

# Abbreviated Notice of Resource Area Delineation (ANRAD)

for

Off Freetown Street Lakeville, MA 02347 Maps/Parcels: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4

#### DATE:

February 27, 2024

#### PREPARED FOR (APPLICANT):

Simonds Hills, LLC 32 Norfolk Avenue South Easton, MA 02375

#### PREPARED BY (REPRESENTATIVE):

Goddard Consulting LLC 291 Main Street, Suite 8 Northborough, MA 01532

#### **ADDRESSED TO:**

Lakeville Conservation Commission 241 Main Street Lakeville, MA 02347



February 27, 2024

Lakeville Conservation Commission 241 Main Street Lakeville, MA 02347

Re: Abbreviated Notice of Resource Area Delineation (ANRAD) Off Freetown Street, Lakeville, MA 02347 Map/Parcel: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4

Dear Lakeville Conservation Commission,

Goddard Consulting, LLC is pleased to submit this Abbreviated Notice of Resource Area Delineation (ANRAD) on behalf of the applicant, Simonds Hills, LLC, for the properties located at Off Freetown Street Lakeville, MA 02347 (Map/Parcel: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4). This ANRAD is being filed under the MA Wetlands Protection Act (the WPA) and the local wetland bylaw. This ANRAD filing requests the review of all delineated resource areas on the subject parcels.

One original and three hard copies of the ANRAD application are enclosed, including full size site plan sets. The titles of all the documents enclosed are as follows:

- ANRAD (WPA Form 4a) Application Form
- ANRAD Wetland Fee Transmittal Form
- Copy of Checks
- Site Access Consent Form
- Lakeville Conservation Commission Fee Schedule
- Affidavit of Service
- Notification to Abutters
- Certified Abutters List
- Wetland Border Report, Goddard Consulting, LLC, 2/14/2024
- USGS of Site Locus, Goddard Consulting LLC, 2/6/2023
- Orthophoto of the Locus Site, Goddard Consulting LLC, 2/6/2023
- Wetland Resource Area Plan, Outback Engineering., 1/30/2024

#### **Existing Conditions**

The site consists of six parcels totaling approximately 186.6 acres (8,039,420 square feet). The site is bordered by Freetown Street to the west, and Route 140 to the east. The site is primarily wooded, with several large Bordering Vegetated Wetland (BVW) systems (44.1 acres), one perennial stream (Cedar Swamp Brook), four Certified Vernal Pools, and several non-jurisdictional Isolated Vegetated Wetlands delineated on-site.

#### **Delineation**

In April and May of 2023, the wetland resources were delineated on land located on or near the above-listed site (refer to enclosed locus maps). The wetland border was flagged using the criteria in the most recent edition of the MA Wetland Protection Act (WPA) and Regulations 310 CMR 10.00 et al. Hydric soil indicators, vegetation changes, hydrological indicators, and topography were all considered for delineation purposes. The attached Wetland Border



Report provides a description of the wetland resource areas and contains DEP Bordering Vegetated Wetland Delineation Field Data Forms (reference *Wetland Border Report*, Goddard Consulting LLC, 2/14/2024).

Bordering Vegetated Wetlands (BVW) were delineated in the field with series A-1A77, GCA1-46, GCB1-GCB78, GCC1-431, GCF1-GCF347, GCI1-GCI340, GCJ1-GCJ53, GCK1-GCK636, GCO1-GCO75. Four Certified Vernal Pools were delineated in the field with flag series GCVPV1-GCVPV24, GCVPW1-GCVPW20, GCVPY1-GCVPY20 and GCVPZ1-GCVPZ15. Non-jurisdictional Isolated Vegetated Wetlands (IVW) were delineated in the field throughout the site with flag series GCD1-GCD10, GCG1-GCG10, GCH1-GCH23, GCN1-GCN69, GCM1-GCM27, GCP1-GCP69, GCQ1-GCQ80, GCR1-GCR8, and GCS1-GCS7. A perennial stream also exists in the western portion of the site, however, was not flagged due to highwater and mucky soil. Flag series and details of each wetland resource area can be viewed below. These wetlands are dominant in red maple, yellow birch, white pine, winterberry, sweet pepperbush, jewelweed, halberd-leaf tearthumb, cinnamon fern, sensitive fern. The adjacent forested uplands are dominant in oak, white pine, American beech, Virginia creeper, eastern hemlock, witch hazel, American holly, Canada mayflower, poison ivy and green brier.

According to the MassGIS data layers for the Natural Heritage & Endangered Species Program (NHESP), the locus site is not located within Estimated and/or Priority Habitat of Rare Wildlife or an Area of Critical Environmental Concern (ACEC). The site is partially located in an Outstanding Resource Waters Area (ORW). There are four mapped certified vernal pools on site. The site partially falls within a jurisdictional FEMA Flood Zone (Flood Zone A with no Base Flood Elevation) which is jurisdictional as Bordering Land Subject to Flooding.

Please feel free to contact us if you have any questions.

Sincerely,

Goddard Consulting, LLC

Tom Schutz, WPIT, WSA

Wetland Scientist

Cc:

- MassDEP Southeast Regional Office, Wetlands Division. 20 Riverside Drive, Lakeville, MA 02347
- Simonds Hills, LLC, 32 Norfolk Avenue, South Easton, MA 02375



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.

### **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

Pro۱	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Lakeville City/Town

#### Canaral Information

1.	Project Location (Note: electronic filers will cl	ick on button for GIS loca	tor):	
	Off Freetown Street	Lakeville	02347	
	a. Street Address	b. City/Town	c. Zip Code	
		41.79941 N	70.96492 W	
	Latitude and Longitude:	d. Latitude	e. Longitude	
	34, 35	2-1, 2-2, 2-11,2-1	2 1-2A 1-4	
	f. Assessors Map/Plat Number	g. Parcel /Lot Number		
2.	Applicant:			
	Muhammad	Itani		
	a. First Name	b. Last Name		
	Simonds Hills, LLC			
	c. Organization			
	32 Norfolk Ave			
	d. Mailing Address			
	South Easton	MA	02375	
	e. City/Town	f. State	g. Zip Code	
	(508) 230-2300 ext.		• •	
	11 i. Fax Number	mitani@stonebridgeh j. Email Address	omesinc.com	
3.	Property owner (if different from applicant):	Check if more than one owner (attach additional sheet with names and contact information)		
	a. First Name	b. Last Name		
	c. Organization			
	d. Mailing Address			
	e. City/Town	f. State	g. Zip Code	
	h. Phone Number i. Fax Number	j. Email Address		
4.	Representative (if any):			
	Tom	Schutz		
	a. Contact Person First Name	b. Contact Person Last Name		
	Goddard Consulting, LLC			
	c. Organization			
	291 Main Street, Suite #8			
	d. Mailing Address			
	Northborough	MA	01532	
	e. City/Town	f. State	g. Zip Code	
		tom@goddardconsultingllc.com		
	(508) 393-3784	tom@goddardconsult	inglic.com	

Fees will be calculated for online users.

\$2,000 \$987.50 \$1,012.50+\$1,000 Bylaw Fee a. Total Fee Paid b. State Fee Paid c. City/Town Fee Paid



#### 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** 

Lakeville	
Citv/Town	

B. Area(s) Delineated	B. A	rea(s	) Deli	neated
-----------------------	------	-------	--------	--------

1. Bordering Vegetated Wetland (BVW) 

44,853

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. X 50% or more wetland indicator plants
    - 2. X 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:

•	
Certified Vernal Pool	1,650
a. Resource Area	b. Linear Feet Delineated
Isolated Vegetated Wetland (Non-Jurisdictional)	4,293
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. X ANRAD (Delineation Plans only)
- 2. Suggestion 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.

#### D. Fees

wpaform4a.doc • rev. 12/11 Page 2 of 4



### **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

Prov	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Lakeville
	City/Town

	City/Town
	reviated Notice of Resource Area Delineation must be n Commission and the Department (see Instructions and
the Commonwealth, federally recognized Incor the Massachusetts Bay Transportation Au	essed for projects of any city, town, county, or district of dian tribe housing authority, municipal housing authority, athority.  Attion (in addition to the attached Wetland Fee Transmittal
2647, 2648	2/19/2024
2. Municipal Check Number	3. Check date
2646	2/19/2024
4. State Check Number	5. Check date
Muhammad	Itani
6. Payor name on check: First Name	7. Payor name on check: Last Name

#### 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

wpaform4a.doc • rev. 12/11 Page 3 of 4



### 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

5. Signature of Representative (if any)(Tom Schutz, Goddard Consulting)

ided by Ma	ssDEP:
MassDEP	File Number
Document	Transaction Number
Lakeville	<b>)</b>
City/Town	

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.	2
1. Signature of Applicant (Michelamed Itani, Simonds Hills, LLC)	02 20 2024
3. Signature of Property Owner (if different)	4. 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.

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



return key.



□ 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

A. App	licant Inform	nation			
I. Locat	ion of Project:				
	reetown Street		Lakeville		
	et Address		b. City/Town		
\$987.			2646		
	amount		d. Check number		
. Applic	cant:				
Muha	mmad	Itani		Stonebridge	Homes
a. First	Name	b. Last Name		c. Company	
	orfolk Avenue ing Address				
	i Easton		М	Α	02375
e. City/				State	g. Zip Code
	230-2300 ext. 11				
. Prope	erty Owner (if differ	ent):			
a. First	Name	b. Last Name		c. Company	
d. Maili	ng Address				
e. City/	Tour			State	g. Zip Code
e. City/	TOWIT		1. 3	State	g. Zip Code
h. Phor	ne Number				
3. Fee	s				
			e Area Delineation inc		
			ch ANRAD, regardless		
ctivity.	ileations, is \$200 a	Clivilles associated w	ith a single-family hou	Se and \$2,000	ior arry ourier
•		. (I I. D. P P F			
Borae		etland Delineation Fee	<b>9</b> :		
1. 🔲	single family	- foot of DVAV	··· ¢2.00 -	<u> </u>	2) // //
	house project	a. feet of BVW	x \$2.00 =	b. Fee for E	
2. 🔀	all other	44,853 a. feet of BVW	\$89,706 x \$2.00 =	\$2,000 - b. Fee for E	Max Fee
	projects	a. leet of by w	χ φ2.00 -	b. ree ioi i	5 V VV
Other	Resource Area (e	.g., bank, riverfront ar	ea, etc.):		
3. 🗌	single family				
	house project	a. linear feet	x \$2.00 =	b. Fee	
4. 🛛	all other	1,650	\$3,300	\$2,000 -	Max Fee
	projects	a. linear feet	x \$2.00 =	b. Fee	
		Total Fee	for all Resource Area	as: $\frac{\$2,000-1}{\text{Fee}}$	Max Fee
			State share of filing fe	ee: $\frac{$987.50}{5.1/2 \text{ of to}}$	tal fee <b>less</b> \$12.50
		Citv/	Town share of filing fe	e: \$1,012.5	0 + \$1,000 Bylav

Fee



#### **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.)



#### Town of Lakeville **Conservation Commission** 346 Bedford St. (office location 241 Main St.) Lakeville, MA 02347

Phone: (508) 946-8823

#### **Site Access Consent Form**

The Lakeville Conservation Commission requires specific and adequate information to make an informed decision on this filing. The Conservation Agent and/or Conservation Commissioners will need to access the property for a site visit prior to the scheduled hearing. Please indicate if you would prefer to be present and we will try to accommodate you. Lack of permission to visit the site may result in denial.

Name:		 
Project Location:		
Phone Number:		
Email:		 
Signature:	NO	

Please be aware that prior to the start of work, the Conservation Office or the Building Commissioner must be notified via email or phone.

- Conservation Commission Office 508-946-8823 email: <a href="mailto:lcanedy@lakevillema.org">lcanedy@lakevillema.org</a>
- Building Commissioner Office 508-946-8804 (to inspect erosion control)



#### Town of Lakeville Conservation Commission 346 Bedford St. (office location 241 Main St.) Lakeville, MA 02347

Phone: (508) 946-8823

### Lakeville Conservation Commission Administrative Fee Schedule

Request for Determination of Applicability (RDA)- includes initial site visit and siltation inspection	\$75.00
Notice of Intent, Residential (NOI)—includes initial site visit and siltation inspection	\$75.00
Notice of Intent, Commercial (NOI) – includes initial site visit and siltation inspection	\$100.00
Abbreviated Notice of Resource Area Delineation (ANRAD)	\$1.00/linear foot – minimum charge \$100.00, maxim charge \$1000.00
Certificate of Compliance <2 acres (required: 2 hard copies of as-built plan and submitted electronically)	\$25.00
Certificate of Compliance >2 acres (required: 2 hard copies of as-built plan and submitted electronically)	\$50.00
Certificate of Compliance >5 acres (required: 2 hard copies of as-built plan and submitted electronically)	\$100.00
Certificate of Compliance, Commercial (required: 2 hard copies of as-built plan and submitted electronically)	\$100.00
Amended Order of Conditions, Residential	\$25.00
Amended Order of Conditions, Commercial/Subdivision	\$200.00
Amended Order of Resource Area Delineation	\$75.00
Extension to Order of Conditions	\$50.00
Site Inspection	\$25.00 flat fee/first hour and \$25.00 each additional hour
Continuation – Applicant's Request	\$25.00 without 48-hour notice
Duplicate Order of Conditions	\$25.00
Simplified Review	\$50.00

#### AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

(to be submitted to the Massachusetts Department of Environmental Protection and the Conservation Commission)

I, <u>Tom Schutz</u> hereby certify under the pains and penalties of perjury that on <u>February 27, 2024</u> I gave notification to abutters in Compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dating April 8, 1994 in connection with the following matter:

An Abbreviated Notice of Resource Area Delineation was filed under the Massachusetts Wetlands Protection Act by <u>Simonds Hills, LLC</u> with the <u>Lakeville</u> Conservation Commission on <u>February 27, 2024</u> for property located at Off Freetown Street, (<u>Map and Parcels: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4</u>) in <u>Lakeville</u>, <u>MA</u> for the confirmation of the delineated resource areas on the locus site.

The form of the notification, and the list of abutters to whom it was given,

#### **Notification to Abutters**

#### By Hand Delivery, Certified Mail (return receipt requested), or Certificates of Mailing

This is a notification required by law. You are receiving this notification because you have been identified as the owner of land abutting another parcel of land for which certain activities are proposed. Those activities require a permit under the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40).

