

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

January 24th, 2022

Paxton Conservation Commission
Town Office Building
Paxton, MA 01612

Re: 80 Asnebumskit Road, Paxton
Applicant: Karen Gearin

Subject: Notice of Intent

Dear Commission Members:

Enclosed please find three (3) copies of a Notice of Intent submitted on behalf of the Applicant: Karen Gearin, filed under the Massachusetts Wetlands Protection Act and Town of Paxton Wetlands Protection Bylaw for the above-referenced property. Also enclosed please find a check in the amount of \$67.50 (check #21179) to cover the town share of the filing fee under the Act, a check in the amount of \$105.00 (check #21182) to cover the recording fee, and a check in the amount of \$50.00 (check #21181) to cover the legal ad fee. This filing comprises:

1. This cover letter;
2. The Notice of Intent forms with required attachments;
3. Checks to cover filing fees, legal notice, and recording fee;
4. Certified Abutters List, Form of Abutter Notice (see Affidavit of Service below);
5. Wetland Resource Evaluation by EcoTec, Inc. dated September 7th, 2021; and
6. Proposed Subsurface Sewage Disposal System Repair Plan, by Quinn Engineering dated December 3rd, 2021, signed and stamped by Kevin J. Quinn, PE.

The applicant is seeking an Order of Conditions for replacement of a failing septic system within the 100-foot Buffer Zone of a Bordering Vegetated Wetland. The Board of Health has approved this plan.

One (1) copy of this filing and a payment of \$42.50 (check #21180) has been submitted by certified mail, return receipt requested to the Central Regional Office of the Department of Environmental Protection and one copy of this filing has been submitted to the property owner and applicant.

Affidavit of service to abutters: In compliance with the Act, all abutters to the site will be notified of this filing. The list of abutters, and the form by which the abutters were notified, are included in the filing. Proof of mailing will be provided.

Paxton Conservation Commission
January 24th, 2022
Page 2.

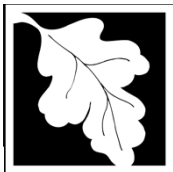
We look forward to meeting with the Commission to discuss this project. If you have any questions, please feel free to contact me at any time.

Sincerely,

A handwritten signature in cursive script that reads "Kate O'Donnell".

Kate O'Donnell, WPIT
Environmental Scientist

KO/E/P/Wet/Paxton Asnebumskit Road 80 NOI cover letter



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

MassDEP File Number
Document Transaction Number
Paxton
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):

<u>80 Asnebumskit Road</u>	<u>Paxton</u>	<u>01612</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:		
<u>26</u>	<u>42.18203 N</u>	<u>-71.54009 W</u>
f. Assessors Map/Plat Number	d. Latitude	e. Longitude
	<u>102B</u>	
	g. Parcel /Lot Number	

2. Applicant:

<u>Karen</u>	<u>Gearin</u>	
a. First Name	b. Last Name	
c. Organization		
<u>80 Asnebumskit Road</u>		
d. Street Address		
<u>Paxton</u>	<u>MA</u>	<u>01612</u>
e. City/Town	f. State	g. Zip Code
<u>508-868-6912</u>	<u>kegearin@gmail.com</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

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

4. Representative (if any):

<u>Kate</u>	<u>O'Donnell</u>	
a. First Name	b. Last Name	
<u>EcoTec, Inc.</u>		
c. Company		
<u>102 Grove Street</u>		
d. Street Address		
<u>Paxton</u>	<u>MA</u>	<u>01612</u>
e. City/Town	f. State	g. Zip Code
<u>508-752-9666 x228</u>	<u>kodonnell@ecotecinc.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$110.00</u>	<u>\$42.50</u>	<u>\$67.50</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

Replacement of a septic system of a single-family house and associated site work ^{within} the 100-foot Buffer Zone to a Bordering Vegetated Wetland.

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

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. 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 CMR10.24(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:

Worcester	
a. County	b. Certificate # (if registered land)
49142	283
c. Book	d. Page Number

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

- 1. 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.
- 2. 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.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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 type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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 type="checkbox"/> Riverfront Area	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: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

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	

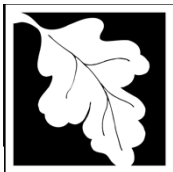
	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	

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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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**

- 9/7/2021
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*

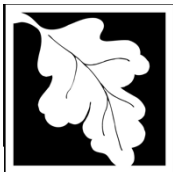
- Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
- Assessor's Map or right-of-way plan of site

- 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 <https://www.mass.gov/endangered-species-act-mesa-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 <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

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, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; 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:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

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.

c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

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.

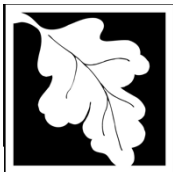
D. Additional Information

- 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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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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.

Proposed Subsurface Sewage Disposal Plan

a. Plan Title

Quinn Engineering, Inc.

Kevin J. Quinn, PE

b. Prepared By

c. Signed and Stamped by

12/24/2021

1"=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:

21179

2. Municipal Check Number

1/11/2022

3. Check date

21180

4. State Check Number

1/11/2022

5. Check date

EcoTec, Inc.

6. Payor name on check: First Name

EcoTec, Inc.

7. Payor name on check: Last Name



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WPA Form 3 – Notice of Intent

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F. Signatures and Submittal Requirements

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

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

_____ 1. Signature of Applicant	_____ 2. Date
_____ 3. Signature of Property Owner (if different) <i>Kate O'Donnell</i>	_____ 4. Date 1/11/2022
_____ 5. Signature of Representative (if any)	_____ 6. Date

For Conservation Commission:

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

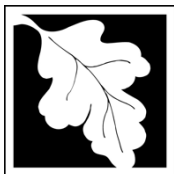
For MassDEP:

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

Other:

If the applicant has checked the "yes" box in 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

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:

80 Asnebumskit Road Paxton
 a. Street Address b. City/Town
 State: 21180, Local: 21179 \$42.50 (state), \$67.50 (local)
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Karen Gearin
 a. First Name b. Last Name
 c. Organization
 80 Asnebumskit Road
 d. Mailing Address
 Paxton MA 01612
 e. City/Town f. State g. Zip Code
 508-868-6912 kegearin@gmail.com
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

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
Category 1e	1	\$110.00	\$110.00

Step 5/Total Project Fee:	<u>110.00</u>
----------------------------------	---------------

Step 6/Fee Payments:

Total Project Fee:	<u>\$110.00</u>
State share of filing Fee:	<u>\$42.50</u>
City/Town share of filing Fee:	<u>\$67.50</u>

a. Total Fee from Step 5
b. 1/2 Total Fee **less** \$12.50
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.)

