

Stamski and McNary, Inc.

Engineering - Planning - Surveying

1000 Main Street Acton, MA 01720 (978) 263-8585

www.stamskiandmcnary.com

Abbreviated Notice of Resource Area Delineation

Under the Massachusetts Wetland Protection Act,
M.G.L. c. 131, s. 40 &
Town of Sudbury Wetlands Administration Bylaw

for

**Powers Road
Sudbury, MA 01776
Parcels B09-01, B08-26, B08-28**

Applicant: Geoffrey Cronnin
Greenscape Property and Building
66 Gilcreast Road
Londonderry, NH 03053

Owners: John and Doris Norman
281 Hunter's Ridge Road
Concord, MA 01742

Date: February 14, 2018

SM-5913A

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WPA Form 4A (Abbreviated Notice of Resource Area Delineation)



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
**WPA Form 4A – Abbreviated Notice of
 Resource Area Delineation**

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

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

Sudbury
 City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button for GIS locator):

Powers Road _____ Sudbury _____ 01776
 a. Street Address b. City/Town c. Zip Code
 Latitude and Longitude: 42d25'45" N _____ 71d24'39" W
 d. Latitude e. Longitude
 B _____ 09-01, 08-26, 08-28
 f. Assessors Map/Plat Number g. Parcel /Lot Number

2. Applicant:

Geoffrey _____ Cronnin _____
 a. First Name b. Last Name
 Greenscape Property and Building
 c. Organization
 66 Gilcreast Road
 d. Mailing Address
 Londonderry _____ NH _____ 03053
 e. City/Town f. State g. Zip Code
 617-840-4332 _____ geoffcronin@earthlink.net
 h. Phone Number i. Fax Number j. Email Address

3. Property owner (if different from applicant):

John and Doris _____ Norman _____
 a. First Name b. Last Name

 c. Organization
 281 Hunter's Ridge Road
 d. Mailing Address
 Concord _____ MA _____ 01742
 e. City/Town f. State g. Zip Code

 h. Phone Number i. Fax Number j. Email Address

Check if more than one owner (attach additional sheet with names and contact information)

4. Representative (if any):

George _____ Dimakarakos _____
 a. Contact Person First Name b. Contact Person Last Name
 Stamski and McNary, Inc.
 c. Organization
 1000 Main Street
 d. Mailing Address
 Acton _____ MA _____ 01720
 e. City/Town f. State g. Zip Code
 978-263-8585 _____ gd@stamskiandmcnary.com
 h. Phone Number i. Fax Number j. Email Address

5. Total WPA Fee Paid (from attached ANRAD Wetland Fee Transmittal Form):

\$1,188 _____ \$581.50 _____ \$606.50 (\$1,688 Bylaw fee)
 a. Total Fee Paid b. State Fee Paid c. City/Town Fee Paid

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

Fees will be calculated for online users.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 4A – Abbreviated Notice of
Resource Area Delineation
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

B. Area(s) Delineated

1. Bordering Vegetated Wetland (BVW) 594
Linear Feet of Boundary Delineated
2. Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:
 - a. MassDEP BVW Field Data Form (attached)
 - b. Other Methods for Determining the BVW boundary (attach documentation):
 1. 50% or more wetland indicator plants
 2. Saturated/inundated conditions exist
 3. Groundwater indicators
 4. Direct observation
 5. Hydric soil indicators
 6. Credible evidence of conditions prior to disturbance
3. Indicate any other resource area boundaries that are delineated:

a. Resource Area	b. Linear Feet Delineated
c. Resource Area	d. Linear Feet Delineated

C. Additional Information

Applicants must include the following plans with this Abbreviated Notice of Resource Area Delineation. 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.

1. ANRAD (Delineation Plans only)
2. 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.)
3. Plans identifying the boundaries of the Bordering Vegetated Wetlands (BVW) (and/or other resource areas, if applicable).
4. List the titles and final revision dates for all plans and other materials submitted with this Abbreviated Notice of Resource Area Delineation.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
**WPA Form 4A – Abbreviated Notice of
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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

 MassDEP File Number

 Document Transaction Number

Sudbury
 City/Town

D. Fees

The fees for work proposed under each Abbreviated Notice of Resource Area Delineation must be calculated and submitted to the Conservation Commission and the Department (see Instructions and Wetland Fee Transmittal Form).

