Bay Colony Group, Inc.
Professional Civil Engineers & Land Surveyors

4 School Street, PO Box 9136
Foxborough, Massachusetts 02035
Telephone (508) 543-3939 • Fax (508) 543-8866
E-mail: mailbox@baycolonygroup.com

Abbreviated Notice of Resource Area Delineation Ridge Road Foxborough, MA

August, 2023

Prepared by:

Bay Colony Group, Inc.
Four School Street
Foxborough, MA 02035

Prepared for:

Fed Cap, Inc.
P.O. Box 669
Foxborough, MA 02035

Bay Colony Group, Inc.
Professional Civil Engineers & Land Surveyors

4 School Street, PO Box 9136
Foxborough, Massachusetts 02035
Telephone (508) 543-3939 • Fax (508) 543-8866
E-mail: mailbox@baycolonygroup.com

August 14, 2023

Mr. Robert W. Boette, Chairman
Foxborough Conservation Commission
40 School Street
Foxborough, MA 02035

RE: Ridge Road ANRAD

Dear Mr. Boette:

Enclosed please find an Abbreviated Notice of Resource Area Delineation (ANRAD) filed on behalf of Fed Cap, Inc. for the parcel of land located on the eastern side of Ridge Road (Map 35 Parcels 6 & 7) about 0.45 miles north of the intersection with Chestnut Street. This filing is in accordance with Ch. 131, S. 40 Wetlands Protection Act and the Foxborough Wetlands Protection Bylaw Chapter 267 in order to delineate resource areas on, and immediately off, the referenced property. Included in the filing is: WPA Form 4A – Abbreviated Notice of Resource Area Delineation, a wetland delineation report, an existing conditions plan showing the wetland delineation, a $1,012.50 check made payable to the Town of Foxborough which represents the filing fee under the Wetlands Protection Act, and a check in the amount of $2,000 made payable to the Town of Foxborough which represents the local bylaw filing fee. Neighbors will be notified by certified mail and a copy of the Form of Notification and the certified list of abutters is enclosed.

The property consists of an approximately 7.8 acre parcel of land that is currently undeveloped and consists of a wooded area. The land is bordered by vacant land to the north, Ridge Road to the west and the Neponset Reservoir to the north and east. Residential properties are located south of the property and on the west side of Ridge Road. The resource areas located include Bordering Vegetated Wetland, Inland Bank, and Bordering Land Subject to Flooding.

The field work to delineate the wetlands and attached documentation were done by PARE Corporation and the wetland flags were located in an on the ground survey and plotted on a base topographic map by Bay Colony Group, Inc. which is included in the filing.

Thank you for your cooperation and we look forward to working with the Commission on this project.

Very truly yours,

BAY COLONY GROUP, INC.

William R. Buckley, Jr., P.E.
Project Manager

Encl.

List of Documents

Previous Page – Letter to Conservation Commission

WPA Form 4A – Abbreviated Notice of Resource Area Delineation
NOI Wetlands Fee Transmittal Form
Copy of checks

Form of Notification to Abutters
List of Abutters

Appendix A:
USGS Map Extract – Wrentham & Mansfield Quadrangles
Wetlands Delineation Report dated August 10, 2023 by Pare Corporation which includes a FEMA Firmette, and MassGIS overlay.

Enclosure:
ANRAD Plan of Ridge Road Foxborough, MA
dated August 14, 2023 by Bay Colony Group, Inc.

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
Foxborough Wetlands Protection Bylaw, Chapter 267

Provided by MassDEP:

157-
MassDEP File Number

Foxborough
City/Town

A. General Information

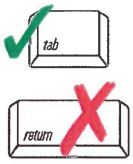
1. Project Location (**Note:** electronic filers will click on button for GIS locator):

Ridge Road — a. Street Address
Foxborough — b. City/Town
02035 — c. Zip Code

Latitude and Longitude:
42°-04'-55.14" — d. Latitude
71°-14'-30.21" — e. Longitude

35 — f. Assessors Map/Plat Number
6 & 7 — g. Parcel /Lot Number

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



2. Applicant:

a. First Name
b. Last Name
Fed Cap, Inc. — c. Organization
P.O. Box 669 — d. Mailing Address
Foxborough — e. City/Town
MA — f. State
02035 — g. Zip Code
508.543.6400 — h. Phone Number
i. Fax Number
koz172@yahoo.com — j. Email Address

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

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

4. Representative (if any):

William — a. Contact Person First Name
Buckley, Jr. — b. Contact Person Last Name
Bay Colony Group, Inc. — c. Organization
4 School Street — d. Mailing Address
Foxborough — e. City/Town
MA — f. State
02035 — g. Zip Code
508.543.3939 — h. Phone Number
508.543.8866 — i. Fax Number
billbuckley@baycolonygroup.com — j. Email Address

Fees will be calculated for online users.

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

$2,000 — a. Total WPA Fees Paid
$987.50 — b. WPA Fee Paid to State
$1012.50 — c.
$2,000 — d. Bylaw Fee Paid to Town

B. Area(s) Delineated

1. Bordering Vegetated Wetland (BVW) — 927 Linear Feet of Boundary Delineated

2. Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:

   a. ☒ MassDEP BVW Field Data Form (attached)

   b. ☒ Other Methods for Determining the BVW boundary (attach documentation):

      1. ☒ 50% or more wetland indicator plants
      2. ☒ Saturated/inundated conditions exist
      3. ☒ Groundwater indicators
      4. ☒ Direct observation
      5. ☒ Hydric soil indicators
      6. ☐ Credible evidence of conditions prior to disturbance

3. Indicate any other resource area boundaries that are delineated:

Bordering Land Subject to Flooding (a. Resource Area)	1,627 (b. Linear Feet Delineated)
Inland Bank (c. Resource Area)	2,083 (d. Linear Feet Delineated)
Bylaw Chapter 267 - 25 Foot No Activity Zone (e. Resource Area)	(f. Linear Feet Delineated)
Bylaw Chapter 267 - 100 Foot Vernal Pool No Activity Zone (g. Resource Area)	(h. Linear Feet Delineated)

C. Additional Information

Applicants must include the following plans with this Abbreviated Notice of Resource Area Delineation. See instructions for details.

1. ☒ ANRAD (Delineation Plans only)
2. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site.
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

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

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

Applicants must submit the following information (in addition to the attached Wetland Fee Transmittal Form) to confirm fee payment:

2282 2. Municipal Check Number (State WPA Fee)	8.13.2023 3. Check date
2281 4. Municipal Check Number (Foxborough Bylaw Fee)	8.13.2023 5. Check date
2285 6. State Check Number	8.13.2023 7. Check date
Fed Cap Inc 8. Payor name on check: First Name	 9. 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 understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

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

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

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

1. Signature of Applicant

2. Date 8/13/23

3. Signature of Property Owner (if different)

4. Date 8/15/2023

5. Signature of Representative (if any)

6. Date

Tax Collector's Release

The above referenced applicant is applying for a permit from the Conservation Commission and is in good standing with respect to any taxes, fees, assessments, betterments or other municipal charges as recorded with the Foxborough Treasurer's Office.

1. Signature of Tax Collector or Agent (on behalf of Treasurer) 2. Date 8/15/23

For Conservation Commission:

One original and seven copies 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 the town fee payment (State and Bylaw) must be sent to the Conservation Commission by certified mail or hand delivery (see instructions on fee transmittal form, below).

Foxborough Conservation Commission
40 South Street
Foxborough, MA 02035

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 by certified mail or hand delivery.

MassDEP, Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

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 Abbreviated Notice of Resource Area Delineation.

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
Foxborough Wetlands Protection Bylaw, Chapter 267

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

A. Applicant Information

1. Location of Project:

Ridge Road	Foxborough
a. Street Address	b. City/Town
$987.50	2285
c. Fee amount	d. Check number

2. Applicant:

		Fed Cap, Inc.
a. First Name	b. Last Name	c. Company

P.O. Box 669
d. Mailing Address

Foxborough	MA	02035
e. City/Town	f. State	g. Zip Code

508.543.6400
h. Phone Number

3. Property Owner (if different):

a. First Name	b. Last Name	c. Company

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number

B. Fees

State Fees

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

☐ check box if fee exempt.

