

**NOTICE OF PUBLIC HEARING  
SUDBURY CONSERVATION COMMISSION  
Monday, January 23, 2023 at 6:45 PM  
Virtual Meeting**

The Sudbury Conservation Commission will hold a public hearing to review the Notice of Intent filing to replace a septic system within the 100-foot Buffer Zone, pursuant to the Wetlands Protection Act and Sudbury Wetlands Administration Bylaw, at 15 Elmwood Avenue, Sudbury, MA. Eugene Warner, Applicant. The hearing will be held on Monday, January 23, 2023 at 6:45 pm, via remote participation.

Please see the Conservation Commission web page for further information.

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-january-23-2023/>

SUDBURY CONSERVATION COMMISSION  
1/11/2023



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*Wetlands Delineation & Permitting Wildlife Studies Herpetology Vernal Pool Ecology Botany Aerial Imagery*

**Notice of Intent  
Pursuant to the Massachusetts Wetlands  
Protection Act (M.G.L. c. 131, §40) & the Town of Sudbury  
Wetlands Administration Bylaw (Article XXII)**

**Installation of New Sewage Disposal System within Buffer Zone to BVW**



**15 Elmwood Ave  
Sudbury, Massachusetts  
(Map / Parcels: F04-0421)**

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***Submitted by:*  
Eugene Warner  
15 Elmwood Avenue  
Sudbury, MA 01776**

***Prepared by:*  
Oxbow Associates, Inc.  
P.O. Box 971  
Acton, MA 01720-0971  
P 978-929-9058  
[www.oxbowassociates.com](http://www.oxbowassociates.com)**

**January 9, 2023**



**Notice of Intent**  
**15 Elmwood Avenue, Sudbury**  
**Parcel F04-0421**

**January 9, 2023**

**Applicant/Owner:** Eugene Warner  
AJEF LLC  
72 French Road  
Sudbury, MA

**Contents:**

WPA Form 3 – Notice of Intent (NOI)  
WPA Appendix B – Wetland Fee Transmittal Form  
Project Narrative  
USGS Locus Map  
NHESP Rare Species Map  
FEMA Floodplain Map  
FEMA Firmette  
Copies of Filing Fee Checks  
Certified List of Abutters  
Notification to Abutters  
Affidavit of Service

**Plans:** “Proposed Sewage Disposal System”  
15 Elmwood Avenue  
Sudbury, MA  
December 28, 2022  
1” = 20’

**Prepared by:** Connorstone Engineering, Inc.  
121 Boston Post Road  
Sudbury, MA 01776



**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

Sudbury

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):

15 Elmwood Avenue

a. Street Address

Sudbury

b. City/Town

01776

c. Zip Code

Latitude and Longitude:

42.39663

d. Latitude

-71.45485

e. Longitude

F04

f. Assessors Map/Plat Number

0421

g. Parcel /Lot Number

2. Applicant:

Eugene

a. First Name

Warner

b. Last Name

c. Organization

15 Elmwood Avenue

d. Street Address

Sudbury

e. City/Town

MA

f. State

01776

g. Zip Code

646-232-5328

h. Phone Number

i. Fax Number

warnered43@yahoo.com

j. Email Address

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

a. First Name

AJEF LLC

b. Last Name

c. Organization

72 French Road

d. Street Address

Sudbury

e. City/Town

MA

f. State

01776

g. Zip Code

646-232-5328

h. Phone Number

i. Fax Number

warnered43@yahoo.com

j. Email address

4. Representative (if any):

Ronald

a. First Name

Strohsahl

b. Last Name

Oxbow Associates, Inc.

c. Company

P.O. Box 971

d. Street Address

Acton

e. City/Town

MA

f. State

01720

g. Zip Code

978-929-9058

h. Phone Number

i. Fax Number

ron@oxbowassociates.com

j. Email address

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

\$110.00

a. Total Fee Paid

\$42.50

b. State Fee Paid

\$67.50

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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### A. General Information (continued)

6. General Project Description:

Installation of septic system within buffer zone to BVW

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 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:

Middlesex South

a. County

55439

c. Book

b. Certificate # (if registered land)

200

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.