In accordance with the second paragraph of the Massachusetts Wetlands Protection Act, and 310 CMR 10.05(4)(a) of the Wetlands Regulations, you are hereby notified that:

A. An Abbreviated Notice of Resource Area Delineation (ANRAD) was filed with the Lakeville Conservation Commission on February 27, 2024, seeking to confirm the wetland resource areas on the subject site. The following is a description of the proposed activity/activities:

The applicant is confirming the delineation of all jurisdictional resource areas under the Massachusetts Wetland Protection Act.

- B. The name of the applicant is: Simonds Hills, LLC
- C. The address of the land where the activity is proposed is: Off Freetown Street Lakeville, MA 02347 (Map/Parcels: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4)
- D. Copies of the Abbreviated Notice of Resource Area Delineation (ANRAD) may be examined or obtained at the office of the Lakeville Conservation Commission, located at 241 Main Steet Lakeville, MA. The regular business hours of the Commission are 9am-12pm Monday, Wednesday, Friday. The Commission may be reached at (508) 946-8823.
- E. Copies of the ANRAD may be obtained from the applicant or their representative by calling Goddard Consulting, LLC at (508) 393-3784. An administrative fee will be applied for providing copies of the ANRAD and plans.
- F. Information regarding the date, time, and location of the public hearing regarding the ANRAD may be obtained from the Lakeville Conservation Commission. Notice of the public hearing will be published at least five business days in advance.

#### CERTIFIED



To the best of my knowledge and with the present records on hand in the Assessor's Office, the abutters appear to be within 100' (one hundred feet) of the applicant

Map, Block, Lot of Applicant

Board of Assessors

Subject Property:

Parcel Number: **CAMA Number:** 

34-2-1, 34-2-2, 34-2-12 34-2-11, 35-1-2A, 35-1-4

Property Address:

**Abutters:** 

Parcel Number: CAMA Number:

012-002-001A 012-002-001A Property Address: 146 HOWLAND RD

012-002-001B

Parcel Number: CAMA Number: 012-002-001B Property Address: 144 HOWLAND RD

Parcel Number: 012-003-010J CAMA Number: 012-003-010J

Property Address: 59 FREETOWN ST

Parcel Number: 012-003-010K CAMA Number: 012-003-010K

Property Address: 63 FREETOWN ST

Parcel Number: 012-003-010P CAMA Number: 012-003-010P

Property Address: 6 ROCKY WOODS RD

Parcel Number: 012-003-010Q **CAMA Number:** 012-003-010Q

Property Address: 5 ROCKY WOODS RD

Parcel Number: 012-003-010R CAMA Number: 012-003-010R Property Address: 7 LITTLE FARM RD

Parcel Number: 012-003-010U **CAMA Number:** 012-003-010U Property Address: 5 LITTLE FARM RD

Parcel Number: 012-003-010W CAMA Number: 012-003-010W Property Address: 3 LITTLE FARM RD

013-001-009A Parcel Number: **CAMA Number:** 013-001-009A Property Address: 16 FREETOWN ST Mailing Address: **BOTELHO JOSEPH F & TARA L** 

146 HOWLAND RD LAKEVILLE, MA 02347

Mailing Address:

**GONSALVES JOSE TRUSTEE** 144 HOWLAND RD

LAKEVILLE, MA 02347

Mailing Address: TOMLINSON STEVEN & ELAINE

59 FREETOWN ST LAKEVILLE, MA 02347

TERRA THOMAS M & SCANLON Mailing Address:

KATHLEEN 63 FREETOWN ST LAKEVILLE, MA 02347

STURGIS BRUCE C & DIANE L Mailing Address:

6 ROCKY WOODS RD LAKEVILLE, MA 02347

**GRODIN DANIEL & FISHER DEBRA A** Mailing Address:

5 ROCKY WOODS RD LAKEVILLE, MA 02347

Mailing Address: PIROZZI GINA E & HODGSON JAMES M

7 LITTLE FARM RD LAKEVILLE, MA 02347

Mailing Address: BELIARD MICHEL A & LISA M

**5 LITTLE FARM RD** LAKEVILLE, MA 02347

LEAHY ANN & ROUKE MARC & DEBRA Mailing Address:

3 LITTLE FARM ROAD LAKEVILLE, MA 02347

Mailing Address: EVANS BARRY R & ANN M EVANS

FAMILY LIVING TRUST 16 FREETOWN ST LAKEVILLE, MA 02347





Parcel Number:

013-001-009B

Mailing Address: MORAD GEORGE R & SUSAN L

CAMA Number: 013-001-009B Property Address: 2 SMITH CIR

LAKEVILLE, MA 02347

Parcel Number: CAMA Number: 013-001-009C 013-001-009C Mailing Address: LAWRENCE SANDRA 15 ASHLEY AVE

2 SMITH CIR

Property Address: 20 FREETOWN ST

E FREETOWN, MA 02717

Parcel Number: CAMA Number: 013-001-009D 013-001-009D

Mailing Address: ANDERSON STANLEY R & CAROLANN L THE ANDERSON FAMILY LIVING TRUST

Property Address: 22 FREETOWN ST

22 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: CAMA Number: 013-001-009E 013-001-009E Mailing Address:

MALONEY JANICE V & JAMES M

Property Address: 24 FREETOWN ST

Property Address: 44 FREETOWN ST

Property Address: 5 PEBBLEBROOK WAY

Property Address: 7 PEBBLEBROOK WAY

MALONEY FAMILY REV TRUST-2018 24 FREETOWN ST

Parcel Number: CAMA Number:

013-001-010 013-001-010 Property Address: 50 FREETOWN ST Mailing Address:

SUTCLIFFE KENNETH W & COLLEEN M

50 FREETOWN ST LAKEVILLE, MA 02347

LAKEVILLE, MA 02347

Parcel Number: CAMA Number: 013-001-010A 013-001-010A Mailing Address:

**DESMARAIS STEVEN J & JAMIE LYNN** 

44 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: CAMA Number:

013-001-010B 013-001-010B

Mailing Address: MISODOULAKIS GREGORY & CELESTE

5 PEBBLEBROOK WAY LAKEVILLE, MA 02347

Parcel Number: CAMA Number: 013-001-010C 013-001-010C Mailing Address:

**DICARLO MICHAEL J & DONNA** 

7 PEBBLEBROOK WAY LAKEVILLE, MA 02347

Parcel Number:

013-001-010D

Mailing Address:

GRAY DAVID S & GAYLE A

CAMA Number: Property Address: 9 PEBBLEBROOK WAY

013-001-010D

9 PEBBLEBROOK WAY LAKEVILLE, MA 02347

Parcel Number:

034-002-001

Mailing Address:

OMRAN WISAM R

CAMA Number: Property Address: REARFREETOWN ST

034-002-001

24 FOREST EDGE RD SOUTH EASTON, MA 02375

Parcel Number:

034-002-002

Mailing Address:

OMRAN WISAM R

CAMA Number: Property Address: REARFREETOWN ST

034-002-002

24 FOREST EDGE RD SOUTH EASTON, MA 02375

Parcel Number:

2/21/2024

034-002-003 034-002-003 Mailing Address:

ITANI MUHAMMAD M 24 FOREST EDGE RD

CAMA Number:

Property Address: 178 COUNTY ST

SOUTH EASTON, MA 02375



Property Address: 1 BRAKE ROCK WAY

Parcel Number: 034-002-005 Mailing Address: RATHBUN KATHLEEN C TRUSTEE CAMA Number: 034-002-005

RATHBUN FAMILY REALTY TRUST

172 COUNTY ST LAKEVILLE, MA 02347

Parcel Number: 034-002-011 Mailing Address: OMRAN WISAM R

CAMA Number: 034-002-011 24 FOREST EDGE RD

Property Address: FREETOWN ST SOUTH EASTON, MA 02375

Mailing Address: SAAD JULIA M & JACOB P Parcel Number: 034-002-011-01

13 FREETOWN ST CAMA Number: 034-002-011-01 LAKEVILLE, MA 02347 Property Address: 13 FREETOWN ST

Parcel Number: 034-002-011-02 Mailing Address: REILLY KATHLEEN & ECKELBERGER

CAMA Number: 034-002-011-02 **MEGHAN** 

Property Address: 15 FREETOWN ST 15 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012 Mailing Address: OMRAN WISAM R CAMA Number: 034-002-012 24 FOREST EDGE RD

SOUTH EASTON, MA 02375 Property Address: FREETOWN ST

SWANSON JARED M TRUSTEE JANICE Parcel Number: 034-002-012A Mailing Address:

CAMA Number: M SWANSON IRR TRUST 034-002-012A 21 FREETOWN ST Property Address: 21 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012B HENDRICKSON CELIA A Mailing Address:

CAMA Number: 23 FREETOWN ST 034-002-012B Property Address: 23 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012C Mailing Address: MASSA SALLY-ANN & MARK LOUIS SR

CAMA Number: 034-002-012C 25 FREETOWN ST Property Address: 25 FREETOWN ST LAKEVILLE, MA 02347

IWAMOTO KENNETH M & TERRI L Parcel Number: 034-002-012D Mailing Address:

CAMA Number: 034-002-012D 27 FREETOWN ST Property Address: 27 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012E PHINNEY JOSEPH A & BRALEY BRITTNI Mailing Address:

CAMA Number: 034-002-012E 29 FREETOWN ST Property Address: 29 FREETOWN ST

LAKEVILLE, MA 02347

Parcel Number: 034-002-012F Mailing Address: KINGMAN AMY M & PATRICK S 31 FREETOWN ST CAMA Number: 034-002-012F

LAKEVILLE, MA 02347 Property Address: 31 FREETOWN ST

CYR TYLER S & STEPHANIE A Parcel Number: 034-002-012G Mailing Address:

33 FREETOWN ST CAMA Number: 034-002-012G LAKEVILLE, MA 02347 Property Address: 33 FREETOWN ST





CHOUINARD RONALD R & LISA Parcel Number: 034-002-012H Mailing Address:

35 FREETOWN ST CAMA Number: 034-002-012H Property Address: 35 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-0121 **OMRAN WISAM R** Mailing Address: CAMA Number: 034-002-0121 24 FOREST EDGE RD

SOUTH EASTON, MA 02375 Property Address: 37 FREETOWN ST

Mailing Address: HORTON MICHAEL S & JOANNE T Parcel Number: 034-002-012J

CAMA Number: 39 FREETOWN ST 034-002-012J Property Address: 39 FREETOWN ST LAKEVILLE, MA 02347

PHIPPS ESTHER M & JESSICA J Parcel Number: 034-002-012K Mailing Address:

41 FREETOWN ST CAMA Number: 034-002-012K Property Address: 41 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012L ALTIERI CHRISTOPHER M & EILEEN M Mailing Address:

CAMA Number: 034-002-012L 43 FREETOWN ST Property Address: 43 FREETOWN ST LAKEVILLE, MA 02347

**BECKER CHERIE & KOSTANT** Parcel Number: 034-002-012M Mailing Address:

CAMA Number: 034-002-012M LAWRENCE E **45 FREETOWN ST** Property Address: 45 FREETOWN ST LAKEVILLE, MA 02347

Mailing Address: PERRY ALBERT J JR & GAIL E Parcel Number: 034-002-012N

**47 FREETOWN ST** CAMA Number: 034-002-012N Property Address: 47 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-012P Mailing Address: MCGREEVY TRACY

CAMA Number: 034-002-012P 49 FREETOWN ST Property Address: 49 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: ZAMBELLO MICHAEL J 034-002-012Q Mailing Address: 51 FREETOWN ST CAMA Number: 034-002-012Q

LAKEVILLE, MA 02347 Property Address: 51 FREETOWN ST

Parcel Number: 034-002-013 Mailing Address: TARADASH MARTHA & BENJAMIN

11 FREETOWN ST CAMA Number: 034-002-013 Property Address: 11 FREETOWN ST LAKEVILLE, MA 02347

Parcel Number: 034-002-015 Mailing Address: OMRAN WISAM R CAMA Number: 034-002-015 24 FOREST EDGE RD

2/21/2024

Property Address: 23 A FREETOWN ST SOUTH EASTON, MA 02375

**OMRAN WISAM R** Parcel Number: 034-002-017 Mailing Address:

CAMA Number: 034-002-017 24 FOREST EDGE RD

Property Address: REARROUTE 140 SOUTH EASTON, MA 02375





Parcel Number:	035-001-001-01	Mailing Address:	LENZA PETER J & ELLEN M
CAMA Number	035-001-001-01	•	6 MARGEAUX DR

Property Address: 6 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-10 Mailing Address: CAREY RYAN P & GUIDOTTI MICHELLE

CAMA Number: 035-001-001-10

Property Address: 10 MARGEAUX DR 10 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-11 Mailing Address: MARDEN MICHAEL G & AMY E

CAMA Number: 035-001-001-11 11 MARGEAUX DR
Property Address: 11 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-12 Mailing Address: BREDBERG GLEN E & ALICIA

CAMA Number: 035-001-001-12 12 MARGEAUX DR
Property Address: 12 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-13 Mailing Address: JOLY PAUL R JR & LINA

CAMA Number: 035-001-001-13 13 MARGEAUX DR
Property Address: 13 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-14 Mailing Address: SANTOS JERRY F & DORIS

CAMA Number: 035-001-001-14 14 MARGEAUX DR
Property Address: 14 MARGEAUX DR LAKEVILLE, MA 02347

Parcel Number: 035-001-001-16 Mailing Address: CIL REALTY OF MASSACHUSETTS INC

CAMA Number: 035-001-001-16 30 JORDAN LN

Property Address: 16 MARGEAUX DR WETHERSFIELD, CT 06129

Parcel Number: 035-001-002 Mailing Address: WILLIAMS GEORGE JR & DESROSIERS

CAMA Number: 035-001-002 KERRY M

Property Address: 145 HOWLAND RD 145 HOWLAND RD LAKEVILLE, MA 02347

Parcel Number: 035-001-002A Mailing Address: OMRAN WISAM R
CAMA Number: 035-001-002A 24 FOREST EDGE RD

Property Address: HOWLAND RD SOUTH EASTON, MA 02375

Parcel Number: 035-001-003 Mailing Address: OMRAN WISAM R

CAMA Number: 035-001-003 24 FOREST EDGE RD
Property Address: REARFREETOWN ST SOUTH EASTON, MA 02375