Bordering Vegetated Wetland Delineation Fee:

1. ☐	single family house project	a. linear feet of BVW	x $2.00 =	b. Fee for BVW
2. ☒	all other projects	927 a. linear feet of BVW	x $2.00 =	$1,854 b. Fee for BVW

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

3. ☐	single family house project	a. linear feet	x $2.00 =	b. Fee
4. ☒	all other projects	3,710 a. linear feet	x $2.00 =	$7,420 b. Fee

Total State Fee for all Resource Areas: $2,000 (Fee)

State share of filing fee: $987.50 (5. 1/2 of total fee **less** $12.50)

Town share of State filing fee: $1012.50 (6. 1/2 of total fee **plus** $12.50)

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
Foxborough Wetlands Protection Bylaw, Chapter 267

B. Fees *(continued)*

Bylaw Fees

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

Bordering Vegetated Wetland Delineation Fee:

1. ☐	single family house project	a. linear feet of BVW	x $2.00 =	b.Fee for BVW
2. ☒	all other projects	927 a. linear feet of BVW	x $2.00 =	$1,854 b. Fee for BVW

Other Resource Areas (e.g., bank, riverfront area, Land Subject to Flooding, etc.):

3. ☐	single family house project	a. linear feet	x $2.00 =	b. Fee
4. ☒	all other projects	3,710 a. linear feet	x $2.00 =	$7,420 b. Fee
		Total Bylaw Fee for all Resource Areas:		$2,000 Fee

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:

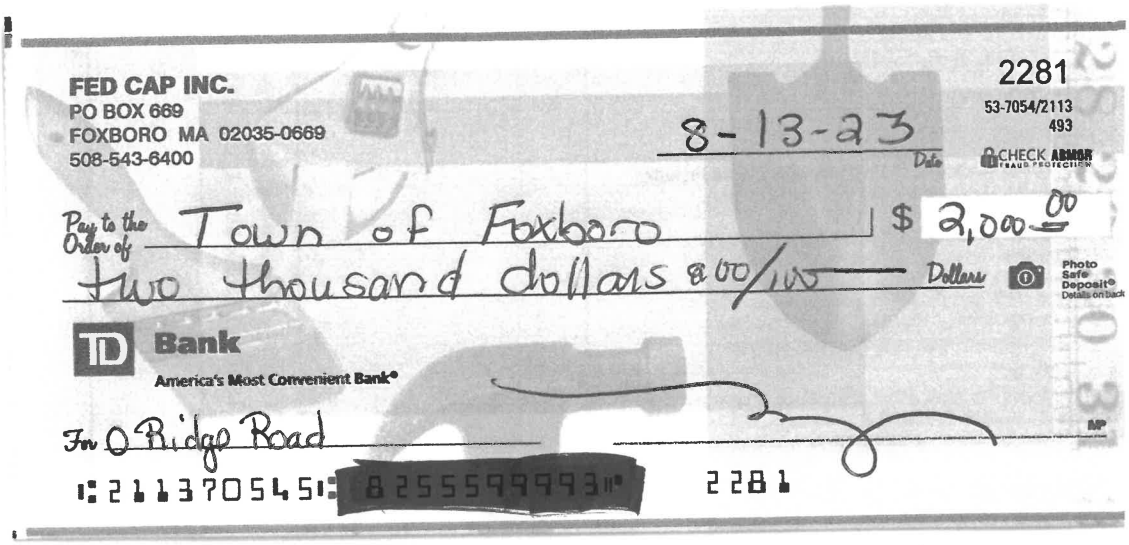
Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Foxborough Conservation Commission:** Send one **copy** of this form with the ANRAD application and the town application fee payments (Bylaw fee and town share of State fee), made payable to the Town of Foxborough, to:

Foxborough Conservation Commission
40 South Street
Foxborough, MA 02035

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.

MassDEP
Southeast Regional Office
20 riverside Drive
Lakeville, MA 02347



FED CAP INC.
PO BOX 669
FOXBORO MA 02035-0669
508-543-6400

2281
53-7054/2113
493

CHECK ARMOR FRAUD PROTECTION

8-13-23
Date

Pay to the Order of Town of Foxboro $ 2,000.00

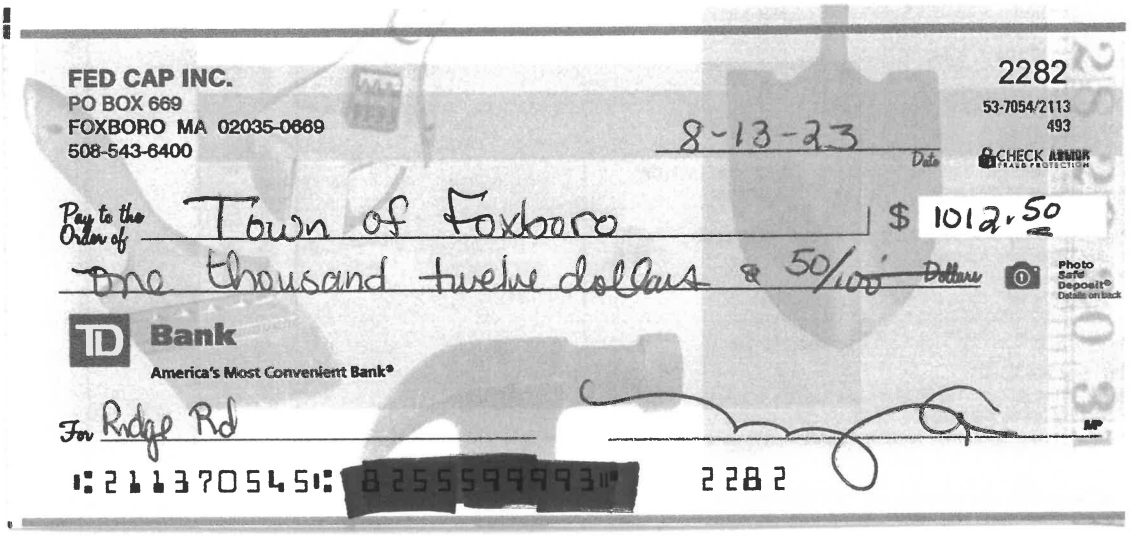
two thousand dollars & 00/100 Dollars

Photo Safe Deposit® Details on back

TD Bank
America's Most Convenient Bank®

For 0 Ridge Road

⑆211370545⑆ [redacted] 2281



FED CAP INC.
PO BOX 669
FOXBORO MA 02035-0669
508-543-6400

2282
53-7054/2113
493

CHECK ARMOR FRAUD PROTECTION

8-13-23
Date

Pay to the Order of Town of Foxboro $ 1012.50

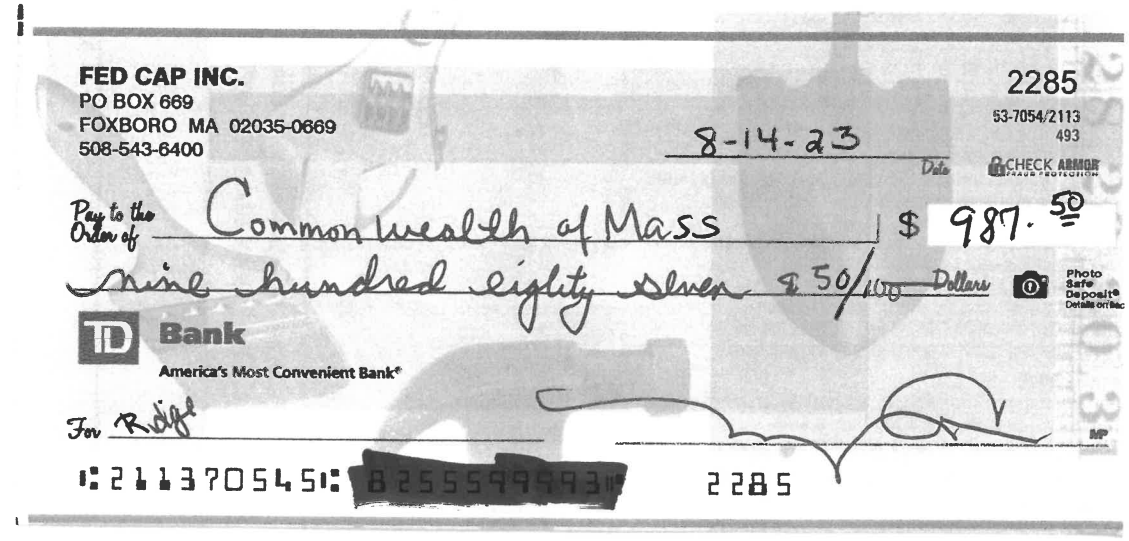
One thousand twelve dollars & 50/100 Dollars

Photo Safe Deposit® Details on back

TD Bank
America's Most Convenient Bank®

For Ridge Rd

⑆211370545⑆ [redacted] 2282



FED CAP INC.
PO BOX 669
FOXBORO MA 02035-0669
508-543-6400

2285
53-7054/2113
493

CHECK ARMOR FRAUD PROTECTION

8-14-23
Date

Pay to the Order of Commonwealth of Mass $ 987.50

nine hundred eighty seven & 50/100 Dollars

Photo Safe Deposit® Details on back

TD Bank
America's Most Convenient Bank®

For Ridge

⑆211370545⑆ [redacted] 2285

NOTIFICATION TO ABUTTERS

Under the
Massachusetts Wetlands Protection Act &
Chapter 267, Wetland Protection Code of Foxborough

(This form must be completed and mailed, certified mail return receipt requested, to all abutters within 100 feet of the proposed project's activity.)

In accordance with the second paragraph of Massachusetts Wetlands Protection Act (G.L. Ch. 131, §40), and §10.05 of 310 CMR 10.00, and Chapter 267, the Wetland Protection Code of Foxborough *(formerly Article IX)* and regulations, you are hereby notified of a public hearing on the matter described below:

A. The applicant has filed an Abbreviated Notice of Resource Area Delineation with the Foxborough Conservation Commission for the delineation of areas subject to protection under the Wetlands Protection Act and the Wetland Protection Code of Foxborough.

B. The name of the applicant is Fed Cap, Inc.

C. The address of the land where the activity is proposed is Ridge Road (Map 35 Parcels 6 & 7), Foxborough.

D. Copies of the Abbreviated Notice of Resource Area Delineation may be examined at the Conservation Commission's office, 40 South Street, Foxborough Town Hall, between 9 am and 4 pm, Monday through Thursday.

