

NOTICE OF PUBLIC HEARING SUDBURY CONSERVATION COMMISSION

The Sudbury Conservation Commission will hold a public hearing to review the Notice of Intent filing for removal of trees and associated landscaping improvements within wetlands jurisdiction, pursuant to the State Act and local Bylaw, at 26 Musket Lane, Sudbury MA. Chris Storm, applicant. The hearing will be held on Mon., April 5, 2021 at 6:45 pm, via Zoom. Please see the Conservation Commission web page for further information.

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-april-5-2021-2/>

SUDBURY CONSERVATION COMMISSION
March 17, 2021



Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

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Username: **STORMC**

Transaction ID: **1264727**

Document: **WPA Form 3 - NOI**

Size of File: **248.66K**

Status of Transaction: **In Process**

Date and Time Created: **3/15/2021:12:46:34 PM**

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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Intent
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1264727
City/Town:SUDBURY

A.General Information

1. Project Location:

a. Street Address	26 MUSKET LN	c. Zip Code	01776
b. City/Town	SUDBURY	e. Longitude	71.41321W
d. Latitude	42.40615N	g.Parcel/Lot #	0415
f. Map/Plat #	E09		

2. Applicant:

☒ Individual ☐ Organization

a. First Name	CHRISTOPHER	b. Last Name	STORM
c. Organization			
d. Mailing Address	26 MUSKET LN		
e. City/Town	SUDBURY	f. State	MA
g. Zip Code	01776	j. Email	storm.christopher@gmail.com
h. Phone Number	860-575-2729	i. Fax	

3. Property Owner:

☐ more than one owner

a. First Name	CHRISTOPHER	b. Last Name	STORM
c. Organization			
d. Mailing Address	26 MUSKET LN		
e. City/Town	SUDBURY	f. State	MA
g. Zip Code	01776	j. Email	storm.christopher@gmail.com
h. Phone Number	860-575-2729	i. Fax	

4. Representative:

a. First Name		b. Last Name	
c. Organization			
d. Mailing Address			
e. City/Town		f. State	
g. Zip Code		j. Email	
h. Phone Number		i. Fax	

5. Total WPA Fee Paid (Automatically inserted from NOI Wetland Fee Transmittal Form):

a. Total Fee Paid	165.00	b. State Fee Paid	70.00	c. City/Town Fee Paid	95.00
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6. General Project Description:

TREE REMOVAL AND GENERAL YARD/PROPERTY IMPROVEMENTS DESCRIBED MORE FULLY IN ATTACHED REPORT OF DANIEL E. CATHCART, INCLUDING APPENDIXES A (GIS TREE MAP) B (PLOT PLAN WITH TREES) AND C (SUMMARY OF LANDSCAPE IMPROVEMENTS)

7a. Project Type:

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Limited Project Driveway Crossing | 4. <input type="checkbox"/> Commercial/Industrial |
| 5. <input type="checkbox"/> Dock/Pier | 6. <input type="checkbox"/> Utilities |
| 7. <input type="checkbox"/> Coastal Engineering Structure | 8. <input type="checkbox"/> Agriculture (eg., cranberries, forestry) |
| 9. <input type="checkbox"/> Transportation | 10. <input type="checkbox"/> Other |

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7b.Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project:

2. Limited Project

8.Property recorded at the Registry of Deeds for:

a.County:

b.Certificate:

c.Book:

d.Page:

SOUTHERN MIDDLESEX

75965

66

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1.Buffer Zone & Resource Area Impacts (temporary & permanent):

☐ This is a Buffer Zone only project - Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.

2.Inland Resource Areas: (See 310 CMR 10.54 - 10.58, if not applicable, go to Section B.3. Coastal Resource Areas)

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
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b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	50	
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1. square feet

2. square feet

c. <input type="checkbox"/> Land under Waterbodies and Waterways	1. Square feet	2. square feet
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3. cubic yards dredged

d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
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3. cubic feet of flood storage lost

4. cubic feet replaced

e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet	
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2. cubic feet of flood storage lost

3. cubic feet replaced

f. <input checked="" type="checkbox"/> Riverfront Area	Pantry Brook	
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1. Name of Waterway (if any)

2. Width of Riverfront Area (check one)

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project

square feet

4. Proposed Alteration of the Riverfront Area:

150

0

150

a. total square feet

b. square feet within 100 ft.

c. square feet between 100 ft.