Parcel Number: 035-001-004 Mailing Address: OMRAN WISAM R
CAMA Number: 035-001-004 24 FOREST EDGE RD

Property Address: REARFREETOWN ST SOUTH EASTON, MA 02375

Parcel Number: 035-001-005 Mailing Address: OMRAN WISAM R

CAMA Number: 035-001-005 24 FOREST EDGE RD
Property Address: REARFREETOWN ST SOUTH EASTON, MA 02375



2/21/2024



035-001-007 Parcel Number: 035-001-007 CAMA Number:

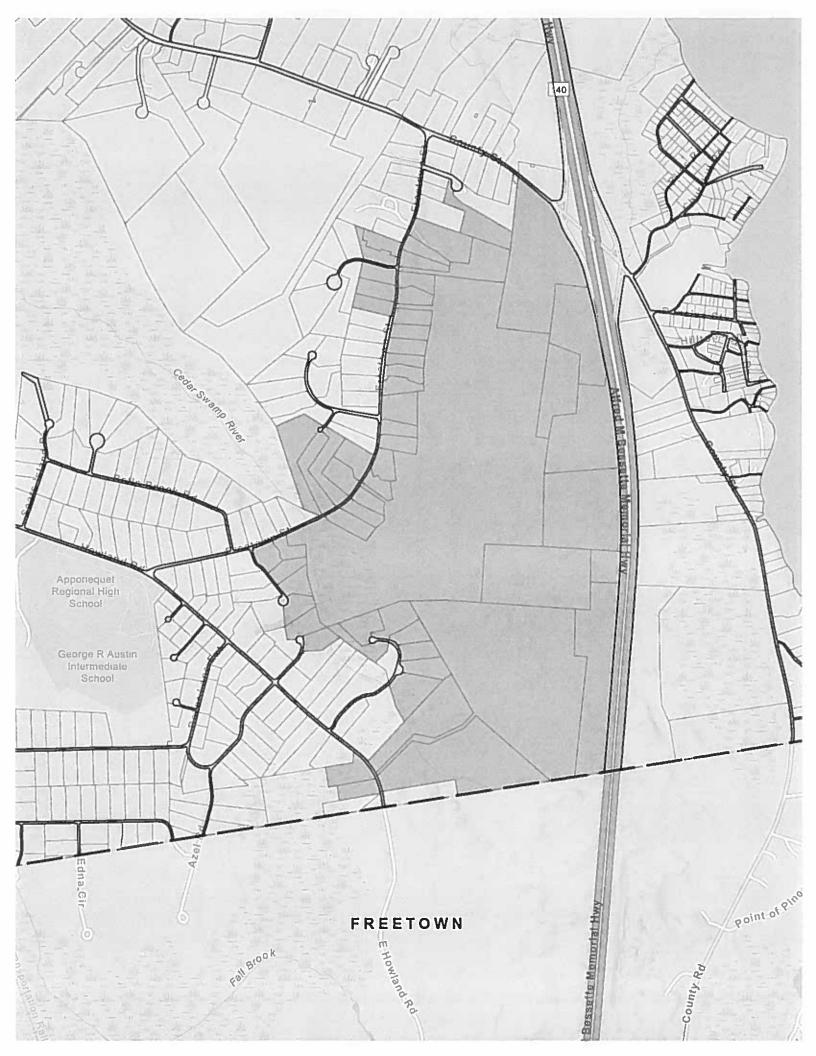
Property Address: 143 HOWLAND RD

Mailing Address: LEACH ST GERMAIN DANIEL P &

KATHLEEN

143 HOWLAND RD LAKEVILLE, MA 02347





#### Off Freetown Street, Lakeville MA

Wetland Border Report | Page 1



#### Wetland Border Report

Site Locus: Off Freetown Street, Lakeville MA

Map, Lot and Parcel: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4

Prepared for: Muhammad Itani, Stonebridge Homes

Prepared by: Goddard Consulting LLC, 291 Main St, Suite 8, Northborough MA 01532

Date: 2/14/2024

#### INTRODUCTION

In April and May of 2023, wetland resources were delineated for Stonebridge Homes on land located on the site known as Off Freetown Street in Lakeville MA (Map/Parcel 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4) (refer to enclosed locus maps). The wetland borders were flagged using the criteria in the most recent edition of MA Wetland Protection Act (WPA) and Regulations 310 CMR 10.00 et al. Hydric soil indicators, vegetation changes, hydrological indicators, and topography were all considered for delineation purposes.

The titles of attached documents are as follows:

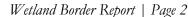
- DEP Bordering Vegetated Wetland Determination Form GCI330
- DEP Bordering Vegetated Wetland Determination Form GCJ30
- DEP Bordering Vegetated Wetland Determination Form GCK343
- NRCS Soil Map Bristol County, Massachusetts, Southern Part
- FEMA Flood Zones on the Locus Site, Goddard Consulting LLC, 2/6/2023
- Outstanding Resource Water Area on the Locus Site, Goddard Consulting LLC, 2/6/2023
- Orthophoto View of Site, Goddard Consulting LLC, 2/6/2023
- USGS of Locus Site, Goddard Consulting LLC, 2/6/2023
- Sketch of the Delineation on the Locus Site, Goddard Consulting LLC, 5/26/2023

#### **SUMMARY OF FINDINGS**

Bordering Vegetated Wetlands (BVW) were delineated in the field with series A-1A77, GCA1-46, GCB1-GCB78, GCC1-431, GCF1-GCF347, GCI1-GCI340, GCJ1-GCJ53, GCK1-GCK636, GCO1-GCO75. Four Certified Vernal Pools were delineated in the field with flag series GCVPV1-GCVPV24, GCVPW1-GCVPW20, GCVPY1-GCVPY20 and GCVPZ1-GCVPZ15. Non-jurisdictional Isolated Vegetated Wetlands (IVW) were delineated in the field throughout the site with flag series GCD1-GCD10, GCG1-GCG10, GCH1-GCH23, GCN1-GCN69, GCM1-GCM27, GCP1-GCP69, GCQ1-GCQ80, GCR1-GCR8, and GCS1-GCS7. A perennial stream also exists in the western portion of the site, however, was not flagged due to highwater and mucky soil. Flag series and details of each wetland resource area can be viewed below. These wetlands are dominant in red maple, yellow birch, white pine, winterberry, sweet pepperbush, jewelweed, halberd-leaf tearthumb, cinnamon fern, sensitive fern. The adjacent forested uplands are dominant in oak, white pine, American beech, Virginia creeper, eastern hemlock, witch hazel, American holly, Canada mayflower, poison ivy and green brier. Department of Environmental Protection BVW field data forms were documented at wetland flags GC I330, GC J30, and GC K343 (see attached forms).

Consistent with the NRCS survey, soils identified on the site range from fine sandy loam, loamy sand, coarse sand, mucky sand, muck and rock outcrop. More detailed information about soils is included in the attached NRCS Soil Map and the DEP Bordering Vegetated Wetland Determination Forms.

#### Off Freetown Street, Lakeville MA





According to the MassGIS data layers for the Natural Heritage & Endangered Species Program (NHESP), the locus site is not located within Estimated and/or Priority Habitat of Rare Wildlife or an Area of Critical Environmental Concern (ACEC). The site is partially located in an Outstanding Resource Waters Area (ORW). There are four mapped certified vernal pools on site. The site partially falls within a jurisdictional FEMA Flood Zone (Flood Zone A with no Base Flood Elevation) which is jurisdictional as Bordering Land Subject to Flooding.

The MA Wetlands Protection Act and the town of Lakeville take jurisdiction over the resource areas detailed in this report. The BVW has a jurisdictional 100-foot Buffer Zone that casts partially onto the locus site. The perennial stream has an associated 200-foot Riverfront Area. Any work within these resource areas including the 100-foot Buffer Zones requires a Request for Determination (RDA) or Notice of Intent (NOI) to be filed with the Lakeville Conservation Commission.

#### **DESCRIPTION OF REGULATED INLAND RESOURCE AREA**

The table below provides the regulatory jurisdiction, flag numbers/colors, and wetland types and locations for the resource areas delineated.

Resource	Regulatory	Flag Numbers	Wetland Types and
Area	Jurisdiction	and Color	Locations
Bordering	BVW & 100-	A1-A77	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	northeastern portion of
Wetland	Zone		the site, adjacent to
(BVW)			Route 140.
Bordering	BVW & 100-	GCA1-GCA46	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	western portion of the
Wetland	Zone		site adjacent to Freetown
(BVW)			Street associated with the
			perennial stream.
Bordering	BVW & 100-	GCB1-GCB78	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	northwestern portion of
Wetland	Zone		the site.
(BVW)			
Bordering	BVW & 100-	GCC1-GCC431	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	western portion of the
Wetland	Zone		site associated with the
(BVW)			perennial stream. This
			system spans into the
			west central portion of
			the site.
Bordering	BVW & 100-	GCF1-GCF347	BVW located in the east
Vegetated	foot Buffer	[Blue Flag]	central portion of the
Wetland	Zone		site, adjacent to Route
(BVW)			140.
Bordering	BVW & 100-	GCI1-GCI340	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	southeast portion of the
Wetland	Zone		site, adjacent to Route
(BVW)			140.
Bordering	BVW & 100-	GCJ1-GCJ53	BVW located in the
Vegetated	foot Buffer	[Blue Flag]	western portion of the
	Zone		site adjacent to Freetown



Wetland (BVW)			Street associated with the perennial stream.
Bordering Vegetated Wetland (BVW)	BVW & 100- foot Buffer Zone	GCK1-GCK636 [Blue Flag]	BVW that exists in the north central portion of the site. The BVW spans the entire site between Route 140 and Freetown Street.
Bordering Vegetated Wetland (BVW)	BVW & 100- foot Buffer Zone	GCO1-GCO75 [Blue Flag]	BVW located in the southwestern portion of the site.
Certified Vernal Pool	CVP	GCVPV1- GCVPV24 [Yellow Flag]	Certified Vernal Pool located within the GCF BVW series.
Certified Vernal Pool	CVP	GCVPW1- GCVPW20 [Yellow Flag]	Certified Vernal Pool located within the GCI IVW series.
Certified Vernal Pool	CVP	GCCVPY1- GCVPY15 [Yellow Flag]	Certified Vernal Pool located within the GCK BVW series.
Certified Vernal Pool	CVP	GCCVPZ1- GCVPZ15 [Yellow Flag]	Certified Vernal Pool located within the GCA, GCC and GCJ BVW series.
Potential Vernal Pool	PVP	GCV1-GCV8 [Yellow Flag]	Potential Vernal Pool located within GCC BVW series.
Potential Vernal Pool	PVP	GCW1-GCW13 [Yellow Flag]	Potential Vernal Pool located within GCC BVW series.
Isolated Vegetated Wetland (IVW)	Non- Jurisdictional	GCD1-GCD10 [Blue Flag]	IVW located in the southwestern portion of the site.
Isolated Vegetated Wetland (IVW)	Non- Jurisdictional	GCG1-GCG10 [Blue Flag]	IVW located in the center of the site.
Isolated Vegetated Wetland (IVW)	Non- Jurisdictional	GCH1-GCH23 [Blue Flag]	IVW located in the center of the site.



Isolated	Non-	GCN1-GCN69	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	center of the site.
Wetland			
(IVW)			
Isolated	Non-	GCM1-GCM27	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	northeastern of the site.
Wetland			This IVW is located
(IVW)			directly behind the on-
			site radio tower.
Isolated	Non-	GCP1-GCP69	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	northeastern of the site.
Wetland			
(IVW)			
Isolated	Non-	GCQ1-GCQ80	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	northeastern of the site.
Wetland			
(IVW)			
Isolated	Non-	GCR1-GCR8	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	northeastern of the site.
Wetland			
(IVW)			
Isolated	Non-	GCS1-GCS7	IVW located in the
Vegetated	Jurisdictional	[Blue Flag]	northeastern of the site.
Wetland			
(IVW)			

Sincerely,

Goddard Consulting, LLC

Tom Schutz, WPIT, WSA Wetland Scientist

Andrew Thibault

Andrew Thibault, WPIT, WSA Environmental Scientist

Chris Frattaroli Wetland Scientist

#### **BORDERING VEGETATED WETLAND DETERMINATION FORM**

Project/Site:	Off Freetown Street	City/Town: Lakeville, MA	Sampling Date: 6/27/23
Applicant/Owner:	Stonebridge Homes, Inc	Sampling Poi	int or Zone: GCJ30
Investigator(s):	Tom Schutz, WPIT, Andrew	Thibault, WPIT, Chris Frattaroli Latitude/	/Longitude: 41.79941 N, 70.96492 W
Soil Map Unit Name:		NWI or DEP Cla	ssification:
		UPGRADIENT	
Are climatic/hydrolog	ic conditions on the site typic	cal for this time of year? Yes	No X (If no, explain in Remarks)
Are Vegetation	, Soil , or	Hydrology significantly disturbed? (If yes, e	explain in Remarks)
Are Vegetation	, Soil , or	Hydrology significantly disturbed? (If yes, e Hydrology naturally problematic? (If yes, e	explain in Remarks)
SUMMARY OF FIND	INGS – Attach site map an	d photograph log showing sampling locations,	, transects, etc
Wetland vegetation cr			etland? Yes No X
Hydric Soils criterion n	met? Yes	NoX	
Wetlands hydrology pr			
Remarks, Photo Details	s, Flagging, etc.:		
· I	, 55 5		
İ			
HYDROLOGY			
Field Observations:			
Surface Water Present?	?	Yes	No X Depth (in)
Water Table Present?		Yes	No X Depth (in)
Saturation Present (inc	cluding capillary fringe)?	Yes	No X Depth (in)
Wetland Hydrology I	Indicators		
Reliable Indicators of V		Indicators that can be Reliable with	Indicators of the Influence of Water
Hydrology		Proper Interpretation	
Water-stained lear	ives	Hydrological records	Direct observation of inundation
Evidence of aquat	ic fauna	Free water in a soil test hole	Drainage patterns
Iron deposits		Saturated soil	Drift lines
Algal mats or crus	sts	Water marks	Scoured areas
Oxidized rhizosph		Moss trim lines	Sediment deposits
Thin muck surface	.,	Presence of reduced iron	Surface soil cracks
Plants with air-fill		Woody plants with adventitious	Sparsely vegetated concave
(aerenchyma)	cu tissue	roots	surface
Plants with polym	nornhic leaves	Trees with shallow root systems	Microtopographic relief
Plants with floatin	•	Woody plants with enlarged lenticels	Geographic position (depression,
Hydrogen sulfide o	· ·	Woody plants with charges lendeds	toe of slope, fringing lowland)
		e, monitoring well, aerial photos, previous inspect	
Kelliai ka jueaci ibe i eee	Ji ded data ii oiii sti caiii gaagt	s, monitoring wen, aeriai photos, previous mapeet	ions, ii availablej.
1			