E. Copies of the Abbreviated Notice of Resource Area Delineation may be obtained from either *(check one)* the ☐ applicant or the ☒ applicant's representative Bay Colony Group, Inc. by calling 508.543.3939 from *[times]* 8:00 am – 4:30 pm on *[days]* Monday through Friday.

F. Information regarding the date, time and place of the public hearing may be obtained from either *(check one)* the ☐ applicant or the ☒ applicant's representative Bay Colony Group, Inc. by calling 508.543.3939 from *[times]* 8:00 am – 4:30 pma on *[day]* Monday through Friday.

Please Note: Notice of the public hearing, including date, time and place, will be published at least five business days in advance in The Foxboro Reporter and will be posted in the Town Hall and on the Town's website at least 48 hours in advance.

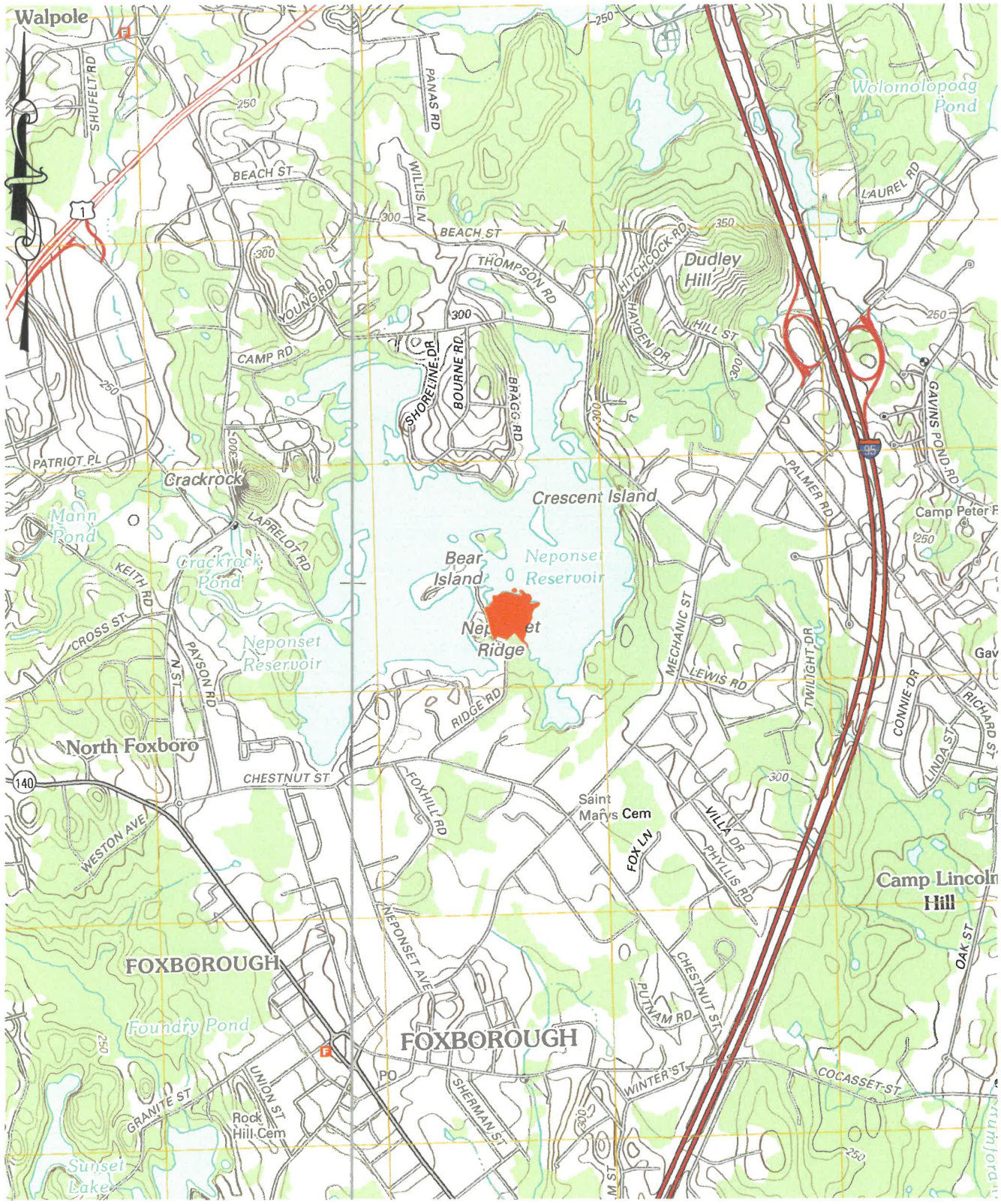
Conservation Commission meeting agendas may be viewed online at:
http://www.foxboroughma.gov/Pages/FoxboroughMA_ConsAgendas/

For additional information about this application or the Wetland Protection Code of Foxborough, please contact the Foxborough Conservation Commission at 508-543-1251 or visit: www.foxboroughma.gov/conservation

For more information about this application or the Wetlands Protection Act, please contact the Department of Environmental Protection (DEP) Southeast Regional Office (Lakeville) at 508-946-2836.

Parcel Number	GIS Number	Cama Number	Property Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
026-032-000	M_220800_870417	026-032-000	NORTH STREET	TOWN OF FOXBOROUGH CONSERVATION	40 SOUTH STREET	FOXBOROUGH	MA	02035
034-001-000	M_221222_870212	034-001-000	54 RIDGE ROAD	MCGUE THOMAS A & KAREN C TE	54 RIDGE ROAD	FOXBOROUGH	MA	02035-0000
034-002-000	M_221239_870256	034-002-000	58 RIDGE ROAD	KENNEDY KRISTEN E	58 RIDGE ROAD	FOXBOROUGH	MA	02035
035-005-000	M_221266_870266	035-005-000	RIDGE ROAD	TOWN OF FOXBOROUGH	40 SOUTH STREET	FOXBOROUGH	MA	02035-0000
045-007-000	M_221289_870065	045-007-000	40 RIDGE ROAD	DONOVAN MICHAEL & DONOVAN MACKENZIE	40 RIDE ROAD	FOXBOROUGH	MA	02035
045-008-000	M_221247_870141	045-008-000	46 RIDGE ROAD	HEINZ JAMES V & THERESA TE	46 RIDGE ROAD	FOXBOROUGH	MA	02035
045-009-000	M_221353_870086	045-009-000	39 RIDGE ROAD	HENDERSON ROBERT B & DEBORAH	39 RIDGE ROAD	FOXBORO	MA	02035-0000
045-010-000	M_221402_870073	045-010-000	37 RIDGE ROAD	OLEARY EDWARD T & CLAUDIA M	37 RIDGE ROAD	FOXBOROUGH	MA	02035-0000

Appendix A – USGS Quadrangle Extract
Wetland Delineation Report
MassGIS Overlay
FEMA Firmette



BAY COLONY GROUP, INC.
FOUR SCHOOL STREET
FOXBOROUGH, MA 02035
(508) 543-3939

USGS MAP EXTRACT
RIDGE ROAD
FOXBOROUGH, MA 02035
WRENTHAM QUADRANGLE/MANSFIELD QUADRANGLE
SCALE: 1"= 2,000'

August 10, 2023

Mr. William Buckley, P.E.
Bay Colony Group, Inc.
4 School Street
Foxborough, MA 02035

Re: **Wetland Delineation**
Ridge Road – Map 35, Parcels 6 and 7
Foxborough, MA
Pare Project No. 18170.39

Dear Mr. Buckley,

Pare Corporation (Pare) delineated the wetland resource areas affecting two undeveloped parcels of land located on Ridge Road in Foxborough (the site). The site is approximately 7.8 acres in size and includes Parcels 6 and 7 on Foxborough Assessor's Map 35. The site consists of a wooded peninsula of land bordering on the south side of the Neponset Reservoir and is located within an area known as "Neponset Ridge". The delineations were completed to establish the limits of wetland resource areas and buffer zones that may impact future development on the property. Pare's investigations and delineations of wetlands were completed between May 2 and May 9, 2023.

The following report describes the delineated wetlands, discusses the delineation methodology, and summarizes review of published mapping for the site. Attached to this report are the following materials: a Site Location Map, an Annotated Aerial Photograph, an excerpt from the FEMA Flood Insurance Rate Map for the area, annotated photographs of the site wetlands, and completed BVW Data Forms.

METHODOLOGY

Wetland edges were delineated in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.55, referred to as the WPA Regulations), and the methodology specified in the publication entitled Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act (Jackson, 2022) and The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region, Version 2.0 (U.S. Army Corps of Engineers, January 2012).

Pink field flags were placed at appropriate intervals along the wetland/upland border, and along the Bank of the Neponset Reservoir bordering the site. Primary parameters evaluated in wetland delineation included vegetation, hydric soil indicators, and visual indicators of wetland hydrology such as water-stained leaves and saturated soils. Banks were delineated according to the first observable break in slope. During the delineation, BVW Data Forms were completed for representative plots along the wetland/upland border.

WETLAND DESCRIPTIONS

Neponset Reservoir

The Neponset Reservoir, an impoundment of the Neponset River, borders the north and east sides of the subject property. While the reservoir was originally constructed to store water for industrial uses, it now supports recreational use and is primarily bordered by residential development. The edges of the Neponset Reservoir are defined in section 10.54 (2) of the WPA Regulations as **Bank,** which has an associated **100-foot Buffer Zone** per section 10.02 (2)(b) of the WPA Regulations, in addition to a **25-foot No Activity Zone** under the Foxborough Wetlands Protection Bylaw.

