

JOHN F. BROWN - (1891-1959)

NATHANIEL K. BROWN

MARK S. RAFFA

PAMELA J. BROWN, FAICP

ERIC R. PRICHARD

BRITNEY M. MARTIN*

* ALSO ADMITTED IN NEW HAMPSHIRE

BROWN & BROWN, P.C.

COUNSELLORS-AT-LAW

110 GREAT ROAD

BEDFORD, MASSACHUSETTS 01730

TELEPHONE (781) 275-7267

TELECOPIER (781) 275-6940

WEBSITE: www.brown-brown-pe.com

Email: pbrown@brown-brown-pe.com

OF COUNSEL

GEORGE E. FOOTE

June 20, 2023

Mr. Gary Wilson, Chair
Littleton Select Board
37 Shattuck Street - Room 306
Littleton, MA 01460

Attn: Ryan Ferrara, Interim Town Administrator

RE: Notice of Hazardous Trees – Littleton Parcel U2-32-5A

Dear Mr. Ferrara and members of the Select Board:

This office represents Rodi and Maureen Adema who reside at 5 Old Farm Road, adjacent to Cloverdale Conservation Area. The Ademas are extremely concerned about a number of hazardous trees that stand immediately adjacent to their property line. The area of concern is located north of the public parking area and is identified on **Exhibits A and B** attached hereto.

On May 27, 2014 the Littleton Conservation Trust (see LCT website) characterized the property as “a tangled mess of broken trees and invasive vines” along with their vision to Cloverdale return to the beautiful pastureland and meadow 1800s Mannion Farm. LCT and the Town sought to preserve the property and accomplish the “removal of dead and undesirable trees, stumps, large stone piles and invasive vines and brush.” The 2021 Cloverdale Conservation Management Plan (**Exhibit F**) sets forth prior and planned work to improve and maintain the area, including invasives management, tree removal and creation of fields. Parcel 32-5A is located in Area 3 and the adjacent Area 1 was previously cleared of trees as indicated in the Plan. This tree removal has contributed to the hazardous condition of the remaining trees as explained in more detail in the Marquis letter (**Exhibit C**)

During a storm on December 23, 2022, two trees located on Town land fell onto the Adema property causing major structural damage to their shed, the loss of a mature arborvitae and a significant cleanup effort. Following notice of the incident, Littleton town officials suggested that the Town would take care of the tree removal and damage to the Adema property. Subsequently, the offer of assistance did not come to fruition as the Town insurance would not cover the damage claiming Littleton had no prior knowledge of any danger posed by the trees. However, just as a driver is responsible for ensuring that the brakes on their car function properly, the Town should take care to manage its properties, including good forestry practices, and the Town knew or should have known about the risks associated with white pine, especially adjacent to residential structures and public use areas.

The Conservation Commission should also be aware of situations of potential risk of injury or property damage. Possibly, the Littleton Conservation Commission Land Stewardship Program should include instruction and training of volunteers to watch out for potential hazards such as dead trees.

Arborist John Marquis, by letter dated February 23, 2023 identified many dangerous and dead trees and the reasons Eastern white pine is a hazard (Exhibit C). The photos that follow in **Exhibit D** and **Exhibit E** illustrate the many dead /dying or otherwise hazardous white pine as well as their proximity to the Adema property. It is Marquis' professional opinion that the pine trees on Lot 5A should be removed to avoid a significant risk of falling causing damage to property and/or personal injury. Please note that the species in this wooded area is mixed and includes many deciduous hardwoods (oak and maple), so clearcutting all of the trees is not necessary. We would welcome some replacement planting of other tree species that can withstand wind and weather.

Please accept this letter as formal notice that the white pine trees on Parcel U2-32-5A along the property line at 5 Old Farm Road are hazardous and create a risk to human life and property. In a cooperative spirit, we request a site visit with Town representatives (potentially Town Manager, Tree Warden, Conservation, Public Works) to discuss and identify trees in greatest need of removal and a plan for accomplishing this mission.

Kindly contact me at your earliest convenience to schedule a mutually agreeable time.