21179

ECOTEC, INC.
102 GROVE STREET
WORCESTER, MA 01605
(508) 752-9666

BayState
Savings Bank
The Community Bank of Choice
53-7102/2113



1/11/2022

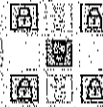
PAY TO THE
ORDER OF Town of Paxton

\$ **67.50

Sixty-Seven and 50/100*****

DOLLARS

Town of Paxton



[Handwritten Signature]
AUTHORIZED SIGNATURE

MEMO

80 Asnebumskit Road, Paxton, NOI - WPA Fee

21180

ECOTEC, INC.
102 GROVE STREET
WORCESTER, MA 01605
(508) 752-9666

BayState
Savings Bank
The Community Bank of Choice
53-7102/2113



1/11/2022

PAY TO THE
ORDER OF Commonwealth of Massachusetts

\$ **42.50

Forty-Two and 50/100*****

DOLLARS

Commonwealth of Massachusetts



[Handwritten Signature]
AUTHORIZED SIGNATURE

MEMO

80 Asnebumskit Road, Paxton, NOI - WPA Fee

21182

ECOTEC, INC.
102 GROVE STREET
WORCESTER, MA 01605
(508) 752-9666

BayState
Savings Bank
The Community Bank of Choice
53-7102/2113



1/11/2022

PAY TO THE
ORDER OF Town of Paxton

\$ **105.00

One Hundred Five and 00/100*****

DOLLARS

Town of Paxton



[Handwritten Signature]
AUTHORIZED SIGNATURE

MEMO

80 Asnebumskit Road, Paxton, NOI - recording fee

ECOTEC, INC.
102 GROVE STREET
WORCESTER, MA 01605
(508) 752-9666

BayState
Savings Bank
The Community Bank of Choice
53-7102/2113



1/11/2022

PAY TO THE
ORDER OF Town of Paxton

\$ **50.00

Fifty and 00/100*****

DOLLARS

Town of Paxton

MEMO

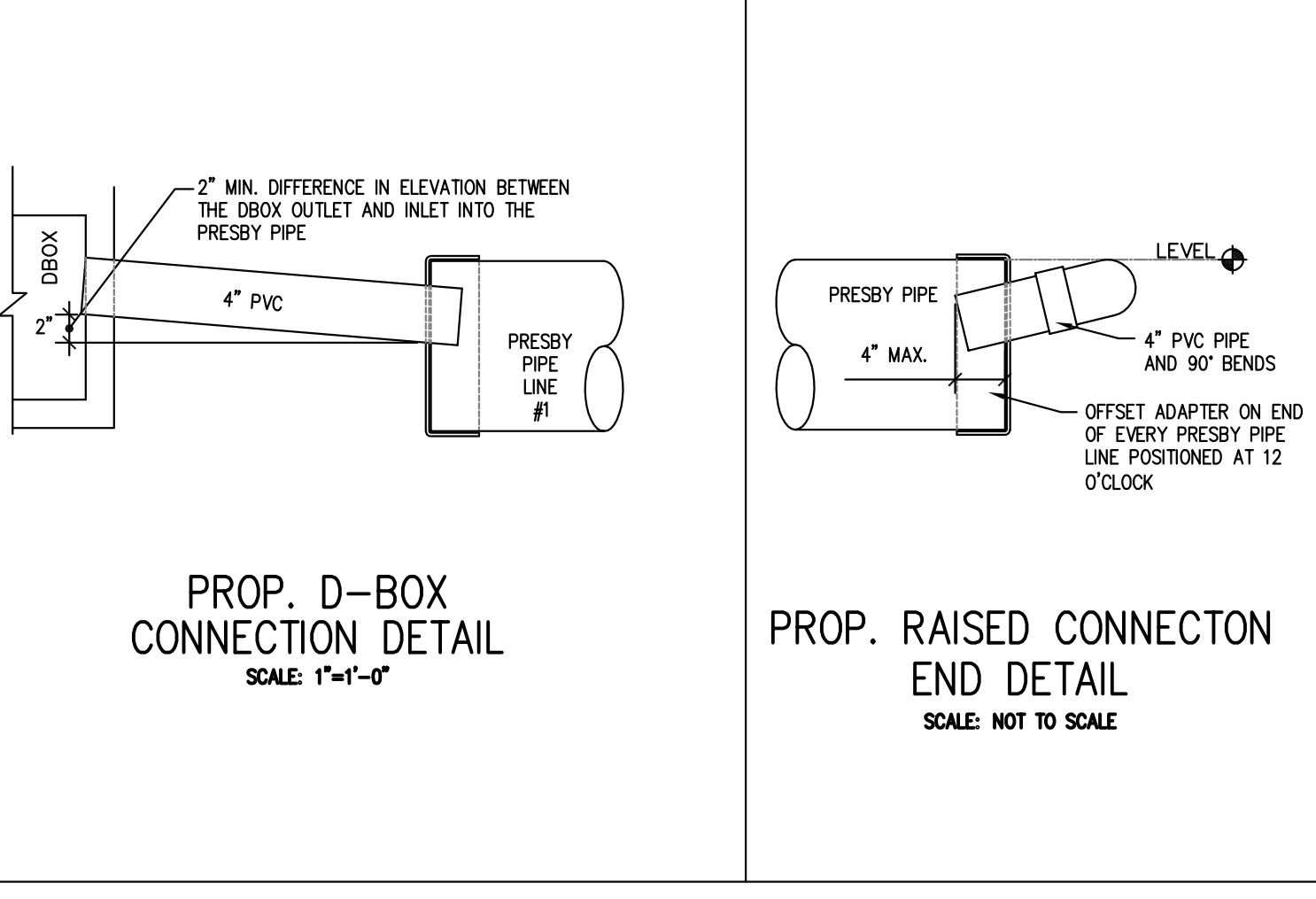
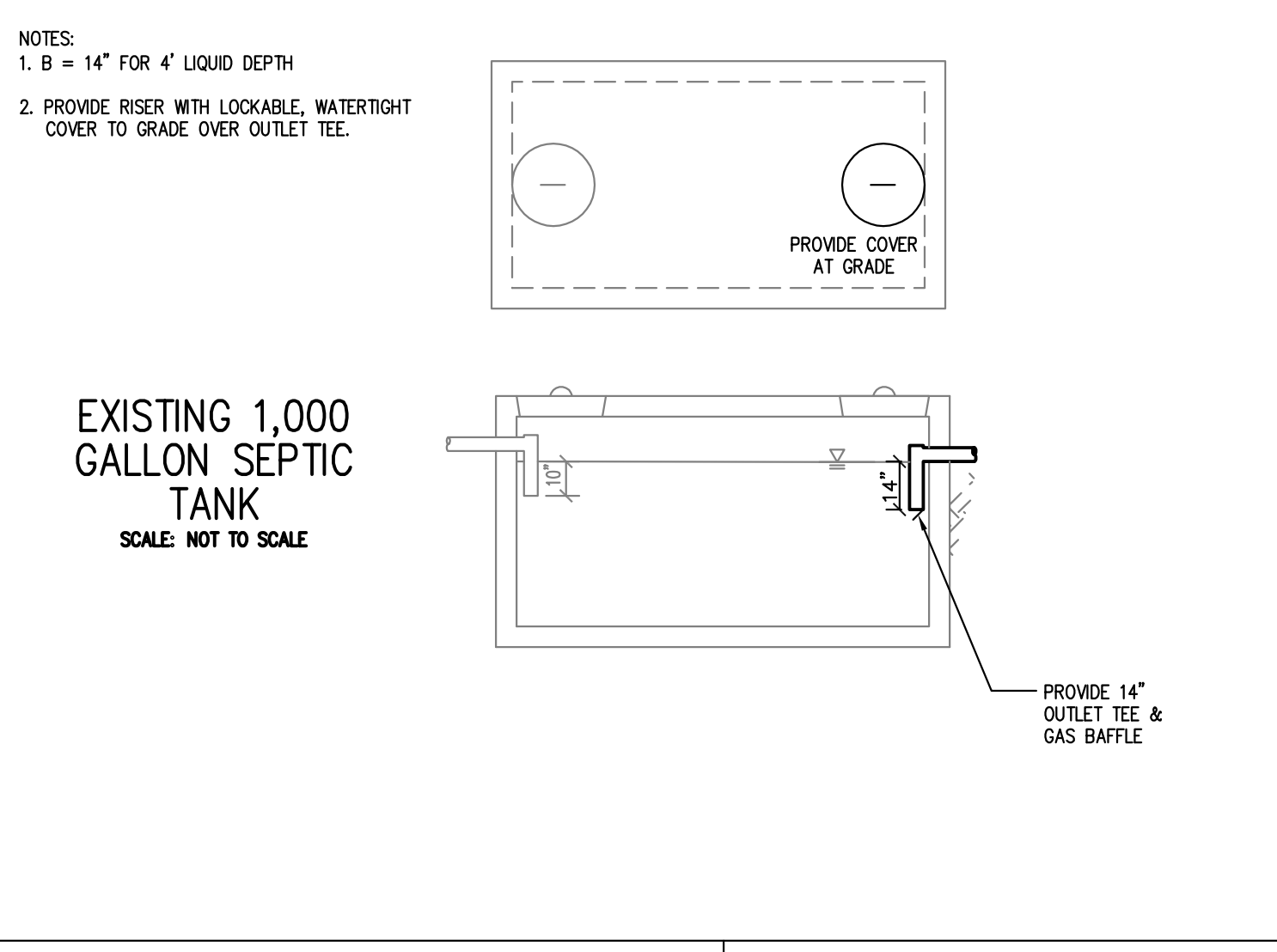


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AUTHORIZED SIGNATURE

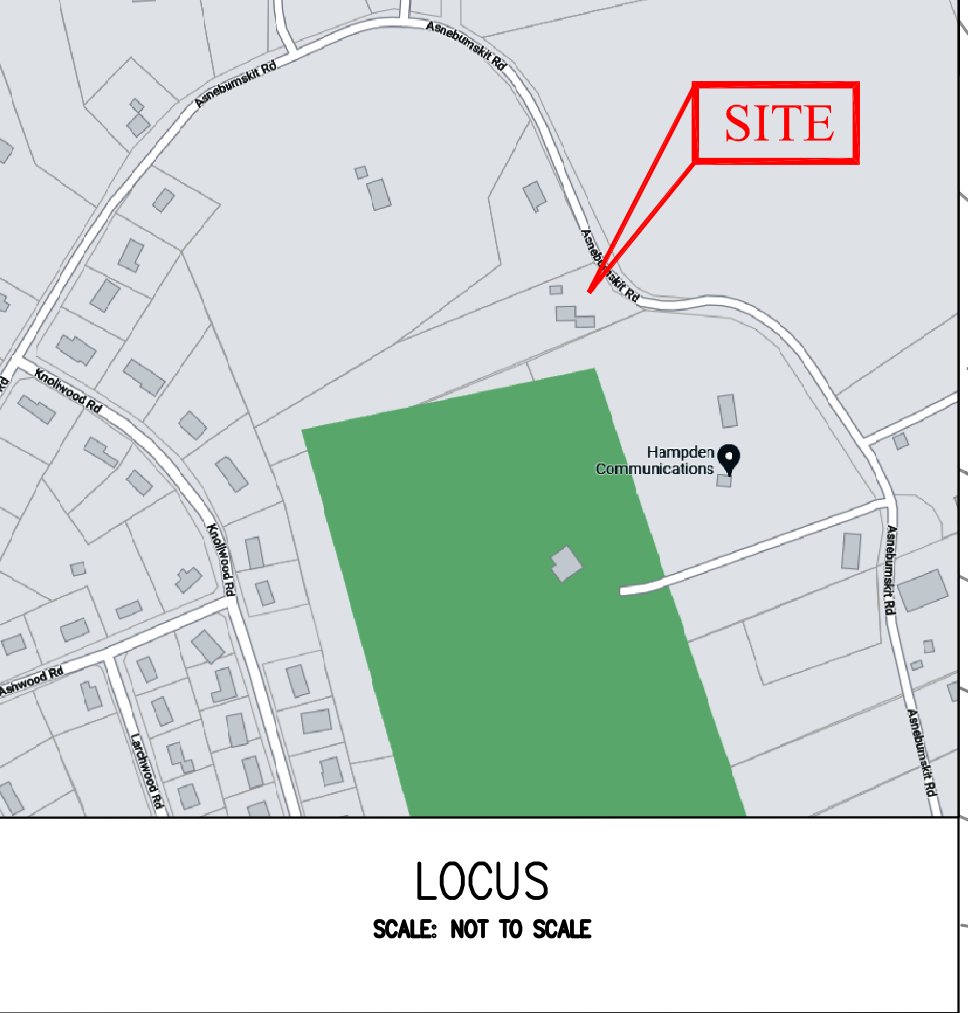
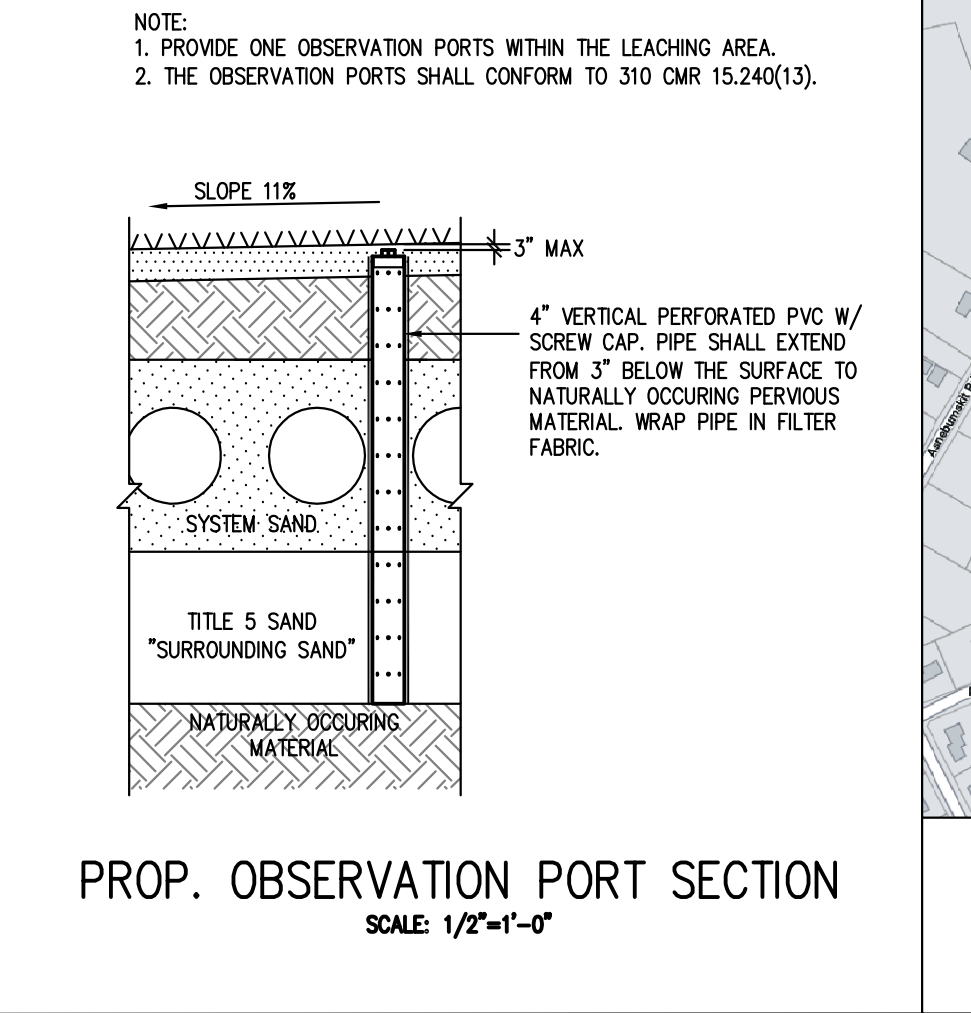
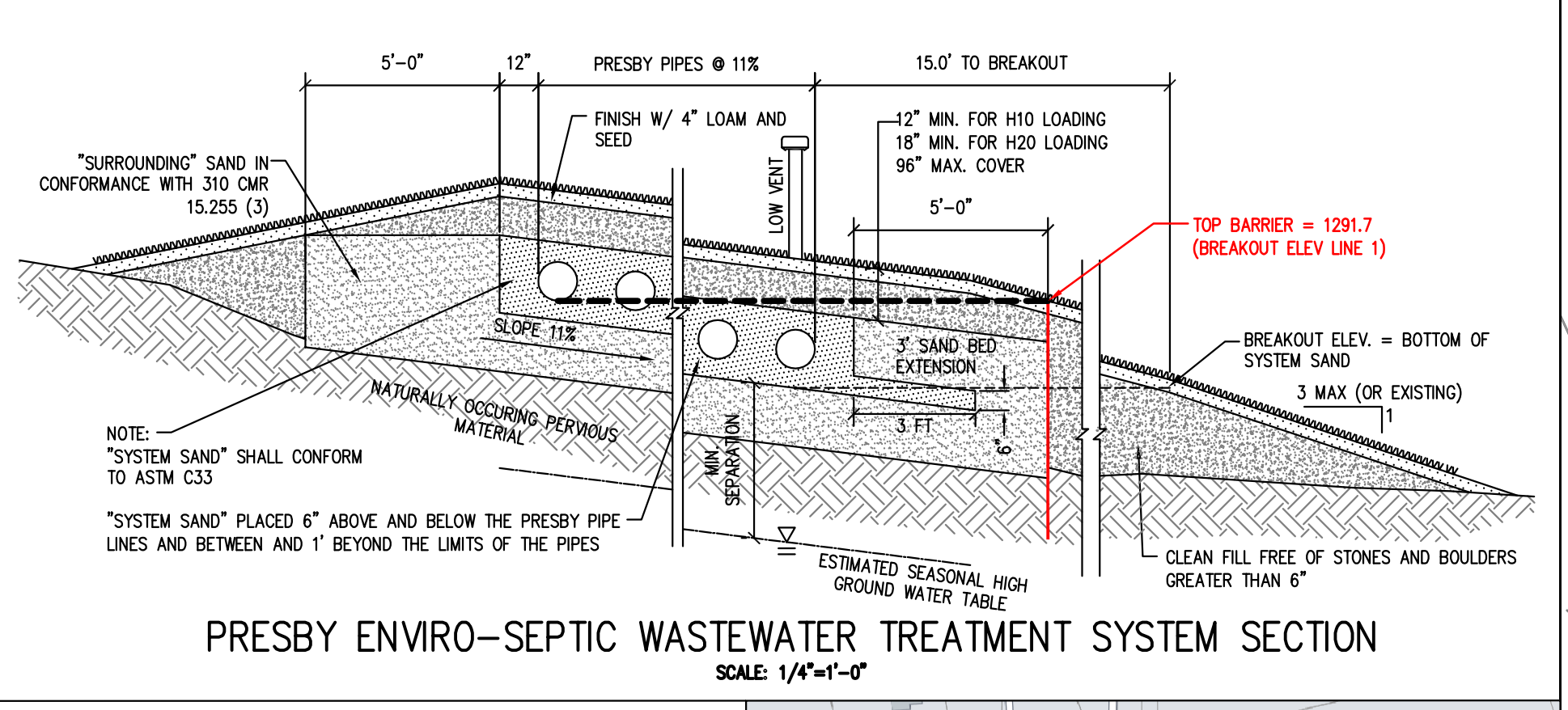
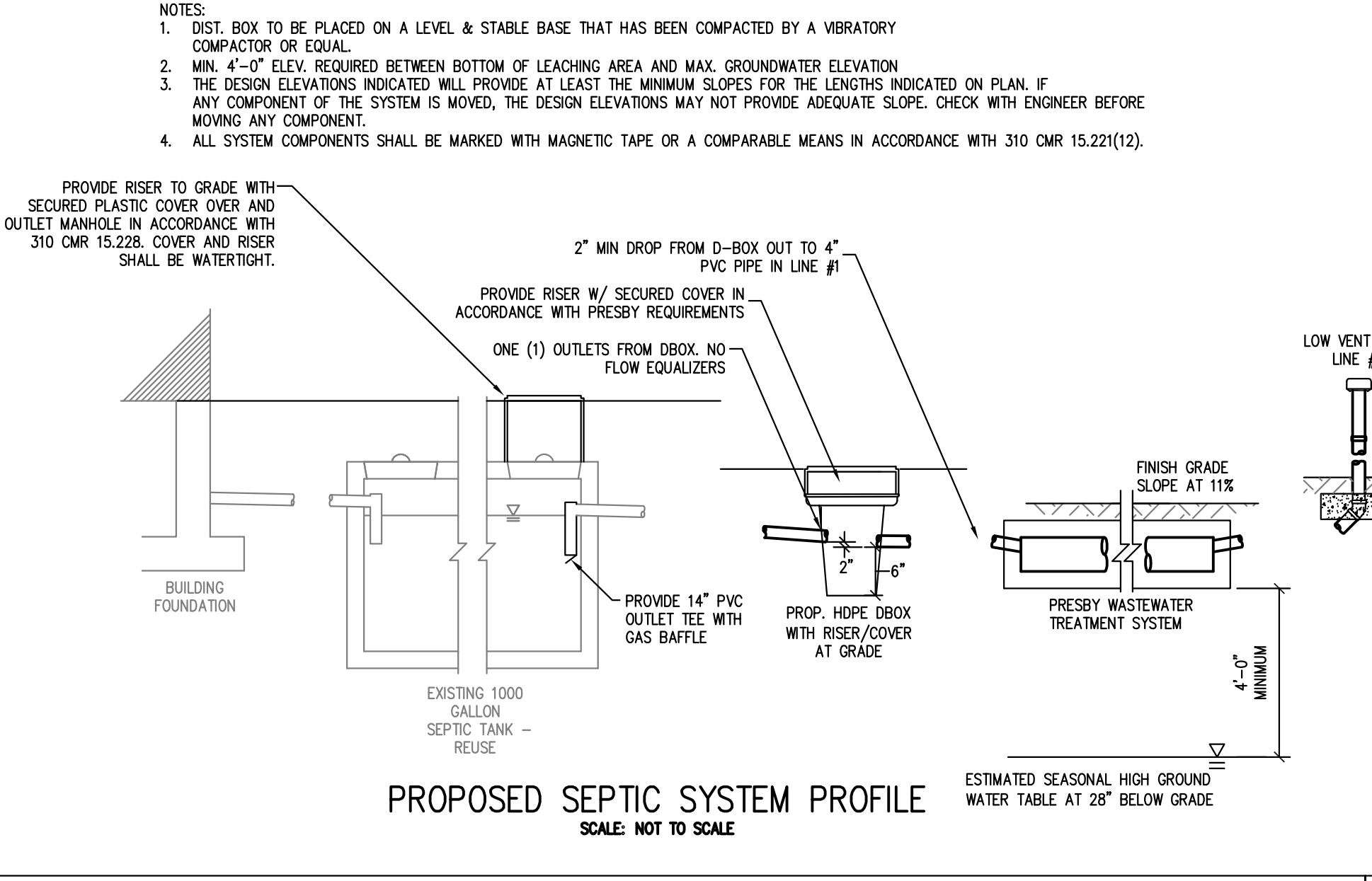
40 Asnebumskit Road, Paxton, MA - legal ad

Security features. Details on back.



SYSTEM NOTES:

- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO VERIFY THAT THE CONSTRUCTION PLANS ARE THE MOST CURRENT REVISION.
- ALL MODIFICATIONS TO THIS PLAN MUST BE PRE APPROVED IN WRITING BY THE DESIGN ENGINEER AND THE LOCAL BOARD OF HEALTH.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE LOCAL BOARD OF HEALTH AND THE STATE ENVIRONMENTAL CODE TITLE 5 (310 CMR 15.000) & THE MANUFACTURER'S SPECIFICATIONS.
- SEVENTY TWO HOURS PRIOR TO COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY DIG-SAFE AT 811. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF NEW UTILITIES WITHIN THE VICINITY OF EXISTING UTILITIES (UNDERGROUND AND OVERHEAD) WITH THE APPROPRIATE UTILITY PROVIDER.
- EXISTING UTILITY LOCATIONS ARE APPROXIMATE ARE TO BE FIELD VERIFIED. QUINN ENGINEERING, INC. DOES NOT WARRANT THAT ALL EXISTING UTILITIES HAVE BEEN INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE EXISTING UTILITY LOCATIONS AND ENSURING THAT THE PROPOSED WORK DOES NOT CONFLICT WITH THE EXISTING UTILITIES (SHOWN OR NOT SHOWN).
- THE SYSTEM WAS NOT DESIGNED TO FACILITATE A GARBAGE DISPOSAL.
- A SURVEYOR REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS SHALL STAKE OUT THE SYSTEM LOCATION AND SHALL PROVIDE AS-BUILT LOCATION AND ELEVATIONS TO QUINN ENGINEERING, INC. THE INSTALLER SHALL NOT COVER THE SYSTEM OR PIPING UNTIL QUINN ENGINEERING, INC. VERIFIES FROM THE AS-BUILT INFORMATION PROVIDED THAT THE SYSTEM LOCATIONS AND ELEVATIONS ARE SUITABLE.
- ALL PORTIONS OF THE FILL, A AND B SOIL HORIZONS SHALL BE REMOVED FROM WITHIN THE LIMITS OF THE LEACHING FACILITY AND FOR A DISTANCE OF FIVE FEET IN ALL DIRECTIONS THEREFROM.(310 CMR 15.255 (5)). (SEE DEEP HOLE DATA FOR SOIL HORIZON INFORMATION.)
- WHERE A SEWAGE DISPOSAL SYSTEM IS TO BE CONSTRUCTED IN FILL, THE FILL SHALL BE PLACED AND COMPACTED IN 12 INCH LIFTS OR ALLOWED TO SETTLE FOR A MINIMUM OF ONE YEAR. THE FILL MATERIAL MUST CONFORM WITH THE LOCAL BOARD OF HEALTH AND STATE ENVIRONMENTAL CODE TITLE 5 SECTION 15.255.
- ALL INTERIOR PLUMBING SHALL BE CONNECTED TO PROPOSED LEACHING FACILITY WITH THE EXCEPTION OF WATER SOFTENING OR CONDITIONING SYSTEMS, BACKWASH FROM FILTRATION SYSTEMS, OR FLOOR DRAINS.
- THE INSTALLER SHALL SUBMIT TO THE ENGINEER A GRADATION ANALYSIS FOR THE FILL WITHIN THE SYSTEM TO DEMONSTRATE CONFORMANCE WITH 310 CMR 15.255(3) FOR "TITLE 5 FILL" & CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS FOR THE "SYSTEM SAND" PRIOR TO PLACING THE FILL. THE SYSTEM INSTALLATION SHALL BE INSPECTED BY THE LOCAL BOARD OF HEALTH AT THE MILESTONES AS DETERMINED BY THE LOCAL BOARD OF HEALTH.
- THE INSTALLER SHALL NOTIFY QUINN ENGINEERING, INC. AT LEAST 24 HOURS IN ADVANCE OF REQUESTING INSPECTIONS. QUINN ENGINEERING, INC. SHALL CONDUCT INSPECTIONS AT THE FOLLOWING MILESTONES:
 - EXCAVATION COMPLETE - PRIOR TO PLACING FILL
 - INSTALLATION OF PIPING
 - FINISH GRADING COMPLETE
 - COMPLETE STABILIZATION
- ALL SYSTEM PIPING SHALL BE MARKED WITH MAGNETIC MARKING TAPE IN ACCORDANCE WITH 310 CMR 15.221 (12).
- THE SYSTEM OWNER SHALL HAVE A SEPTAGE HANDLER, LICENSED BY THE LOCAL BOARD OF HEALTH, PUMP THE SEPTIC TANK IN ACCORDANCE WITH 310 CMR 15.351. ALL COMPONENTS OF THE SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CMR 15.351. THE SYSTEM MANUFACTURER'S REQUIREMENTS OR OTHER APPLICABLE SECTION OF 310 CMR 15.
- MACHINERY WHICH MAY CRUSH OR DISTURB THE PIPE SHALL NOT BE ALLOWED ON THE DISPOSAL AREA.
- THE CONSTRUCTION OF PERMANENT STRUCTURES UPON THE DISPOSAL SYSTEM AND/OR RESERVE AREA IS NOT ALLOWED.



PRESBY LEACHING SYSTEM NOTES:

- INSTALLATION, MAINTENANCE, MONITORING, REPORTING, ETC. SHALL BE IN ACCORDANCE WITH THE REMEDIAL USE CERTIFICATION ISSUED BY DEP DATED OCTOBER 2019 AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- MASS DEP AND PRESBY REQUIRE ALL DESIGNERS AND INSTALLERS TO BE CERTIFIED. SYSTEM TO BE INSTALLED IN ACCORDANCE WITH PRODUCT DESIGN AND INSTALLATION MANUAL, STATE AND LOCAL REGULATIONS. FOR PRODUCT INFORMATION OR THE NEAREST DEALER CONTACT PRESBY.
- INSTALLERS OF PRESBY SYSTEMS SHALL PROVIDE OWNER, MANUFACTURER, AND THE LOCAL APPROVING AUTHORITY WITH A COPY OF A COMPLETED "SYSTEM INSTALLATION REPORT FORM" FOR EACH NEW OR REMEDIAL SYSTEM INSTALLED.
- ALL SYSTEMS SHALL BE DESIGNED AND INSTALLED USING DISTRIBUTION BOXES AS INSPECTION PORTS. THE OUTLET OF THE D-BOX SHALL BE AT LEAST 2" ABOVE THE INLET OF THE HIGHEST PRESBY LINE WITH THE CONNECTING PIPE SLOPE NOT LESS THAN 2%.
- THE MINIMUM TOTAL DEPTH OF COVER ON PRESBY LINES IS 10': 6" OF SYSTEM SAND PLUS 4" OF TOPSOIL. PRESBY PIPES WITH 12" OF STRUCTURAL COVER IS DESIGNED FOR H-10 LOADING, AND PRESBY PIPE WITH 16" OF STRUCTURAL COVER IS DESIGNED FOR H-20 LOADING. THE USE OF PRESSURE DISTRIBUTION LINES IN PRESBY WASTEWATER TREATMENT SYSTEMS IS PROHIBITED.
- SYSTEMS INCORPORATING PUMPS TO GAIN ELEVATION MUST USE DIFFERENTIAL VENTING AND VELOCITY REDUCTION TO CONTROL LIQUID FLOW. VELOCITY REDUCTION MAY BE ACCOMPLISHED THROUGH THE USE OF A DISTRIBUTION BOX WITH A TEE OR 90° ELBOW AT THE FORCE MAIN OUTLET.
- EACH PRESBY SYSTEM MUST BE INSTALLED WITH VENTING AT THE END OF EACH D-BOX LINE, SECTION OR SERIAL BED. VENT MANIFOLDS MAY BE USED TO CONNECT MULTIPLE VENTS TO ONE VENT OUTLET.
- EFFLUENT TEE FILTERS WILL NOT BE REQUIRED FOR SEPTIC TANKS USED IN GRAVITY PRESBY SYSTEMS.
- PRESBY SYSTEMS MAY BE INSTALLED IN AN AREA UP TO 40X SMALLER THAN A CONVENTIONAL TITLE 5 BED DESIGNED IN ACCORDANCE WITH 310 CMR 15.252. CURRENTLY MASSACHUSETTS LIMITS ALL SYSTEMS TO A MINIMUM BED SIZE OF 400 SF.
- ALL CONFIGURATIONS OF PRESBY SYSTEM REQUIRE A MINIMUM OF 6" OF SYSTEM SAND SURROUNDING THE CIRCUMFERENCE OF THE PIPE, AND 12" OF SAND BEYOND ALL PIPE ENDS AND THE OUTER PIPE ROWS (FIRST & LAST). ASTM STANDARD: C-33 (CONCRETE SAND) MEETS THE REQUIREMENTS FOR SYSTEM SAND.
- SAND BEDS SLOPING 10% OR LESS REQUIRE THE SYSTEM SAND AREA TO EXTEND A MINIMUM OF 1 FOOT AROUND THE PERIMETER OF THE PRESBY PIPE. (SEE EFFLUENT DISPOSAL AREA CROSS SECTION DETAIL).
- SAND BEDS SLOPING GREATER THAN 10% REQUIRE THE SYSTEM SAND AREA TO EXTEND A MINIMUM OF 1 FOOT AROUND THE PERIMETER OF THE PRESBY PIPE PLUS AN ADDITIONAL 3 FOOT EXTENSION SHALL BE PROVIDED ON THE DOWNSLOPE SIDE. (SEE EFFLUENT DISPOSAL AREA CROSS SECTION DETAIL).
- A COMBINATION DISTRIBUTION IS REQUIRED FOR SYSTEMS WITH GREATER THAN 500GPD. TO PREVENT MOVEMENT, BE SURE DISTRIBUTION BOX IS PLACED ON A STABLE SOIL BASE OR CONCRETE PAD.
- ALL DISTRIBUTION BOXES THAT DIVIDE EFFLUENT FLOW IN PUMP OR GRAVITY SYSTEMS REQUIRE FLOW EQUALIZERS IN THEIR OUTLETS. MOST FLOW EQUALIZERS ARE LIMITED TO A MAXIMUM OF 10 GALLONS/MINUTE IN GRAVITY SYSTEMS AND 20 GALLONS/MINUTE IN PUMPED SYSTEMS.
- DO NOT INSTALL SYSTEM ON FROZEN GROUND OR LEAVE SYSTEM UNCOVERED FOR EXTENDED PERIODS OF TIME.

DESIGN CRITERIA:

RESIDENTIAL LOADING:
 3 BEDROOMS
 30 MPI LAB TESTED
 SOIL GROUP: CLASS II
 SYSTEM SLOPE: 11.0 %
 GARBAGE DISPOSAL / GRINDER: NOT ALLOWED
 PIPE ROW LENGTH: 50 FT
 ENVIRO-SEPTIC PIPE REQ'D: 210 FT
 ENVIRO-SEPTIC PIPE PROVIDED: 250 FT
 C/L TO C/L PIPE SPACING: 2.0 FT
 NUMBER OF SECTIONS: 1
 NUMBER OF PIPE ROWS: 5 ROWS
 MIN SAND AREA REQ'D: 800 SQ FT
 SAND AREA PROVIDED: 728 SQ FT
 SYSTEM SAND LENGTH: 52 FT
 SYSTEM SAND WIDTH: 14 FT (INCL 3' EXTENSION)

LEACHING AREA REQUIRED UNDER TITLE 5:
 330 GPD/0.33 GPD/S.F. = 1000 S.F.
 (PRESBY SYSTEMS ARE REQUIRED TO BE NO LESS THAN 60% OF THE AREA OF A PIPE AND AGGREGATE SYSTEM AND NO LESS THAN 400 S.F.)

728 S.F. PROVIDED > (1000 S.F.)/(60%) OK
 728 S.F. PROVIDED > 600 S.F. REQ'D OK

DESIGN ELEVATION (HIGHEST EXISTING) = 1290.00'
 RECORDED DEPTH TO SEASONAL HIGH GROUNDWATER = 28 INCHES
 SEPARATION PROVIDED TO HIGH GROUNDWATER = 4 FEET
 C-33 SYSTEM SAND BEYOND HIGHEST ROWS = 1 FT
 MATERIAL COVER OVER ENVIRO-SEPTIC PIPES = 10 INCHES
 SYSTEM SLOPE = 11.0 %
 CENTER-TO-CENTER SPACING = 2.0 FT
 NUMBER OF ROWS = 5
 DROP IN ELEVATION FROM PIPE TO PIPE = 0.22 FT
 OUTSIDE-TO-OUTSIDE PIPE LAYOUT WIDTH OF SYSTEM = 9.0 FT
 TOTAL SYSTEM SAND WIDTH = 11.0 + 3.0 FT = 14.0 FT
 TOTAL SYSTEM SAND LENGTH = 52 FT

NOTES:

- PROPERTY INFORMATION:
 APPLICANT: KAREN GEARIN
 ADDRESS: 80 ASNEBUMSKIT ROAD
 ASSESSORS REF: 26/102/B
 DEED REF: BOOK 4842 PAGE 283
- THERE ARE RESOURCE AREAS WITHIN 100' OF THE PROPOSED SAS INDICATED ON WFP FROM COMMUNITY PANEL MAPS.
- NO PORTION OF THE PROPOSED WORK FALLS WITHIN A MAPPED ESTIMATED HABITAT OF RARE WILDLIFE OR WITHIN A PRIORITY HABITAT OF RARE SPECIES.
- A PORTION OF THE PROPOSED SITE IS LOCATED WITHIN A ZONE A OF A SURFACE WATER PROTECTION AREA. THE SITE IS IN A ZONE II OF A WELHEAD PROTECTION AREA. THE SITE IS WITHIN THE MAPPED OUTSTANDING RESOURCE WATER.
- CONSERVATION APPROVAL IS REQUIRED FOR THE WORK SHOWN ON THIS PLAN.

COMPONENT ELEVATIONS

DBOX OUT	1292.95
DBOX IN	1293.12
INV TANK OUT	HOLD EXISTING
INV TANK IN	HOLD EXISTING
FS OVER TANK	HOLD EXISTING
INV HOUSE OUT	1294.39± HOLD

FIELD ELEVATIONS

ROW #	1	2	3	4	5
FINISH GRADE (SYSTEM SLOPE = 11%)	1294.17	1293.95	1293.73	1293.51	1293.29
TOP OF ENVIRO-SEPTIC PIPE	1293.17	1292.95	1292.73	1292.51	1292.29
4" PVC INVERT INTO PIPE	1292.75	1292.53	1292.31	1292.09	1291.87
BOTTOM OF ENVIRO-SEPTIC PIPE	1292.17	1291.95	1291.73	1291.51	1291.29
BOTTOM OF C33 SYSTEM SAND (=BREAKOUT)	1291.67	1291.45	1291.23	1291.01	1290.79

SOIL TESTING

DATE PERFORMED: 10/3/21
 BY: SHELLEY HULTGREN
 WITNESS: WAYNE CURRAN, RS
 PERC RATE: LAB TESTED, CLASS II, 30 MPI EQUIVALENT

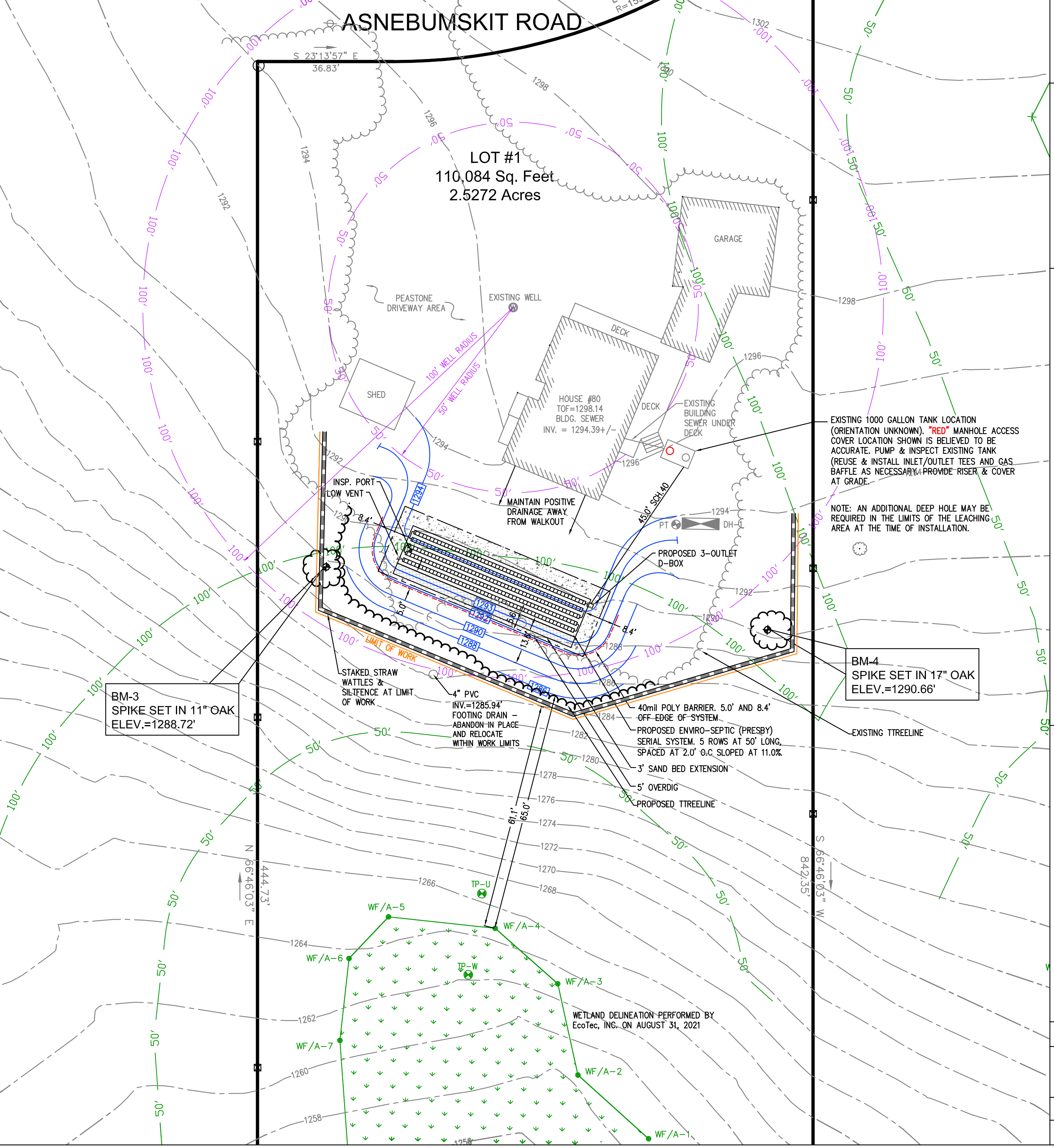
DH-1 SURFACE

L 10YR3/3	A 0-8
SL 10YR5/6	B 8-22
SL 2.YY5/6	C 22-58

MOTTLES @ 28"
 WEEP/WATER @ 58"
 NO REFUSAL

LUA REQUESTS:

- LESS THAN 100' FROM A WELL TO SAS - 64.8' PROVIDED
- LESS THAN 100' FROM WETLANDS BORDERING SURFACE WATER SUPPLY TO SAS - 81.4' PROVIDED



DIG SAFE

REVISIONS:

NO.	DATE	REVISION
3.	12/24/21	REVISE FOOTING DRAIN NOTE
2.	12/23/21	ADD EX. & PROP. TIE LINES
1.	12/17/21	ADD LUA REQUESTS

OWNER: KAREN GEARIN, 80 ASNEBUMSKIT ROAD, PAXTON, MA 01912
 APPLICANT: KAREN GEARIN, 80 ASNEBUMSKIT ROAD, PAXTON, MA 01912
 DESIGNER: KEVIN J. QUINN CIVIL #33922

Notification of Abutters Under the
Massachusetts Wetlands Protection Act and the Town of Paxton Wetland Bylaw

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

- A. The name of the applicant is Karen Gearin.
- B. The applicant has filed a Notice of Intent with the Conservation Commission for the municipality of Paxton seeking permission to replace a septic system in the 100-foot buffer zone to an Area Subject to Protection Under the Wetlands Protection Act (General Laws Chapter 131, Section 40) and the Town of Paxton Wetlands Bylaw.
- C. The address where the planned activity will take place is 80 Asnebumskit Road.
- D. Copies of the Notice of Intent may be examined and obtained by making an appointment at EcoTec, Inc., 102 Grove Street, Worcester, MA, during regular business hours.

For more information call Kate O'Donnell of EcoTec at (508) 752-9666 x228 to make an appointment to review the filing materials. This is the applicant's representative.

- E. Information regarding the date, time and place of the public hearing may be obtained from EcoTec, Inc., by calling this telephone number (508) 752-9666 during regular business hours, or by calling the Paxton Conservation Commission: (508) 753-2803 ext. 11

NOTE: Notice of the public hearing, including the date, time and place will be published at least five (5) days in advance in the Landmark, Worcester Telegram, or other local newspaper.

NOTE: Notice of the public hearing, including the 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



Town of Paxton
Board of Assessors
697 Pleasant Street
Paxton, MA 01612
(508) 799-7231 – phone
(508) 797-0966 – fax

January 20, 2022

CERTIFIED ABUTTERS LIST FOR Map 26, Lot 102B

map_par_id	site_addr	owner1	own_addr	own_city	own_state	own_zip
26/102C	78 ASNEBUMSKIT RD	MORTIMER WILLIAM R & EMILY K	78 ASNEBUMSKIT RD	PAXTON	MA	01612
26/102	82 ASNEBUMSKIT RD	JACKSON KURT R	82 ASNEBUMSKIT RD	PAXTON	MA	01612
26/102A	60 ASNEBUMSKIT RD	HODGSON CATHARINE H	60 ASNEBUMSKIT RD	PAXTON	MA	01612
26/102Y	KNOLLWOOD RD	PAXTON TOWN OF	697 PLEASANT ST	PAXTON	MA	01612
26/90	5 KNOLLWOOD RD	SLATKIN CHARLES H & MARCIA R	5 KNOLLWOOD ROAD	PAXTON	MA	01612
26/106A	87 ASNEBUMSKIT RD	SANDBERG KERRI A	77 ASNEBUMSKIT RD	PAXTON	MA	00612
26/106	77 ASNEBUMSKIT RD	SANDBERG KERRI A	77 ASNEBUMSKIT RD	PAXTON	MA	01612
26/91	9 KNOLLWOOD RD	GAUDET ANDRE J	9 KNOLLWOOD RD	PAXTON	MA	01612
26/92	11 KNOLLWOOD RD	MCINTYRE JEAN MARY ESTATE OF	11 KNOLLWOOD RD	PAXTON	MA	01612

Kateri M. Clute

Principal Assessor, Town of Paxton
 697 Pleasant St., Paxton, MA 01612
 508/799-7231 Ext 16, Fax 508/797-0966
kclute@townofpaxton.net

EcoTec, Inc.
ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

September 7, 2021

Bob Derosier
Dig In Deep
85 Laurel Street,
Paxton, MA 01612

RE: Wetland Resource Evaluation, Portion of 80 Asnebumskit Road, Paxton, MA.

Dear Mr. Derosier:

On August 31st, 2021, EcoTec, Inc. inspected a portion of the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the “Act”) and its implementing regulations (310 CMR 10.00 *et seq.*; the “Regulations”); (2) the Town of Paxton Wetlands Protection Bylaw and its implementing regulations; and (3) the U.S. Clean Water Act (i.e., Section 404 and 401 wetlands). Art Allen and Kate O’Donnell conducted the inspection.

The subject site consists of a 1-acre portion of a 2.5-acre parcel located in Paxton. The upland portions of the site consist of a single-family dwelling, driveway, lawn, and undeveloped forested land. Plant species observed include northern red oak (*Quercus rubra*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), and shag-bark hickory (*Carya ovata*) trees and/or saplings; and hay-scented fern (*Dennstaedtia punctilobula*) ground cover. The wetland resources observed on the site are described below.

Methodology

The site was inspected, and areas suspected to qualify as wetland resources were identified. The boundary of Bordering Vegetated Wetlands and, in the absence of Bordering Vegetated Wetlands, Bank was delineated in the field in accordance with the definitions set forth in the regulations at 310 CMR 10.55(2)(c) and 310 CMR 10.54(2). Section 10.55(2)(c) states that “The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.” Section 10.54(2)(c) states that “The upper boundary of Bank is the first observable break in the slope or the mean annual flood level, whichever is lower.” The methodology used to delineate Bordering Vegetated Wetlands is further described in: (1) the BVW Policy “*BVW: Bordering Vegetated Wetlands Delineation Criteria and Methodology*,” issued March 1, 1995; and (2) “*Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: A Handbook*,” produced by the Massachusetts Department of Environmental Protection, dated March 1995. The plant taxonomy used in this report is based on the *National List of Plant Species that Occur in Wetlands: Massachusetts* (Fish and Wildlife Service, U.S. Department of the Interior, 1988). Federal wetlands were

presumed to have boundaries conterminous with the delineated Bordering Vegetated Wetlands and Bank. One set of DEP Bordering Vegetated Wetland Delineation Field Data Forms completed for observation plots located in the wetlands and uplands near flag A-4 is attached. The table below provides the Flag Numbers, Flag Type, and Wetland Types and Locations for the delineated wetland resources.

Flag Numbers	Flag Type	Wetland Types and Locations
Start A1 to A8 Stop	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the western portion of the site that is associated with an unmapped intermittent stream.
Start B1 to B9 Stop	Blue Flags	Bank of the unmapped intermittent stream located off-site to the south of the property.

Findings

Wetland A (i.e., flags A1 – A8) consists of a wooded swamp located in the western portion of the site that is associated with an intermittent stream. Wetland B (i.e., flags B1 – B9) consists of bank of an intermittent stream located off-site to the south of the property. Plant species observed include red maple (*Acer rubrum*) trees and/or saplings; common winterberry (*Ilex verticillata*) shrubs; and sensitive fern (*Onoclea sensibilis*), spotted touch-me-not (*Impatiens capensis*), and poison ivy (*Toxicodendron radicans*) ground cover. Evidence of wetland hydrology, including hydric soils, high groundwater, saturated soils, pore linings, evidence of flooding, and drainage patterns, was observed within the delineated wetland. The vegetated wetland borders an intermittent stream; accordingly, the vegetated wetland would be regulated as Bordering Vegetated Wetlands and the intermittent streams would be regulated as Bank under the Act. A 100-foot Buffer Zone extends horizontally outward from the edge of Bordering Vegetated Wetlands and Bank under the Act and Bylaw.

Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that “The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm.” Based upon a review of the Flood Insurance Rate Map, Worcester County, Massachusetts, Map Number 25027C0595E, Effective Date 7/4/2011, the site is mapped as Other Areas: Zone X, which is defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). The project engineer should evaluate the most recent National Flood Insurance Program flood profile data to determine if Bordering Land Subject to Flooding occurs on the site. Bordering Land Subject to Flooding would occur in areas where the 100-year flood elevation is located outside of or upgradient of the delineated Bordering Vegetated Wetlands or Bank boundary. Bordering Land Subject to Flooding does not have a Buffer Zone under the Act.

The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map (i.e., Worcester North Quadrangle, dated 1983, attached) and observations made during the site inspection, two streams that are not shown on the USGS Map is located in the western and southern portions of

the site, respectively. The watershed areas for the streams at the site were determined to be 0.0382 and 0.0672 square miles, respectively, which are both less than 0.5 square miles (see attached watershed calculations). As such, the streams would be designated intermittent under the Massachusetts Wetlands Protection Act regulations and Riverfront Area would not be associated with the intermittent streams. Furthermore, based upon a review of the current USGS Map and observations made during the site inspection, there are no other mapped or unmapped streams located within 200 feet of the site. Accordingly, Riverfront Area would not occur on the site. Riverfront Area does not have a Buffer Zone under the Act.

The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 15th edition, Priority Habitats and Estimated Habitats from the NHESP Interactive Viewer, valid from August 1, 2021, and Certified Vernal Pools from MassGIS, there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; “MESA”) and MESA Regulations (321 CMR 10.00 *et seq.*)], or Certified Vernal Pools on or in the immediate vicinity of the site. A copy of this map is attached.

Based upon a review of Mass-GIS Surface Water Protection Area data layer, attached, portions of the site are located within mapped Zone A areas. Zone A is defined in Massachusetts Drinking Water Regulations at 310 CMR 22.02. The presence of a mapped Zone A may have implications on the location of proposed septic systems under 310 CMR 15.000 (The State Environmental Code Title 5) and structural stormwater best management practices under 310 CMR 10.00 (Wetlands Protection Act regulations and Massachusetts Stormwater Handbook). Within the mapped Zone A areas there is a Tributary to a Surface Water Supply and Wetlands bordering a Surface Water Supply or Tributary thereto. The tributaries and wetlands, within the Zone A areas, are Outstanding Resource Waters with regulatory implications for wetland and stream crossings.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. Brief descriptions of our experience and qualifications are attached. If you have any questions, please feel free to contact us at any time.

Cordially,
ECOTEC, INC.



Art Allen
Vice President, EcoTec, Inc.



Kate O'Donnell
Environmental Scientist

Attachments (14 pages)



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 / Fax: 508-752-9494

Arthur Allen, CPSS, CWS, CESSWI
Vice President
Soil & Wetland Scientist

Arthur Allen is the Vice President of EcoTec, Inc. and has been a senior environmental scientist there since 1995. His work with EcoTec has involved wetland delineation, wildlife habitat evaluation, environmental permitting (federal, state and local), environmental monitoring, expert testimony, peer reviews, contaminated site assessment and the description, mapping and interpretation of soils. His clients have included private landowners, developers, major corporations and regulatory agencies. Prior to joining EcoTec, Mr. Allen mapped and interpreted soils in Franklin County, MA for the U.S.D.A. Natural Resources Conservation Service (formerly Soil Conservation Service) and was a research soil scientist at Harvard University's Harvard Forest. Since 1994, Mr. Allen has assisted the Massachusetts Department of Environmental Protection and the Massachusetts Association of Conservation Commissions as an instructor in the interpretation of soils for wetland delineation and for the Title V Soil Evaluator program.

Mr. Allen has a civil service rating as a soil scientist, an undergraduate degree in Natural Resource Studies and a graduate certificate in Soil Studies. His work on the Franklin County soil survey involved interpretation of landscape-soil-water relationships, classifying soils and drainage, and determining use and limitation of the soil units that he delineated. As a soil scientist at the Harvard Forest, Mr. Allen was involved in identifying the legacies of historical land-use in modern soil and vegetation at a number of study sites across southern New England. He has a working knowledge of the chemical and physical properties of soil and water and how these properties interact with the plants that grow on a given site. While at Harvard Forest he authored and presented several papers describing his research results which were later published. In addition to his aforementioned experience, Mr. Allen was previously employed by the Trustees of Reservations as a land manager and by the Town of North Andover, MA as a conservation commission intern.

Education:

1993-Graduate Certificate in Soil Studies, University of New Hampshire
1982-Bachelor of Science in Natural Resource Studies, University of Massachusetts

Professional Affiliations:

Certified Professional Soil Scientist (ARCPACS CPSS #22529)
New Hampshire Certified Wetland Scientist (#19)
Registered Professional Soil Scientist – Society of Soil Scientists of SNE [Board Member (2000-2006)]
Certified Erosion, Sediment & Stormwater Inspector (#965)
Massachusetts Approved Soil Evaluator (#13764)
Massachusetts Arborists Association-Certified Arborist (1982 – 1998)
New England Hydric Soils Technical Committee member
Massachusetts Association of Conservation Commissions member
Society of Wetland Scientists member

Refereed Publications:

Soil Science and Survey at Harvard Forest. A.Allen. In: Soil Survey Horizons. Vol. 36, No. 4, 1995, pp. 133-142.
Controlling Site to Evaluate History: Vegetation Patterns of a New England Sand Plain. G.Motzkin, D.Foster, A.Allen, J.Harrodd, & R.Boone. In: Ecological Monographs 66(3), 1996, pp. 345-365.
Vegetation Patterns in Heterogeneous Landscapes: The Importance of History and Environment. G.Motzkin, P.Wilson, D.R.Foster & A.Allen. In: Journal of Vegetation Science 10, 1999, pp. 903-920.



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street

Worcester, MA 01605-2629

508-752-9666 / Fax: 508-752-9494

Kate O'Donnell Wetland Scientist

Kate O'Donnell is the newest member of EcoTec, Inc. and started working in June of 2021. Her work with EcoTec, Inc. thusfar has involved wetland delineation, environmental permitting (federal, state and local), and interpretation of soils. Prior to starting at EcoTec, Kate was an undergraduate student at the College of the Holy Cross, double majoring in Biology and Environmental Studies, with a minor in geosciences. Her educational background includes courses in geoscience, biology, chemistry, environmental law, and comparative vertebrate morphology, with extensive coursework in ecology and environmental science. During her time as an undergrad, she conducted hydrologic and water quality research during her senior year to investigate the impacts of road salt on the salinity of the Middle River in Worcester, MA. Kate is working to become a Professional Wetland Scientist in Training and is training in wetland delineation, vegetation identification, and soil properties.

Education:

Bachelor of Arts in Biology and Bachelor of Arts in Environmental Studies- *Cum Laude*, College of the Holy Cross, 2021

Professional Affiliations:

Society of Wetland Scientists

Massachusetts Association of Conservation Commissioners

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

Applicant [REDACTED]

Prepared by: EcoTec, Inc

Project Location: Paxton 80 Asnebumskit Rd.

DEP File #

Section I. Vegetation

Number: TP-Upland

Transect # A4

Date of Delin: 8/31/2021

A.	Sample layer and plant species (Enter largest to smallest % cover by layer)	Plant Species	Percent Cover (or basal area)	Percent Dominance	Dominant Plant?	Wetland Indicator Category
Tree	red maple	Acer rubrum	80	80.0	YES	FAC *
	red oak	Quercus rubra	20	20.0	YES	FACU-
Sapling	black cherry	Prunus serotina	20	66.7	YES	FACU
	shagbark hickory	Carya ovata	10	33.3	YES	FACU-
Shrub						
Ground	hay-scented fern	Dennstaedtia punctilobula	40	80.0	YES	NL
	intermediate woodfern	Dryopteris intermedia	10	20.0	YES	FACU
Vine						

Vegetation Conclusions	
Number of dominant wetland indicator plants	1
Number of dominant non-wetland indicator plants	5
Is the number of dominant wetland plants equal or greater than the number of dominant non-wetland plants?	NO

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

Applicant [redacted]

Prepared by: EcoTec, Inc

Project Location: Paxton 80 Asnebumskit Rd.

DEP File #

Section II. Indicators of Hydrology

Number: TP-Upland

Transect # A4

Date of Delin: 8/31/2021

1. Soil Survey

Is there a published soil survey for this site? [redacted]

title/date
map number
soil type mapped
hydric soil inclusions

Are field observations consistent with soil survey? [redacted]

Remarks: [redacted]

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
Leaf Litter	1 inch	[redacted]	[redacted]
O	1-0	[redacted]	[redacted]
A	0-4	10YR 3/2	[redacted]
Bw	4-15	10YR 5/6	[redacted]

Remarks [redacted]

3. Other very stony, fine, sandy, loams

Conclusion: Is the soil hydric? No

Other Indicators of hydrology (check all that apply):

- Site Inundated [redacted]
- Depth to free water in observation hole [redacted]
- Depth to soil saturation in observation hole [redacted]
- Water marks [redacted]
- Drift lines [redacted]
- Sediment Deposits [redacted]
- Drainage patterns in BVWs [redacted]
- Oxidized rhizospheres [redacted]
- Water stained leaves [redacted]
- Recorded data (stream, lake, or tidal gauge; aerial photo; other): [redacted]
- Other: [redacted]

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present:		
Hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample Location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Applicant

Prepared by: EcoTec, Inc

Project Location: 80 Asnebumskit Rd. Paxton

DEP File #

Section I. Vegetation

Number: TP-Wetland

Transect # A-4

Date of Delin: 8/31/2021

A. Sample layer and plant species (Enter largest to smallest % cover by layer)			Percent Cover (or basal area)	Percent Dominance	Dominant Plant?	Wetland Indicator Category
Tree	red maple	Acer rubrum	80	80.0	YES	FAC *
	green ash	Fraxinus pennsylvanica	20	20.0	YES	FACW *
Sapling	black cherry	Prunus serotina	20	100.0	YES	FACU
Shrub	winterberry	Ilex verticillata	60	100.0	YES	FACW+ *
Ground	jewelweed	Impatiens capensis	20	44.4	YES	FACW *
	poison ivy	Toxicodendron radicans	15	33.3	YES	FAC *
	sensitive fern	Onoclea sensibilis	10	22.2	YES	FACW *
Vine						

Vegetation Conclusions

Number of dominant wetland indicator plants	6	Number of dominant non-wetland indicator plants	1
Is the number of dominant wetland plants equal or greater than the number of dominant non-wetland plants?		YES	

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

Applicant [REDACTED]

Prepared by: EcoTec, Inc

Project Location: 80 Asnebumskit Rd. Paxton

DEP File #

Section II. Indicators of Hydrology

Number: TP-Wetland

Transect # A-4

Date of Delin: 8/31/2021

1. Soil Survey

Is there a published soil survey for this site? [REDACTED]

title/date
map number
soil type mapped
hydric soil inclusions

Are field observations consistent with soil survey? [REDACTED]

Remarks: [REDACTED]

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
Leaf Litter	1 inch	[REDACTED]	[REDACTED]
A	0-6	10YR 2/1	[REDACTED]
B	6-15	10YR 5/2	20% 7.5YR 4/6

Remarks A is stony, mucky loam
B is very stony, fine, sandy loam

3. Other [REDACTED]

Conclusion: Is the soil hydric? Yes

Other Indicators of hydrology (check all that apply):

- Site Inundated [REDACTED]
- Depth to free water in observation hole surface
- Depth to soil saturation in observation hole [REDACTED]
- Water marks [REDACTED]
- Drift lines [REDACTED]
- Sediment Deposits [REDACTED]
- Drainage patterns in BVWs [REDACTED]
- Oxidized rhizospheres [REDACTED]
- Water stained leaves [REDACTED]
- Recorded data (stream, lake, or tidal gauge; aerial photo; other): [REDACTED]
- Other: [REDACTED]

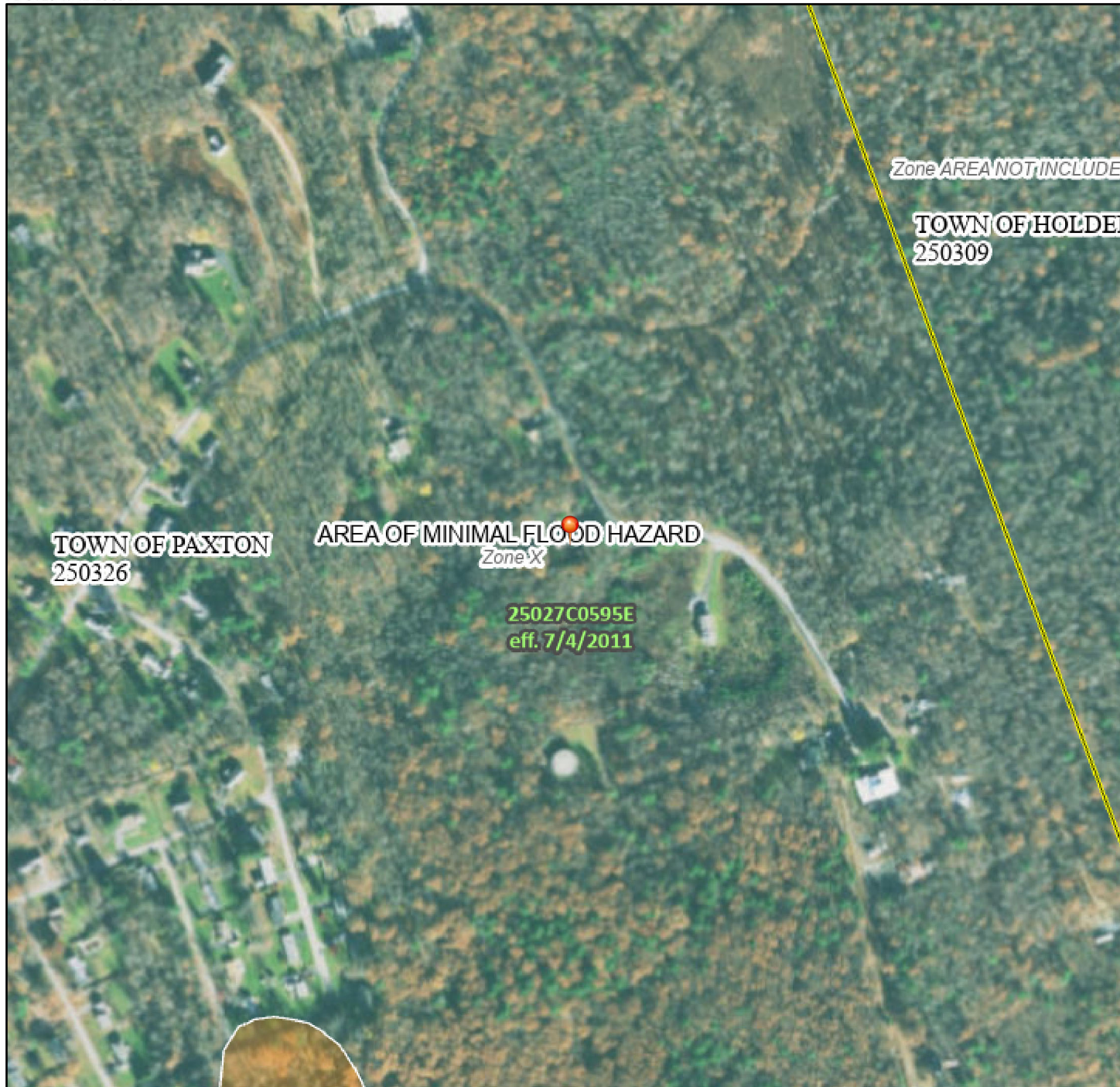
Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present:		
Hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other indicators of hydrology present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample Location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

National Flood Hazard Layer FIRMette



71°54'20"W 42°18'33"N



Legend

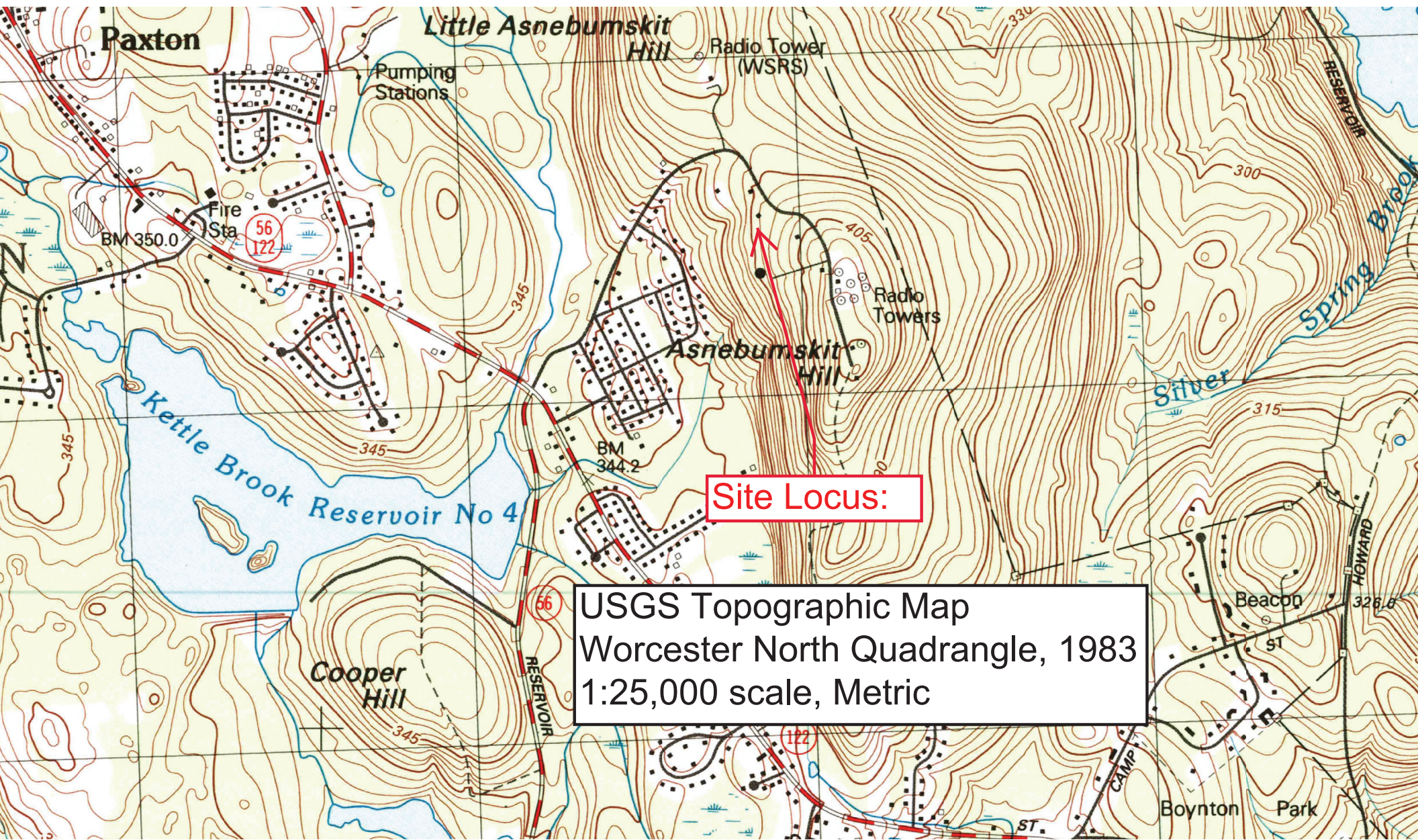
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		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 <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped
		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 **9/7/2021 at 9:22 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.



Site Locus:

USGS Topographic Map
Worcester North Quadrangle, 1983
1:25,000 scale, Metric

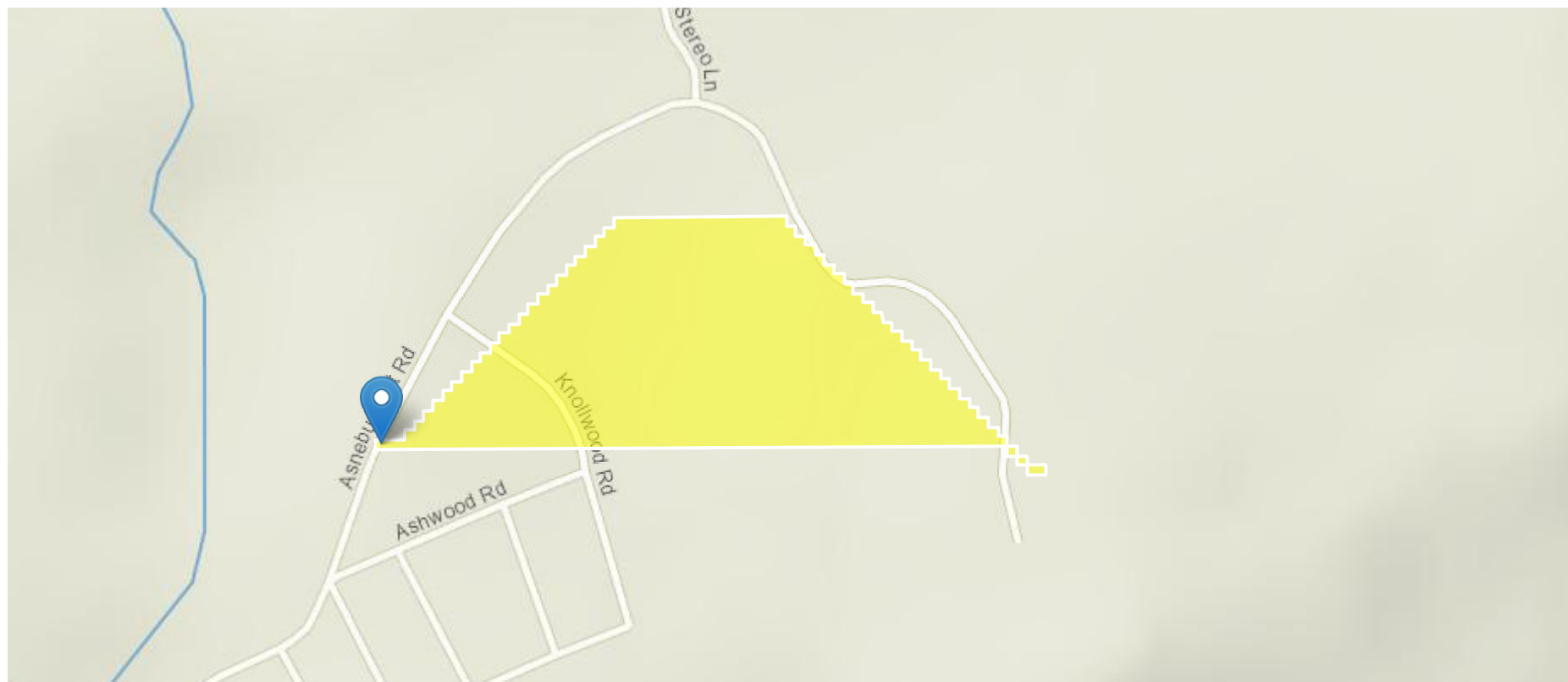
StreamStats Report

Region ID: MA

Workspace ID: MA20210907132825963000

Clicked Point (Latitude, Longitude): 42.30402, -71.90573

Time: 2021-09-07 09:28:39 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
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Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0382	square miles
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	0	percent
FOREST	Percentage of area covered by forest	41.52	percent
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Probability Statistics Parameters [Perennial Flow Probability]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0382	square miles	0.01	1.99
PCTSNDGRV	Percent Underlain By Sand And Gravel	0	percent	0	100
FOREST	Percent Forest	41.52	percent	0	100
MAREGION	Massachusetts Region	0	dimensionless	0	1

Probability Statistics Flow Report [Perennial Flow Probability]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PC
Probability Stream Flowing Perennially	0.2	dim	71

Probability Statistics Citations

Bent, G.C., and Steeves, P.A.,2006, A revised logistic regression equation and an automated procedure for mapping the probability of a stream flowing perennially in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2006-5031, 107 p. (http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf)

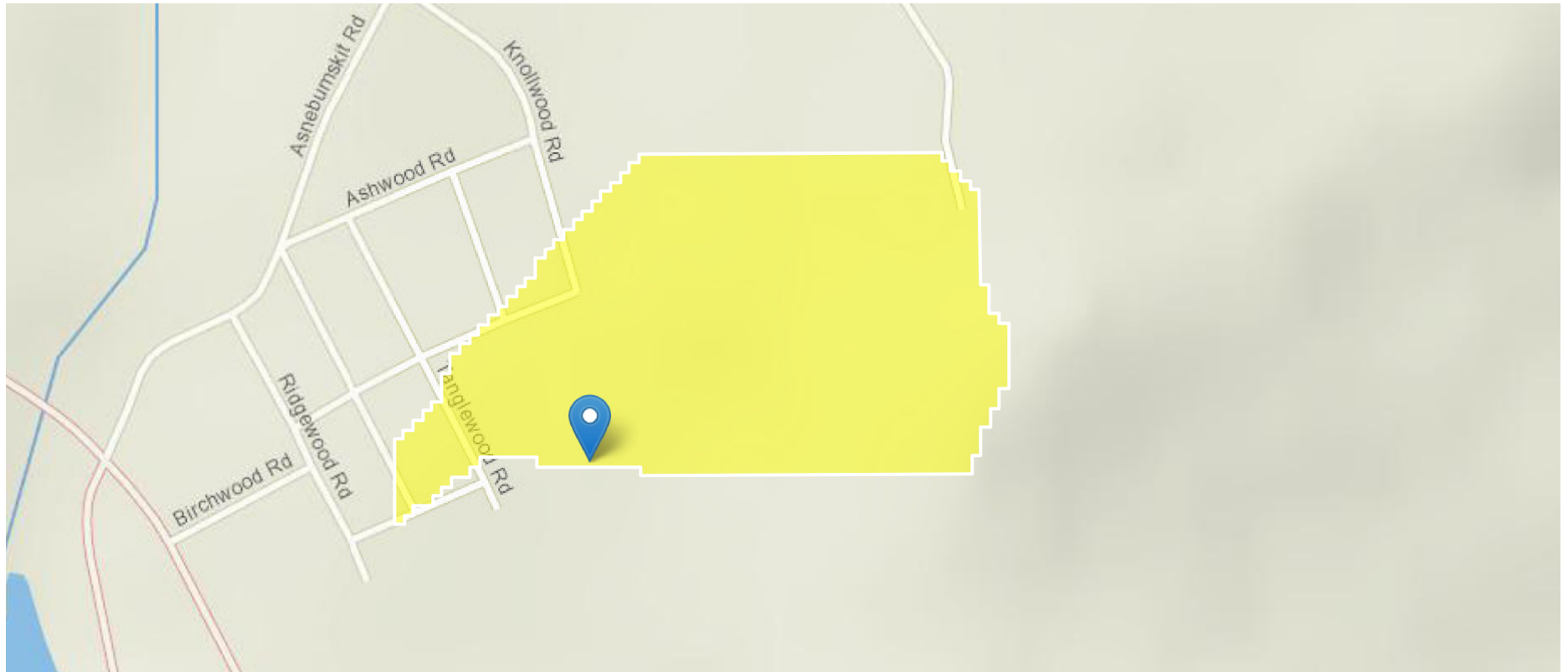
StreamStats Report

Region ID: MA

Workspace ID: MA20210907132944392000

Clicked Point (Latitude, Longitude): 42.30069, -71.90253

Time: 2021-09-07 09:29:57 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
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Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0672	square miles
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	0	percent
FOREST	Percentage of area covered by forest	63.56	percent
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Probability Statistics Parameters [Perennial Flow Probability]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0672	square miles	0.01	1.99
PCTSNDGRV	Percent Underlain By Sand And Gravel	0	percent	0	100
FOREST	Percent Forest	63.56	percent	0	100
MAREGION	Massachusetts Region	0	dimensionless	0	1

Probability Statistics Flow Report [Perennial Flow Probability]

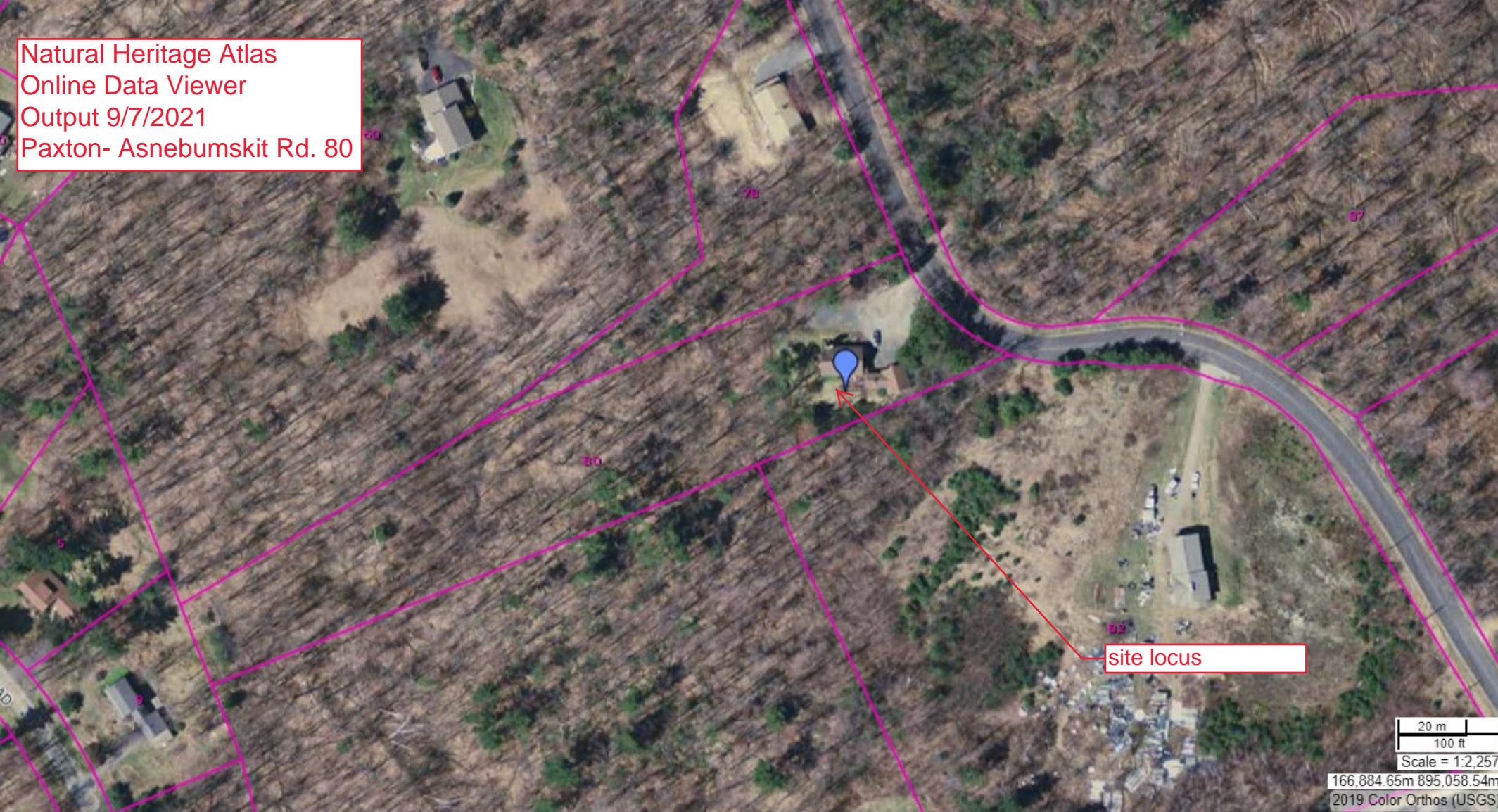
PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PC
Probability Stream Flowing Perennially	0.207	dim	71

Probability Statistics Citations

Bent, G.C., and Steeves, P.A.,2006, A revised logistic regression equation and an automated procedure for mapping the probability of a stream flowing perennially in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2006-5031, 107 p. (http://pubs.usgs.gov/sir/2006/5031/pdfs/SIR_2006-5031rev.pdf)

Natural Heritage Atlas
Online Data Viewer
Output 9/7/2021
Paxton- Asnebumskit Rd. 80



Active Data Layers

Check all | Uncheck all

Legend

MassDOT Roads Street Names

Major MassDOT Routes

 Interstate Highways

 US Roads

 State

Massachusetts Towns



NHESP Estimated Habitats of Rare Wildlife



NHESP Priority Habitats of Rare Species