Flag series **P-1** to **P-98** defines the Bank of the Reservoir bordering the subject property. The flag series begins at the northwest limit of the site along the shoulder of Ridge Road and follows east and then south along the perimeter of the property before ending a short distance offsite to the southeast. The Bank is generally located at the base of a well-defined, forested slope. Steeper portions of the Bank transition immediately to forested upland, however several fringes of Bordering Vegetated Wetland (BVW, described in a later section) are present along the toe of the slope. Between flags P-26 to P-28, a small cove-like area of the pond extends into the tree line. A narrow earthen berm colonized by shrubs and young trees is present between cove and the main body of the pond, however water staining and scour marks across the berm indicate that it regularly overtops. A linear, wooded area extends eastward into the pond along the east side of the site between Bank flags P-59 and P-70, creating a small peninsula. Species of vegetation observed along the Bank included, but was not limited to, the following:

Common Name	Scientific Name	Indicator Status
American Beech	*Fagus grandifolia*	FACU
Red Oak	*Quercus rubra*	FACU
White Oak	*Quercus alba*	FACU
White Pine	*Pinus strobus*	FACU
Red Maple	*Acer rubrum*	FAC
Eastern Hemlock	*Tsuga canadensis*	FACU
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Sweet Pepperbush	*Clethra alnifolia*	FAC
Princess Pine	*Lycopodium obscurum*	FACU
Common Greenbriar	*Smilax rotundifolia*	FAC

Bordering Vegetated Wetlands

Five (5) forested wetlands are present along the perimeter of the site. Each of these areas consists of a fringe wetland located between the toe of slope and delineated Bank. According to 310 CMR 10.55(2), these areas are classified as **Bordering Vegetated Wetlands (BVW)** which have associated **100-foot Buffer Zones** under the WPA Regulations in addition to a **25-foot "No Activity Zone"** under the Foxborough Wetlands Protection Bylaw. Each of these areas is described below.

Wetland A

Flag series **A-1** to **A-8** defines the edge of a narrow fringe wetland in the southwestern portion of the site. The series begins a short distance offsite to the south at Bank flag P-94 and extends northeast along the toe of slope before ending between bank flags P-88 and P-89. The wetland is a low-lying forested area along the northern bank of a small inlet of the Neponset Reservoir and appears to be seasonally flooded with pockets of water stained leaves. The BVW is dominated by Red Maple (*Acer rubrum*), Sweet Pepperbush

(*Clethra alnifolia*), Sheep Laurel (*Kalmia angustifolia*), and Highbush Blueberry (*Vaccinium corymbosum*). Species of vegetation observed within the wetland included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
American Beech	*Fagus grandifolia*	FACU
Black Birch	*Betula lenta*	FACU
White Oak	*Quercus alba*	FACU
White Pine	*Pinus strobus*	FACU
Red Maple	*Acer rubrum*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Sweet Pepperbush	*Clethra alnifolia*	FAC
Sheep-Laurel	*Kalmia angustifolia*	FAC
Princess Pine	*Lycopodium obscurum*	FACU

Wetland B

Flag series **B-1** to **B-30** defines the edge of a BVW located along the north side of the site. The series begins at Bank flag P-29 and extends south for a short distance to follow a small cove-like area of the reservoir before turning west along the toe of the wooded slope. The series ends at Bank flag P-2 in a disturbed area adjacent to the shoulder of Ridge Road. In most areas the wetland consists of a narrow fringe wetland closely bordering the edge of the Neponset Reservoir, however broadens in locations where the slope is more gradual. The BVW is dominated by Red Maple (*Acer rubrum*), Highbush Blueberry (*Vaccinium corymbosum*) and Sweet Pepperbush (*Clethra alnifolia*). Species of vegetation observed within the wetland included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Black Birch	*Betula lenta*	FACU
Red Oak	*Quercus rubra*	FACU
White Pine	*Pinus strobus*	FACU
Red Maple	*Acer rubrum*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Sweet Pepperbush	*Clethra alnifolia*	FAC
Black Huckleberrry	*Gaylussacia baccata*	FACU
Witch Hazel	*Hamamelis virginiana*	FACU

Wetland C

Flag series **C-1** to **C-9** defines the edge of a BVW along the southeast edge of the site between Bank flags P-80 and P-86. It occupies a small low-lying area adjacent of the Neponset Reservoir and appears to be seasonally flooded/saturated based on the presence of microrelief and pockets of water stained leaves. A large area of tree throw has extended the Bank of the Neponset Reservoir deeper into the wetland than previously existed. The BVW is dominated by Red Maple (*Acer rubrum*), Black Tupelo (*Nyssa sylvatica*), Swamp Azalea (*Rhododendron viscosum*), Dangleberry (*Gaylussacia frondosa*), Highbush Blueberry (*Vaccinium corymbosum*), and Princess Pine (*Lycopodium obscurum*). Species of vegetation observed within the wetland included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Oak	*Quercus rubra*	FACU
Black Tupelo	*Nyssa Sylvatica*	FAC
White Pine	*Pinus strobus*	FACU
Red Maple	*Acer rubrum*	FAC
Swamp Azalea	*Rhododendron viscosum*	FACW
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Sweet Pepperbush	*Clethra alnifolia*	FAC
Dangleberry	*Gaylussacia frondosa*	FAC
Princess Pine	*Lycopodium obscurum*	FACU
American Wintergreen	*Pyrola americana*	FAC

Wetland D

Flag series **D-1** to **D-8** defines the edge of a BVW at the east side of the site. The series begins at Bank flag P-76 and extends north along the toe of the slope to Bank flag P-71. The area consists of a narrow fringe wetland between the toe of the slope and Bank. The BVW is dominated by Red Maple (*Acer rubrum*), Red Oak (*Quercus rubra*), Highbush Blueberry (*Vaccinium corymbosum*), and Sweet Pepperbush (*Clethra alnifolia*). The wetland appears to have saturated hydrology and may be temporarily to seasonally flooded in lower elevation areas closer to the Reservoir. Species of vegetation observed within the wetland included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Oak	*Quercus rubra*	FACU
Red Maple	*Acer rubrum*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Witch Hazel	*Hamamelis virginiana*	FACU
Common Greenbriar	*Smilax rotundifolia*	FAC

Wetland E

Flag series **E-1** to **E-9** defines the southwest edge of a BVW at the northeast corner of the site. The series begins at Bank flag P-51 and extends north for a short distance and turning west, ending at Bank flag P-39. In this area, there is a slight protrusion of forested wetland into the Reservoir as well as shallow areas below the Bank colonized by shrubs and emergent vegetation. Most of the wetland has a saturated hydrology and and may be temporarily to seasonally flooded in lower elevation areas closer to the Reservoir. The BVW is dominated by Red Maple (*Acer rubrum*), Red Oak (*Quercus rubra*), Black Huckleberry (*Gaylussacia baccata*), Highbush Blueberry (*Vaccinium corymbosum*), and Common Greenbriar (*Smilax rotundifolia*). Species of vegetation observed within the wetland included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Oak	*Quercus rubra*	FACU
White Pine	*Pinus strobus*	FACU
Red Maple	*Acer rubrum*	FAC
Highbush Blueberry	*Vaccinium corymbosum*	FACW
Black Huckleberry	*Gaylussacia baccata*	FACU
Sweet Pepperbush	*Clethra alnifolia*	FAC
Common Greenbriar	*Smilax rotundifolia*	FAC

REVIEW OF PUBLISHED MAPPING

Review of published mapping and relevant MassGIS data layers on August 10, 2023 revealed the following:

- No Certified Vernal Pools or Potential Vernal Pools are located on the subject property. A Potential Vernal Pool (PVP ID 26459) is mapped within the interior of the A-series BVW, approximately 350 feet offsite to the east. Due to its distance from the site, the PVP was not investigated or delineated.
- There is no mapped Priority or Estimated Habitat of Rare Species on the site.
- The site is not located within Outstanding Resource Waters.
- The site is not located within an Area of Critical Environmental Concern.
- According to the FEMA Flood Insurance Rate Map (FIRM) for the site (Community Panel No. 25021C0353E, effective date July 17, 2012), the site includes an area of 100-year Floodplain designated as Zone A, areas subject to inundation by the 100-year frequency storm. The Floodplain does not include a base flood elevation. According to 310 CMR 10.57, the mapped Floodplain area outside of the Neponset Reservoir and BVWs (if any) is classified as **Bordering Land Subject to Flooding.** The FIRM is attached as Figure 3.