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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eDEP Transaction #:1264727
City/Town:SUDBURY

☒ Yes ☐ No

Proposed Replacement (if any)

a. <input type="checkbox"/> Designated Port Areas	Indicate size under	Land under the ocean below,
b. <input type="checkbox"/> Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes, below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	1. square feet	2. cubic yards dune nourishment
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab, crea.
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	

b. square feet of Salt Marsh

5. Projects Involves Stream Crossings

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☐ Project Involves Streams Crossings

If the project involves Stream Crossings, please enter the number of new stream crossings/number of replacement stream crossings.

a. number of new stream crossings

b. number of replacement stream crossings

C. Other Applicable Standards and Requirements

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage of Endangered Species program (NHESP)?

a. ☐ Yes ☒ No

If yes, include proof of mailing or hand delivery of NOI to:
Natural Heritage and Endangered Species
Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

b. Date of map:AUGUST 2017

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18)...

c. Submit Supplemental Information for Endangered Species Review * (Check boxes as they apply)

1. ☐ Percentage/acreage of property to be altered:

(a) within Wetland Resource Area

percentage/acreage

(b) outside Resource Area

percentage/acreage

2. ☐ Assessor's Map or right-of-way plan of site

3. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetland jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

a. ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

b. ☐ Photographs representative of the site

c. ☐ MESA filing fee (fee information available at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>)

Make check payable to "Natural Heritage & Endangered Species Fund" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

d. ☐ Vegetation cover type map of site

e. ☐ Project plans showing Priority & Estimated Habitat boundaries

d. OR Check One of the following

1. ☐ Project is exempt from MESA review. Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing.

a. NHESP Tracking Number

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Bureau of Resource Protection - Wetlands

WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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MassDEP File #:

eDEP Transaction #:1264727

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b. Date submitted to NHESP

3. ☐ Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review...

2. For coastal projects only, is any portion of the proposed project located below the mean high waterline or in a fish run?

a. ☒ Not applicable - project is in inland resource area only

b. ☐ Yes ☐ No

If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 S. Rodney French Blvd
New Bedford, MA 02744

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930

If yes, it may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No

If yes, provide name of ACEC (see instructions to WPA Form 3 or DEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC Name

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. ☐ Yes ☒ No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L.c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L.c. 130, § 105)?

a. ☐ Yes ☒ No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. ☐ Yes, Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook ☐ Vol.2, Chapter 3)

2. A portion of the site constitutes redevelopment ☐

3. Proprietary BMPs are included in the Stormwater Management System ☐

b. ☒ No, Explain why the project is exempt:

1. ☒ Single Family Home

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☐ 2. Emergency Road Repair

☐ 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department by regular mail delivery.

- ☐ 1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- ☐ 2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.
- ☒ 3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s).
- ☒ 4. Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.
- ☒ 4. List the titles and dates for all plans and other materials submitted with this NOI.

a. Plan Title:	b. Plan Prepared By:	c. Plan Signed/Stamped By:	c. Revised Final Date:	e. Scale:
ASSESSMENT OF TREES IN BUFFER ZONE	DANIEL E. CATHCART		3/15/21	
GIS TREE MAP	DANIEL E. CATHCART		3/15/21	
PLOT PLAN OF LAND WITH TREES	HANCOCK SURVEY ASSOCIATES, INC./ GREGORY G. GOULD	AND DANIEL E. CATHCART	10/29/20	SCALE 1" = 30'

- ☐ 5. If there is more than one property owner, please attach a list of these property owners not listed on this form.
- ☐ 6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
- ☐ 7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
- ☐ 8. Attach NOI Wetland Fee Transmittal Form.
- ☒ 9. Attach Stormwater Report, if needed.
- ☐

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E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number

3. Check date

4. State Check Number

5. Check date

6. Payer name on check: First Name

7. Payer name on check: Last Name

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Christopher C. Storm

3/15/2021

1. Signature of Applicant

2. Date

Christopher C. Storm

3/15/2021

3. Signature of Property Owner(if different)

4. Date

5. Signature of Representative (if any)

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in Section C, Items 1-3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 3 - Notice of Wetland Fee Transmittal
Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
MassDEP File #:
eDEP Transaction #:1264727
City/Town:SUDBURY

A. Applicant Information

1. Applicant:

a. First Name	CHRISTOPHER	b. Last Name	STORM
c. Organization			
d. Mailing Address	26 MUSKET LN		
e. City/Town	SUDBURY	f. State	MA
g. Zip Code	01776		
h. Phone Number	8605752729	i. Fax	
j. Email	storm.christopher@gmail.com		