Very truly yours,



Pamela J. Brown, Esq. FAICP
President

Copy to:

Mr. Chase Gerbig & Ms. Sarah Seaward, co-chairs
Littleton Conservation Commission
37 Shattuck Street
Littleton, MA 01460

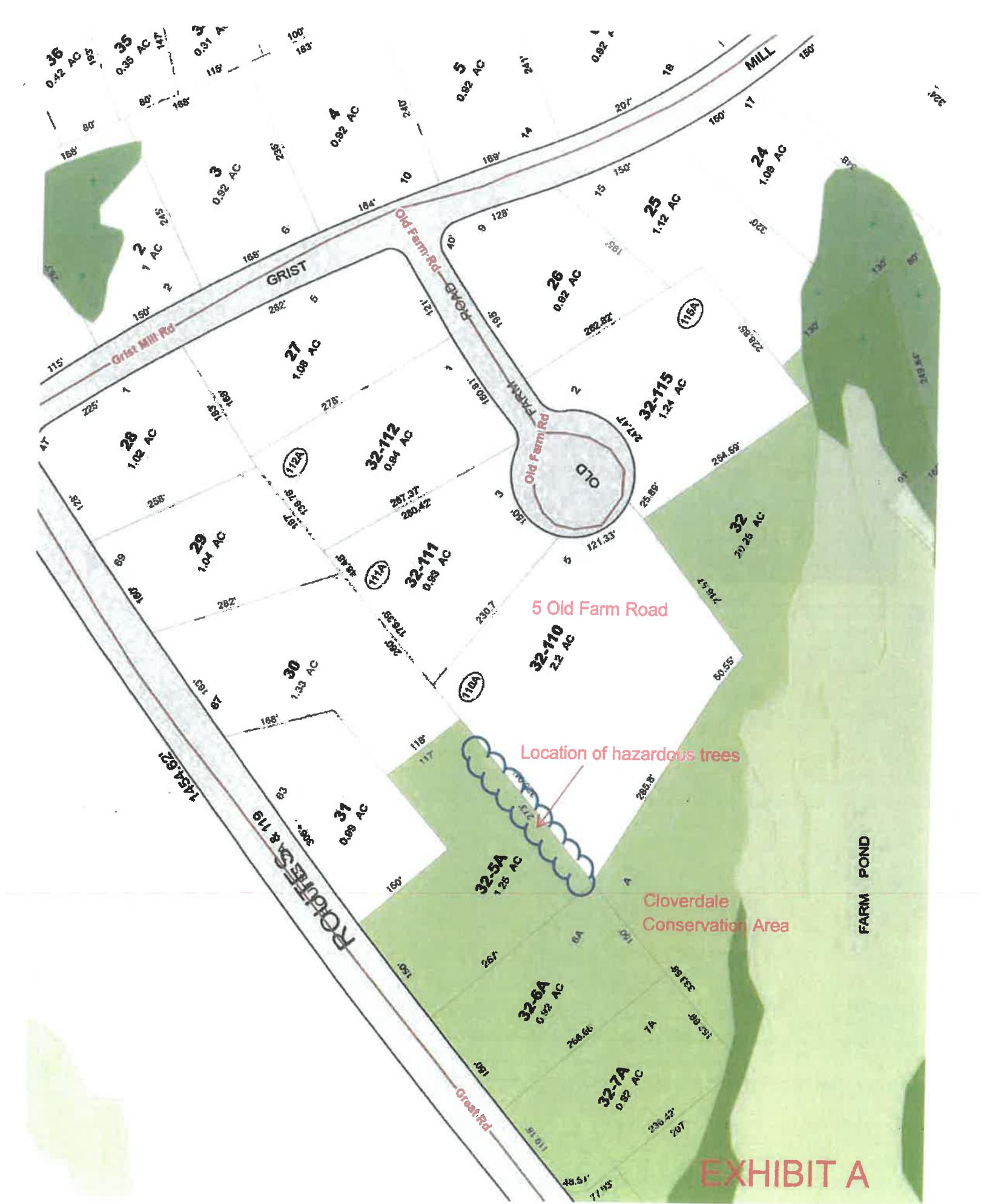


EXHIBIT A



Town Trees Affecting Property at 5 Old Farm Road



Imagery ©2023 MassGIS, Commonwealth of Massachusetts EOEA, Maxar Technologies, Map data ©2023 100 ft

EXHIBIT B

<https://www.google.com/maps/@42.5298794,-71.4415191,370m/data=!3m1!1e3?entry=ttu>



MARQUIS TREE SERVICE INC.,
10 Republic Road, N. Billerica, MA 01862
Tel: 781-860-9618 978-657-5633 781-272-6662

February 23, 2023

To whom it may concern:

My name is John Marquis. I am the owner of Marquis Tree Service, Incorporated. I hold an associate degree in Arboriculture and a bachelor's degree, in Urban Forestry; from the University of Massachusetts at Amherst. I am currently an ISA certified arborist.