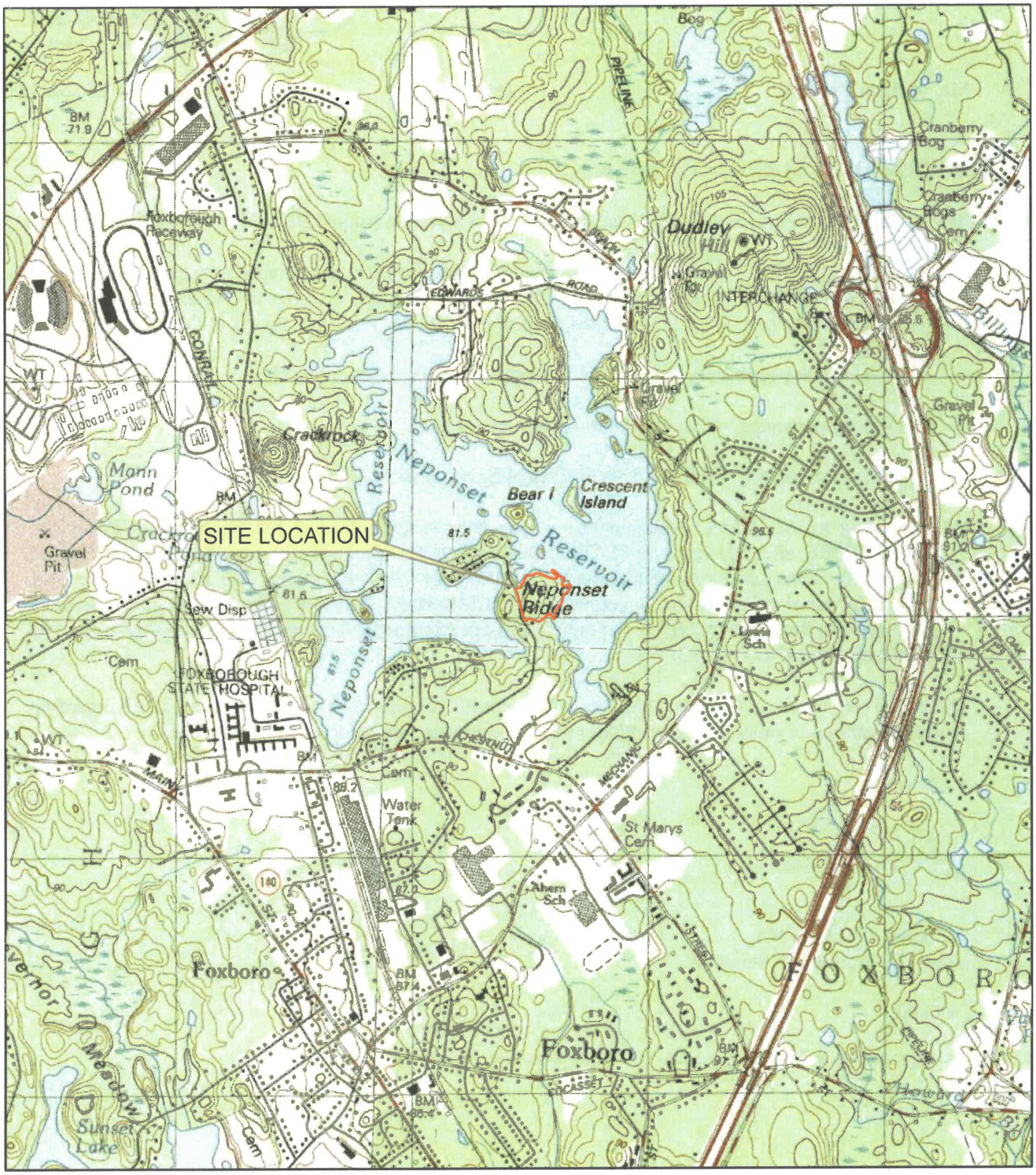
Thank you very much for the opportunity to assist you with this project. If you have any questions regarding project permitting or other issues, or require further assistance, please do not hesitate to call.

Sincerely,

Lauren H. Gluck, P.W.S.
Senior Environmental Scientist

LHG/GL

Z:\JOBS\18 Jobs\18170.39 – Ridge Road Foxborough - MA\REPORTS\Wetlands\Wetland Report.doc



MASS GIS

SITE LOCATION MAP

SCALE:1"=2,000'

N
W E
S

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

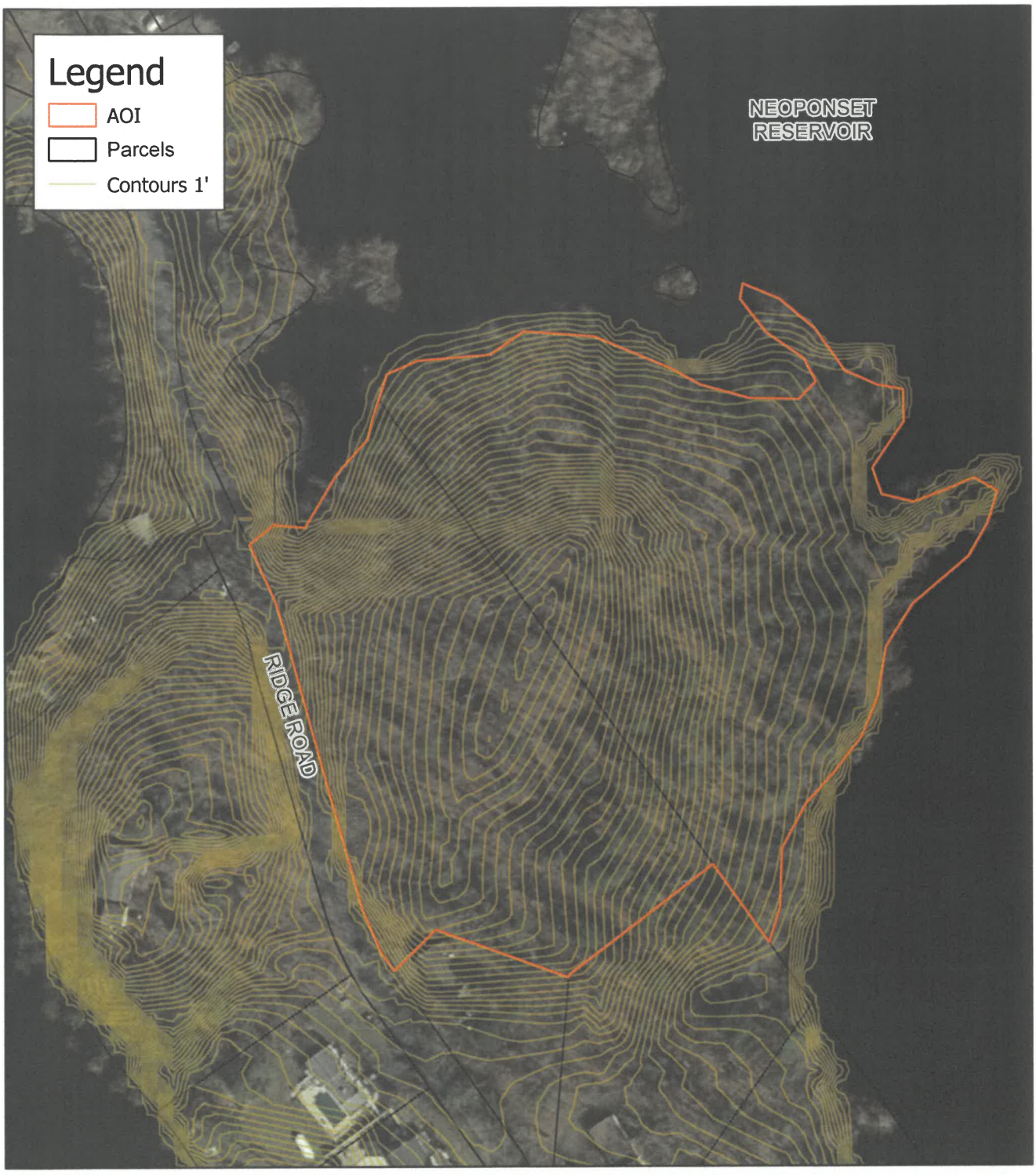
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 18170.39

MAY 2023

FIGURE 1

RIDGE ROAD
FOXBORO, MA



MASS GIS

ANNOTATED AREIAL PHOTOGRAPH

SCALE:1"=150'

N
W E
S

8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
(401) 334-4100

10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
(508) 543-1755

PARE PROJECT No. 18170.39

MAY 2023

FIGURE 2

RIDGE ROAD
FOXBORO, MA

FIGURE 3

National Flood Hazard Layer FIRMette

FEMA

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

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

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

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/10/2023 at 10:58 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Photo 1: Typical view of Bank and Wetland B at northwest side of site, facing downslope from road shoulder.

Photo 2: Bank and northeast end of Wetland B along small cove-like area, facing south from Bank flag P-28.

Photo 3: Typical view of Bank along north side of site in the upland area between Wetland B and E.

Photo 4: Wetland E located along Bank at northeast side of site, facing downslope to Neponset Reservoir.

Photo 5: Upland peninsula extending into Neponset Reservoir between Bank flags P-58 and P-70.

Photo 6: Wetland D located along east side of site, facing north along Bank of Neponset Reservoir.

Photo 7: Wetland C located along southeast side of site, facing north along Bank of Neponset Reservoir.

Photo 8: Wetland A located at southeast corner of site, facing southeast from wetland edge.

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: A4 UPLAND

Investigator(s): Lauren Gluck, PWS; Greg LaCroix Latitude/Longitude: 42°04'53.3"N 71°14'27.3"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes _____ No X	Depth (inches) _____
Water Table Present?	Yes _____ No X	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes _____ No X	Depth (inches) _____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____ Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 A4 UPLAND

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)
1. American Beech	*Fagus grandifolia*	FACU	10.5%	no	no
2. Black Birch	*Betula lenta*	FACU	3.0%	no	no
3. Red Oak	*Quercus rubra*	FACU	20.5%	yes	no
4. White Oak	*Quercus alba*	FACU	10.5%	no	no
5. White Pine	*Pinus strobus*	FACU	20.5%	yes	no
6.					
7.					
8.					
9.					