2. Property Owner:(if different)

a. First Name	CHRISTOPHER	b. Last Name	STORM
c. Organization			
d. Mailing Address	26 MUSKET LN		
e. City/Town	SUDBURY	f. State	MA
g. Zip Code	01776		
h. Phone Number	8605752729	i. Fax	
j. Email	storm.christopher@gmail.com		

3. Project Location:

a. Street Address	26 MUSKET LN	b. City/Town	SUDBURY
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Are you exempted from Fee? ☐ (YOU HAVE SELECTED 'NO')

Note: Fee will be exempted if you are one of the following:

- City/Town/County/District
- Municipal Housing Authority
- Indian Tribe Housing Authority
- MBTA

State agencies are only exempt if the fee is less than \$100

B. Fees

Activity Type	Activity Number	Activity Fee	RF Multiplier	Sub Total
A.) WORK ON SINGLE FAMILY LOT; ADDITION, POOL, ETC.;	1	110.00	RFA MULTIPLIER 1.5	165.00

City/Town share of filing fee	State share of filing fee	Total Project Fee
\$95.00	\$70.00	\$165.00



Tree Location Map

Prepared for:

Christopher Storm
26 Musket Lane
Sudbury, MA 01776

Prepared by:

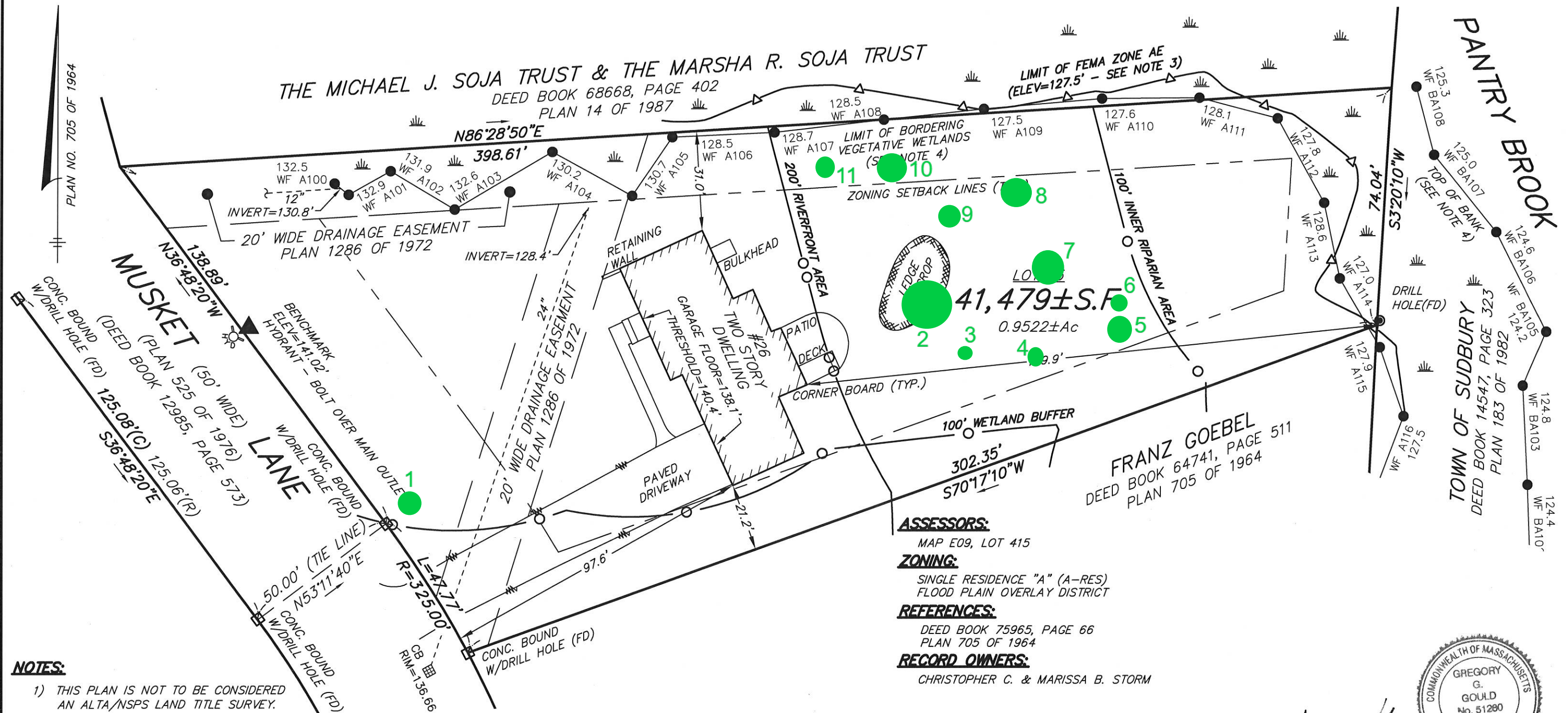
Daniel Cathcart
Plant Healthcare Consultants, Inc
134 Allen Street
Braintree, MA 02184