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

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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	2. square feet
	3. cubic yards dredged	

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	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) - <b>specify coastal or inland</b>	

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

Provided by MassDEP:

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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.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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
	_____	
	Size of Proposed Alteration	Proposed Replacement (if any)
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. <input type="checkbox"/> 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. <input type="checkbox"/> 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

1. 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](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 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\*

1.  Percentage/acreage of property to be altered:

(a) within wetland Resource Area \_\_\_\_\_

percentage/acreage

(b) outside Resource Area \_\_\_\_\_

percentage/acreage

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

2.  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](mailto: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](mailto: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

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### 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:
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Sudbury
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.

Proposed Sewage Disposal System

a. Plan Title

Connorstone Engineering

b. Prepared By

December 28, 2022

d. Final Revision Date

c. Signed and Stamped by

1 inch = 20 feet

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:

7472

2. Municipal Check Number

7473

4. State Check Number

Oxbow Associates, Inc.

6. Payor name on check: First Name

January 9, 2023

3. Check date

January 9, 2023

5. Check date

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection  
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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.

*[Handwritten Signature]*

1. Signature of Applicant

*5 Jan 2023*

2. Date

3. Signature of Property Owner (if different)

*[Handwritten Signature]*

4. Date

*Jan 5, 2023*

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:

15 Elmwood Avenue

a. Street Address

7473

c. Check number

Sudbury

b. City/Town

\$25.00

d. Fee amount

2. Applicant Mailing Address:

Eugene

a. First Name

Warner

b. Last Name

c. Organization

15 Elmwood Avenue

d. Mailing Address

Sudbury

e. City/Town

646-232-5328

h. Phone Number

i. Fax Number

MA

f. State

01776

g. Zip Code

warnered43@yahoo.com

j. Email Address

3. Property Owner (if different):

a. First Name

AJEF LLC

b. Last Name

c. Organization

72 French Road

d. Mailing Address

Sudbury

e. City/Town

646-232-5328

h. Phone Number

i. Fax Number

MA

f. State

01776

g. Zip Code

warnered43@yahoo.com

j. Email Address

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

**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.



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
Cat. 1. a)	1	\$110.00	\$110.00
<b>Step 5/Total Project Fee:</b>			\$110.00
<b>Step 6/Fee Payments:</b>			
Total Project Fee:		\$110.00	
State share of filing Fee:		\$42.50	
City/Town share of filing Fee:		\$67.50	
		a. Total Fee from Step 5	
		b. 1/2 Total Fee <b>less</b> \$12.50	
		c. 1/2 Total Fee <b>plus</b> \$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.)



**Narrative to Accompany Notice of Intent Filing  
Septic System Replacement  
15 Elmwood Avenue, Sudbury**

The accompanying Notice of Intent is submitted for the approval of an on-site sewage disposal system (SDS) in place of a failed system servicing a two-bedroom single-family home. The property lies partially within the Buffer Zone to a Bordering Vegetated Wetland (BVW; 310 CMR 10.55). The proposed replacement SDS leach field has been designed to be located as far as possible from the BVW and will replace an existing cesspool, located at the edge of the wetland. This installation will improve local surface and groundwater quality protection.

**Existing Conditions**

The property is located north of Birchwood Avenue, south of Elmwood Avenue, west of Arborwood Road, and east of Great Lake Drive. The site encompasses approximately 0.4± acres and contains a single-family house with a gravel driveway, flagstone walkways, and a manicured yard. The periphery of the site is forested. Topography on the property is generally flat, but gradually slopes to the south toward a shrub-scrub wetland system.

**Resource Area Description**

Oxbow Associates, Inc. (OA: specifically, R. Strohsahl) reviewed the above referenced site with specific regard to wetland resource areas on December 2, 2022. This evaluation was conducted in accordance with standard methodology for delineating vegetated wetlands under the Massachusetts Wetlands Protection Act (the "Act"; MGL Ch. 131, §40), its Regulations (310 CMR 10.00), and the Town of Sudbury Wetlands Administration Bylaw (Article XXII) and its Regulations.