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point	GCJ30

#### **VEGETATION** – Use both common and scientific names of plants.

	Plot size 30'					
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1 White Pine	Pinus strobus	FACU	38.0%	X		65.0%
2 Red Oak	Quercus rubra	FACU	20.5%	X		35.0%
3						
4						
5						
6						
7						
8						
9						
	 	I	58.5%	=Total Cover		1
Shrub/Sapling Stratum	Plot size 15'			_		
	10000120					
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1 Witch Hazel	Hamamelis virginiana	FACU	38.0%	X	() /	46.19
2 Sweet Pepperbush	Clethra alnifolia	FAC	20.5%	X	Х	24.89
3 Sassafras	Sassafras albidum	FACU	10.5%			12.79
4 Highbush Blueberry	Vaccinium corymbosum	FACW	10.5%		X	12.79
5 American Holly	llex opaca	FACU	3.0%			3.69
6	пех ораса	FACU	3.0%			3.0
7						-
8						
			+			
9			1			
_9			82.5%	=Total Cover		
			82.5%	=Total Cover		
•	Plot size 5'		82.5%	=Total Cover		
•	Plot size5'		82.5%	=Total Cover		
	Plot size 5'	Indicator	82.5% Absolute %	=Total Cover	Wetland Indictor?	
•	Plot size 5'	Indicator Status		Dominant?		% Dominant
Herb Stratum  Common Name			Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no) X	
Common Name 1 Sweet Pepperbush	Scientific name Clethra alnifolia	Status	Absolute %	Dominant?	(yes/no)	38.99
Common Name  1 Sweet Pepperbush 2 Canada Mayflower	Scientific name Clethra alnifolia Maianthemum canadense	Status FAC FACU	Absolute % Cover 10.5% 10.5%	Dominant? (yes/no)	(yes/no) X	38.99 38.99
Common Name 1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no)	38.9 <sup>1</sup> 38.9 <sup>1</sup> 11.1 <sup>1</sup>
Common Name 1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root	Scientific name Clethra alnifolia Maianthemum canadense	Status FAC FACU	Absolute % Cover 10.5% 10.5%	Dominant? (yes/no)	(yes/no) X	38.99 38.99 11.19
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root 5	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.9 <sup>1</sup> 38.9 <sup>1</sup> 11.1 <sup>1</sup>
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root 5	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.9 <sup>1</sup> 38.9 <sup>1</sup> 11.1 <sup>1</sup>
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern Indian Cucumber root 5 6	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.99 38.99 11.19
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root 5 6 7	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.9 <sup>1</sup> 38.9 <sup>1</sup> 11.1 <sup>1</sup>
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root 5 6 7 8	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.9 <sup>1</sup> 38.9 <sup>1</sup> 11.1 <sup>1</sup>
Lerb Stratum  Common Name  Sweet Pepperbush Canada Mayflower New York Fern Indian Cucumber root  Canada Mayflower  Reversible For Parity Properties  Reversible For Parity Prope	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	38.99 38.99 11.19
Common Name  1 Sweet Pepperbush 2 Canada Mayflower 3 New York Fern 4 Indian Cucumber root 5 6 7 8	Scientific name Clethra alnifolia Maianthemum canadense Parathelypteris noveboracensis	Status FAC FACU FAC	Absolute % Cover 10.5% 10.5% 3.0%	Dominant? (yes/no)	(yes/no) X	% Dominant 38.99 38.99 11.19 11.19

#### VEGETATION - continued.

Wo	Woody Vine Stratum Plot size 30'						
	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)	% Dominant
1							
2							
3							
4							
				0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indic	Do all dominant species have an indicator status of OBL or FACW?				
Dominance Test:	ninance Test: Number of dominant species Number of dominant species that are		Do wetland indicator plants make			
		wetland indicator plants		up ≥ 50% of dominant plant		
				species?		
	6	2		Yes	No X	
Prevalence Index:		Total % Cover	Multiply by:		Result	
		(all strata)				
	OBL species	0%	x1	=	0%	
	FACW species	11%	x2	=	21%	
	FAC species	34%	х3	=	102%	
	FACU species	121%	x4	=	482%	
	UPL species	3%	x5	=	15%	
	Column Totals (A)	168%		(B)	620%	
Prevalence Index		B/A=	3.69	Is the Prevalence	e Index ≤ 3.0?	
				Yes	No X	
Wetland vegetation crit	erion met? Yes No X			•		

#### **Definitions of Vegetation Strata**

Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Tree Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall Shrub/Sapling All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall All woody vines greater than 3.3 ft. (1 m) in height Herb

Woody vines

Cover Ranges						
Range	Midpoint					
1-5 %	3.00%					
6-15 %	10.50%					
15-25 %	20.50%					
26-50 %	38.00%					
51-75 %	63.00%					
76-95 %	85.50%					
96-100 %	98.00%					

#### SOIL

Profile Description: (D	escribe to the	depth	needed to doc	ument	t the indicator or conf	rm the absence of indicato	ors)		
Depth	Matrix				Redox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks	
A 0-2"	10YR2/2	100					FSL		
B 2-5"	10YR5/4	100					FSL		
C 5-24"	10YR4/4	100					FSL		
1- 00	5 5 1 11	D14 D			1 16 10 : 21	DI D. 1111 A4A411			
				S=IVIas	ked Sand Grains Locati	on: PL=Pore Lining, M=Matrix			
Hydric Soil Indicators	(Check all that	t apply		1 (6)	- \	Indicators for Problematic Hydric Soils			
Histosol (A1)			Sandy Re		•	2 cm Muck (A10)			
Histic Epipedon (A2)	2)		Stripped		` '	5 cm Mucky Peat or Peat (S3)			
Black Histic (A3)	. 4)				w Surface (S8)	Dark Surface (S7)			
Hydrogen Sulfide (A	•		Thin Darl		. ,	Polyvalue Below Surface (S8)			
Stratified Layers (A5 Depleted Below Da	,			,	Aineral (F1)	Thin Dark Surface (S9)			
Thick Dark Surface (	• •	,	Loanly G Depleted		Matrix (F2)	Iron-Manganese Masses (F12) Mesic Spodic (A17)			
Sandy Mucky Miner	,		Redox Da			Red Parent Mat	•		
Sandy Gleyed Matri					Surface (F8)		ark Surface (TF12)		
Dark Surface (S7)	X (34)	•		Darks	our face (i o)		, ,	·ks)	
Dark Surface (S7) Other (Include Explanation in Remarks)  Restrictive Layer (if observed) Type: Depth (inches):									
Remarks	,	1700.			2000	· (menes).			
Hydric Soils criterion m	et?	Yes	No	Х					
,			***						

#### DOWNGRADIENT

Are Vegetation , Soil	, or H	yarology	significantly distur	oea ? (11	yes, exp	olain in Rema	rks)		
Are Vegetation, Soil	, or H	ydrology	naturally problema	itic?(If	yes, exp	ilain in Rema	rks)		
SUMMARY OF FINDINGS – Attach	site map and	photograph	log showing samplin	g loca	tions, t	ransects, etc	:		
Wetland vegetation criterion met?	Yes X	No	Is the Sampled Area	withir	n a Wetl	and?	Yes X No		
Hydric Soils criterion met?	Yes X	No	<u> </u>						
Wetlands hydrology present?	Yes X	No	<u> </u>						
Remarks, Photo Details, Flagging, etc.:									
HYDROLOGY									
Field Observations:									
Surface Water Present?				Yes	Х	No	Depth (in)	0"	
Water Table Present?				Yes	Х	No	Depth (in)	0"	
Saturation Present (including capillary	fringe)?			Yes	Х	No	Depth (in)	0"	
Wetland Hydrology Indicators									
Reliable Indicators of Wetlands		Indicators th	at can be Reliable with			Indicators	of the Influence of Water		
X Water-stained leaves		Нус	Irological records			Dir	ect observation of inundatio	n	
Evidence of aquatic fauna		Fre	e water in a soil test ho	le		Drainage patterns			
Iron deposits		Sat	urated soil			Drift lines			
			ter marks			Scoured areas			
Algal mats or crusts	. ~			ss trim lines			Sediment deposits		
Algal mats or crustsOxidized rhizospheres/pore lining	S					Cur	face soil cracks		
Oxidized rhizospheres/pore lining	S	Pre	sence of reduced iron			Jui	idee son cracks		
Oxidized rhizospheres/pore lining	S			titious			rsely vegetated concave		
Oxidized rhizospheres/pore lining Thin muck surfaces	s		sence of reduced iron ody plants with advent	titious		Spa			
Oxidized rhizospheres/pore lining Thin muck surfaces Plants with air-filled tissue	S	Wo	sence of reduced iron ody plants with advent			Spa sur	rsely vegetated concave		
Oxidized rhizospheres/pore lining Thin muck surfaces Plants with air-filled tissue (aerenchyma)	S	roc X Tre	sence of reduced iron ody plants with advent ts	stems		Spa sur Mid	rsely vegetated concave face	١,	
Oxidized rhizospheres/pore lining Thin muck surfaces Plants with air-filled tissue (aerenchyma) Plants with polymorphic leaves	S	roc X Tre	sence of reduced iron ody plants with advent ts es with shallow root sy	stems		Spa sur Mid X Ged	rsely vegetated concave face crotopographic relief	١,	

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point	GCJ30	

VEGETATION -	<ul> <li>Use both comn</li> </ul>	non and scientif	ic names of	plants.
--------------	-----------------------------------	------------------	-------------	---------

ree Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Red Maple	Acer rubrum	FAC	0.0%	Х	Χ	
2						
3						
4						
5						
6						
7						
8						
9						
	<u> </u>	•	0.0%	=Total Cover		
hrub/Sapling Stratum	Plot size 15'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Sweet Pepperbush	Clethra alnifolia	FAC	38.0%	Х	X	64.4
2 Red Maple	Acer rubrum	FAC	10.5%		X	17.8
3 Yellow Birch	Betula alleghaniensis	FAC	10.5%		X	17.8
4						
5						
6						
7						
8						
9						
			59.0%	=Total Cover		
erb Stratum	Plot size 5'					
Common Name				Dominant?	Wetland Indictor?	
	Scientific name	Indicator	Absolute %	Dominant:	Wettana maietor.	% Dominant
	Scientific name Parathelypteris noveboracensis	Indicator FAC	Absolute % 20.5%	Х	Х	
						% Dominant 39.4 20.2
1 New York Fern 2 Cinnamon Fern	Parathelypteris noveboracensis	FAC	20.5%	Х	Х	39.4 20.2
1 New York Fern	Parathelypteris noveboracensis Osmundastrum cinnamomeum	FAC FACW	20.5% 10.5%	X X	X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
<ol> <li>New York Fern</li> <li>Cinnamon Fern</li> <li>Sweet Pepperbush</li> <li>Sphagnum Moss</li> </ol>	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5 6 7	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5 6 7	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5 6 7	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5 6 7 8 9	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2
1 New York Fern 2 Cinnamon Fern 3 Sweet Pepperbush 4 Sphagnum Moss 5 6 7 8 9 0	Parathelypteris noveboracensis Osmundastrum cinnamomeum Clethra alnifolia	FAC FACW FAC	20.5% 10.5% 10.5%	X X X	X X X	39.4 20.2 20.2

#### VEGETATION - continued.

Woody Vine Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1						
2						
3						
4						
			0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indic	Do all dominant species have an indicator status of OBL or FACW?					
Dominance Test:	Number of dominant species	Number of dominant sp	pecies that are	Do wetland indi	icator plants make		
	6	6		Yes X	No		
Prevalence Index:		Total % Cover	Multiply by:		Result		
	OBL species	11%	x1	=	11%		
	FACW species	11%	x2	=	21%		
	FAC species	90%	х3	=	270%		
	FACU species	0%	x4	=	0%		
	UPL species	0%	x5	=	0%		
	Column Totals (A)	111%		(B)	302%		
Prevalence Index		B/A=	2.72	Is the Prevalence	e Index ≤ 3.0?		
				Yes X	No		
Wetland vegetation crite	rion met? Yes X No						

#### **Definitions of Vegetation Strata**

Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges							
Range	Midpoint						
1-5 %	3.00%						
6-15 %	10.50%						
15-25 %	20.50%						
26-50 %	38.00%						
51-75 %	63.00%						
76-95 %	85.50%						
96-100 %	98.00%						

#### SOIL

Profile Description: (D	escribe to the	depth	needed to doc	ument	the indicator or con	firm the absence of indicate	ors)		
Depth	Matrix				Redox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks	
0 0-9"	10YR2/1	100					Muck		
C 9-24+	10YR6/1	100			D=Depletion	M=Matrix	Sand		
<sup>1</sup> Type: C=Concentration	, D=Depletion,	RM=Re	duced Matrix, M	S=Mas	ked Sand Grains <sup>2</sup> Locat	ion: PL=Pore Lining, M=Matrix	(		
<b>Hydric Soil Indicators</b>	(Check all that	t apply	)			Indicators for Problemati	c Hydric Soils		
X Histosol (A1)			Sandy Re	dox (S	5)	2 cm Muck (A10)			
Histic Epipedon (A2	2)	•	Stripped	Matrix	(S6)	5 cm Mucky Peat or Peat (S3)			
X Black Histic (A3)		•	Polyvalu	e Belov	v Surface (S8)	Dark Surface (S7)			
Hydrogen Sulfide (A	A4)	•	Thin Darl	Surfa	ce (S9)	Polyvalue Below Surface (S8)			
Stratified Layers (AS	5)	•	Loamy M	ucky N	/lineral (F1)	Thin Dark Surfa	ce (S9)		
X Depleted Below Da	rk Surface (A11	)	Loamy G	eyed N	Лatrix (F2)	Iron-Manganes	e Masses (F12)		
X Thick Dark Surface	(A12)		Depleted	Matri	x (F3)	Mesic Spodic (A	A17)		
Sandy Mucky Miner	ral (S1)		Redox Da	ırk Sur	face (F7)	Red Parent Mat	erial (F21)		
X Sandy Gleyed Matri	ix (S4)		Depleted	Dark S	Surface (F8)	Very Shallow D	ark Surface (TF12)		
Dark Surface (S7)						Other (Include	Explanation in Remar	·ks)	
Restrictive Layer (if o	bserved)	Type:			Dept	h (inches):			
Remarks									
Hydric Soils criterion m	et?	Yes	X No						