March 11, 2021

TREE	COMMON	DBH
1	WHITE PINE	31
2	WHITE PINE	54
3	WHITE PINE	12
4	WHITE PINE	24
5	WHITE PINE	33
6	WHITE PINE	23
7	WHITE PINE	35
8	WHITE PINE	34
9	WHITE PINE	30
10	WHITE PINE	32
11	WHITE PINE	22

— Wetland Deliniation Lines

Per MA Wetland Shapefile



NOTES:

- 1) THIS PLAN IS NOT TO BE CONSIDERED AN ALTA/NSPS LAND TITLE SURVEY.
- 2) UTILITIES SHOWN HEREON ARE FROM FIELD LOCATIONS OF SURFACE VISIBLE STRUCTURES. THE LOCATION OF UNDERGROUND UTILITIES WAS NOT INCLUDED WITHIN THE SCOPE OF THIS SURVEY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 811 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- 3) THE LIMIT OF FEMA ZONE AE IS AN ELEVATION DEFINED LINE AS SHOWN ON FEMA NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) NUMBERS 25017C03066F & 25017C0368F, HAVING EFFECTIVE DATES OF JULY 7, 2014. THE POSITION OF SAID LINE SHOWN HEREON IS BASED ON TOPOGRAPHIC INFORMATION COLLECTED VIA FIELD SURVEY BY HANCOCK ASSOCIATES (SEE NOTES 5 & 6) AND IS SHOWN HEREON AS ELEVATION 127.5' WITHIN THE AREA OF THE SUBJECT PROPERTY.
- 4) THE LIMITS OF BORDERING VEGETATED WETLANDS AND TOP OF BANK SHOWN HEREON WERE DELINEATED BY HANCOCK ASSOCIATES AND LOCATED VIA FIELD SURVEY.
- 5) THE VERTICAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). SAID DATUM WAS ESTABLISHED VIA GPS OBSERVATIONS UTILIZING NAD83 (NA2011) EPOCH 2010.00 (MYCS2) AND GEOID 18.
- 6) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY HANCOCK ASSOCIATES ON OCTOBER 8, 2020.

ASSESSORS:

MAP E09, LOT 415

ZONING:

SINGLE RESIDENCE "A" (A-RES)
FLOOD PLAIN OVERLAY DISTRICT

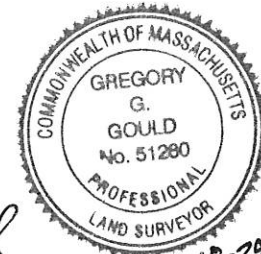
REFERENCES:

DEED BOOK 75965, PAGE 66
PLAN 705 OF 1964

RECORD OWNERS:

CHRISTOPHER C. & MARISSA B. STORM

FRANZ GOEBEL
DEED BOOK 64741, PAGE 511
PLAN 705 OF 1964



Gregory G. Gould
PROFESSIONAL LAND SURVEYOR
10-29-20

PLOT PLAN OF LAND 26 MUSKET LANE, SUDBURY, MASSACHUSETTS PREPARED FOR: CHRISTOPHER STORM HANCOCK Survey Associates, Inc. 34 CHELMSFORD STREET, UNIT 2, CHELMSFORD, MA 01824 VOICE (978) 244-0110, FAX (978) 244-1133 X:\24015-Storm-Sudbury\Surv\DWG\ 24015-sv.dwg Oct 29, 2020 - 8:31 am		CHK. BY: GGG DATE: 10/29/20 JOB NO. 24015
SCALE: 1" = 30' 0 15 30 60		

Appendix C- Summary of Landscape Improvements

26 Musket Lane

I. Drainage

To improve drainage around the house, we plan to place a 24" wide course of crushed stone or river pebbles along the perimeter of the foundation of the house. The stone will be kept in place by 4'x4' pressure treated lumber which will be embedded approximately 2" into the ground and retained by rebar or stakes.