I was asked by Rodi and Maureen Adema to evaluate several trees at his home at 5 Old Farm rd, Littleton MA because of their concerns about the safety of his trees after a tree fell onto his shed and pool deck.

During this visit Rodi and Maureen pointed out multiple tall trees that line his back yard. Two of these trees completely uprooted and fell into his yard during a recent wind storm. The trees in question are all Eastern white pine. Eastern white pine trees have a very shallow root system causing them to be more likely to blow over than other species. These particular trees are even more likely to fail in my opinion because of two factors. The first and most important factor is that the ground where the trees are located appears to be a shallow trough that pools with water when it rains causing the ground to soften and be unable to support the tall trees. The second is the wind exposure that was created when a large area of trees was cleared adjacent to this row of trees. Eastern white pine trees grow in a grove to protect each other from wind. When the grove is disturbed, the wind hits the trees differently and increases the failure rate. In this instance there is now a very large open expanse of land behind the row of trees. The wind now pushes these trees toward the Adema's property and there is little protection because the other trees are gone. I would also mention that at least two of the trees on the property line are completely dead.

The first question in determining whether-or-not a tree is a hazard is "what is the target and what is the likelihood of serious physical injury or property damage if a failure should occur?" If these trees continue to fail at the base like the two I witnessed during my visit, it is almost certain to cause more serious property damage and more importantly potential harm to people.

The Adema's are understandably petrified of the trees and experience real anxiety during inclement weather because of these trees.

In closing I would like to repeat that because of the species of these trees, the soft ground and recently changed wind patterns, as well as the proximity to people and property, it is my opinion that the trees are hazards and should be removed.

Please feel free to contact me directly if you have any questions.