#### **BORDERING VEGETATED WETLAND DETERMINATION FORM**

Project/Site:	Off Freetown Street	City/Town: Lakeville, MA	Sampling Date: 6/27/23
Applicant/Owner:	Stonebridge Homes, Inc	Sampling Poi	int or Zone: GCJ30
Investigator(s):	Tom Schutz, WPIT, Andrew	Thibault, WPIT, Chris Frattaroli Latitude/	/Longitude: 41.79941 N, 70.96492 W
Soil Map Unit Name:		NWI or DEP Cla	ssification:
		UPGRADIENT	
Are climatic/hydrolog	ic conditions on the site typic	cal for this time of year? Yes	No X (If no, explain in Remarks)
Are Vegetation	, Soil , or	Hydrology significantly disturbed? (If yes, e	explain in Remarks)
Are Vegetation	, Soil , or	Hydrology significantly disturbed? (If yes, e Hydrology naturally problematic? (If yes, e	explain in Remarks)
SUMMARY OF FIND	INGS – Attach site map an	d photograph log showing sampling locations,	, transects, etc
Wetland vegetation cr			etland? Yes No X
Hydric Soils criterion n	met? Yes	NoX	
Wetlands hydrology pr			
Remarks, Photo Details	s, Flagging, etc.:		
· I	, 55 5		
İ			
HYDROLOGY			
Field Observations:			
Surface Water Present?	?	Yes	No X Depth (in)
Water Table Present?		Yes	No X Depth (in)
Saturation Present (inc	cluding capillary fringe)?	Yes	No X Depth (in)
Wetland Hydrology I	Indicators		
Reliable Indicators of V		Indicators that can be Reliable with	Indicators of the Influence of Water
Hydrology		Proper Interpretation	
Water-stained lear	ives	Hydrological records	Direct observation of inundation
Evidence of aquat	ic fauna	Free water in a soil test hole	Drainage patterns
Iron deposits		Saturated soil	Drift lines
Algal mats or crus	sts	Water marks	Scoured areas
Oxidized rhizosph		Moss trim lines	Sediment deposits
Thin muck surface	.,	Presence of reduced iron	Surface soil cracks
Plants with air-fill		Woody plants with adventitious	Sparsely vegetated concave
(aerenchyma)	cu tissue	roots	surface
Plants with polym	nornhic leaves	Trees with shallow root systems	Microtopographic relief
Plants with floatin	•	Woody plants with enlarged lenticels	Geographic position (depression,
Hydrogen sulfide o	· ·	Woody plants with charges lendeds	toe of slope, fringing lowland)
		e, monitoring well, aerial photos, previous inspect	
Kelliai ka jueaci ibe i eee	Ji ded data ii oiii sti caiii gaagt	s, monitoring wen, aeriai photos, previous mapeet	ions, ii availablej.
1			

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point	GCJ30

#### **VEGETATION** – Use both common and scientific names of plants.

Tree Stratum	Plot size 30'					
Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)	% Dominant
1 White Pine	Pinus strobus	FACU	38.0%		(yes/110)	78.4%
				X		
2 Northern White Oak 3	Quercus alba	FACU	10.5%	Х		21.6%
4				-		
5						
6						
7						
8						
9						
9			48.5%	=Total Cover		
Shrub/Sapling Stratum	Plot size 15'		48.370	_ = TOTAL COVEL		
Siliub/Sapillig Stratulli	15					
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1 Witch Hazel	Hamamelis virginiana	FACU	20.5%	X	W1 - 1	40.6%
2 Eastern Hemlock	Tsuga canadensis	OBL	10.5%	Х	Х	20.89
3 Sweet Pepperbush	Clethra alnifolia	FAC	10.5%	Х	Х	20.89
4 Northern White Oak	Quercus alba	FACU	3.0%			5.9%
5 Highbush Blackberry	Rubus allegheniensis	FACU	3.0%			5.9%
6 American Holly	llex opaca	FACU	3.0%			5.9%
7	·					
8						
9						
· ·	•	l .	50.5%	=Total Cover		1
Herb Stratum	Plot size5'			_		
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1 Partridge Berry	Mitchella repens	FACU	10.5%	Х		33.3%
2 Northern White Oak	Quercus alba	FACU	10.5%	Х		33.3%
3 Sarsaparilla	Aralia nudicaulis	FACU	10.5%	Х		33.39
4						
5						
6						
7						
8						
9						
10						
11						
12						
			31.5%	=Total Cover		·

#### VEGETATION - continued.

Woody Vine Stratum Plot size 30'							
	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)	% Dominant
1	Green brier	Smilax rotundifolia	FAC	10.5%	X	Х	100.0%
2							
3							
4							
	10.5% =Total Cover						

Rapid Test:	Do all dominant species have an indic	Do all dominant species have an indicator status of OBL or FACW?			No X	
Dominance Test:	Number of dominant species	Number of dominant species that are		Do wetland indicator plants make		
		wetland indicator plants		up ≥ 50% of dominant plant		
				species?		
	9	3		Yes	No X	
Prevalence Index:		Total % Cover	Multiply by:		Result	
		(all strata)				
	OBL species	11%	x1	=	11%	
	FACW species	0%	x2	=	0%	
	FAC species	21%	х3	=	63%	
	FACU species	110%	x4	=	438%	
	UPL species	0%	x5	=	0%	
	Column Totals (A)	141%		(B)	512%	
Prevalence Index		B/A=	3.63	Is the Prevalence Index ≤ 3.0?		
				Yes	No X	
Wetland vegetation crit	erion met? Yes No X					

#### **Definitions of Vegetation Strata**

Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Tree Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall Shrub/Sapling All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall All woody vines greater than 3.3 ft. (1 m) in height Herb

Woody vines

Cover Ranges				
Range	Midpoint			
1-5 %	3.00%			
6-15 %	10.50%			
15-25 %	20.50%			
26-50 %	38.00%			
51-75 %	63.00%			
76-95 %	85.50%			
96-100 %	98.00%			

# SOIL

Depth (inches) Color (moist) % Color (moist) % Type¹ Location² Texture Remar Ao-7" 10YR2/1 100 FSL FSL FSL FSL FSL FSL FSL FSL FSL FSL	Profile Description: (D	escribe to the	depth	needed to doc	ument	the indicator or conf	irm the absence of indicate	ors)	
A0-7"	Depth	Matrix				Redox Features			
B7-12" 10YR5/1 100 FSL C12-24" 10YR4/6 100 FSL		Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks
C12-24" 10YR4/6 100 FSL  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains 2Location: PL=PoreLining, M=Matrix  Hydric Soil Indicators (Check all that apply) Indicators for Problematic Hydric Soils  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10)  Histic Epipedon (A2) Stripped Matrix (S6) 5 cm Mucky Peat or Peat (S3)  Black Histic (A3) Polyvalue Below Surface (S8) Dark Surface (S7)  Hydrogen Sulfide (A4) Thin Dark Surface (S9) Polyvalue Below Surface (S9)  Stratified Layers (A5) Loamy Mucky Mineral (F1) Thin Dark Surface (S9)  Sandy Mucky Mineral (S1) Depleted Matrix (F3) Mesic Spodic (A17)  Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Redox Dark Surface (F7)  Dark Surface (S7) Other (Include Explanation in Remarks)  Restrictive Layer (if observed) Type: Depth (inches):	A 0-7"	10YR2/1	100					FSL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains 2Location: PL=Pore Lining, M=Matrix  Hydric Soil Indicators (Check all that apply)  Histosol (A1)  Histos Epipedon (A2)  Black Histic (A3)  Polyvalue Below Surface (S8)  Hydrogen Sulfide (A4)  Thin Dark Surface (S9)  Polyvalue Below Surface (S9)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Toamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F8)  Depth (Include Explanation in Remarks)	B 7-12"	10YR5/1	100					FSL	
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)	C 12-24"	10YR4/6	100					FSL	
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)									
Hydric Soil Indicators (Check all that apply)  Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (S9) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (S7) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)	1								
Histosol (A1) Sandy Redox (S5) Stripped Matrix (S6) Black Histic (A3) Polyvalue Below Surface (S8) Dark Surface (S7) Hydrogen Sulfide (A4) Thin Dark Surface (S9) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)					S=Mas	ked Sand Grains 'Locat			
Histic Epipedon (A2)  Black Histic (A3)  Polyvalue Below Surface (S8)  Dark Surface (S7)  Hydrogen Sulfide (A4)  Straiffied Layers (A5)  Depleted Below Dark Surface (A11)  Thin Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F8)  Depth (include Explanation in Remarks)	•	(Check all tha	t apply	•					
Black Histic (A3) Polyvalue Below Surface (S8) Dark Surface (S7) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Matrix (F3) Mesic Spodic (A17) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Depleted Matrix (S4) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Depth (include Explanation in Remarks)  Restrictive Layer (if observed) Type: Depth (inches):					,	•		•	
Hydrogen Sulfide (A4) Thin Dark Surface (S9) Polyvalue Below Surface (S8) Stratified Layers (A5) Loamy Mucky Mineral (F1) Thin Dark Surface (S9) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Matrix (F3) Mesic Spodic (A17) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Dark Surface (S7)  Depleted Dark Surface (F8) Other (Include Explanation in Remarks)  Restrictive Layer (if observed) Type: Depth (inches):		2)				` '		` '	
Stratified Layers (A5) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) Thick Dark Surface (A12) Depleted Matrix (F3) Mesic Spodic (A17) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Red Parent Material (F21) Sandy Gleyed Matrix (S4) Dark Surface (S7)  Restrictive Layer (if observed) Type: Depth (inches):						` '		•	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Dark Surface (S7)  Redox Dark Surface (F8) Dark Surface (S7)  Restrictive Layer (if observed)  Loamy Gleyed Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Mesic Spodic (A17) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Include Explanation in Remarks)	Hydrogen Sulfide (A	<b>44</b> )		Thin Darl	< Surfa	ce (S9)	Polyvalue Belo	w Surface (S8)	
Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Dark Surface (S7)  Redox Dark Surface (F8)  Depleted Dark Surface (F8)	Stratified Layers (AS	5)		Loamy N	lucky N	/lineral (F1)	Thin Dark Surfa	ice (S9)	
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Dark Surface (F8) Dark Surface (F8) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Other (Include Explanation in Remarks)  Restrictive Layer (if observed) Type: Depth (inches):	Depleted Below Da	rk Surface (A11	)	Loamy G	leyed N	Лatrix (F2)	Iron-Manganes	e Masses (F12)	
Sandy Gleyed Matrix (S4) Dark Surface (F8) Dark Surface (S7)  Restrictive Layer (if observed) Depleted Dark Surface (F8) Depleted Dark Surface (F8) Other (Include Explanation in Remarks) Depth (inches):	Thick Dark Surface	(A12)		Depleted	Matri	x (F3)	Mesic Spodic (	A17)	
Dark Surface (S7)  Restrictive Layer (if observed)  Type:  Depth (inches):	Sandy Mucky Miner	ral (S1)		Redox Da	rk Sur	face (F7)	Red Parent Ma	terial (F21)	
Restrictive Layer (if observed) Type: Depth (inches):	Sandy Gleyed Matri	x (S4)		Depleted	Dark S	Surface (F8)	Very Shallow D	ark Surface (TF12)	
	Dark Surface (S7)			<u></u>			Other (Include	Explanation in Remar	·ks)
Remarks	Restrictive Layer (if o	bserved)	Type:			Dept	h (inches):		
	Remarks								
Hydric Soils criterion met? Yes No X	Hydric Soils criterion m	et?	Yes	No	Х				

### DOWNGRADIENT

Are Vegetation , Soil	, or Hydrology	significantly disturbed? (If yes, exp	plain in Remarks)
Are Vegetation, Soil	, or Hydrology	naturally problematic? (If yes, exp	plain in Remarks)
SUMMARY OF FINDINGS - Attach	site man and nhotograph	log showing sampling locations, to	transects etc
		Tog snowing sumpling locations, to	
Wetland vegetation criterion met?	Yes X No	Is the Sampled Area within a Wetl	land? Yes X No
Hydric Soils criterion met?	Yes X No	<u></u>	
Wetlands hydrology present?	Yes X No	<u>—</u>	
Remarks, Photo Details, Flagging, etc.:			
HYDROLOGY			
Field Observations:			
Surface Water Present?		Yes	No X Depth (in)
Water Table Present?		Yes	No X Depth (in)
Saturation Present (including capillary	rfringe)?	Yes	No X Depth (in)
Wetland Hydrology Indicators			
Reliable Indicators of Wetlands		nat can be Reliable with	Indicators of the Influence of Water
X Water-stained leaves		drological records	Direct observation of inundation
Evidence of aquatic fauna		e water in a soil test hole	Drainage patterns
Iron deposits		urated soil	Drift lines
Algal mats or crusts		ater marks	Scoured areas
Oxidized rhizospheres/pore lining		oss trim lines	Sediment deposits
Thin muck surfaces	Pre	esence of reduced iron	Surface soil cracks
Plants with air-filled tissue	Wo	oody plants with adventitious	Sparsely vegetated concave
	roc	ots	surface
(aerenchyma)			Microtopographic relief
(aerenchyma) Plants with polymorphic leaves	X Tre	es with shallow root systems	
. , ,		es with shallow root systems body plants with enlarged lenticels	X Geographic position (depression,
Plants with polymorphic leaves		•	