The scrub-shrub wetland is within an isolated basin located south of Willis Lake extending east-west between Arrowwood Road and Great Lake Drive. Within the western end of the basin there is an area of open water which qualifies as a "Pond" under the Bylaw (Section 9, >5,000sf). The remaining basin is a shallow palustrine wetland, characterized by pit-and-mound topography with tussock and hummock understory and a dense shrub-dominated overstory. The bottom composition within the water is generally composed of a mucky peat and on the day of inspection there was less than six inches of standing water within the wetland areas directly adjacent to the property. The edges of the basin are steep and there were no visible culverts connecting under any of the surrounding roads to any other wetland system.

Based on our observations, OA believes that the wetland resource areas located on or adjacent to the site includes Isolated Land Subject to Flooding (ILSF; 310 CMR 10.57) under the Act, and a "freshwater wetland" (Section 2.1.3) under the Bylaw. At least part

of the wetland system may also qualify as a vernal pool, which is further protected under the local Bylaw Regulations.

OA was unable to confirm whether there are intermittent stream channels located elsewhere within the basin, or if the area of open water occasionally exceeds the 10,000 square foot threshold to be considered a Pond under the Act. To meet the most comprehensive permitting requirements, we are also classifying the wetland system as Bordering Vegetated Wetland (BVW; 310 CMR 10.55) under the Act with the same boundary delineated under the Bylaw.

OA delineated the limit of the BVW affecting the property with blue plastic flags labeled A1 through A17. The wetland boundary was delineated based on topography, predominance of wetland vegetation, and indicators of hydrology which include hydric soils (redoximorphic features), silt-stained leaves, buttressed tree roots, and limit of standing water.

Vegetation associated with the wetland includes: red maple (*Acer rubrum*), eastern white pine (*Pinus strobus*), gray birch (*Betula populifolia*), speckled alder (*Alnus incana*), sweet pepperbush (*Clethra alnifolia*), gray dogwood (*Swida racemosa*), highbush blueberry (*Vaccinium corymbosum*), winterberry holly (*Ilex verticillata*), maleberry (*Lyonia ligustrina*), glossy false buckthorn (*Frangula alnus*), northern spicebush (*Lindera benzoin*), purple loosestrife (*Lythrum salicaria*), water willow (*Decodon verticillatus*), tussock sedge (*Carex stricta*), cinnamon fern (*Osmundastrum cinnamomeum*), sensitive fern (*Onoclea sensibilis*), jewelweed (*Impatiens capensis*), skunk cabbage (*Symplocarpus foetidus*), northern bog clubmoss (*Lycopodiella inundata*), Lindberg's hypnum moss (*Calliergonella lindbergii*), and *Sphagnum* spp. mosses.

Vegetation within the upland on the property includes white pine, oaks (*Quercus* spp.), red maple, glossy false buckthorn, winged euonymus (*Euonymus alatus*), and goldenrods (*Solidago* spp.)

According to the Massachusetts Natural Heritage and Endangered Species Program Atlas (15<sup>th</sup> Edition; MassGIS 2021), there is no Priority or Estimated Habitat for rare species, or certified or potential vernal pools immediately on the property. However, there are mapped rare species polygons (PH 1400, EH 995) associated with Willis Pond, located directly across from the subject property, and portions of the flagged wetland system may be considered vernal pool habitat.

## **Proposed Project**

The Applicant proposes to replace the failing cesspool on the property with a new sewage disposal system (SDS) along the northern boundary of the lot, to meet the requirements of Title V. The proposed design includes the replacement of the existing cesspool located south of the house with a new 1,500-gallon septic tank and leach field north of the house, within the existing lawn. The existing cesspool and laundry pit will be pumped, left in situ, and backfilled for safety. The existing plumbing for the waste pipes



will be rerouted from the rear of the house to the west side of the house towards the proposed septic tank.

The leach field and septic tank will be installed into the existing lawn north of the house, where the current water line is installed. The water line will need to be relocated away from the proposed septic tank before its construction. All proposed work will occur within the 100-foot buffer zone to the BVW as it envelops the entirety of the property. At the closest point the septic tank will be located at 32.4 feet, and the leaching lines will be located 50.0 feet, from the BVW edge, respectively. A poly barrier is proposed between the leach field and the house, as the leaching lines are located within 10 feet of the existing slab (8 feet), and within 20 feet of the existing foundation (13.7 feet).

All work will occur within the buffer zone (and adjacent upland resource area) to the BVW, within the existing lawn. Additional system details are provided on the accompanying Proposed Sewage Disposal System Plan (January 26, 2022).