Respectfully,

MARQUIS TREE SERVICE, INC

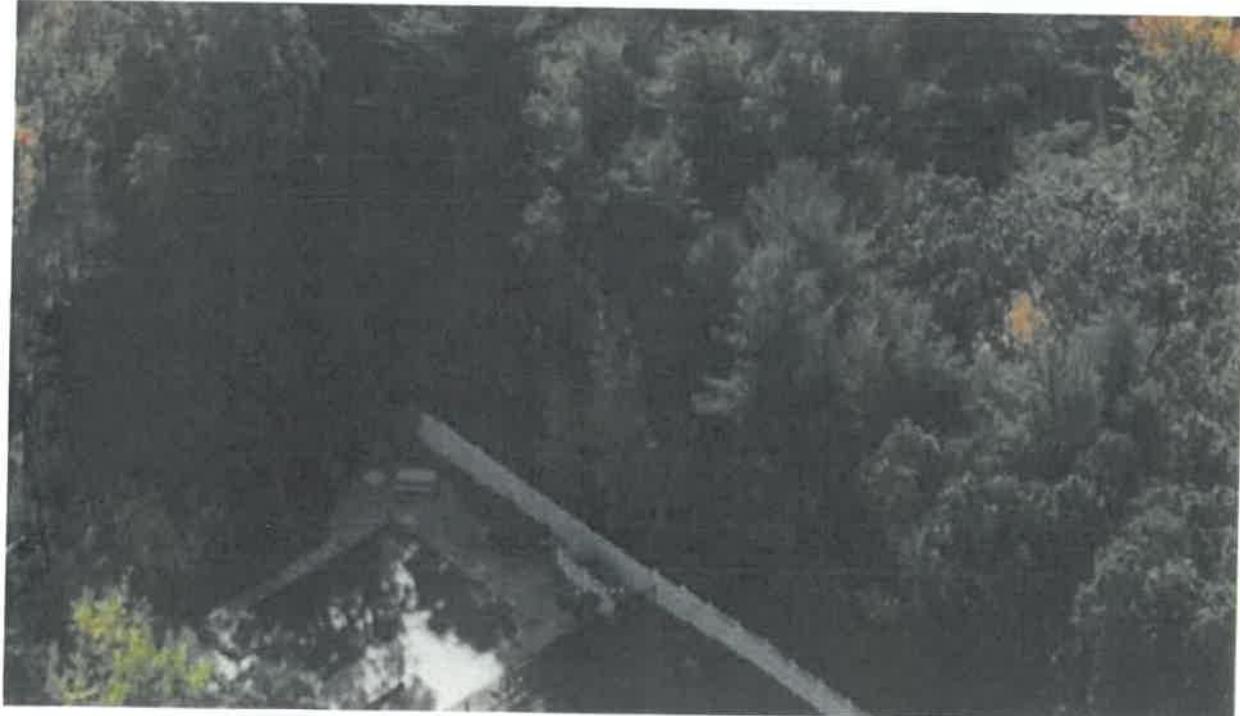


John Marquis
President
ISA #NE-7104A



Birdseye view from Town GIS – Beautiful from above, danger below (above).

Zoom of trees at property line – mix of deciduous hardwood and hazardous white pine (below).





Dead pine trees along property line between 5 Old Farm Road and Town land.

These trees are hazardous and prior clearing on Town land has weakened the ability of remaining pines to withstand wind and storms.



Healthy oak interspersed with hazardous white pine (dead, dying and weak trees). The pine is more dangerous than the hardwoods due to shallow root systems and other factors.



Dead pines.



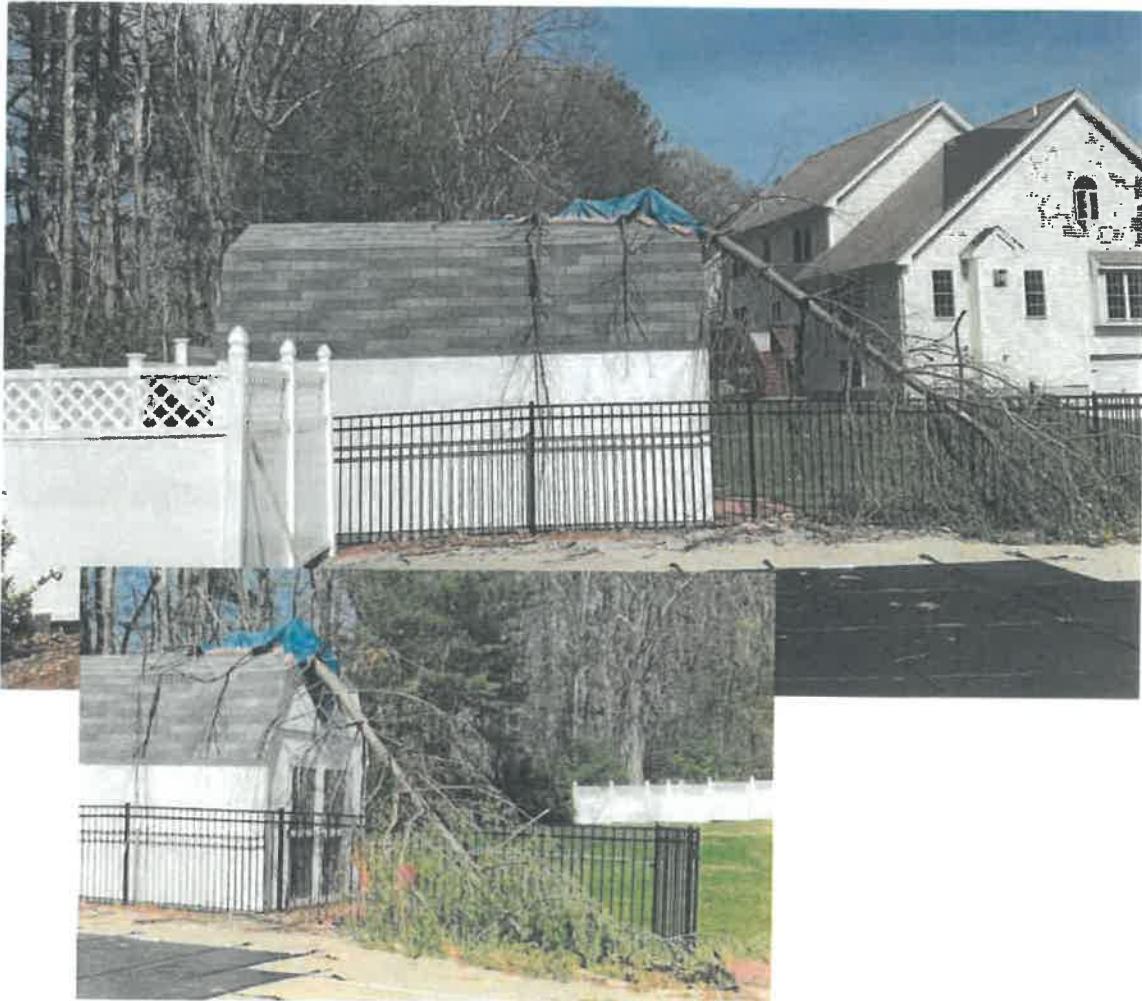
Hazardous pine trees need to be removed to avoid injury to persons or property. Selective cutting of this densely forested area would aid survival of remaining hardwoods.