65.0% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Highbush Blueberry	*Vaccinium corymbosum*	FACW	20.5%	yes	yes
2. White Pine	*Pinus strobus*	FACU	38.0%	yes	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					

58.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sheep-Laurel	*Kalmia angustifolia*	FAC	63.0%	yes	yes
2. Princess Pine	*Lycopodium obscurum*	FACU	10.5%	no	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

73.5% = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	5	2		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	20.5	X 2	= 41
	FAC species	63	X 3	= 189
	FACU species	113.5	X 4	= 454
	UPL species	0	X 5	= 0
	Column Totals	(A) 197		(B) 684
	Prevalence Index	B/A = 3.47		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point A4 UPLAND

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 0.5-0"	10YR 3/4						Fibric	
A 0-2"	10YR 3/2						Fine Sandy Loam	
Bw 2-20+"	10YR 5/6						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes_____ No__X_____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: A4 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'53.3"N 71°14'27.3"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes _____ No X	Depth (inches) N/A
Water Table Present?	Yes X No _____	Depth (inches) 5"
Saturation Present (including capillary fringe)?	Yes X No _____	Depth (inches) 0"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
X Water-stained leaves	_____Hydrological records	X Direct observation of inundation
_____ Evidence of aquatic fauna	_____Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 A4 Wetland

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)
1. Red Oak	*Quercus rubra*	FACU	20.5%	yes	no
2. Red Maple	*Acer rubrum*	FAC	38.0%	yes	yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					

58.5% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	*Clethra alnifolia*	FAC	38.0%	yes	yes
2. Highbush Blueberry	*Vaccinium corymbosum*	FACW	38.0%	yes	yes
3. White Pine	*Pinus strobus*	FACU	10.5%	no	no
4.					
5.					
6.					
7.					
8.					
9.					

86.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sheep-Laurel	*Kalmia angustifolia*	FAC	38.0%	yes	yes
2. Princess Pine	*Lycopodium obscurum*	FACU	10.5%	yes	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

48.5% = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?		Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes X No _____
	6	4	
Prevalence Index:		Total % Cover (all strata)	Multiply by: / Result
	OBL species		X 1 =
	FACW species		X 2 =
	FAC species		X 3 =
	FACU species		X 4 =
	UPL species		X 5 =
	Column Totals	(A)	(B)
	Prevalence Index	B/A =	Is the Prevalence Index ≤ 3.0? Yes _____ No _____
Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point A4 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 1-0"	10YR 3/4						Fibric	
A 0-4"	10YR 2/1		5YR 4/0				Fine Sandy Loam	
Bw 4-20+"	10YR 5/6						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
____ Histosol (A1)	__X__ 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes __X__ No _____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: B3 Upland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'58.5"N 71°14'30.2"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes _____	No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes X	No _____	Depth (inches) 6"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	X Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

Saturated conditions present following a day of heavy rain and appear atypical for the area with no other indicators present; therefore, were not considered an indicator of wetland hydrology.

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 B3 Upland

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)
1. American Beech	*Fagus grandifolia*	FACU	10.5%	yes	no
2. White Pine	*Pinus strobus*	FACU	10.5%	yes	no
3. Eastern Hemlock	*Tsuga canadensis*	FAC	10.5%	yes	yes
4. Red Oak	*Quercus rubra*	FACU	10.5%	yes	no
5. Black Birch	*Betula lenta*	FACU	3.0%	no	no
6.					
7.					
8.					
9.					

45.0% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Highbush Blueberry	*Vaccinium corymbosum*	FACW	20.5%	yes	yes
2. Black Huckleberrry	*Gaylussacia baccata*	FACU	20.5%	yes	no
3. Witch Hazel	*Hamamelis virginiana*	FACU	10.5%	yes	no
4.					
5.					
6.					
7.					
8.					
9.					

51.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sheep-Laurel	*Kalmia angustifolia*	FAC	3.0%	yes	yes
2. Princess Pine	*Lycopodium obscurum*	FACU	3.0%	yes	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

6.0% = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	9	3		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	20.5	X 2	= 41
	FAC species	13.5	X 3	= 40.5
	FACU species	68.5	X 4	= 274
	UPL species	0	X 5	= 0
	Column Totals	(A) 102.5		(B) 355.5
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point B3 Upland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Location[2]	Texture	Remarks
O 0-1"	10YR 3/4						Fibric	
A 1-5"	10YR 2/2						Fine Sandy Loam	
Bw 5-20+"	10YR 5/6						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes_____ No___X_____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: B3 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'58.5"N 71°14'30.2"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes X	No _____	Depth (inches) 0"
Water Table Present?	Yes X	No _____	Depth (inches) 2"
Saturation Present (including capillary fringe)?	Yes X	No _____	Depth (inches) 0"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	_____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	X Drainage patterns
_____ Iron deposits	X Saturated soil	_____ Drift lines
_____ Algal mats or crusts	_____ Water marks	X Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	_____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	_____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	_____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	_____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	_____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

Located adjacent to cove-like area of pond within treeline that appears to regularly overtop from main body of reservoir as indicated by scour marks.

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 B3 Wetland

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)
1. Red Maple	*Acer rubrum*	FAC	63.0%	yes	yes
2. Black Birch	*Betula lenta*	FACU	10.5%	no	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					

73.5% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Highbush Blueberry	*Vaccinium corymbosum*	FACW	38.0%	yes	yes
2. Sweet Pepperbush	*Clethra alnifolia*	FAC	20.5%	yes	yes
3. Witch Hazel	*Hamamelis virginiana*	FACU	3.0%	no	no
4.					
5.					
6.					
7.					
8.					
9.					

61.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

N/A = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes ____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes X No ____
	3	3		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	=
	FACW species		X 2	=
	FAC species		X 3	=
	FACU species		X 4	=
	UPL species		X 5	=
	Column Totals	(A)		(B)
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes ____ No ____
Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point B3 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 0.5-0"	10YR 3/4						Fibric	
A 0-1"	10YR 2/2						Fine Sandy Loam	
Bg 1-20+"	10YR 6/2						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ Depleted Below Dark Surface (A11)	____ Loamy Gleyed Matrix (F2)	____ Iron-Manganese Masses (F12)
____ Thick Dark Surface (A12)	X Depleted Matrix (F3)	____ Mesic Spodic (A17)
____ Sandy Mucky Mineral (S1)	____ Redox Dark Surface (F7)	____ Red Parent Material (F21)
____ Sandy Gleyed Matrix (S4)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes X No _____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: B28 Upland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'56.8"N 71°14'33.8"W

Soil Map Unit Name: Hinckley loamy sand, 15 to 35 percent slopes (253D) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes _____	No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes _____	No X	Depth (inches) N/A

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____ Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 B28 Upland

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)
1. Black Birch	*Betula lenta*	FACU	20.5%	yes	no
2. Red Oak	*Quercus rubra*	FACU	20.5%	yes	no
3. White Oak	*Quercus alba*	FACU	10.5%	no	no
4. Red Maple	*Acer rubrum*	FAC	10.5%	no	yes
5. White Pine	*Pinus strobus*	FACU	10.5%	no	no
6.					
7.					
8.					
9.					

72.5% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Black Huckleberrry	*Gaylussacia baccata*	FACU	38.0%	yes	no
2. American Witch-Hazel	*Hamamelis virginiana*	FACU	20.5%	yes	no
3. Sweet Pepperbush	*Clethra alnifolia*	FAC	10.5%	no	yes
4.					
5.					
6.					
7.					
8.					
9.					

69.0% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Lowbush Blueberry	*Vaccinium angustifolium*	FACU	10.5%	yes	no
2. Princess Pine	*Lycopodium obscurum*	FACU	10.5%	yes	no
3. Canada Mayflower	*Maianthemum canadense*	FACU	3.0%	yes	no
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

14.0% = 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)
1. N/A	N/A	N/A	0.0%		
2.					
3.					
4.					
			0.0% = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	7	0		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	0	X 2	= 0
	FAC species	21	X 3	= 63
	FACU species	141.5	X 4	= 566
	UPL species	0	X 5	= 0
	Column Totals	(A) 162.5		(B) 629
	Prevalence Index	B/A = 3.9		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point B28 Upland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 0-1"	7.5YR 2.5/2							
A 1-2"	10YR 2/2							
B 2+"	10YR 4/4							

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type:_____ Depth (inches):_____

Remarks:

Hydric Soils criterion met? Yes_____ No__X__

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: B28 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'56.8"N 71°14'33.8"W

Soil Map Unit Name: Hinckley loamy sand, 15 to 35 percent slopes (253D) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes _____	No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes X	No _____	Depth (inches) 10"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
X Water-stained leaves	_____Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	X Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	X Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 B28 Wetland

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)
1. Black Birch	*Betula lenta*	FACU	20.5	yes	no
2. Red Maple	*Acer rubrum*	FAC	20.5%	yes	yes
3. White Pine	*Pinus strobus*	FACU	10.5%	no	no
4. Red Oak	*Quercus rubra*	FACU	10.5%	no	no
5.					
6.					
7.					
8.					
9.					

62.0 = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	*Clethra alnifolia*	FAC	63.0%	yes	yes
2. Highbush Blueberry	Vaccinium corymbosum	FACW	20.5%	no	yes
3. American Witch-Hazel	*Hamamelis virginiana*	FACU	10.5%	no	no
4. Dangleberry	Gaylussacia frondosa	FAC	10.5%	no	yes
5.					
6.					
7.					
8.					
9.					