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 the attached Wetland Fee Transmittal Form) to confirm fee payment:

7717

2. Municipal Check Number

7716

4. State Check Number

Geoffrey

6. Payor name on check: First Name

2/14/18

3. Check date

2/14/18

5. Check date

Cronnin

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 4A – Abbreviated Notice of
Resource Area Delineation

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury
City/Town

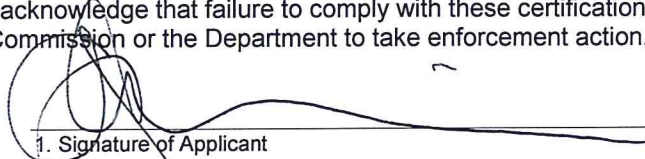
E. Signatures

I certify under the penalties of perjury that the foregoing Abbreviated Notice of Resource Area Delineation 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 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.

I hereby grant permission, to the Agent or member of the Conservation Commission and the Department of Environmental Protection, to enter and inspect the area subject to this Notice at reasonable hours to evaluate the wetland resource boundaries subject to this Notice, and to require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

I acknowledge that failure to comply with these certification requirements is grounds for the Conservation Commission or the Department to take enforcement action.



1. Signature of Applicant

14 FEB 2018

2. Date

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 Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; two copies of the ANRAD Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; one copy of the ANRAD Wetland Fee Transmittal Form; and a copy of the state fee payment must be sent to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

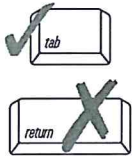
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

WPA Form 4A (ANRAD Wetland Fee Transmittal Form)



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
ANRAD Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

<u>Powers Road</u>	<u>Sudbury Road</u>
a. Street Address	b. City/Town
<u>\$581.50</u>	<u>7716</u>
c. Fee amount	d. Check number

2. Applicant:

<u>Geoffrey</u>	<u>Cronin</u>	<u>Greenspace Property and Building</u>
a. First Name	b. Last Name	
<u>66 Gilcrest Road</u>		
d. Mailing Address		
<u>Londonderry</u>	<u>NH</u>	<u>03053</u>
e. City/Town	f. State	g. Zip Code
<u>617-840-4332</u>		
h. Phone Number		

3. Property Owner (if different):

<u>John and Doris</u>	<u>Norman</u>	
a. First Name	b. Last Name	c. Company
<u>281 Hunters Ridge Road</u>		
d. Mailing Address		
<u>Concord</u>	<u>MA</u>	<u>01742</u>
e. City/Town	f. State	g. Zip Code
<u></u>		
h. Phone Number		

B. Fees

The fee is calculated as follows for each Resource Area Delineation included in the ANRAD (check applicable project type). The maximum fee for each ANRAD, regardless of the number of Resource Area Delineations, is \$200 activities associated with a single-family house and \$2,000 for any other activity.

Bordering Vegetated Wetland Delineation Fee:

1. <input type="checkbox"/>	single family house project	<u></u>	<u></u>	<u></u>
		a. feet of BVW	x \$2.00 =	b. Fee for BVW
2. <input checked="" type="checkbox"/>	all other projects	<u>594</u>	<u>\$1,188</u>	<u>\$1,188</u>
		a. feet of BVW	x \$2.00 =	b. Fee for BVW

Other Resource Area (e.g., bank, riverfront area, etc.):

3. <input type="checkbox"/>	single family house project	<u></u>	<u></u>	<u></u>
		a. linear feet	x \$2.00 =	b. Fee
4. <input type="checkbox"/>	all other projects	<u></u>	<u></u>	<u></u>
		a. linear feet	x \$2.00 =	b. Fee

Total Fee for all Resource Areas:	<u>Fee</u>
	<u>\$581.50</u>
State share of filing fee:	<u>5. 1/2 of total fee less \$12.50</u>
	<u>\$606.50 (\$1,688 Bylaw)</u>
City/Town share of filing fee:	<u>6. 1/2 of total fee plus \$12.50</u>

Online users: check box if fee exempt.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
ANRAD Wetland Fee Transmittal Form
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Submittal Requirements

- a.) Send a copy of this form, with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts, to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Abbreviated Notice of Resource Area Delineation; a **copy** of this form; and the city/town fee payment.
- c.) **To DEP Regional Office:** Send one copy of the Abbreviated Notice of Resource Area Delineation (and any additional documentation required as part of a Simplified Review Buffer Zone Project); a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