Some loam will need to be placed to fill low spots near the house foundation in the current large rhododendron planting behind the house before the stone is placed to achieve appropriate surface draining.

II. Landscaping in Front Mulch Beds

The plants and trees in the front mulch beds have grown too large for the house and block light into the front rooms, particularly the living room behind the weeping cherry tree. Additionally, the landscaping has grown too close to the house and two trees are growing up into the electrical service cable. We would like to re-plant with different species that are more proportionate and with better spacing. We propose:

- Removing the current trees and plants in mulch beds on either side of the walkway, except we would leave the current pachysandra because of the difficulty establishing new ground cover in that heavily shaded area. We would trim the pachysandra back to reveal the existing stone retaining wall and to ensure the pachysandra does not cross the existing lawn into the wetland area. We will remove pachysandra plants that have grown east toward the walkway.
- Planting an Atlas Cedar where the current tree west of the front door is located.
- Planting a hedge of a miniature boxwood species on both sides of the walkway. The hedge will reach a height of approximately 3'. The hedge will run parallel to the foundation/walkway.
- Between the hedge and the walkway, planting annual and perennial flowers.
- Planting dwarf grass species in the mulch beds.
- Placing fresh mulch.
- Shovel edging (or Belgian block, budget permitting) where the front mulch bed meets the front lawn.
- Installing a 25' flagpole approximately where the current tree is in the front mulch bed. The location may need to be adjusted to achieve clearance from the power line. Flagpole to be illuminated with spotlight.

III. New Mulch Bed/Moving the Lamp Post

The current lamp post will be removed. A new lamp post and lamp will be installed in a new approximately 6' diameter circular bed to be established in the front yard, approximately one third the length of the driveway from the street. The new mulch bed will be planted with annual and perennial flowers. The current lamp wiring will be extended through a hand-dug trench adjacent to the driveway to the new location.

IV. Deck removal/Patio conversion

The existing stairs, deck and stone patio behind the three-season porch is being removed. We will replace it with a contractor-installed 28' x 16' poured concrete patio. The existing footprint to the north and west (the sides oriented closest to the resource areas) will be maintained. The footprint on the east side will be enlarged by about five feet into what is currently lawn. The footprint of the proposed patio compared to the existing deck and patio is reflected on the next page in red.

V. Landscaping Behind the Garage/Adjacent to the Screened Porch

Very overgrown rhododendron next to the screened porch/behind the garage have been damaged by siding work on the house and will be removed. A six foot length of PVC fencing (at a right angle) will be placed to screen trash and recycling containers which will be stored there so they are not visible from street. See next page in blue. Drainage will be addressed as per section I. The existing lawn will be extended toward the crushed stone drainage perimeter. The existing stairs will be relocated to the east side of the screened in porch where a set of stairs with a railing and four-foot landing will be installed. See next page in green.



VI. Swing Set

We would put a Creative Playthings or similar swing set in the back yard.

VII. Tree Care

The trees on the west side of the property are growing very close to the house. Branches are overhanging the roof and coming into contact with the chimney. Additionally, green organic material is growing on the side of the chimney in that location from lack of sunlight and air flow. We would like to hire a tree service of Maynard to trim back all branches that overhang the narrow strip of grass on the west side of the property to promote better light and air movement.

We would like to remove white pine on the property consistent with the proposal by Iron Tree Service.

VIII. Mitigation

Please see Arborist's Report.



Plant Healthcare Consultants

American Society of Consulting Arborist • International Society of Arboriculture
Massachusetts Arborist Association • Massachusetts Tree Wardens and Foresters Association
TREE INVENTORIES • APPRAISALS • DIAGNOSIS • TREE RISK ASSESSMENTS



Assessment of Trees in Buffer Zone

Prepared for:

Christopher Storm
26 Musket Lane
Sudbury, MA 01776

Prepared by:

Daniel E. Cathcart
Certified Consulting Arborist
Plant Healthcare Consultants, Inc.
134 Allen Street
Braintree, MA 02184

March 4, 2021

Carl A. Cathcart • Daniel E. Cathcart
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Table of Contents

Summary	3
Introduction.....	3
Background & History.....	3
Assignment.....	4
Limits of Assignment.....	4
Purpose and Use of Report	4
Observations	4
Tree Inventory.....	5
Tree Map (See Appendix A for 11 x 17 copy of Map).....	6
Plot Plan with Approximate Tree Locations (See Appendix B for 11 x 17 copy of Plan)	6
Tree Photographs	7
Supplemental Photos – Weather Event of March 12, 2021	9
Discussion.....	10
Conclusion.....	10
Recommendations.....	10
Alternative Analysis for Altering Upland Resource Area	10
Mitigation Plan	10
Mitigation Planting Plan	11
Additional Mitigation Actions	11
Assumptions and Limited Conditions	12
Certification of Performance.....	13

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Summary

On February 12, 2021 I met Mr. Christopher Storm at 26 Musket Lane, Sudbury, MA at approximately 9:00 am.