Hazardous trees need to be removed to avoid injury to persons or property. Damage already occurred during a storm on December 23, 2022.



White pines along the common property line are likely to fall and cause damage to structures or people.



Google Maps

Littleton, Massachusetts

View into Town Land from 5 Old Farm Road



5 Old Farm Rd

EXHIBIT E

Cloverdale Conservation Land (CCL)

Management Plan

(January 19, 2021)

This plan has been developed to help guide stewardship of the property, with particular focus on controlling the invasive, non-native plants that have become well established in many areas. It is expected that this document will be re-visited as conditions on the property change.

1.0 Site Description

CCL is located on Great Road and is comprised of numerous parcels. Figures 1 and 2 show the Conservation-owned parcels (red; 25.43 acres), and general Town- owned parcels (blue; 7.73 acres). The bulk of the property was donated to the town as part of the Apple D'Or subdivision in 1999 for recreation. The site turned out to be too small for upland development as playing fields, and laid fallow until it was transferred to the Conservation Commission in 2013. Since then the Commissions efforts have been to manage the property primarily to control invasive species and enhance public use. The re-establishment of trails, completion of a hiking loop with the boardwalks and construction of the parking lot have substantially increased the public enjoyment of this area, including programmed events such as the Friends of the Library Story walks.

The land includes a central wetland surrounded by fringe uplands (Figure 3). For convenience, the area is divided into nine reference areas (Figure 4):

- Area 1: Upland meadow generally associated with parking lot (generally Lots 32-6A and 32-7A)
- Area 2: Upland meadow on eastern end, along Great Road (generally Lot 32-116)
- Area 3: Upland meadow on western end, along Great Road (generally Lot 32-5A)
- Area 4: Upland pines between Areas 1 and 4 (generally Lot 32-5A/6A)
- Area 5: Core wetland area (generally Lot 32; 32-14; 32-15)
- Area 6: Upland hardwoods and scrub on northern side of the property (generally part of Lot 32; Lots 32-93 through 32-97)
- Area 7: Upland hardwood island in Area 5 (generally Lot 32)
- Area 8: Successional uplands near Surrey Road (generally Lot 32-102)
- Area 9: Stormwater basins along Surrey Road (generally Lot 32-96)

Key features (Figure 5) include: Parking lot and kiosk; boardwalks and ramps, old cattle crossing; and old foundation. The dark green points are existing features and the light green is a proposed Eagle Scout project boardwalk (2021). A beaver dam and beaver deceiver have been variously active in the northwest outlet location.