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point	GCJ30

**VEGETATION** – Use both common and scientific names of plants.

ree Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Red Maple	Acer rubrum	FAC	10.5%	X	Х	33.3%
2 White Pine	Pinus strobus	FACU	10.5%	X		33.3%
3 Eastern Hemlock	Tsuga canadensis	OBL	10.5%	Х	X	33.3%
4						
5						
6						
7						
8						
9						
			31.5%	=Total Cover		1
hrub/Sapling Stratum	Plot size 15'			_		
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Sweet Pepperbush	Clethra alnifolia	FAC	20.5%	X	Х	39.4
2 Winterberry	llex verticillata	FACW	10.5%	X	Х	20.2
3 Highbush Blueberry	Vaccinium corymbosum	FACW	10.5%	Х	Х	20.2
4 Red Maple	Acer rubrum	FAC	10.5%	Х	Х	20.2
5						
6						
7						
8						
9						
-	-	•	52.0%	=Total Cover		
erb Stratum	Plot size 5'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
Common Name 1 Sphagnum Moss		Indicator OBL	Absolute %	Dominant?	Wetland Indictor?	
Common Name 1 Sphagnum Moss 2 Sensitive Fern	Scientific name					33.1
Common Name 1 Sphagnum Moss	Scientific name Sphagnum L.	OBL	20.5%	Х	X	33.1 33.1
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern	Scientific name Sphagnum L. Onoclea sensibilis	OBL FACW	20.5% 20.5%	Х	X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5 6 7	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5 6 7	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5 6 7 8 9	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	% Dominant 33.1 33.1 16.9
Common Name  1 Sphagnum Moss 2 Sensitive Fern 3 Eastern Marsh Fern 4 Royal Fern 5 6 6 7 8 9 0 0	Scientific name Sphagnum L. Onoclea sensibilis Thelypteris palustris	OBL FACW FACW	20.5% 20.5% 10.5%	Х	X X X	33.1 33.1 16.9

### VEGETATION - continued.

Woody Vine Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Green brier	Smilax rotundifolia	FAC	3.0%	Х	Х	100.0%
2						
3						
4						
			3.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indic	Yes	No X			
Dominance Test:	Number of dominant species	Number of dominant species that are		Do wetland indicator plants make		
	10	9		Yes X	No	
Prevalence Index:		Total % Cover	Multiply by:		Result	
	OBL species	42%	x1	=	42%	
	FACW species	52%	x2	=	104%	
	FAC species	45%	х3	=	134%	
	FACU species	11%	x4	=	42%	
	UPL species	0%	x5	=	0%	
	Column Totals (A)	149%		(B)	321%	
	Prevalence Index	B/A=	2.16	Is the Prevalence	e Index ≤ 3.0?	
				Yes X	No	
Wetland vegetation crit	erion met? Yes X No					

### **Definitions of Vegetation Strata**

Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges							
Range	Midpoint						
1-5 %	3.00%						
6-15 %	10.50%						
15-25 %	20.50%						
26-50 %	38.00%						
51-75 %	63.00%						
76-95 %	85.50%						
96-100 %	98.00%						

# SOIL

Depth	Matrix				Redox Feature	<b>.</b>			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks	
0 0-24"	10YR2/1	100			,,		Muck		
C 24+	10YR4/1	100			D=Depletion	M=Matrix	Sand		
<sup>1</sup> Type: C=Concentrat				S=Mask	ed Sand Grains <sup>2</sup> Locat	ion: PL=Pore Lining, M=Matri			
X Histosol (A1)	ors (check an that	. арріу	Sandy Re	dox (S5	)	2 cm Muck (A1			
Histic Epipedor	n (A2)	•	Stripped	•	•		eat or Peat (S3)		
X Black Histic (A3	s)	•	Polyvalu	vvalue Below Surface (S8)  Dark Surface (S			(S7)		
Hydrogen Sulfic	de (A4)		Thin Darl	` '			Below Surface (S8)		
Stratified Layer	s (A5)		Loamy N	ucky M	ineral (F1)	Thin Dark Surface (S9)			
X Depleted Below	v Dark Surface (A11)		Loamy G	leyed N	latrix (F2)	Iron-Manganese Masses (F12)			
X Thick Dark Surfa	ace (A12)		Depleted	Matrix	(F3)	Mesic Spodic (A17)			
Sandy Mucky Mineral (S1) Redox Dark Surface (F7)			ace (F7)	Red Parent Material (F21)					
X Sandy Gleyed N	Matrix (S4)		Depleted	Dark S	urface (F8)	Very Shallow [	Oark Surface (TF12)		
Dark Surface (S7	7)					Other (Include	Explanation in Remar	ks)	
Restrictive Layer (	if observed)	Type:			Dep	th (inches):			
Remarks									
Hydric Soils criterio	n met?	Yes	X No						

# **BORDERING VEGETATED WETLAND DETERMINATION FORM**

Project/Site:	Off Freetown Street	City/Town: Lakeville, MA			Sampling Date: 6/27/23
Applicant/Owner:	Stonebridge Homes, Inc	Sampling Poi	nt or Zone: (	GCK343	
Investigator(s):	Tom Schutz, WPIT, Andrev	v Thibault, WPIT, Chris Frattaroli Latitude/	Longitude: 4	11.79941	N, 70.96492 W
Soil Map Unit Name:		NWI or DEP Cla	ssification:		
			_		
		UPGRADIENT			
, , ,	ic conditions on the site typi			X (I	If no, explain in Remarks)
Are Vegetation	, Soil , or	Hydrology significantly disturbed? (If yes, or naturally problematic? (If yes, or naturally problematic?)	explain in Rer	marks)	
Are Vegetation	, Soil , or	Hydrology naturally problematic? (If yes, e	explain in Ren	narks)	
SUMMARY OF FIND	INGS – Attach site map ar	nd photograph log showing sampling locations	, transects,	etc	
Wetland vegetation cr	iterion met? Yes	No X Is the Sampled Area within a We	otland?	Voc	No X
Hydric Soils criterion r		No X	ctialiu:	163_	NO <u>X</u>
Wetlands hydrology p					
Wetianus nyurorogy p	1636111: 163				
Remarks, Photo Detail	s, Flagging, etc.:				
,	, 65 6,				
HYDROLOGY					
Field Observations:					
Surface Water Present	?	Yes	No	Х	Depth (in)
Water Table Present?		Yes	No	X	Depth (in)
	cluding capillary fringe)?	Yes	No	Х	Depth (in)
Wetland Hydrology					, , ,
Reliable Indicators of		Indicators that can be Reliable with	Indicate	ors of the I	nfluence of Water
Hydrology	vvetidilas	Proper Interpretation	marcace	3130111161	Time the of Water
Water-stained lea	ves	Hydrological records		Direct obse	ervation of inundation
Evidence of aquat		Free water in a soil test hole		Drainage p	
Iron deposits	ic iddiid	Saturated soil		Drift lines	atterns
Algal mats or crus	tc	Water marks		Scoured ar	PAS
Oxidized rhizosph		Moss trim lines		Sediment o	
Thin muck surface		Presence of reduced iron		Surface soi	•
Plants with air-fill		Woody plants with adventitious			egetated concave
(aerenchyma)	ieu tissuc	roots		sparsery ve surface	egetateu concave
Plants with polyn	normhic logyos	Trees with shallow root systems	-		graphic relief
Plants with floating	•	Woody plants with enlarged lenticels			c position (depression,
Hydrogen sulfide	•	woody plants with emarged lenticers			
					e, fringing lowland)
Remarks (describe reco	orded data from stream gaug	e, monitoring well, aerial photos, previous inspect	ions, it availa	ibie):	

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

# **VEGETATION** – Use both common and scientific names of plants.

Tree Stratum	Plot size 30'					
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1						
2						
3						
4						
5						
6						
7						
8						
9						
31			0.0%	=Total Cover		
Shrub/Sapling Stratum	Plot size 15'		0.070			
		Indicator	Absolute %	Dominant?	Wetland Indictor?	
Common Name	Scientific name	Status	Cover	(yes/no)	(yes/no)	% Dominant
1 White Pine	Pinus strobus	FACU	10.5%	X		21.9%
2 American Beech	Fagus grandifolia	FACU	10.5%	X		21.9%
3 Virginia Creeper	Parthenocissus quinquefolia	FACU	10.5%	X		21.99
4 Eastern Hemlock	Tsuga canadensis	OBL	10.5%	Х	X	21.9%
5 Red Maple	Acer rubrum	FAC	3.0%		X	6.3%
6 American Holly	llex opaca	FACU	3.0%			6.3%
7	·					
8						
9						
		1	48.0%	=Total Cover		
				-		
lerb Stratum	Plot size 5'					
<u>Herb Stratum</u>	Plot size 5'	ı	T			ı
<u>Herb Stratum</u>	Plot size 5'	Indicator	Absolute%	Dominant?	Wetland Indictor?	
Common Name	Plot size 5' Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)	% Dominant
Common Name	Scientific name	Status	Cover	(yes/no)		60.3%
Common Name 1 Canada Mayflower	Scientific name  Maianthemum canadense	Status FACU	Cover 20.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name 1 Canada Mayflower 2 Eastern Poison Ivy	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name 1 Canada Mayflower 2 Eastern Poison Ivy 3 Virginia Creeper	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name 1 Canada Mayflower 2 Eastern Poison Ivy 3 Virginia Creeper	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name  1 Canada Mayflower  2 Eastern Poison Ivy  3 Virginia Creeper  4  5	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name  1 Canada Mayflower  2 Eastern Poison Ivy  3 Virginia Creeper  4  5  6  7	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name 1 Canada Mayflower 2 Eastern Poison Ivy 3 Virginia Creeper 4 5 6 7	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99
Common Name  1 Canada Mayflower  2 Eastern Poison Ivy  3 Virginia Creeper  4  5  6  7  8	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	% Dominant 60.3% 30.9% 8.8%
Common Name  1 Canada Mayflower  2 Eastern Poison Ivy  3 Virginia Creeper  4  5  6  7  8  9  10	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.3% 30.9%
Common Name 1 Canada Mayflower 2 Eastern Poison Ivy 3 Virginia Creeper 4 5 6 7 8	Scientific name Maianthemum canadense Toxicodendron radicans	Status FACU FAC	Cover 20.5% 10.5%	(yes/no) X	(yes/no)	60.39 30.99

### VEGETATION - continued.

Wo	ody Vine Stratum P	lot size 30'					
	Common Name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)	% Dominant
1							
2							
3							
4							
			•	0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indic	Do all dominant species have an indicator status of OBL or FACW?				
Dominance Test:	Number of dominant species	Number of dominant s	species that are	Do wetland indicator plants make		
		wetland indicator plan	nts	up ≥ 50% of dor	minant plant	
				species?		
	6	2		Yes	No X	
Prevalence Index:		Total % Cover	Multiply by:		Result	
		(all strata)				
	OBL species	11%	x1	=	11%	
	FACW species	0%	x2	=	0%	
	FAC species	14%	х3	=	41%	
	FACU species	58%	x4	=	232%	
	UPL species	0%	x5	=	0%	
	Column Totals (A)	82%		(B)	283%	
	Prevalence Index	B/A=	3.45	Is the Prevalence	e Index ≤ 3.0?	
				Yes	No X	
Wetland vegetation cri	terion met? Yes No X	•		•		

# **Definitions of Vegetation Strata**

Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Tree Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall All woody vines greater than 3.3 ft. (1 m) in height Herb

Woody vines

Cover Ranges						
Range	Midpoint					
1-5 %	3.00%					
6-15 %	10.50%					
15-25 %	20.50%					
26-50 %	38.00%					
51-75 %	63.00%					
76-95 %	85.50%					
96-100 %	98.00%					

# SOIL

Profile Description: (D	escribe to the	depth	needed to doc	ument	t the indicator or cor	firm the absence of inc	dicators)			
Depth	Matrix				Redox Feature	5				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks		
A 0-2"	10YR2/1	100					FSL			
B 2-9"	10YR4/3	100					FSL			
C 9-15"	10YR5/4	100					FSL			
1=										
_ ' '				S=Mas	ked Sand Grains Loca	ion: PL=Pore Lining, M=N				
Hydric Soil Indicators	(Check all tha	t apply			- \	Indicators for Proble				
Histosol (A1)	.,		Sandy Re		•	2 cm Muck (A10)				
Histic Epipedon (A2	2)		Stripped		` '	5 cm Mucky Peat or Peat (S3)				
Black Histic (A3)					w Surface (S8)	Dark Surface (S7)				
Hydrogen Sulfide (A	•		Thin Darl		` '	Polyvalue Below Surface (S8)				
Stratified Layers (AS	,			ny Mucky Mineral (F1) Thin Dark Surfa			` '	• •		
Depleted Below Da	•	)	Loamy Gleyed Matrix (F2)			Iron-Manganese Masses (F12)				
Thick Dark Surface	,		Depleted				Mesic Spodic (A17)			
Sandy Mucky Miner			Redox Da		` '		t Material (F21)			
Sandy Gleyed Matri	x (S4)		Depleted	Dark S	Surface (F8)		Very Shallow Dark Surface (TF12)			
Dark Surface (S7)							lude Explanation in Remar	ks)		
Restrictive Layer (if o	bserved)	Type:	Rock		Dep	th (inches): 15	+			
Remarks										
Hydric Soils criterion m	et?	Yes	No	Χ						

### DOWNGRADIENT

Are Vegetation , Soil	, or Hydrology	significantly disturbed? (If yes, exp	plain in Remarks)
Are Vegetation, Soil	, or Hydrology	naturally problematic? (If yes, exp	plain in Remarks)
SUMMARY OF FINDINGS - Attach	site man and nhotograph	log showing sampling locations, to	transects etc
		Tog snowing sumpling locations, to	
Wetland vegetation criterion met?	Yes X No	Is the Sampled Area within a Wetl	land? Yes X No
Hydric Soils criterion met?	Yes X No	<u></u>	
Wetlands hydrology present?	Yes X No	<u>—</u>	
Remarks, Photo Details, Flagging, etc.:			
HYDROLOGY			
Field Observations:			
Surface Water Present?		Yes	No X Depth (in)
Water Table Present?		Yes	No X Depth (in)
Saturation Present (including capillary	rfringe)?	Yes	No X Depth (in)
Wetland Hydrology Indicators			
Reliable Indicators of Wetlands		nat can be Reliable with	Indicators of the Influence of Water
X Water-stained leaves		drological records	Direct observation of inundation
Evidence of aquatic fauna		e water in a soil test hole	Drainage patterns
Iron deposits		urated soil	Drift lines
Algal mats or crusts		ater marks	Scoured areas
Oxidized rhizospheres/pore lining		oss trim lines	Sediment deposits
Thin muck surfaces	Pre	esence of reduced iron	Surface soil cracks
Plants with air-filled tissue	Wo	oody plants with adventitious	Sparsely vegetated concave
	roc	ots	surface
(aerenchyma)			Microtopographic relief
(aerenchyma) Plants with polymorphic leaves	X Tre	es with shallow root systems	
. , ,		es with shallow root systems body plants with enlarged lenticels	X Geographic position (depression,
Plants with polymorphic leaves		•	