GEOFFREY D CRONIN
MARIA G CRONIN
270 WESTFORD RD
CONCORD MA 01742-5209

7715
53-13/110 MA
26522

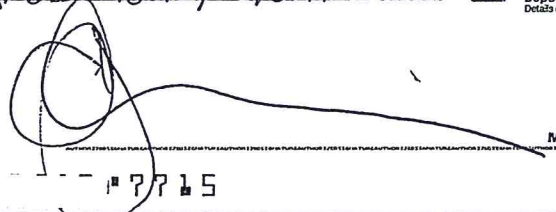
14 FEB 2018
Date

Pay to the Order of TOWN OF SUBURY | \$ 1,688.00
ONE THOUSAND SIX HUNDRED EIGHTY EIGHT Dollars

Bank of America

ACH R/T 011000138

For OFF POWERS ROAD



⑈ 7715



Photo Safe Deposit™
Details on back

stand Clarke GUARDIAN SAFETY® YELLOW

GEOFFREY D CRONIN
MARIA G CRONIN
270 WESTFORD RD
CONCORD MA 01742-5209

7717
53-13/110 MA
26522

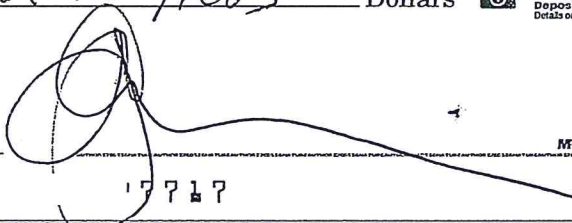
14 FEB 2018
Date

Pay to the Order of TOWN OF SUBURY | \$ 606.50
SIX HUNDRED AND SIX + 50/100'S Dollars

Bank of America

ACH R/T 011000138

For OFF POWERS ROAD



⑈ 7717



Photo Safe Deposit™
Details on back

stand Clarke GUARDIAN SAFETY® YELLOW

GEOFFREY D CRONIN
MARIA G CRONIN
270 WESTFORD RD
CONCORD MA 01742-5209

7716
53-13/110 MA
26522

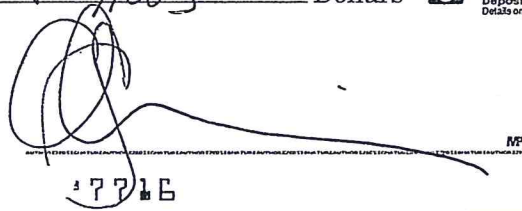
14 FEB 2018
Date

Pay to the Order of COMMONWEALTH OF MASSACHUSETTS | \$ 581.50
FIVE HUNDRED EIGHTY ONE + 50/100'S Dollars

Bank of America

ACH R/T 011000138

For OFF POWERS ROAD



⑈ 7716



Photo Safe Deposit™
Details on back

stand Clarke GUARDIAN SAFETY® YELLOW

Abutters List / Affidavit / Notification to Abutters

abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_town	abutters_state	abutters_zip
B08-0007	PEARSE ROGER N & JACQUELINE E		70 CHAMPLAIN RD	ORLEANS	MA	02653
B08-0024	HSU JASON & KRISTEN		205 HUNTERS RIDGE RD	CONCORD	MA	01742
B08-0025	MAXWELL DENNIS		219 HUNTERS RIDGE RD	CONCORD	MA	01742
B08-0026	NORMAN DORIS S	C/O JOHN NORMAN	281 HUNTERS RIDGE RD	CONCORD	MA	01742
B08-0028	NORMAN JOHN C & DORIS		281 HUNTERS RIDGE RD	CONCORD	MA	01742
B08-0319	PHU PHILLIP K W & HSU CHIHHAN		76 MAYNARD FARM RD	SUDBURY	MA	01776
B08-0449	BLACK CLIFTON & ALLISON		70 MAYNARD FARM RD	SUDBURY	MA	01776
B08-0450	REINHARD ANDREW A	REINHARD-MACINNES JENNIFER	58 MAYNARD FARM RD	SUDBURY	MA	01776
B08-0451	BROOKS JOHN W III & STACEY S		52 MAYNARD FARM RD	SUDBURY	MA	01776
B09-0001	NORMAN JOHN C & DORIS		281 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0002	KIELAR CHRISTINE Q		185 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0003	DEROCHE GERALD W		143 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0004	URTON GARY D & MYERSON JULIA L		91 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0005	MUELLER HAROLD B & MARY S		69 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0006	BURNHAM FREDERICK A &		59 HUNTERS RIDGE RD	CONCORD	MA	01742
B09-0007	BONADIO CHARLES F & ELIZABETH	STERLING MARY L	1445 OLD MARLBORO RD	CONCORD	MA	01742
B09-0106	DOW MARILYN GRACE		10 BARNET RD	SUDBURY	MA	01776
B09-0201	SANTANGELO JOSEPH & CAROLINE C		188 POWERS RD	SUDBURY	MA	01776
B09-0202	BAIN MICHAEL D & KRISTIN		182 POWERS RD	SUDBURY	MA	01776
B09-0452	KRAEMER JOHN E & ANDREA L		44 MAYNARD FARM RD	SUDBURY	MA	01776
B09-0453	MURPHY JOSEPH A & ROBERTA M	TRUSTEES 40 MAYNARD FARM ROAD	40 MAYNARD FARM RD	SUDBURY	MA	01776
B09-0459	ROBINSON MICHAEL J & AMY E		153 POWERS RD	SUDBURY	MA	01776
B09-0462	MORAN ANN P	TRUSTEE OF THE ANN P MORAN	175 POWERS RD	SUDBURY	MA	01776

AFFIDAVIT OF SERVICES
Under the Massachusetts Wetlands Protection Act
and the
Sudbury Wetlands Administration Bylaw Regulations
(to be submitted to the Conservation Commission
when filing a Notice of Intent)

I, Paul Kirchner, hereby certify under the pains and penalties of perjury that on 2/15/18 I gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

An Abbreviated Notice of Resource Area Delineation filed under the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw Regulations by Greenscape Property and Building with the Sudbury Conservation Commission for property located at Powers Road, Parcels B09-01, B08-26, and B08-28.

The form of the notification, and a list of the abutters to whom it was given and their addresses, are attached to this Affidavit of Service.

Name: 

Date: 2/15/18

**Notification to Abutters Under the
Massachusetts Wetlands Protection Act
and the
Sudbury Wetlands Administration Bylaw Regulations**

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified to the following.

- A. The name of the applicant is Greenscape Property and Building.
- B. The applicant has filed an Abbreviated Notice of Resource Area Delineation with the Conservation Commission for the municipality of Sudbury seeking confirmation of an Area Subject to Protection Under the Wetlands Protection Act (General Laws Chapter 131, Section 40) and the Town of Sudbury Wetland Bylaw.
- C. The address of the lot where the activity is proposed is Powers Road, Parcels B09-01, B08-26, and B08-28.
- D. Copies of the Notice of Intent may be examined at the Sudbury Conservation Commission Office between the hours of 9 A.M. and 3 P.M. on the following days of the week: Monday-Friday

For more information, call: (978) 440-5471

This is the Approving Authority.

- E. Copies of the Notice of Intent may be obtained from the Applicant's Representative by calling (978) 263-8585 between the hours of 8 A.M. and 4 P.M. on the following days of the week: Monday – Friday.
- F. Information regarding the date, time and place of the public hearing may be obtained from the Sudbury Conservation Commission by calling (978) 440-5471 between the hours of 9 A.M. and 3 P.M. on the following days of the week: Monday-Friday.

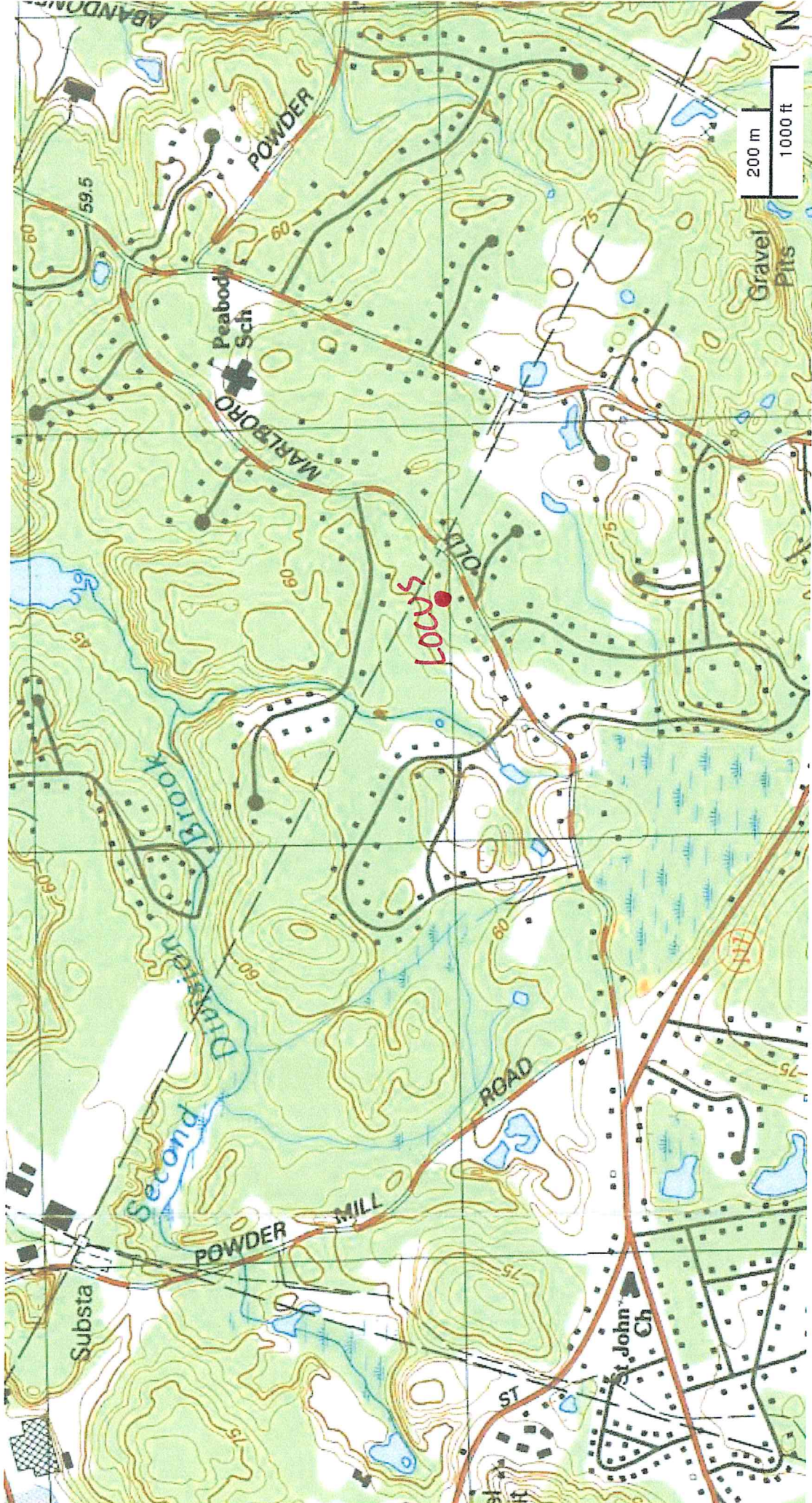
This is the Approving Authority.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in The Sudbury Town Crier.

NOTE: Notice of the public hearing, including its date, time, and place, will be posted in the City or Town Hall not less than forty-eight (48) hours in advance.

NOTE: You also may contact your local Conservation Commission for more information about this application.

U.S.G.S. Locus Map



FEMA Flood Map

National Flood Hazard Layer FIRMette

42°26'0.01"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth
- Regulatory Floodway Zone AE, AO, AH, VE, A
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee, See Notes, Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS OF FLOOD HAZARD

- NO SCREEN
- Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/14/2018 at 11:56:23 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRW panel number, and FIRW effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

71°24'24.75"W
42°25'33.46"N
Feet 1:6,000

DEP Bordering Vegetated Wetland Delineation Field Forms

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: _____

Project location: Lot 0 Powers Road

DEP File #: _____

Check all that apply: Vegetation alone presumed adequate to delineate BVW boundary; fill out Section I only
 Vegetation and other indicators of hydrology used to delineate BVW boundary; fill out Sections I and II
 Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: A22	Transect Number: Upgradient	Date of Delineation: 10-Oct-17	Wetland Indicator Category*
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
Red Oak	<i>Quercus rubra</i>	20%	26.3%	Yes	FACU
White pine	<i>Pinus strobus</i>	36%	47.4%	Yes	FACU
Northern white oak	<i>Quercus alba</i>	20%	26.3%	Yes	FACU
<u>Sapling Layer</u>					
Black huckleberry	<i>Gaylussacia baccata</i>	10%	100.0%	Yes	FACU
<u>Climbing Woody Vine</u>					
<u>Ground Cover</u>					
Northern Braeken fern	<i>Pteridium aquilinum</i>	10%	33.3%	Yes	FACU
Princess-pine	<i>Dendrolycopodium obscurum</i>	20%	66.7%	Yes	FACU

Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth

Morphological Adaptations: 0

* An asterisk after indicator status denotes wetlands plants; plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum, or plants listed as FAC, FACW, or OBL.

Vegetation conclusion:

Number of dominant wetland indicator plants: 0 Number of dominant non-wetland indicator plants: 6
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? yes no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Canton fine sandy loam

hydric soil inclusions: _____

Are field observations consistent with soil survey? yes no

Remarks: _____

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottles Color or Texture
A	1-8	10YR3/3	
B	8-20	10YR5/6	

Remarks: _____

3. Other:

Conclusion: Is soil hydric? yes no

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated: _____
- Depth to free water in observation hole: _____
- Depth to soil saturation in observation hole: _____
- Water marks: _____
- Drift Lines: _____
- Sediment deposits: _____
- Drainage patterns in BVW: _____
- Oxidized rhizospheres: _____
- Water-stained leaves: _____
- Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- Other: _____

Vegetation and Hydrology Conclusion for Upgradient of A22

Number of wetland indicator plants
 >= number of non-wetland plants

yes no

X

Wetland hydrology present:

hydric soils present

X

other indicators of hydrology present

X

Sample location is in a BVW

X

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

DEP File #: _____

Project location: Lot 0 Powers Road

Prepared by: Goddard Consulting LLC

Check all that apply: Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
 Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
 Method other than dominance test used (attach additional information)

Section I. Vegetation Transect Number: Downgradient Date of Delineation: 10-Oct-17

Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u> Red Maple	<i>Acer rubrum</i>	63%	100.0%	Yes	FAC*
<u>Sapling Layer</u> Red maple White pine	<i>Acer rubrum</i> <i>Pinus strobus</i>	10% 20%	33.3% 66.7%	Yes Yes	FAC* FACU
<u>Shrub Layer</u> European buckthorn Highbush blueberry Winterberry	<i>Frangula alnus</i> <i>Vaccinium corymbosum</i> <i>Ilex verticillata</i>	36% 3% 20%	61.0% 5.1% 33.9%	Yes No Yes	FAC* FACW* FACW*
<u>Climbing Woody Vine</u> Eastern poison ivy	<i>Toxicodendron radicans</i>	10%	100.0%	Yes	FAC*
<u>Ground Cover</u> Cinnamon fern Eastern poison ivy Princess-pine	<i>Osmundastrum cinnamomeum</i> <i>Toxicodendron radicans</i> <i>Dendrolycopodium obscurum</i>	36% 10% 3%	73.5% 20.4% 6.1%	Yes Yes No	FACW* FAC* FACU

Remarks: * An asterisk after common plant name indicates stunted growth, ** indicates extremely stunted growth
 Morphological Adaptations: 0 Description: _____

* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.

Vegetation conclusion:

Number of dominant wetland indicator plants: 7 **Number of dominant non-wetland indicator plants: 1**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? yes no
 title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)
 map number: _____
 soil type mapped: Canton fine sandy loam
 hydric soil inclusions: Ridgebury fine sandy loam

Are field observations consistent with soil survey? yes no
 Remarks: _____

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottles Color or Texture
O	1-8	10YR2/1	
C	8-20	10YR6/1	

Remarks: _____

 3. Other: _____

Conclusion: Is soil hydric? yes no

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated: _____
- Depth to free water in observation hole: _____
- Depth to soil saturation in observation hole: _____
- Water marks: _____
- Drift Lines: _____
- Sediment deposits: _____
- Drainage patterns in BVW: _____
- Oxidized rhizospheres: _____
- Water-stained leaves: _____
- Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- Other: _____

Vegetation and Hydrology Conclusion for Downgradient of A22

	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present: hydric soils present	X	
other indicators of hydrology present	X	

Sample location is in a BVW X

Submit this form with the Request for Determination of Applicability or Notice of Intent

**Resource Area Delineation Plan by
Stamski and McNary, Inc.,
Dated February 14, 2018**