Mr. Storm has concerns about several large trees and the risks they pose to his property and family. Mr. Storm would like to remove 11 *Pinus strobus* (Eastern white pine) trees of various sizes to reduce risk of damage to the property.

The Town of Sudbury's Conservation Commission informed Mr. Storm that the trees he wants to remove are in a Wetland Protection Act (WPA) Buffer Zone. As such, he needs to submit the necessary documents to receive a waiver to proceed with the work.

I inspected the 11 trees around in 100' the buffer zone along the property. It is my opinion that the trees should be removed as these trees pose a high-risk in their current condition. I arrived at this opinion upon inspecting the tree's health, condition, location, anchorage, potential risk points and defects. My observations are included in this report.

Introduction

Mr. Storm called my office on February 8, 2021 to inquire about retaining my services as a Consulting Arborist. Mr. Storm is planning to remove some trees on his property at 26 Musket Lane, Sudbury, MA. He advised me that the trees are in protected wetlands 100' buffer zone. Mr. Storm is seeking independent, third party assistance, in procuring the necessary documentation to proceed with his tree removal plans. An appointment was scheduled for February 12, 2021 at 9:00 am to discuss, inspect and gather data for creating this report.

Background & History

The Sudbury Conservation Commission ("SCC") was established in 1962 to protect local natural resources and features and to act as stewards of the town's conservation properties.

The SCC has legal authority granted under The Conservation Commission Act, by the Massachusetts Wetlands Protection Act, and by the Sudbury Wetlands Administration Bylaw.

To receive the proper permits to perform the tree removals Mr. Storm is required to submit appropriate documentation and applications to the SCC, including a Notice of Intent ("NOI").

The work Mr. Storm is proposing falls under Notice of Intent Project - Category 1:

- a.) Work on single family lot; addition, pool, etc.;
- b.) Site work without a house;
- c.) Control vegetation;
- d.) Resource improvement;
- e.) Work on septic system separate from house;

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- f.) Monitoring well activities minus roadway;
- g.) New agricultural or aquaculture projects.

Assignment

The scope of this project is to evaluate the trees that Mr. Storm is proposing for removal, assess risk of the trees as well as the trees impact on the property, make recommendations regarding mitigation and present the finding in this report. Additionally, to assist in the completion of the permit application documentation.

Limits of Assignment

The recommendations and conclusions provided in this report are based on visual observations only. No examinations of the plant's interiors were taken nor were and soil or plant tissue taken and submitted for laboratory testing.

Purpose and Use of Report

The purpose of this report is to provide information regarding the trees Mr. Storm is proposing to remove from his property. The report includes observation about tree risk as well as additional impact on the property. This report is to accompany the NOI application as supporting documentation.

The report is the property of Mr. Christopher Storm and may be used and shared as he sees fit.

Observations

On February 12, 2021, at 9:00 am I met Mr. Storm at this home at 26 Musket Lane, Sudbury, MA. Mr. Storm showed me the trees for which he is applying for a permit to remove.

I identified the species - common and Latin names - measured the diameter at breast height (DBH) and height, assessed the condition, each tree (see Tree Inventory section).

Additionally, I numbered, geolocated and plotted each tree (see Tree Map section & Appendix A).

Photographs of each tree were taken (see Tree Photographs section).