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point GCK34	3
----------------------	---

**VEGETATION** – Use both common and scientific names of plants.

ree Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Red Maple	Acer rubrum	FAC	10.5%	Х	Х	100.0%
2						
3						
4						
5						
6						
7						
8						
9						
1			10.5%	=Total Cover		
hrub/Sapling Stratum	Plot size 15'			-		
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Red Maple	Acer rubrum	FAC	10.5%	Х	Х	20.0
2 Yellow Birch	Betula alleghaniensis	FAC	10.5%	Х	Х	20.0
3 White Pine	Pinus strobus	FACU	10.5%	Х		20.0
4 Winterberry	llex verticillata	FACW	10.5%	Х	Х	20.0
5 Sweet Pepperbush	Clethra alnifolia	FAC	10.5%	Х	X	20.0
6						
7						
8						
9						
1	-		52.5%	=Total Cover		•
erb Stratum	Plot size 5'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1 Sphagnum Moss		Indicator OBL	Absolute % 20.5%	Х	X	
1 Sphagnum Moss 2 Jewelweed	Scientific name Sphagnum L. Impatiens capensis					% Dominant 32.8 16.8
1 Sphagnum Moss	Scientific name Sphagnum L.	OBL	20.5%	Х	X X X	32.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern	Scientific name Sphagnum L. Impatiens capensis	OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia	OBL FACW OBL	20.5% 10.5% 10.5%	X X	X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6 7 8 9	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6 7	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6 7 8 9	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8
1 Sphagnum Moss 2 Jewelweed 3 Halberd-Leaf Tearthumb 4 Cinnamon Fern 5 Sensitive Fern 6 7 8 9 10	Scientific name Sphagnum L. Impatiens capensis Persicaria arifolia Osmundastrum cinnamomeum	OBL FACW OBL FACW	20.5% 10.5% 10.5% 10.5%	X X	X X X X	32.8 16.8 16.8

### VEGETATION - continued.

Woody Vine Stratum	Plot size 30'					
Common Name	Scientific name	Indicator	Absolute %	Dominant?	Wetland Indictor?	% Dominant
1						
2						
3						
4						
			0.0%	=Total Cover		

Rapid Test:	Do all dominant species have an indic	Do all dominant species have an indicator status of OBL or FACW?				
Dominance Test:	Number of dominant species	Number of dominant species that are		Do wetland indicator plants make		
	9	8		Yes X	No	
Prevalence Index:		Total % Cover	Multiply by:		Result	
	OBL species	31%	x1	=	31%	
	FACW species	42%	x2	=	84%	
	FAC species	42%	x3	=	126%	
	FACU species	11%	x4	=	42%	
	UPL species	0%	x5	=	0%	
	Column Totals (A)	126%		(B)	283%	
	Prevalence Index	B/A=	2.25	Is the Prevalence	Index ≤ 3.0?	
				Yes X	No	
Wetland vegetation crit	erion met? Yes X No					

### **Definitions of Vegetation Strata**

Tree Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height Shrub/Sapling Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

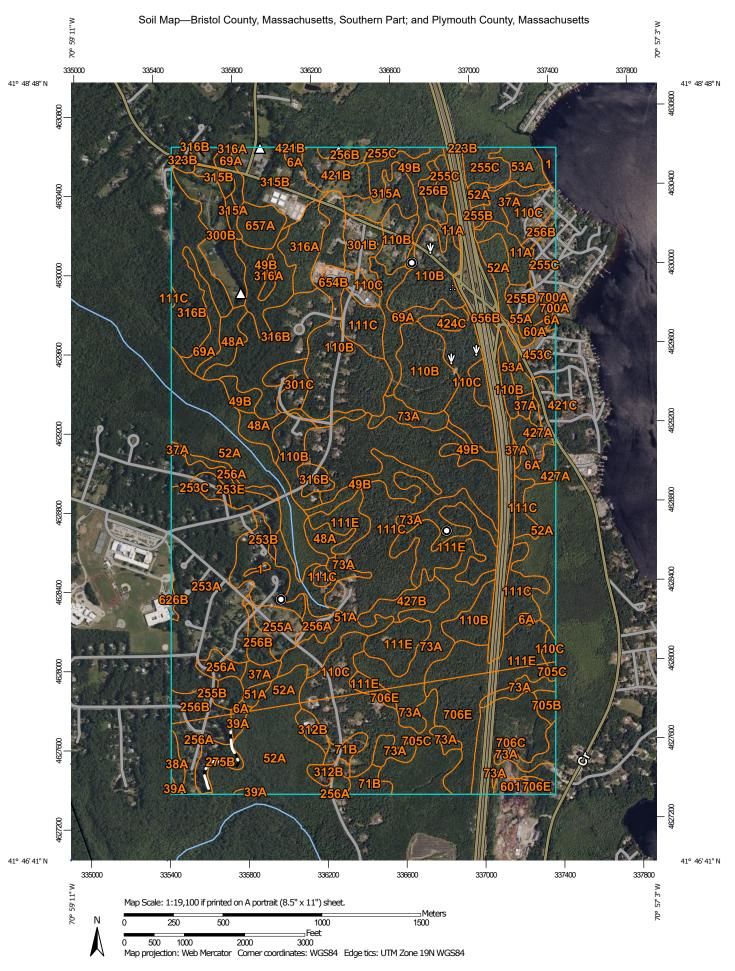
Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges						
Range	Midpoint					
1-5 %	3.00%					
6-15 %	10.50%					
15-25 %	20.50%					
26-50 %	38.00%					
51-75 %	63.00%					
76-95 %	85.50%					
96-100 %	98.00%					

# SOIL

Profile Description: (D	escribe to the	depth	needed to doc	ument	the indicator or con	firm the absence of indicate	ors)	
Depth	Matrix				Redox Feature	;		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Location <sup>2</sup>	Texture	Remarks
0 0-12"	10YR2/1	100					Muck	
C 12-24"+	10YR6/1	100			D=Depletion	M=Matrix	Sandy Loam	
1Type: C=Concentration	D=Doplotion	DM-Do	ducad Matrix M	C=N/1acl	kod Sand Grains 21 acad	ion: PL=Pore Lining, M=Matri:		
Hydric Soil Indicators				3-iviasi	keu Janu Granis Local	Indicators for Problemati		
X Histosol (A1)	(Cricck all tha	т арргу	Sandy Re	dox (St	5)	2 cm Muck (A1	•	
Histic Epipedon (A2	2)	•	Stripped	•	•	5 cm Mucky Peat or Peat (S3)		
X Black Histic (A3)	-,	•			v Surface (S8)	Dark Surface (S7)		
Hydrogen Sulfide (A	<b>\4</b> )		Thin Darl		, ,	Polyvalue Below Surface (S8)		
Stratified Layers (A5	,				/lineral (F1)	Thin Dark Surface (S9)		
X Depleted Below Da	rk Surface (A11	)	Loamy G	leyed N	Лatrix (F2)	Iron-Manganese Masses (F12)		
X Thick Dark Surface (	(A12)		Depleted	Matrix	x (F3)	Mesic Spodic (A17)		
Sandy Mucky Miner	ral (S1)		Redox Da	rk Surf	face (F7)	Red Parent Material (F21)		
X Sandy Gleyed Matri	ix (S4)		Depleted	Dark S	Surface (F8)	Very Shallow D	ark Surface (TF12)	
Dark Surface (S7)						Other (Include Explanation in Remarks)		
Restrictive Layer (if o	bserved)	Type:			Dep	:h (inches):		
Remarks	-							
Hydric Soils criterion m	et?	Yes	X No					



#### MAP LEGEND

å

00

Δ

**Water Features** 

Transportation

---

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

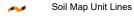
Aerial Photography

### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### **Special Point Features**

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

... Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:12,000 to 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bristol County, Massachusetts, Southern Part

Survey Area Data: Version 17, Sep 10, 2023

Soil Survey Area: Plymouth County, Massachusetts Survey Area Data: Version 16, Sep 10, 2023

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 10, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Map Unit Legend**

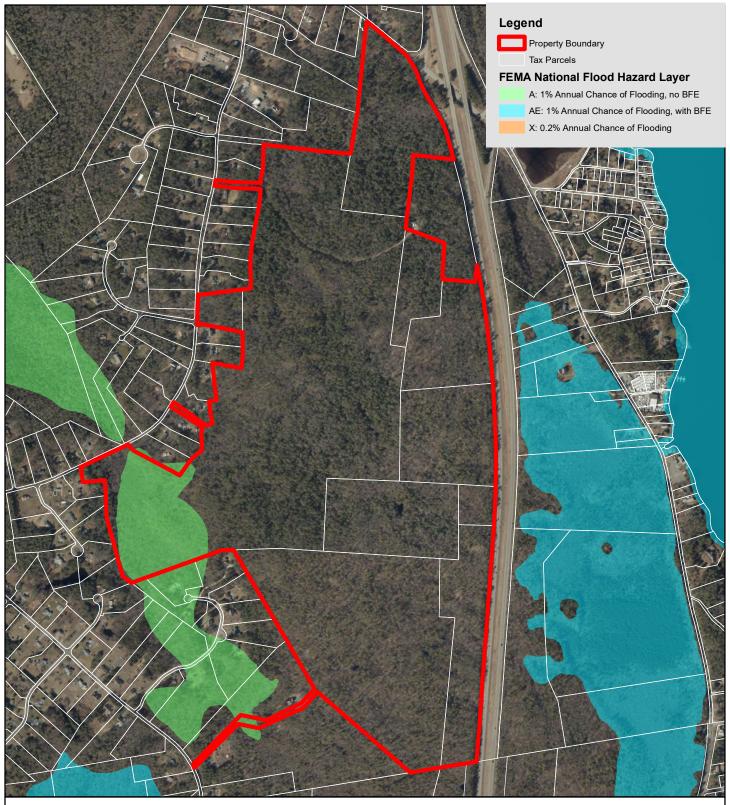
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
38A	Pipestone loamy sand, 0 to 3 percent slopes	3.3	0.2%
39A	Scarboro mucky fine sandy loam, 0 to 3 percent slopes	3.4	0.2%
52A	Freetown muck, 0 to 1 percent slopes	46.2	2.9%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	10.2	0.6%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	27.2	1.7%
256A	Deerfield loamy fine sand, 0 to 3 percent slopes	14.1	0.9%
275B	Agawam fine sandy loam, 3 to 8 percent slopes	8.1	0.5%
312B	Woodbridge fine sandy loam, 0 to 8 percent slopes, extremely stony	8.8	0.6%
601	Pits, quarry	3.3	0.2%
705B	Charlton-Paxton fine sandy loams, 0 to 8 percent slopes, very rocky	3.5	0.2%
705C	Chariton-Paxton complex, 8 to 15 percent slopes, very rocky	50.6	3.2%
706C	Chariton-Rock outcrop-Paxton complex, 3 to 15 percent slopes	34.5	2.2%
706E	Charlton-Rock outcrop-Paxton complex, 15 to 35 percent slopes	35.1	2.2%
Subtotals for Soil Survey A	Area	248.2	15.7%
Totals for Area of Interest		1,580.2	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Water	4.1	0.3%
6A	Scarboro muck, coastal lowland, 0 to 3 percent slopes	15.1	1.0%
11A	Rainberry coarse sand, 0 to 3 percent slopes	11.2	0.7%
37A	Massasoit - Mashpee complex, 0 to 3 percent slopes	15.2	1.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
48A	Brockton sandy loam, 0 to 3 percent slopes, extremely stony	25.1	1.6%
49B	Norwell mucky fine sandy loam, 3 to 8 percent slopes, extremely stony	59.5	3.8%
51A	Swansea muck, 0 to 1 percent slopes	28.4	1.8%
52A	Freetown muck, 0 to 1 percent slopes	101.3	6.4%
53A	Freetown muck, ponded, 0 to 1 percent slopes	15.7	1.0%
55A	Freetown coarse sand, 0 to 3 percent slopes, sanded surface	3.1	0.2%
60A	Swansea coarse sand, 0 to 2 percent slopes	4.6	0.3%
69A	Mattapoisett loamy sand, 0 to 3 percent slopes, extremely stony	31.2	2.0%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	54.5	3.4%
110B	Canton-Chatfield-Rock outcrop complex, 0 to 8 percent slopes, very stony	146.5	9.3%
110C	Canton-Chatfield-Rock outcrop complex, 8 to 15 percent slopes, very stony	56.5	3.6%
111C	Chatfield-Rock outcrop-Canton complex, 8 to 15 percent slopes, very stony	139.4	8.8%
111E	Chatfield-Rock outcrop-Canton complex, 15 to 35 percent slopes, very stony	77.1	4.9%
223B	Scio very fine sandy loam, 3 to 8 percent slopes	0.0	0.0%
253A	Hinckley loamy sand, 0 to 3 percent slopes	82.3	5.2%
253B	Hinckley loamy sand, 3 to 8 percent slopes	20.8	1.3%
253C	Hinckley loamy sand, 8 to 15 percent slopes	4.7	0.3%
253E	Hinckley loamy sand, 15 to 35 percent slopes	14.7	0.9%
255A	Windsor loamy sand, 0 to 3 percent slopes	11.2	0.7%
255B	Windsor loamy sand, 3 to 8 percent slopes	11.4	0.7%