EXHIBIT F

2.0 Previous Efforts

Major management efforts in the past have included:

- Area 5 – beaver deceiver: Installed in May 2011 but discovered to have been dragged away in 2017.
- Area 1 and 2: Bay State Forestry did foliar spray of buckthorn and cut and daub of vines. (October 2013).
- Areas 1 and 2: clearing of trees and invasive species to allow future mowing management (approved 2015; MADEP #204-765).
- Area 5: construction of a boardwalk (approved 2018; MADEP #204-863),
- Area 1: construction of a parking lot and installation of entrance sign and kiosk (finalized 2019)
- Area 8: connecting trail to Surrey Road (2019)
- Area 1: installation of demonstration native pollinator wildflower gardens (2020).
- Area 2: Clearing of brush/invasive species and excavation of old foundation (2020)
- Survey portions of Lot 32-5A and SW end of Lot 32 (2020)
- Cattle tunnel on Town property 32-14/32-15 cleared (2020)

3.0 Management Plan

3.1 Trails

The trails should continue to be maintained which will likely include clearing felled trees, mowing frequently along the trails and their immediate edges to allow passage, and improvements as needed, such as additional boardwalk and/or crossings of wet areas. The existing boardwalks will need routine maintenance such as replacement of planks. Consideration of trails improvements, such as on the steeper sections of the new trail to Surrey Road will be considered. Connection to Area 7 is a possible future effort, as is a trail to Surrey Road through Lot 32-96.

3.2 Upland Fields Meadows (eg Areas 1, 2, 3 and 8)

These should be managed as per the Best Management Practices laid out in the *Field Management: Mowing Strategies to Maintain Ecologically Valuable Fields*, prepared by Sudbury Valley Trustees for Littleton (2020). The Cloverdale fields would qualify as Small Field, with bordering Wet Meadow. These fields are currently challenged by invasive species and, as such, may need mowing more than once a year to keep the invasive species from spreading. As of 2021 it is assumed that mowing will occur twice a year in the meadow portions of Area 3, but once a year in Areas 1 and 2. The shrubby fringe of areas 1 and 2, which includes large areas of the invasive species buckthorn, will be mowed on as needed basis to keep these shrubs from dominating the area (but not more than once a year). The goal, however, would be to mow only once a year, in the fall. The presence/abundance of invasive species will have to be tracked. The primary goal is to control invasive species through mowing. If herbaceous invasive species start spreading, however, consideration could be given to limited use of herbicides.

Area 8 has some native shrubs in it and these should not be mowed. Invasive/non native shrubs should be removed. Initial cutting and mowing may be enough but, again, if this is not effective to keep out species such as the autumn olive, some targeted use of herbicides may be considered.

The establishment of native wildflowers is a high priority and the success of the installed wildflower garden should be tracked and expanded if successful. Wildflowers can easily take years to become established from seed, so this will be a long term project.

3.3 Upland Wooded/shrubby areas (eg Areas 4, 6, 7 and 8)

Similar to the upland meadows, some of these areas are infested with invasive species and, at the least, their spread should be controlled if the invasive cannot be eradicated. This can be done with limited mowing, but the focus should be on using hand tools such as a weed wrench to pull out invasive shrubs. Some targeted use of herbicides may be considered. In general fallen tree debris that is not blocking the trails should be left in place as a habitat feature, with the exception of areas of the pine grove in Area 4 which can be kept relatively free of fallen branches to maintain the area as an attractive grove..

3.4 Wetlands

Some of these areas, especially the more peripheral areas where invasive species are an issue should continue to be mowed at least once a year so that invasives cannot get a foot hold and spread. Some targeted use of herbicides may be considered.

There is a small patch of Phragmites and this area should be targeted for hand pulling, if possible, or cut and daub and/or injection by limited herbicides to eradicate this growth before it gets a large foothold in the expansive wet meadow.

As indicated above, mowing/brush hogging of invasive shrubs can occur, but not more than once a year, to try to limit their spread and ability to go to seed. Manual removal of the shrub and its roots, possible with application of herbicide, is a good strategy.