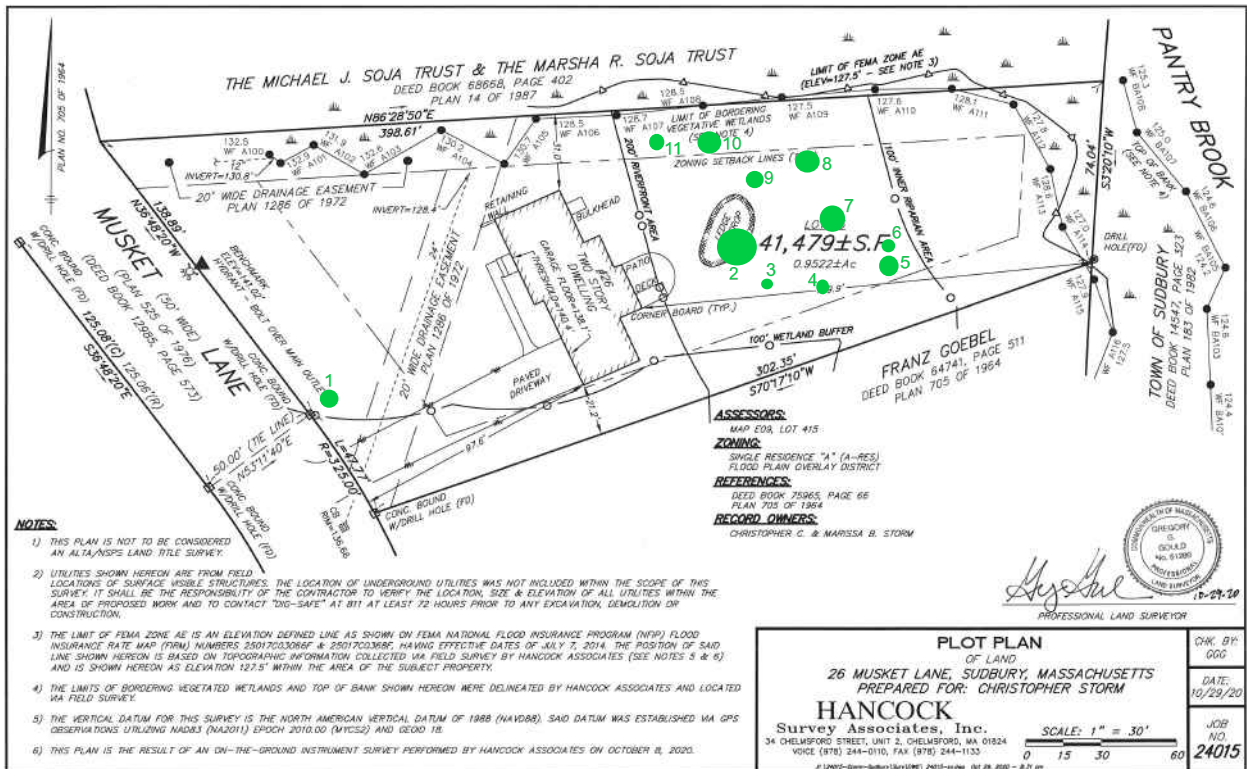
Tree Inventory

Tree #	DBH	Common Name	Latin Name
1	28	Eastern White Pine	Pinus strobus
2	54	Eastern White Pine	Pinus strobus
3	9	Eastern White Pine	Pinus strobus
4	20	Eastern White Pine	Pinus strobus
5	32	Eastern White Pine	Pinus strobus
6	21	Eastern White Pine	Pinus strobus
7	38	Eastern White Pine	Pinus strobus
8	35	Eastern White Pine	Pinus strobus
9	11	Eastern White Pine	Pinus strobus
10	37	Eastern White Pine	Pinus strobus
11	14	Eastern White Pine	Pinus strobus

Tree Map (See Appendix A for 11 x 17 copy of Map)



Plot Plan with Approximate Tree Locations (See Appendix B for 11 x 17 copy of Plan)



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Tree Photographs

□



Tree # 1

□



Tree # 2

□



Tree # 2 - Crack

□



Tree # 2 - Crack

□



Tree # 2 - Roots

□



Tree # 2 - Roots

□



Tree # 2 - Roots

□



Tree # 2 - Roots

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Tree # 3



Tree # 4



Tree # 5



Tree # 6



Tree # 7



Tree # 8



Tree # 9



Tree # 10



Tree # 11

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Supplemental Photos – Weather Event of March 12, 2021

The following photographs were taken by Christopher Storm on March 13, 2021. The failure of a major portion of Tree #2 was a result of the weather event that had high winds on March 12, 2021.



Discussion

Tree #1, the only tree in the front of the property, is showing signs of decline and is not very healthy. It is also in close proximity to utility lines. The susceptibility of white pines to shed limbs presents a safety risk to cars and pedestrian traffic as well as the potential of downing utility lines.

Tree #2 is an extreme-risk tree. The recent crack that developed in the large lower limb presents an imminent likelihood of failure. Additionally, this pine, along with all pines, has a shallow root system. This particular tree is growing on ledge with very little soil to develop anchorage. The roots are forced to grow above the ground and are decaying. This tree is also the largest and closest to the house.

