Emerald Ash Borer.

Saplings are preferential as positioning the equipment required to plant more mature trees will further damage otherwise healthy vegetation growing in the deed-restricted area.

Timing

The 30 saplings will be planted in the Spring of 2022. DEC recommends spring planting of saplings and accordingly makes their sapling stock available in spring only.

Locations

A map of the property and its dee-restricted area is provided. The approximate locations of the removed tress (red circles) and new saplings (green triangles) as depicted below:

