

Notice of Intent Application

Wetlands Protection Act and Boxford Wetlands By-law

**325 Ipswich Road
Boxford, MA**

February 2020



**Wetlands & Land Management, Inc.
100 Conifer Hill Drive-Suite 516
Danvers, MA 01923**

Wetlands & Land Management, Inc.

100 Conifer Hill Drive - #516
Danvers, MA 01923
978-777-0004 Telephone

February 18, 2020

Mr. Ross Povenmire
Boxford Conservation Commission
7A Spofford Road
Boxford, MA 01921

RE: Notice of Intent for a septic system repair and installation of three additional floats
325 Ipswich Road

Dear Mr. Povenmire and Conservation Commission Members:

On behalf of the applicant, Wetlands & Land Management Inc. is submitting this Notice of Intent application to install a repair septic system for the existing dwelling. There is no expansion of use at the home. The system is designed for the current number of bedrooms at the house.

The owners also desire to add additional length to their permitted and licensed float in the adjacent Spofford Pond. Annual weed growth surrounds the current floats. The added length will get the end float out to clear water.

The site abuts the Pond and Pye Brook flows out of the pond in proximity to this lot. I visited the site this past fall to delineate the limits of wetlands and riverfront area on the property. The site is also encumbered by Bordering Land Subject to Flooding. Fortunately, the proposed septic system work is located in the front yard, directly adjacent to the road and outside of wetland and flood plain. Riverfront area encumbers a portion of the new septic system, but a septic system upgrade is exempted from Riverfront Area requirements. (Notwithstanding, the project would be compliant with riverfront area impact thresholds anyway.)

Please schedule this matter for your next available meeting – March 5, 2020. I will be available to present the project and answer any questions.

Sincerely,

Wetlands & Land Management, Inc.

William Manuell

William J. Manuell
Wetland Scientist
For the Applicant

Locus Map
Source: United States Geological Survey



SCALE: 1:25,000

Wetlands & Land Management, Inc.
100 Conifer Hill Drive - #516
Danvers, MA 01923
978-777-0004



National Flood Hazard Layer FIRMette



42°41'49.09"N

71°1'31.27"W



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, AE, AO, AH, VE, AR With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
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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 OF FLOOD HAZARD	NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMFRs
OTHER AREAS	Area of Undetermined Flood Hazard Zone I

GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
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Cross Sections with 1% Annual Chance Water Surface Elevation	20.2 17.5
Coastal Transect	
Base Flood Elevation Line (BFE)	
Limit of Study	
Jurisdiction Boundary	
Coastal Transect Baseline	
Profile Baseline	
Hydrographic Feature	

OTHER FEATURES	Digital Data Available No Digital Data Available Unmapped
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MAP PANELS	The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.
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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 10/7/2019 at 4:34:03 PM 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.