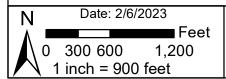
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
255C	Windsor loamy sand, 8 to 15 percent slopes	27.3	1.7%
256A	Deerfield loamy fine sand, 0 to 3 percent slopes	15.7	1.0%
256B	Deerfield loamy fine sand, 3 to 8 percent slopes	27.1	1.7%
300B	Montauk fine sandy loam, 3 to 8 percent slopes	24.9	1.6%
301B	Montauk fine sandy loam, 0 to 8 percent slopes, very stony	12.4	0.8%
301C	Montauk fine sandy loam, 8 to 15 percent slopes, very stony	9.4	0.6%
315A	Scituate gravelly sandy loam, 0 to 3 percent slopes	15.5	1.0%
315B	Scituate gravelly sandy loam, 3 to 8 percent slopes	30.3	1.9%
316A	Scituate gravelly sandy loam, 0 to 3 percent slopes, very stony	18.2	1.2%
316B	Scituate gravelly sandy loam, 3 to 8 percent slopes, very stony	84.5	5.3%
323B	Poquonock sand, 3 to 8 percent slopes, very stony	3.1	0.2%
421B	Canton fine sandy loam, 0 to 8 percent slopes, very stony	14.1	0.9%
421C	Canton fine sandy loam, 8 to 15 percent slopes, very stony	10.3	0.7%
424C	Canton very fine sandy loam, 8 to 15 percent slopes, extremely bouldery	1.9	0.1%
427A	Newfields fine sandy loam, 0 to 3 percent slopes, extremely stony	4.5	0.3%
427B	Newfields fine sandy loam, 3 to 8 percent slopes, extremely stony	12.2	0.8%
453C	Gloucester - Canton complex, 8 to 15 percent slopes, extremely bouldery	11.1	0.7%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	0.9	0.1%
654B	Udorthents, loamy, 0 to 8 percent slopes	6.4	0.4%
656B	Udorthents - Urban land complex, 0 to 8 percent slopes	57.6	3.6%
657A	Aquepts, 0 to 3 percent slopes	10.7	0.7%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
700A	Udipsamments, wet substratum, 0 to 3 percent slopes	0.2	0.0%
Subtotals for Soil Survey Area		1,332.0	84.3%
Totals for Area of Interest		1,580.2	100.0%

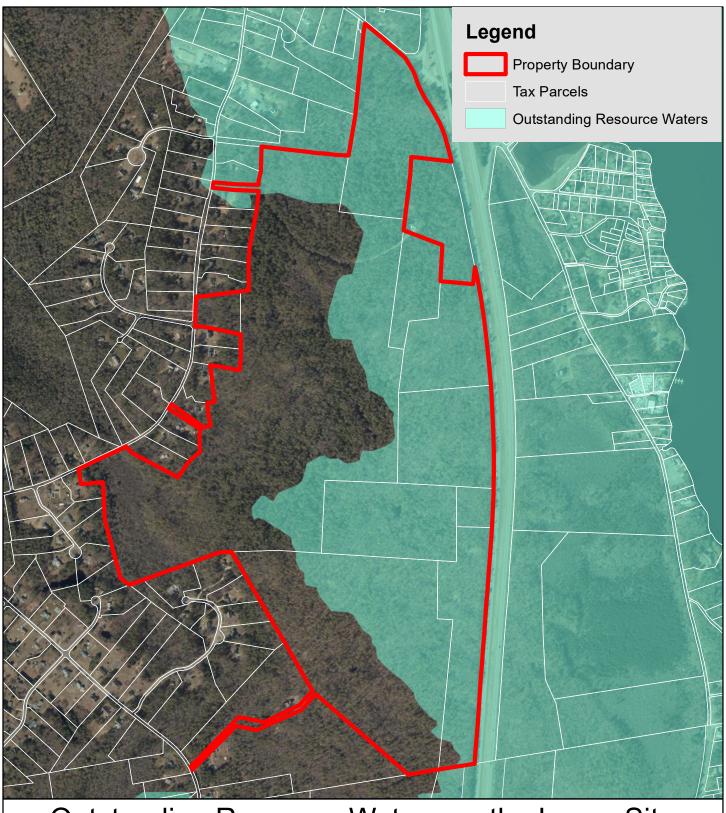


# FEMA Flood Zones on the Locus Site Country Street - Lakeville, MA

(Map: 34, 35, Block: 1, 2, Lots: 1, 2, 2A, 3, 4, 5, 12, 17)

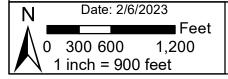


GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"

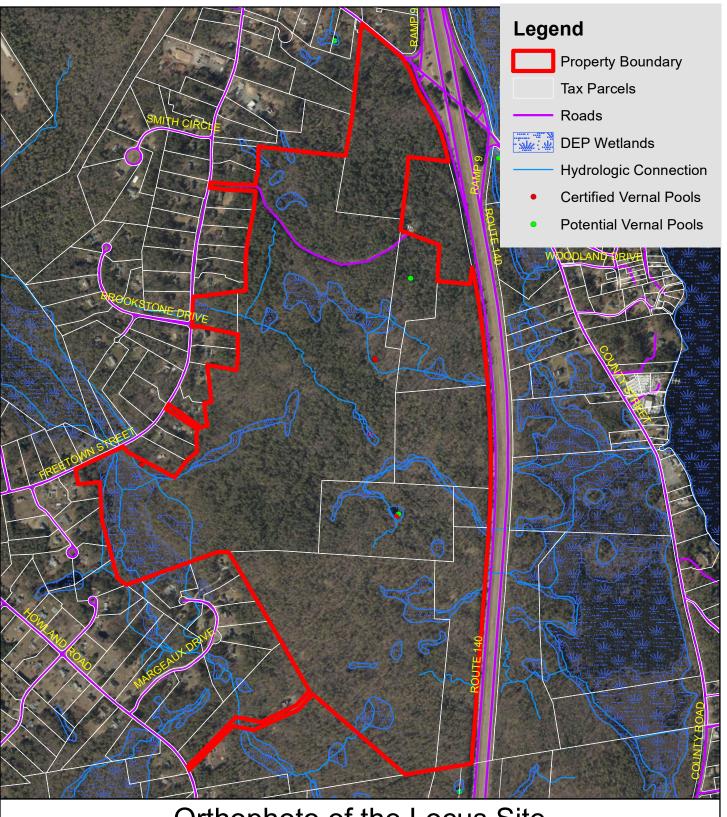


# Outstanding Resource Waters on the Locus Site Country Street - Lakeville, MA

(Map: 34, 35, Block: 1, 2, Lots: 1, 2, 2A, 3, 4, 5, 12, 17)

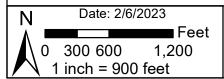


GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"

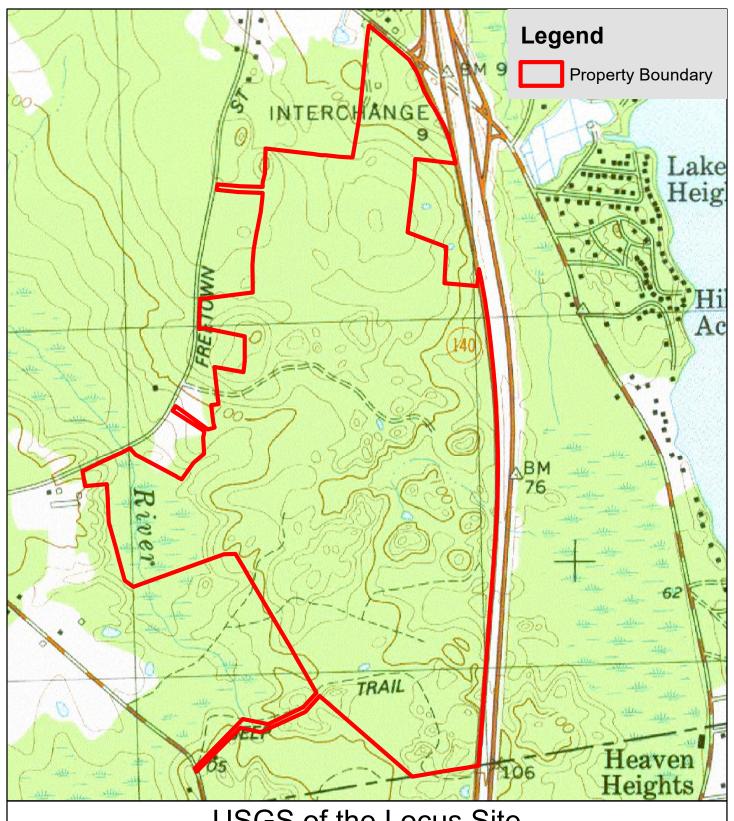


# Orthophoto of the Locus Site Country Street - Lakeville, MA

(Map: 34, 35, Block: 1, 2, Lots: 1, 2, 2A, 3, 4, 5, 12, 17)

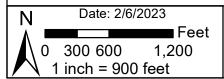


GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"



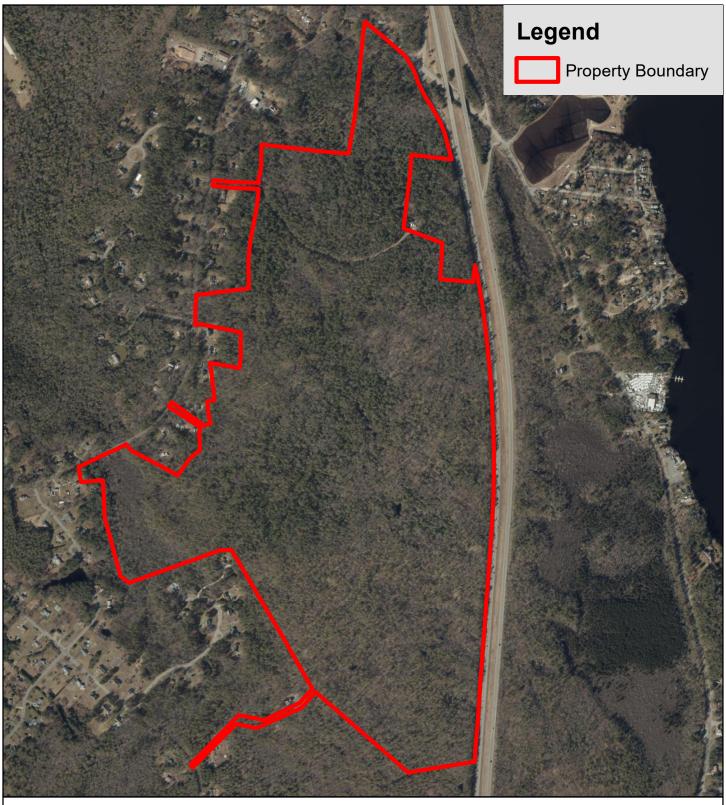
# USGS of the Locus Site Country Street - Lakeville, MA

(Map: 34, 35, Block: 1, 2, Lots: 1, 2, 2A, 3, 4, 5, 12, 17)



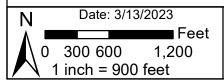
GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"



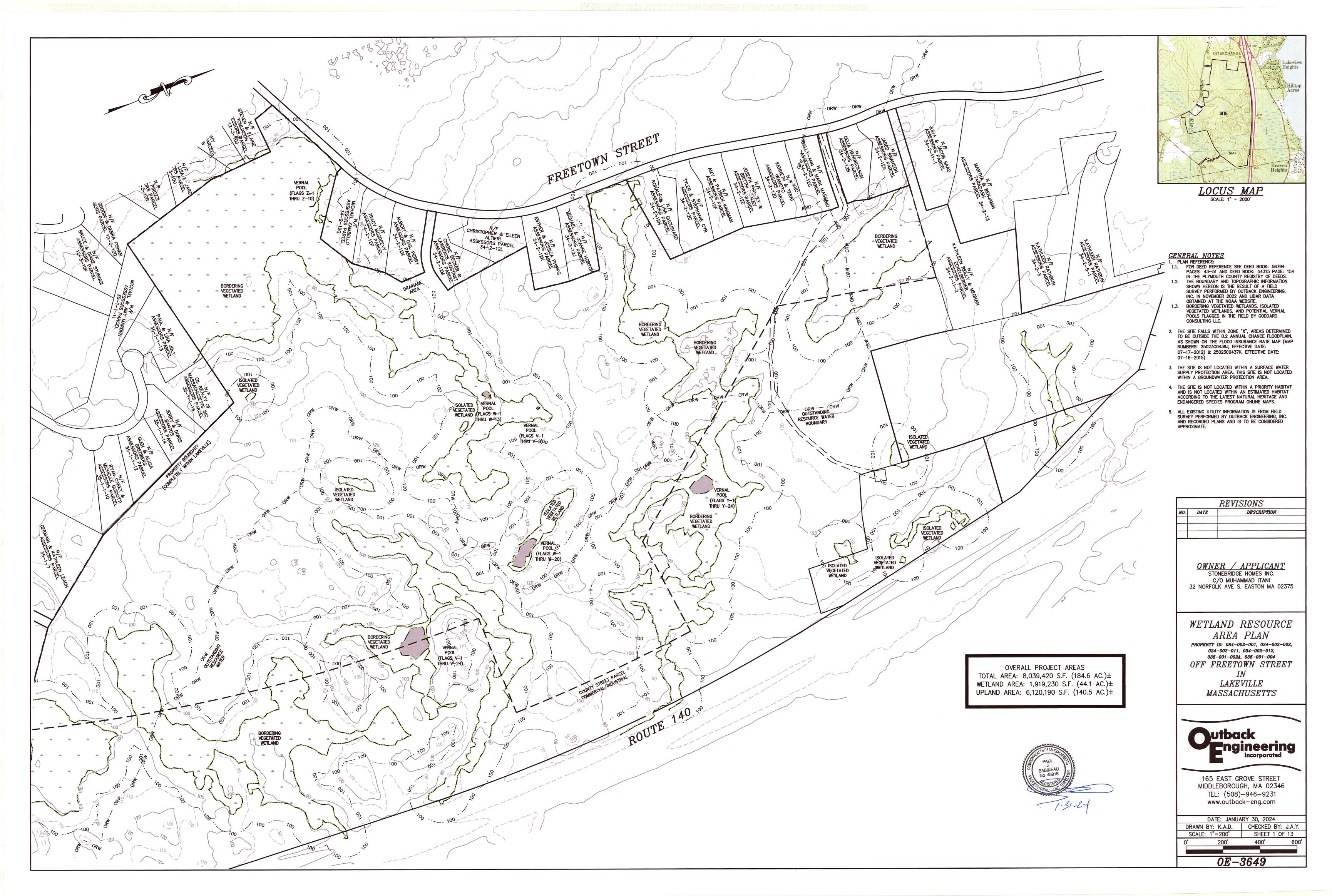


# Sketch of the Delineation of the Locus Site Country Street - Lakeville, MA

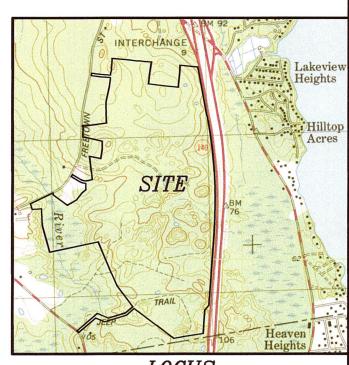
(Map: 34, 35, Block: 1, 2, Lots: 1, 2, 2A, 3, 4, 5, 12, 17)



GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT"







*0E-3649* 