104.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	*Clethra alnifolia*	FAC	10.5%	yes	yes
2. Princess Pine	*Lycopodium obscurum*	FACU	3.0%	yes	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

13.5% = 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)
1. N/A	N/A	N/A	0.0%		
2.					
3.					
4.					
			0.0% = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes X No _____
	5	3		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	20.5	X 2	= 41
	FAC species	104.5	X 3	= 313.5
	FACU species	45	X 4	= 180
	UPL species	0	X 5	= 0
	Column Totals	(A) 170		(B) 534.5
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point B28 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Location[2]	Texture	Remarks
O 0-2"	7.5YR 2.5/2							
A 2-4"	10YR 2/1							
B 4+"	10YR 4/3		10YR 2/1	20%	RM	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
____ Histosol (A1)	__X__ 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes ___X___ No _____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: C5 Upland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'54.0"N 71°14'27.7"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes _____ No X	Depth (inches) _____
Water Table Present?	Yes _____ No X	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes _____ No X	Depth (inches) _____

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____ Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 C5 Upland

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)
1. Red Maple	*Acer rubrum*	FAC	10.5%	yes	yes
2. White Oak	*Quercus alba*	FACU	3.0%	no	no
3. White Pine	*Pinus strobus*	FACU	10.5%	yes	no
4. Red Oak	*Quercus rubra*	FACU	10.5%	yes	no
5. Black Birch	*Betula lenta*	FACU	10.5%	yes	no
6.					
7.					
8.					
9.					

45.0% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Dangleberry	*Gaylussacia frondosa*	FAC	10.5%	yes	yes
2. Highbush Blueberry	*Vaccinium corymbosum*	FACW	3.0%	no	yes
3. Sweet Pepperbush	*Clethra alnifolia*	FAC	3.0%	no	yes
4. White Pine	*Pinus strobus*	FACU	10.5%	yes	no
5.					
6.					
7.					
8.					
9.					

27.0% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sheep-Laurel	*Kalmia angustifolia*	FAC	3.0%	yes	yes
2. Princess Pine	*Lycopodium obscurum*	FACU	3.0%	yes	no
3. Winterberry	*Ilex verticillata*	FACW	3.0%	yes	yes
4. Smooth Crab Grass	Digitaria ischaemum	FACU	3.0%	yes	no
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

12.0% = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	10	4		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	6	X 2	= 12
	FAC species	27	X 3	= 81
	FACU species	51	X 4	= 204
	UPL species	0	X 5	= 0
	Column Totals	(A) 84		(B) 297
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point C5 Upland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 3-0"	10YR 3/4						Fibric	
A 0-3"	10YR 2/2						Fine Sandy Loam	
Bw1 3-14"	10YR 4/6						Fine Sandy Loam	
Bw2 14-20+"	10YR 5/6						Fine Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type:_____ Depth (inches):_____

Remarks:

Hydric Soils criterion met? Yes_____ No____X____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: C5 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'54.0"N 71°14'27.7"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes X	No _____	Depth (inches) 16"
Saturation Present (including capillary fringe)?	Yes X	No _____	Depth (inches) 0"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
X Water-stained leaves	_____Hydrological records	X Direct observation of inundation
_____ Evidence of aquatic fauna	_____Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 C5 Wetland

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)
1. Black Tupelo	*Nyssa sylvatica*	FACW	20.5%	yes	yes
2. White Pine	*Pinus strobus*	FACU	10.5%	yes	no
3. Red Maple	*Acer rubrum*	FAC	10.5%	yes	yes
4.					
5.					
6.					
7.					
8.					
9.					

41.5% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Swamp Azalea	Rhododendrun viscosum	FACW	63.0%	yes	yes
2. Dangleberry	*Gaylussacia frondosa*	FAC	20.5%	no	yes
3. Highbush Blueberry	*Vaccinium corymbosum*	FACW	10.5%	no	yes
4. Sweet Pepperbush	*Clethra alnifolia*	FAC	38.0%	yes	yes
5. Black Tupelo	*Nyssa sylvatica*	FACW	10.5%	no	yes
6.					
7.					
8.					
9.					

142.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Princess Pine	*Lycopodium obscurum*	FACU	10.5%	yes	no
2. Winterberry	*Ilex verticillata*	FACW	3.0%	yes	yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

13.5% = 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes ____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes X No ____
	7	5		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	=
	FACW species		X 2	=
	FAC species		X 3	=
	FACU species		X 4	=
	UPL species		X 5	=
	Column Totals	(A)		(B)
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes ____ No ____
Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point C5 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Location[2]	Texture	Remarks
O 2-0"	10YR 3/4						Fibric	
A 0-3"	10YR 3/4						Fine Sandy Loam	
Bg 3-20+"	10YR 6/2			5%	RM	M	Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
____ Histosol (A1)	_X_ 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ Depleted Below Dark Surface (A11)	____ Loamy Gleyed Matrix (F2)	____ Iron-Manganese Masses (F12)
____ Thick Dark Surface (A12)	_X_ Depleted Matrix (F3)	____ Mesic Spodic (A17)
____ Sandy Mucky Mineral (S1)	____ Redox Dark Surface (F7)	____ Red Parent Material (F21)
____ Sandy Gleyed Matrix (S4)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes _X_ No _____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: D4 Upland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'55.3"N 71°14'26.0"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil_____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes _____ No X	Depth (inches) N/A
Water Table Present?	Yes _____ No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes X No _____	Depth (inches) 6"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	X Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		

Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):

saturated soil conditions present in upland following a day of heavy rain, and were not considered a reliable hydrologic indicator due to the atypical condition and lack of other indicators.

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 D4 Upland

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)
1. White Pine	*Pinus strobus*	FACU	10.5%	yes	no
2. Red Oak	*Quercus rubra*	FACU	10.5%	yes	no
3. American Beech	*Fagus grandifolia*	FACU	3.0%	no	no
4. White Oak	*Quercus alba*	FACU	3.0%	no	no
5.					
6.					
7.					
8.					
9.					
			27.0%	= Total Cover	

Shrub/Sapling Stratum	Plot size 15'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Black Huckleberrry	*Gaylussacia baccata*	FACU	20.5%	yes	no
2. Sweet Pepperbush	*Clethra alnifolia*	FAC	10.5%	yes	yes
3. Highbush Blueberry	*Vaccinium corymbosum*	FACW	10.5%	yes	yes
4. White Pine	*Pinus strobus*	FACU	3.0%	no	no
5. Eastern Hop-Hornbeam	Ostrya virginiana	FACU	3.0%	no	no
6.					
7.					
8.					
9.					
			47.5%	= Total Cover	

Herb Stratum	Plot size 5'				
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
			N/A	= 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)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
			N/A = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	5	2		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	10.5	X 2	= 21
	FAC species	10.5	X 3	= 31.5
	FACU species	53.5	X 4	= 214
	UPL species	0	X 5	= 0
	Column Totals	(A) 74.5		(B) 266.5
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point D4 Upland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Location[2]	Texture	Remarks
O 0-1"	10YR 3/4						Fibric	
A 0-3"	10YR 3/2						Fine Sandy Loam	
Bw 3-20+"	10YR 5/6						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes_____ No__X__

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: D4 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'55.3"N 71°14'26.0"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes _____	No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes X	No _____	Depth (inches) 10"

Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	X Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available): Buttressed roots		

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 D4 Wetland

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)
1. Red Oak	*Quercus rubra*	FACU	20.5%	yes	no
2. Red Maple	*Acer rubrum*	FAC	20.5%	yes	yes
3.					
4.					
5.					
6.					
7.					
8.					
9.					

41.0% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	*Clethra alnifolia*	FAC	85.5%	yes	yes
2. Witch Hazel	*Hamamelis virginiana*	FACU	10.5%	no	no
3. Highbush Blueberry	*Vaccinium corymbosum*	FACW	10.5%	no	yes
4.					
5.					
6.					
7.					
8.					
9.					

106.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

N/A = 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)
1. Greenbirer	*Smilax rotundifolia*	FAC	3.0%	yes	yes
2.					
3.					
4.					
			3.0% = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes ____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes X No ____
	4	3		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	=
	FACW species		X 2	=
	FAC species		X 3	=
	FACU species		X 4	=
	UPL species		X 5	=
	Column Totals	(A)		(B)
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes ____ No ____
Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point D4 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Location[2]	Texture	Remarks
O 0.5-0"	10YR 3/4						Fibric	
A 0-3"	10YR 2/2						Fine Sandy Loam	
Bw 3-16"	10YR 5/6						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
____ Histosol (A1)	_x_ 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: Refusal Depth (inches): 16"

Remarks:

Hydric Soils criterion met? Yes X No

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: E6 Upland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'57.1"N 71°14'24.9"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soils criterion met?	Yes _____ No X	
Wetlands hydrology present?	Yes _____ No X	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes _____	No X	Depth (inches) N/A
Water Table Present?	Yes _____	No X	Depth (inches) N/A
Saturation Present (including capillary fringe)?	Yes _____	No X	Depth (inches) N/A

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
_____ Water-stained leaves	_____ Hydrological records	____ Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	_____ Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 E6 Upland

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)
1. Red Oak	*Quercus rubra*	FACU	38.0%	yes	no
2. White Pine	*Pinus strobus*	FACU	10.5%	no	no
3. American Beech	*Fagus grandifolia*	FACU	20.5%	yes	no
4.					
5.					
6.					
7.					
8.					
9.					