3.5 Other

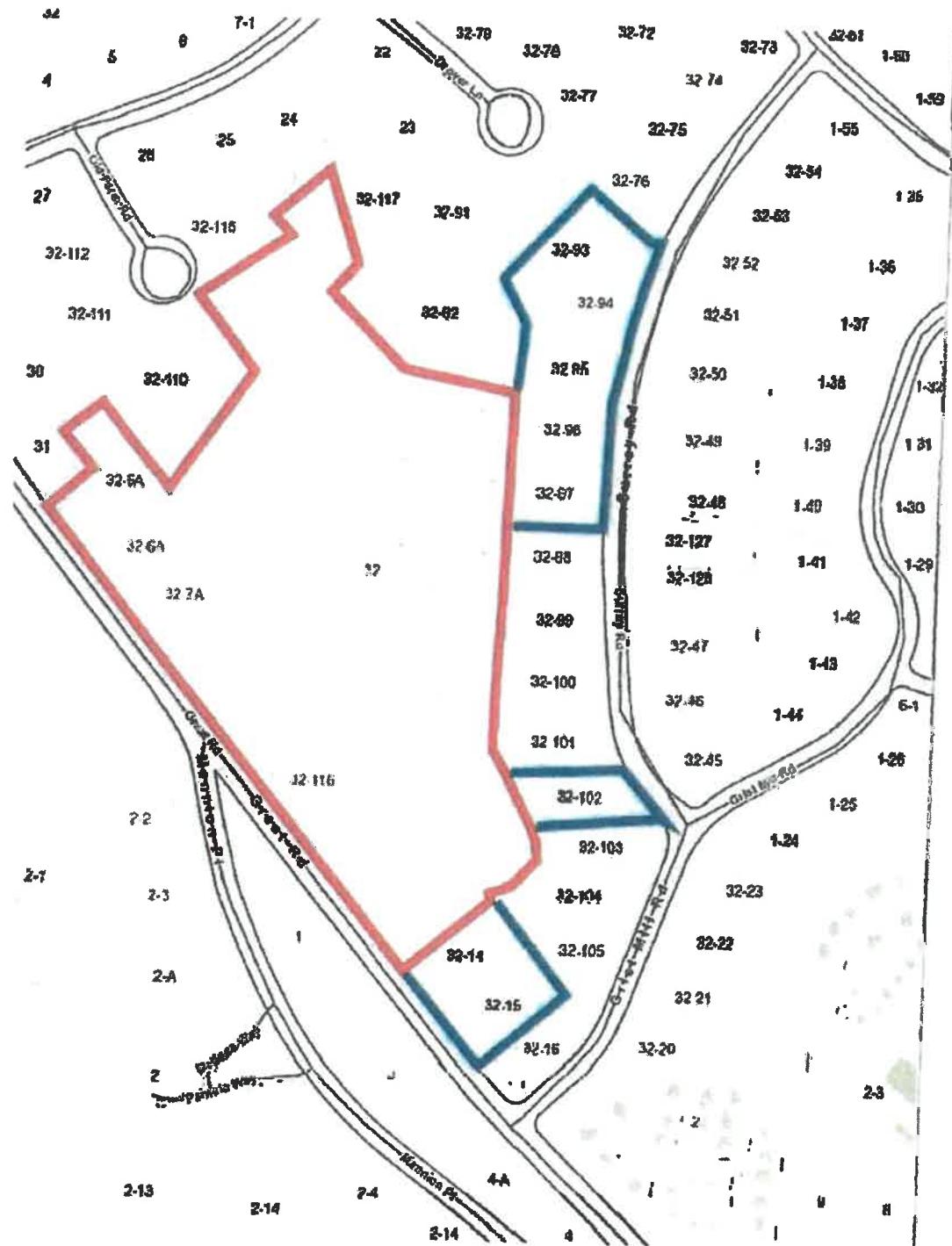
Beaver activity – discovered in January 2017 that it had been pulled out by someone; was repaired with Jim O'Neill and Mike Callahan on September 14, 2017 but left to the side as Mike did not think there was enough water depth. It remains on site until such time as the water depth is sufficient for re-installation. Beaver activity should be monitored in case they return.

Foundation – the area should be kept clear so that it can be mowed and not serve as a potential area for invasives to get a foothold. Educational signage is a possibility

Cattle tunnel – the opening to this should remain cleared so that it is visible. It is in a very wet area so is not really accessible. Educational signage is a possibility

Stormwater basins – this is on Town property and the Select Board should be consulted about maintaining (mowing) the basin, trying to control invasives, and discouraging dumping of landscaping debris from the abutters.

Burning – Burning, as allowed by the Fire Department, can be used as a tool to remove accumulated invasive species that have been cut and/or gathered fallen tree limbs from the trails.



Red – Conservation land

Blue - Town land

FIGURE 1



FIGURE 4
Management Areas