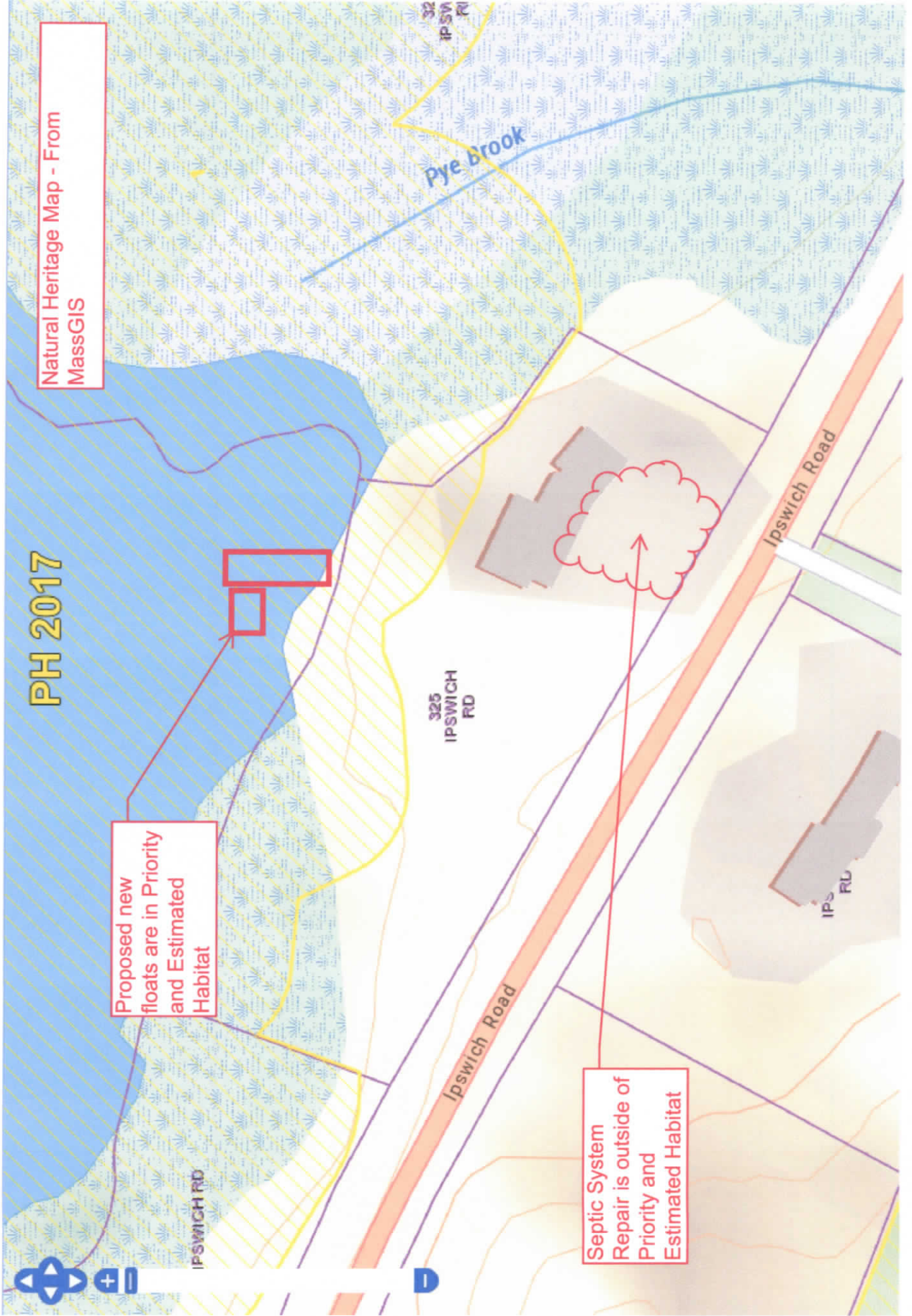
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

USGS The National Map, Orthoimagery, Data refreshed April, 2019



325 Ipswich road, boxford, m:

Zoom to a town



NOTICE OF INTENT APPLICATION (WPA FORM 3)



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Boxford

City/Town

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



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

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

325 Ipswich Road

a. Street Address

Boxford

b. City/Town

01921

c. Zip Code

Latitude and Longitude:

42.6934

d. Latitude

-71.0199

e. Longitude

18, Block 2

f. Assessors Map/Plat Number

15

g. Parcel /Lot Number

2. Applicant:

Jeffrey & Kimberly

a. First Name

Markuns

b. Last Name

c. Organization

325 Ipswich Road

d. Street Address

Boxford

e. City/Town

MA

f. State

01921

g. Zip Code

617-429-5824

h. Phone Number

i. Fax Number

whassupdoc@comcast.net

j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

SAME

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

William

a. First Name

Manuell

b. Last Name

Wetlands & Land Management, Inc.

c. Company

100 Conifer Hill Drive #516

d. Street Address

Danvers

e. City/Town

MA

f. State

01923

g. Zip Code

978-777-0004

h. Phone Number

i. Fax Number

bill@wetlandslm.com

j. Email address

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

\$254.00

a. Total Fee Paid

\$114.50

b. State Fee Paid

\$139.50 plus \$600. local fee

c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

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City/Town

A. General Information (continued)

6. General Project Description:

Install a repair septic system. Install three additional floats to the existing licensed float assemblage.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

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

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

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Essex South

a. County

29196

c. Book

b. Certificate # (if registered land)

60

d. Page Number

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

- Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input checked="" type="checkbox"/> Land Under Waterbodies and Waterways	4 sf 1. square feet 3. cubic yards dredged	2. square feet

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input checked="" type="checkbox"/> Riverfront Area	<u>Pye Brook</u> 1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 21,830+/-
square feet

4. Proposed alteration of the Riverfront Area:

1315+/- a. total square feet 0 b. square feet within 100 ft. 1315+/- - (septic systems are exempt from RA standards.)

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. square feet _____	
	2. cubic yards dredged _____	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet _____	2. cubic yards beach nourishment _____
e. <input type="checkbox"/> Coastal Dunes	1. square feet _____	2. cubic yards dune nourishment _____

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet _____	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet _____	
h. <input type="checkbox"/> Salt Marshes	1. square feet _____	2. sq ft restoration, rehab., creation _____
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet _____	
	2. cubic yards dredged _____	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet _____	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged _____	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet _____	

4. Restoration/Enhancement
 If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW _____ b. square feet of Salt Marsh _____

5. Project Involves Stream Crossings

a. number of new stream crossings _____ b. number of replacement stream crossings _____



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Boxford	
City/Town	

C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

- Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

MassGIS Web site
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review*

- Percentage/acreage of property to be altered:

(a) within wetland Resource Area 4 +/-sf - dock anchors
percentage/acreage

(b) outside Resource Area _____
percentage/acreage

- Assessor's Map or right-of-way plan of site

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

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

(b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_fee_schedule.htm). Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

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

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following
1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/mesa/mesa_exemptions.htm; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)
 2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____
 3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.
3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?
- a. Not applicable – project is in inland resource area only b. Yes No

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

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

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

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



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

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City/Town

C. Other Applicable Standards and Requirements (cont'd)

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
- a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
- a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
- a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
- a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
- b. No. Check why the project is exempt:
1. Single-family house
 2. Emergency road repair
 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

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

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

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Boxford

City/Town

D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Subsurface Sewage Disposal System Upgrade

a. Plan Title

Scanlan Engineering, LLC

James Scanlan, PE

b. Prepared By

c. Signed and Stamped by

2-11-20

20

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

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

E. Fees

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

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

5956

2-17-20

2. Municipal Check Number

3. Check date

5955

2-17-20

4. State Check Number

5. Check date

Kimberly


Markuns

6. Payor name on check: First Name

7. Payor name on check: Last Name

best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

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

1. Signature of Applicant		2. Date	2/18/20
3. Signature of Property Owner (if different)		4. Date	
5. Signature of Representative (if any)	Will-J Mennell	6. Date	2-19-20

For Conservation Commission:

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

For MassDEP:

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

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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

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

A. Applicant Information

NOTICE OF INTENT FEE TRANSMITTAL FORM

(WPA Appendix B)



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

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



A. Applicant Information

1. Location of Project:

325 Ipswich Road Boxford
 a. Street Address b. City/Town
5955 \$114.50
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Jeffrey & Kimberly Markuns
 a. First Name b. Last Name
 c. Organization
325 Ipswich Road
 d. Mailing Address
Boxford MA 01921
 e. City/Town f. State g. Zip Code
617-429-5824 whassupdoc@comcast.net
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

SAME
 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

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



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

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Septic system repair (exempt from RA)	one	\$110	\$110.00
new floats (exempt from RA - will need Ch 91 License)	36 lf	\$4/ lf	\$144.00

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

Total Project Fee:	\$254.00
State share of filing Fee:	a. Total Fee from Step 5 \$114.50
City/Town share of filing Fee:	b. 1/2 Total Fee less \$12.50 \$139.50
	c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and a copy of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

Kimberly A. Markuns
Jeffrey F. Markuns
325 Ipswich Rd.
Boxford, Ma 01921-1505

5-7017/2110

5955

Date 2/17/20

Pay to Commonwealth of Massachusetts \$ 114.50
the Order of
One Hundred Fourteen and 50/100 Dollars

Citizens Bank

Monica Markuns Septic

⑆ 211070175⑆ 1105810434⑆ 5955

© DELUXE ORANGE COUNTY/CHECKS © H. Hargrave (2008) Courtesy of M&S Learning

Kimberly A. Markuns
Jeffrey F. Markuns
325 Ipswich Rd.
Boxford, Ma 01921-1505

5-7017/2110

5956

Date 2/17/20

Pay to Town of Boxford \$ 139.50
the Order of
One Hundred Thirty Nine and 50/100 Dollars

Citizens Bank

Monica Markuns Septic

⑆ 211070175⑆ 1105810434⑆ 5956

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Kimberly A. Markuns
Jeffrey F. Markuns
325 Ipswich Rd.
Boxford, Ma 01921-1505

5-7017/2110

5957

Date 2/17/20

Pay to Town of Boxford \$ 600.00
the Order of
Six hundred and 00/100 Dollars

Citizens Bank

Monica Markuns Septic

⑆ 211070175⑆ 1105810434⑆ 5957

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Security Features Included. Details on Back.

Clearer Service

Security Features Included. Details on Back.

Clearer Service

Security Features Included. Details on Back.

Clearer Service

Filing Fee Calculation

Wetlands Protection Act fees:

36 lf of additional floats (Subject to Ch 91 License) – 36 x \$4	\$144.00
Septic System repair (Exempt from RA)	<u>\$110.00</u>
	\$254.00

Boxford fees:

New floats	\$200.00
Septic System	200.00
495 lf of wetland boundary at \$50/ 100 feet(minus 100 lf)	<u>\$200.00</u>
	\$600.00

$\$254.00 - 25.00 = 229.00/2 = \114.50 to the Commonwealth of MA

$\$114.50 + 25.00 = \139.50 to the Town of Boxford plus \$600.00 local fees (above)

ABUTTER INFORMATION

TOWN OF BOXFORD
ABUTTER LIST

PARCEL # 18-02-15 - 325 IPSWICH ROAD - CONSERVATION COMMISSION 250' plus PARCEL # 14-2 - SPOFFORD POND DIRECT ABUTTERS

PARCEL ID	PARCEL ADDRESS	OWNER 1	OWNER 2	MAILING ADDRESS	CITY/TOWN	STATE	ZIP CODE
14-02-39	HIGHLAND RD	ESSEX COUNTY GREENBELT ASSOC		82 EASTERN AVE	ESSEX	MA	01929
14-02-07	345 IPSWICH RD	WRIGHT DONNA M		345 IPSWICH RD	BOXFORD	MA	01921
14-02-08	351 IPSWICH RD	BRUCE AMANDA	RYAN JOHN PAUL	351 IPSWICH RD	BOXFORD	MA	01921
14-02-09	SPOFFORD POND	BOND CARL & DOROTHY	C/O MRS BARBARA SMIT	526 ROYAL LN	MIDDLETHIAN	TX	76065
15-01-01	50 SPOFFORD RD	MALBON LUKE G	MALBON LINDA J	50 SPOFFORD RD	BOXFORD	MA	01921
15-01-02	38 SPOFFORD RD	GRUNER RONALD H	GRUNER NANCY M	1919 COCOPULUM WAY	NAPLES	FL	34105
15-01-03	32 SPOFFORD RD	CARBERRY WAYNE A & JANET A TE	C/O LINDA LUCY	32 SPOFFORD RD	BOXFORD	MA	01921
18-02-11	IPSWICH RD	TOWN OF BOXFORD	WILDCAT RESERVATION	7A SPOFFORD RD	BOXFORD	MA	01921
18-02-15	325 IPSWICH RD	MARKUNS JEFFREY F	MARKUNS KIMBERLY A	325 IPSWICH RD	BOXFORD	MA	01921
18-02-16	IPSWICH RD	MILNES KATHRYN M		18 CLOVERDALE CT N	PALM COAST	FL	32137
18-02-17	339 IPSWICH RD	RAGONNESE REGINA		339 IPSWICH RD	BOXFORD	MA	01921
18-02-08	336 IPSWICH RD	ROSSI MICHAEL & CRAIG JTWROS	C/O SANDRA ANN ROSSI	336 IPSWICH RD	BOXFORD	MA	01921
18-02-09	326 IPSWICH RD	LEVY WENDY M TR	326 IPSWICH RD TRUST	326 IPSWICH RD	BOXFORD	MA	01921
19-01-01	12 SPOFFORD RD	GIALLOMBARDO ROBERT J TE	GIALLOMBARDO SUSAN R	12 SPOFFORD RD	BOXFORD	MA	01921
19-01-02-2	321 IPSWICH RD	COX LESLIE NYE		321 IPSWICH RD	BOXFORD	MA	01921
19-01-05	322 IPSWICH RD	DOUCETTE MARYELLEN		322 IPSWICH RD	BOXFORD	MA	01921

CERTIFIED COPY



October 30, 2019

Notification to Abutters Under the Massachusetts Wetlands Protection Act

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

- A. The name of the applicant is Jeffrey and Kimberly Markuns
- B. The applicant has filed a Notice of Intent with the Conservation Commission for work subject to jurisdiction under the Wetlands Protection Act (General Laws Chapter 131, Section 40).

Activities Proposed:

Install a repair septic system at the property. Install 3 additional floats in the pond.

- C. The Address of the Lot where the activity is proposed is 325 Ipswich Road
- D. Copies of the Notice of Intent may be examined by appointment at Wetlands & Land Management, Inc between the hours of 9 AM and 3 PM on the following days of the week: M-F
For an appointment, call: (978) 777-0004
This is the applicant's representative.

Name of Representative: Wetlands & Land Management, Inc. – William Manuell

- E. Copies of the Notice of Intent may be obtained from the Town Hall or for a fee from the applicant's representative by calling this telephone number (978)-777-0004 between the hours of 9 AM and 4 PM on the following days of the week: M-F
- F. Information regarding the date, time, and place of the public hearing may be obtained from the Conservation Commission by calling this telephone number 978-887-6000 between the hours of 9AM and 4PM on the following days of the week: M-Thur.

NOTE: Notice of the public hearing, including its date, time and place, will be published at least five (5) days in advance in the Tri-Town Transcript
(name of newspaper)

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

NOTE: You also may contact your local Conservation Commission or the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act.

To contact DEP, call:

Central Region: 508-792-7650

Northeast Region: 978-694-3200

Southeast Region: 508-946-2800

Western Region: 413-784-1100

PROJECT DESCRIPTION

Project Description

Discussion of Proposed Conditions and Wetland Resource Areas at 325 Ipswich Road

Introduction

The Notice of Intent application is for construction of a repair septic system at the site. The owners also request to install three additional floats to their existing licensed float assemblage in order to get to weed free open water during the kayaking season.

The new septic system will replace the existing substandard system. There is no expansion of use or increase in number of bedrooms for the existing house, and the rate of flow will remain the same. All proposed septic system work avoids wetland and flood plain alteration; however, a portion of the septic system site is encumbered by riverfront area. This house was built circa 1949 according to the Town Assessors data. Regulations at 310 CMR 10.58(6) exempt septic system upgrades from the riverfront area requirements for homes built prior to 1996.

The plans have been filed with the Board of Health.

The floats are pre-fabricated aluminum frame and composite decking with float tubs underneath. The present float assemblage is anchored at the shoreline and along each float by means of a galvanized pipe driven through a bracket attached to the float and into the bottom substrate. The applicants propose to add three similar floats. Two will extend the end floats farther from the shore (by 24 additional feet) and the third float extends at a right angle to position the end floats in weed free water. All floats are removed from the pond at the end of the boating season and stored under the applicant's deck.

Site Description

The project site is located at 325 Ipswich Road in Boxford, MA. The project lot size is one acre+/- The project site is an existing residential house lot with a single-family home, lower drive and upper parking area, lawn area and landscaping around the house. Roughly half of this lot remains wooded. The site is serviced by a septic system in the front yard.

Ipswich Road is to the south of the site. The property borders on Spofford Pond to the north. Thick, deep wetlands are located to the east of the site. Pye Brook is the outlet of Spofford Pond and is located within the interior of this deep wetlands area. The land to the west is wooded with another residential home located a couple hundred feet away in that direction.

Wetland Resources at the Site

Spofford Pond abuts the site to the north. Accordingly, there are several wetland resource areas associated with the pond. These include bordering vegetated wetlands, riverfront area, land under water bodies and bordering land subject to flooding.

The proposed floats will be anchored to the pond bottom. This will impact a small amount of land under water bodies.

Bordering Vegetated Wetlands

Wetlands on the site were delineated by Wetlands & Land Management, Inc. in fall 2019. Wetlands on the site were evaluated using delineation methodology established in the Wetlands Protection Act and the Department of Environmental Protection "Delineating Bordering Vegetated Wetlands Handbook" dated 1995, and the US Army Corps of Engineers Manual (1987). These regulations and methodology incorporate the evaluation of hydric soils, predominance of wetland vegetation and wetland hydrology to evaluate the upper limit of vegetated wetlands.

The wetland is marked with blue surveyors flagging labeled A1 through A29. The wetland delineation begins at the edge of Ipswich Road in the front, right corner of the site. Here, the land slopes steeply downhill from the adjacent Ipswich Road.

The delineation trends northerly, initially marking the edge of the deep palustrine marsh on this side of the property. The wetland boundary encounters the edge of the pond near flag A12 and then runs along a narrow shrubby strip of land between the maintained rear yard and the pond edge. The flagging enters the wooded portion of the site at A22 and continues along the base of a steep embankment along the pond edge. The final flag is A29 at the northwest property corner.

A 100-foot buffer zone extends from the wetland boundary. The Boxford Wetlands By-law also has a 25-foot no disturb zone and a 75-foot no-build zone.

Riverfront Area

Pye Brook commences at the outlet of Spofford Pond. This length of brook is shown as an intermittent stream on the USGS map and is not designated as a perennial stream in the Boxford Wetlands By-law. Nevertheless, when a stream is indicated as intermittent on the USGS map, the Reviewer is directed by WPA regulations to evaluate the stream using the USGS StreamStat program. The resultant evaluation shows the stream has a watershed area of 0.62 square miles. The flow duration in the 99th percentile is 0.08 cfs. The regulations direct that if a watershed is greater than 0.5 square miles and the residual flow rate in the 99th percentile is greater than 0.01 cfs, the reach of stream is determined to be perennial. There will be riverfront area associated with the brook.

The thread of the brook is located in the interior of a deep, thickly vegetated wetland. It was impossible to access the brook to define the mean annual high-water line. The thread of the brook is distinct and easily identifiable on Google Earth or MassGIS. The thread of the brook was scaled onto the site plans from MassGIS.

Riverfront area begins at the outlet of the pond. The riverfront area limit at the pond outlet is drawn as a perpendicular line to the pond outlet. The associated 200-foot riverfront area encumbers a portion of the proposed septic system but does not encumber the float area.

The extent of riverfront area illustrated on the plan is approximate. The precise identification of mean annual high-water line is not critical for this project because both aspects of the application are exempt from riverfront area requirements. Septic system upgrades are exempt from riverfront area requirements.

The applicants have a Chapter 91 License for the existing float. The expansion of the float will require a license amendment. Structures subject to Chapter 91 licensing requirements are also exempt for riverfront area requirements.

Bordering Land Subject to Flooding

The FEMA Flood Insurance Rate Map indicates a Zone A 100-year zone without a base flood elevation determined. The extent of 100-year flood plain is scaled onto the site plans from the FEMA maps. The limit of flooding is confined to the rear yard.

Land Under Water Bodies

The portion of land under the water of Spofford Pond is characterized as land under water bodies. The proposed floats will be in the water column above the land under water bodies. The float anchors will have a small impact on this resource area.

Rare Species

According to the MassGIS data layer for the Massachusetts Natural Heritage Atlas of Estimated Habitats of Rare Wetlands Wildlife and Certified Vernal Pools, the property is not mapped as Estimated Habitat of Rare Wetlands Wildlife.

A portion of the site and area surrounding the pond is mapped as Priority Habitat of Threatened or Endangered species.

There are no certified vernal pools on the site.

The Priority Habitat designation will require a MESA Checklist filing with the Natural Heritage Program. Septic system upgrades are exempt from MESA filing requirements, but the float installation is not exempt.

Proposed Work

Septic System Installation

The Notice of Intent application is for installation of a new septic system to service the existing residential home. The system upgrade provides for replacement of the current sub-standard wastewater disposal at the house. The repair consists of replacing the existing septic tank with a new tank/ pump pit combination, installing an advanced treatment Waterloo Bio-filter and a new pressure -dosed leach field. The system is in the front yard, as close to the road as possible. Notwithstanding, the leaching field still falls in the 100-foot buffer zone. All repair components are outside the 25-foot no disturb zone and maintain the Title 5 50-foot setback from wetlands. All the work is outside of bordering land subject to flooding. Portions of the proposed work do occur in riverfront area (but septic systems are exempt from riverfront area requirements) and the leaching field is within the Boxford Wetlands By-law 100-foot exclusion zone.

The system upgrade will feature a new leaching field which is appropriately sized for the flow volume and soil percolation rates. The new leaching field is constructed essentially over the old system. The existing system components will be removed and backfilled with suitable Title 5 material. The new system will be installed by excavating to the proper depth and installing the appropriate leaching distribution network. The system is connected back to the septic tank and Waterloo Bio-filter via a PVC force main sewer pipe.

The septic tank will be installed between the new system and the house. The old tank will be pumped prior to system installation, and then broken and removed. The new tank is then installed at the correct elevation and connected to the existing house sewer. The bio-filter tank is installed next to the septic tank. The bio-filter provides an advanced level of pretreatment prior to discharge to the leaching field. Effluent receives primary settling and treatment in the septic tank. The effluent is pumped/ sprayed into the Waterloo component where the effluent percolates over numerous foam cubes. The effluent is collected at the bottom of this tank where 50% of the effluent is pumped to the leaching field and 50% is returned to the septic tank for additional treatment.