Trees #3 - #9 present potential risk in their current state. All the trees are white pines with shallow roots systems and are in close proximity to the house and rear yard. This risk has limited the Storm's from utilizing the rear yard for fear of potential tree failure.

Tree #10 & #11 are just inside the BVW zone, as shown on the Plot Plan. The root systems of these trees are often in saturated soil. This can result in a very unstable root system and may potentially fail. They also may strike the house and rear yard if failure occurs.

Conclusion

Based on my education, training and years of experience in the field of arboriculture it is my professional opinion that the 11 trees be removed.

Recommendations

Alternative Analysis for Altering Upland Resource Area

As this NOI is requesting permission to remove trees from the site alternative options are quite limited.

Option 1 – Do not remove the trees.

This option is not practical because it does not remove the risk of tree failure.

Option 2 – Remove the trees and implement mitigation to limit impact to upland resource area.

This is the only viable option to reduce the risk of tree failure and damage to people and property while maintaining the integrity of the protected wetlands.

Mitigation Plan

Trees #10 & #11 are to be removed but leave 12' standing trunk to provide habitat for wildlife.

To mitigate removal of trees #1 – #9 the following native species will be planted to replace these trees.

This will help preserve the area and restore it to its condition prior to the removal of the trees. The new plantings will be placed along the rear of the property, following the arc of the removed trees, to restore a natural feel and provide habitat for wildlife.

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Mitigation Planting Plan

Latin Name	Common Name	Size	# of units	Benefits
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	10 gal	8	Produce berries for birds
<i>Ilex verticillata</i>	Winterberry	10 gal	8	Favorable to pollinators
<i>Vaccinium angustifolium</i>	Lowbush Blueberry	3-4'	8	Favorable to pollinators
<i>Kalmia latifolia</i>	Mountain Laurel	3-4'	8	Shade tolerant

The selection of plantings will help preserve the area, benefit wildlife, and will not present similar concerns in the near future.

Additional Mitigation Actions

Removals of Invasive Species:

- Buckthorn: The property is overrun with buckthorn. We will systematically remove it from the property. We will hand-pull small specimens and discard in black plastic trash bags. Larger specimens will be cut 12" above ground and an herbicide will be hand-applied to the cut stump, which will be marked with an indicator dye. This will occur before April. The specimens themselves will be removed by a removal service. In July, we will cut the stumps to 1-2" above ground and hand-apply a second herbicide application.
- Wild Rose: Several wild rose plants were identified and will be removed.
- Oriental Bittersweet: Oriental bittersweet exists on the perimeter of the property and is climbing trees. These vines will be cut and removed from the property by being bagged in plastic bags.

Yard waste removal:

We previously removed one large brush pile that was located in the northeastern quadrant of the property by paying a local removal service to take the brush away. The brush pile was primarily pine limbs and branches. The property has two other brush piles. One is located in the northeastern quadrant of the property and appears to be primarily lawn clippings and leaves, and it is located near the stream. This pile will be packed into lawn and leaf bags and brought to the transfer station. The other pile is in the southeastern quadrant of the property and consists mostly of branches. This pile will be removed by a removal service.

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Assumptions and Limited Conditions

1. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
4. Unless required by law, otherwise, possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.
5. Unless required by law, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant-particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualifications.
6. This report expressed herein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
7. Sketches, drawings, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by *Plant Healthcare Consultants* as to the sufficiency or accuracy of said information.
8. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring unless otherwise specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
9. Loss or alteration of any part of this report invalidates the entire report.

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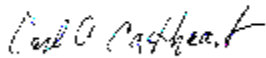
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Certification of Performance

Plant Healthcare Consultants, Inc. certify that:

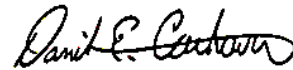
1. We have personally inspected the tree and property referred to in this report and have stated our findings accurately.
2. We have no current or prospective interest in the trees or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
3. The analysis, opinions and conclusions stated herein are our own and are based on current scientific procedures and facts.
4. Our analysis, opinions and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
5. No one provided significant professional assistance to us, except as indicated within the report.
6. Our compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

We further certify that Plant Healthcare Consultants is a member in good standing of the Massachusetts Arborist Association, American Society of Consulting Arborists, the International Society of Arboriculture and Massachusetts Tree Wardens and Foresters Association. We have been involved in the field of Arboriculture for over 60 years



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ISA Tree Risk Assessment Qualified



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