69.0% = Total Cover

Shrub/Sapling Stratum — Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Sweet Pepperbush	*Clethra alnifolia*	FAC	20.5%	yes	yes
2. Witch Hazel	*Hamamelis virginiana*	FACU	10.5%	no	no
3. Black Huckleberrry	*Gaylussacia baccata*	FACU	20.5%	yes	no
4. Highbush Blueberry	*Vaccinium corymbosum*	FACW	3.0%	no	yes
5.					
6.					
7.					
8.					
9.					

54.5% = Total Cover

Herb Stratum — Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. American Wintergreen	*Pyrola americana*	FAC	3.0%	yes	yes
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

3.0% = Total Cover

Sampling Point E6 Upland

VEGETATION – continued.

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

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?			Yes _____ No X
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants		Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No X
	5	2		
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species	0	X 1	= 0
	FACW species	3	X 2	= 6
	FAC species	23.5	X 3	= 70.5
	FACU species	100	X 4	= 400
	UPL species	0	X 5	= 0
	Column Totals	(A) 126.5		(B) 476.5
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No X
Wetland vegetation criterion met?		**Yes** _____ **No** X		

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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point E6 Upland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Location[2]		
O 0.5-0"	10YR 2/2						Fibric	
A 0-4"	10YR 2/2						Fine Sandy Loam	
Bw1 4-12"	10YR 5/6						Fine Sandy Loam	
Bw2 12-20+"	10YR 5/4						Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, 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 (S8)
____ Stratified Layers (A5)	____Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type:_____ Depth (inches):_____

Remarks:

Hydric Soils criterion met? Yes_____ No___X_____

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: Ridge Road City/Town: Foxborough, MA Sampling Date: 05/02/2023

Applicant/Owner: Town of Foxborough Sampling Point or Zone: E6 Wetland

Investigator(s): Greg LaCroix Latitude/Longitude: 42°04'57.1"N 71°14'24.9"W

Soil Map Unit Name: Hinckley loamy sand, 8 to 15 percent slopes (245C) NWI or DEP Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____ , Soil _____ , or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soils criterion met?	Yes X No _____	
Wetlands hydrology present?	Yes X No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes _____ No X	Depth (inches) _____
Water Table Present?	Yes _____ No X	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes X No _____	Depth (inches) 3"

Wetland Hydrology Indicators

Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
X Water-stained leaves	_____ Hydrological records	X Direct observation of inundation
_____ Evidence of aquatic fauna	_____ Free water in a soil test hole	____ Drainage patterns
_____ Iron deposits	X Saturated soil	____ Drift lines
_____ Algal mats or crusts	_____ Water marks	____ Scoured areas
_____ Oxidized rhizospheres/pore linings	_____ Moss trim lines	____ Sediment deposits
_____ Thin muck surfaces	_____ Presence of reduced iron	____ Surface soil cracks
_____ Plants with air-filled tissue (aerenchyma)	_____ Woody plants with adventitious roots	____ Sparsely vegetated concave surface
_____ Plants with polymorphic leaves	_____ Trees with shallow root systems	____ Microtopographic relief
_____ Plants with floating leaves	_____ Woody plants with enlarged lenticels	____ Geographic position (depression, toe of slope, fringing lowland)
_____ Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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 E6 Wetland

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)
1. Red Maple	*Acer rubrum*	FAC	20.5%	yes	yes
2. White Pine	*Pinus strobus*	FACU	38.0%	yes	no
3.					
4.					
5.					
6.					
7.					
8.					
9.					

58.5% = Total Cover

Shrub/Sapling Stratum Plot size 15'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. Black Huckleberrry	*Gaylussacia baccata*	FACU	38.0%	yes	no
2. Highbush Blueberry	*Vaccinium corymbosum*	FACW	38.0%	yes	yes
3. Sweet Pepperbush	*Clethra alnifolia*	FAC	38.0%	yes	yes
4.					
5.					
6.					
7.					
8.					
9.					

114.0% = Total Cover

Herb Stratum Plot size 5'

Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
1. N/A	N/A	N/A	N/A	N/A	N/A
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

N/A = 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)
1. Greenbirer	*Smilax rotundifolia*	FAC	10.5%	yes	yes
2.					
3.					
4.					
			10.5% = Total Cover		

Rapid Test:	Do all dominant species have an indicator status of OBL or FACW?		Yes _____ No x
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes x No _____
	6	4	

Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	=
	FACW species		X 2	=
	FAC species		X 3	=
	FACU species		X 4	=
	UPL species		X 5	=
	Column Totals	(A)		(B)
	Prevalence Index	B/A =		Is the Prevalence Index ≤ 3.0? Yes _____ No _____

Wetland vegetation criterion 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 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point E6 Wetland

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Location[2]	Texture	Remarks
O 3-0"	10YR 3/4						Fibric	
A 0-2"	10YR 2/1						Fine Sandy Loam	
Bw 2-20"	10YR 6/4		5YR 4/6	5%	RM	M	Sandy Loam	
			10YR 7/1	5%	RM	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		**Indicators for Problematic Hydric Soils**
____ Histosol (A1)	__X__ 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 (S8)
____ Stratified Layers (A5)	____ Loamy Mucky Mineral (F1)	____ Thin Dark Surface (S9)
____ 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)	____ Depleted Dark Surface (F8)	____ Very Shallow Dark Surface (TF12)
____ Dark Surface (S7)		____ Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: _____ Depth (inches): _____

Remarks:

Hydric Soils criterion met? Yes_____ No___X___

NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM AN ON THE GROUND SURVEY AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CONTRACTORS ARE TO CHECK AND VERIFY THE LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. DIG SAFE PHONE NO. 1-888-344-7233

2. ELEVATIONS, IN FEET, ARE REFERRED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88). HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM 1983 (NAD 83).

3. FIELD SURVEY PERFORMED BETWEEN MAY 12, 2023 AND JUNE 23, 2023. OFF SITE DETAILS AND PROPERTY LINES ARE FROM TOWN OF FOXBOROUGH GIS. CONTOUR INTERVAL = 1 FOOT.

4. WETLAND RESOURCE AREAS FLAGGED BY PARE CORPORATION AND FLAGGING WAS LOCATED BY BAY COLONY GROUP, INC.

KEY:

HYD	HYDRANT		STONE WALL
WG	WATER GATE		CONC. BOUND (set)
WS	WATER SERVICE		UTILITY POLE
GG	GAS GATE		LIGHT
	DRAIN MANHOLE		CONC BOLLARD
	CATCH BASIN		GUY WIRE
	SEWER MANHOLE		SIGN

NAD83

NEPONSET RESERVOIR
n/f TOWN OF FOXBOROUGH

WATER ELEVATION = 268.0' (6/23/2023)

ZONE A ELEVATION = 271.4' FROM LOMA #14-01-2985A

25' NO ACTIVITY ZONE

100' BUFFER ZONE

TREELINE

n/f KRISTEN E. KENNEDY
58 RIDGE ROAD
MAP 034, PARCEL 002

n/f THOMAS & KAREN MCGUE
54 RIDGE ROAD
MAP 034, PARCEL 001

n/f JAMES & THERESA HEINZ
46 RIDGE ROAD
MAP 045, PARCEL 008

n/f ROBERT & DEBORAH HENDERSON
39 RIDGE ROAD
MAP 045, PARCEL 009

n/f EDWARD & CLAUDIA O'LEARY
37 RIDGE ROAD
MAP 045, PARCEL 010

ASSESSOR'S MAP 35 PARCEL 007 4.94 ACRES

ASSESSOR'S MAP 35 PARCEL 006 2.94 ACRES

RIDGE ROAD (PUBLIC VARIABLE WIDTH)

8" WATER

12" WATER

UPL 14

UPL 13

(IN FEET)
1 inch = 40 ft.

PROJECT:

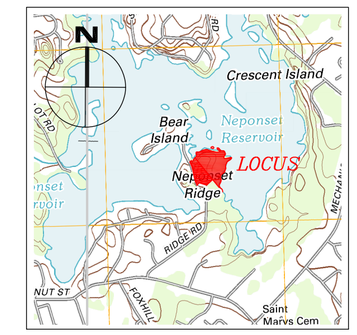
Ridge Road
Foxborough, MA
02035

OWNER:

Fed Cap, Inc.
P.O. Box 669
Foxborough, MA
02035

Bay Colony Group, Inc.
Professional Civil Engineers & Professional Land Surveyors

FOUR SCHOOL STREET
P.O. BOX 9136
FOXBOROUGH, MA 02035
508-543-3939



LOCUS 1"=2,000'

REFERENCES:

DEED REF:

BK.41154, PG.190
BK.36492, PG.243

ASSESSOR'S REF:

MAP 35, PARCELS 6 & 7

ZONING REF:

RESIDENTIAL-AGRICULTURAL R-40
(WITHIN A WRPOD PRIMARY RESOURCE AREA)

FLOOD ZONE:

ZONE "A" & "X"
MAP NUMBER 25021C0353E
EFFECTIVE DATE: JULY 17, 2012

STAMP

COMMONWEALTH OF MASSACHUSETTS
WILLIAM R. BUCKLEY, JR.
CIVIL
No. 35813
REGISTERED PROFESSIONAL ENGINEER

DRAWING TITLE

ANRAD Plan

SCALE: 1" = 40'

AUGUST 14, 2023	SHEET NUMBER
23-01.38-ANRAD	1