A siltation barrier will be installed to prevent sedimentation to the easterly wetland. The existing house will [prevent any sediment movement toward the pond. All disturbed areas will be loamed and seeded at the conclusion of the project.

Proposed Floats

The Commission has previously approved for installation of several floats in the pond. The shoreline has become progressively weeded up. The applicant proposes to install three additional, similar floats to get out a few feet further to clear water at the end of the float.

The current and proposed floats have aluminum frame and composite decking with 4 float tubs under each float. The floats are installed and removed seasonally. When installed, the floats are secured in

place by several vertical galvanized posts that are embedded a foot or so in the pond bottom. At the end of the season, the posts are removed and the floats are removed from the water. They are stored under the deck, adjacent to the house in the winter season.

The applicant desires to install two 12.2 x 4.2 floats perpendicular to the shore to project out another 24.4 feet from the shore. The third float, similar in size, would be installed parallel to the shore to extend the end floats roughly eight feet to the west. The current end floats would be relocated to the end of the third float. This extends the floats out another 16.6 feet overall.

Resource Area Impacts

There is no alteration of bordering vegetated wetland nor bordering land subject to flooding. Construction of the proposed repair system does occur within buffer zone to the adjacent bordering vegetated wetlands on the adjacent property. To avoid impacts, appropriate erosion controls will be installed as indicated on the permit plan.

The erosion controls shall serve to arrest overland travel of sediment during rain events, and also serve as a visual barrier and physical determination of the limit of work. The siltation barriers will remain in place until the final cover over the septic system is well established.

The septic system upgrade is exempt from riverfront area requirements. Notwithstanding, the system is located as far, logistically as possible from the mean annual high-water line of Pye Brook. The Town is serviced by private wells. The leaching field is situated as close to the road as possible, i.e., as far from the river and pond as possible, but also maintains the required setback from the well on site.

Total ground disturbance in riverfront area is about 1315 square feet. Despite the exemption, the project would be afforded up to 10% or 5000 square feet of riverfront area disturbance without being deemed to have an impact on the riverfront area. The project would be compliant with riverfront area performance standards.

The new system will be installed essentially over the old system location. It appears that no additional tree removal is necessary to install the system upgrade. There will be no change in the existing canopy coverage.

Waiver to install the leach field within the 100-foot Buffer Zone

The environmental and logistical constraints prohibit compliance with this section of the Boxford Wetlands By-law. There is one limited area on the site where a system can be installed and be 100 feet away from wetlands however the 100-foot well setback encumbers most of this area, leaving only a narrow strip of land within a few feet of the front property line. Wetlands confine the system on the north and east sides. The 100-foot well setback encumbers most of the west side of the site. (The designer has to request a waiver from Boxford Board of Health regulations to site the system within 150 feet of the existing well.) The western side of the property has several rock outcrops. This area was avoided for soil testing not only because of the rock

outcrops but also because the area is fully wooded. A waiver is required to install the repair system in the buffer zone.

To support this waiver request, the designer has utilized advanced treatment technology with the Waterloo Biofilter. This technology treats and then re-treats a portion of the effluent stream before disposal to the leaching field. The advanced treatment technology allows for reduction of leach field size in order to minimize incursion into the buffer zone.

There is no other location on the site that can fully comply with the 100-foot setback. Given this is an improvement over current conditions, the applicant requests a waiver from this section of the Wetlands By-law.

Existing Float Pictures

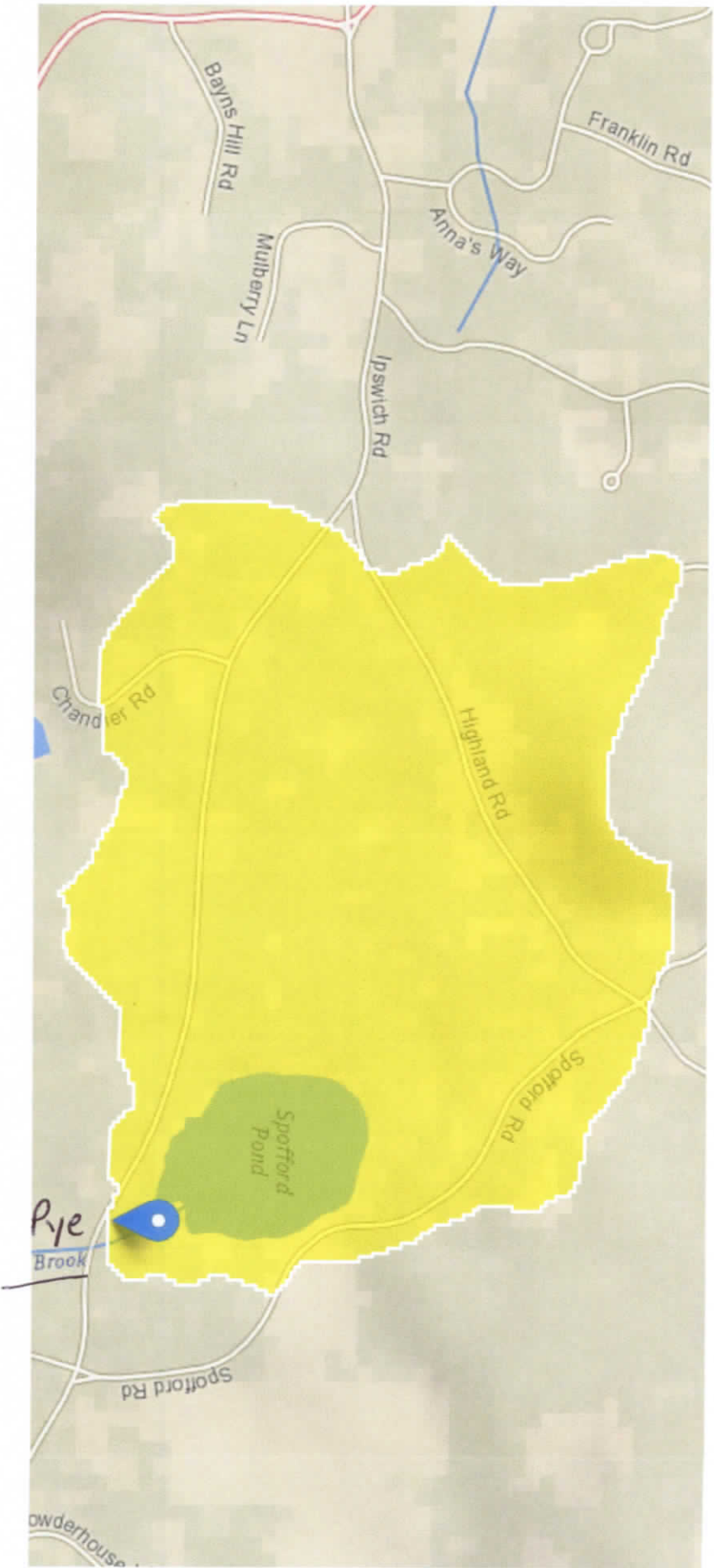


STREAMSTAT INFORMATION

StreamStats Report

Boxford By-laws does not include this reach as perennial

Region ID: MA
Workspace ID: MA20191007202158380000
Clicked Point (Latitude, Longitude): 42.69298, -71.01914
Time: 2019-10-07 16:22:13 -0400



Basin Characteristics

Parameter Code	Parameter Description
----------------	-----------------------

Value	Unit
-------	------

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.62	square miles
DRFTPERSTR	Area of stratified drift per unit of stream length	1.05	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless
BSLDEM250	Mean basin slope computed from 1:250K DEM	3.114	percent

Flow-Duration Statistics Parameters[Statewide Low Flow WRRR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.62	square miles	1.61	149
DRFTPERSTR	Stratified Drift per Stream Length	1.05	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1
BSLDEM250	Mean Basin Slope from 250K DEM	3.114	percent	0.32	24.6

205 mi²

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Flow-Duration Statistics Flow Report[Statewide Low Flow WRRR00 4135]

Statistic	Value	Unit
50 Percent Duration	0.586	ft ³ /s
60 Percent Duration	0.47	ft ³ /s
70 Percent Duration	0.383	ft ³ /s
75 Percent Duration	0.323	ft ³ /s

Statistic	Value	Unit
80 Percent Duration	0.418	ft ³ /s
85 Percent Duration	0.323	ft ³ /s
90 Percent Duration	0.353	ft ³ /s
95 Percent Duration	0.193	ft ³ /s
98 Percent Duration	0.125	ft ³ /s
99 Percent Duration	0.0886	ft ³ /s

70.61 cfs

Flow-Duration Statistics Citations

Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (<http://pubs.usgs.gov/wri/wri004135/>)

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3.7 KM TO INTERSTATE 95
ROWLEY 11 KM

Stream shows
as intermittent

42°
42'30

42°29

42°28

42°27

42°26

40'

42°25