The area of the proposed leaching bed has two >12-inch trees that will need to be removed before installation can begin. The trees will be replaced with native shrubs following the “Tree Removal Performance Standards” provided by the Sudbury Conservation Commission, if necessary.

Following the installation of the leach field, the area will be graded, loamed, and seeded to lawn, and replacement shrubs will be installed.

Erosion control will be installed around the limit of work within the buffer zone and will consist of a staked silt fence with 10-inch straw wattles. Erosion control will be repaired by the contractor as needed with sufficient spare silt fence and wattle to be kept on site. The driveway will be used for all construction access, and all stockpiled soils will be removed from the site after each day. Existing vegetation will be maintained, where possible. All disturbed areas will be stabilized as soon as is feasible and loamed and seeded at completion.

### **Alternatives Analysis**

Due to the size and configuration of the property alternative locations for the placement of the septic system and leach field were considered but ultimately dismissed. No work could be completed to the south of the house without approaching the estimated ILSF boundary, the wetland boundary, and high groundwater.

An alternative layout would require a mounded system, extending off the existing grades on the north side of the property, but would require potentially filling ILSF, and moving the leach fields and septic tank closer to the wetlands.

The current configuration positions the leach field at the maximum feasible distance from the BVW, within the existing lawn, with minimal impacts to vegetation.

## Summary

The proposed activities will establish a functional septic system on-site, with a clear reduced risk to water quality to on-site wetland resource areas, as well as, within groundwater and off-site wetland resource areas. The proposed leaching lines are at a greater distance from the existing cesspool and is located beyond the 50-foot BVW buffer zone. Impacts to the buffer zone have been minimized, occurring largely within the existing lawn, at the furthest location from the wetland system. Erosion and sedimentation controls have been proposed in areas within the buffer zone where soils will be disturbed.

The proposed on-site sewage disposal replacement complies with all standards of the Wetlands Protection Act as well as the local 25-foot No-Disturbance zone. The project team has considered alternatives; there is no functional equivalent project alternative that results in lesser alteration.

The septic plan has been submitted to the Sudbury Board of Health; Mr. Robert Lazo of the Sudbury Health Department witnessed the percolation test on December 20, 2022.

On behalf of the Applicant, we request that the Sudbury Conservation Commission issue an Order of Conditions approving the SDS installation as proposed on the accompanying site plan.



**Representative Site Photos**  
**15 Elmwood Avenue (Parcel F04-0421)**



Photo 1: Property viewed from street, facing south. Proposed septic system to be installed between roadway and front of house.



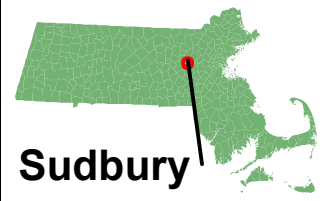
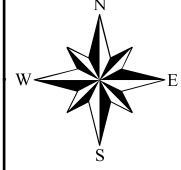
Photo 2: Extent of maintained yard on existing fill, extending to wetland edge. Lawn is a mixture of grasses and mosses. Cinder block (left) indicates location of existing cesspool.



Photo 3: Mixture of mosses and grass within the wetland at the rear of the yard.



Photo 4: Area of open water to west of the property, viewed from north, along Lake Shore Drive.

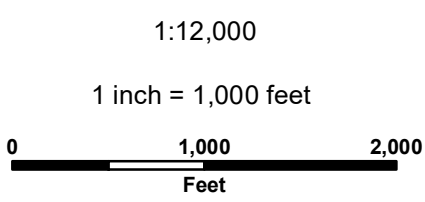


Approx.  
Site Locus

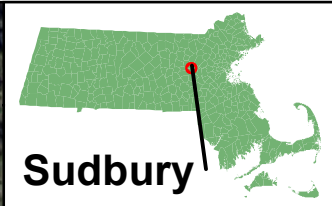
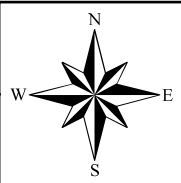
**Legend**

Property Boundary

Data Source:  
Bureau of Geographic Information (MassGIS),  
Commonwealth of Massachusetts,  
Executive Office of Technology and Security Services  
USGS, MassGIS



**USGS Site Locus  
Notice of Intent  
15 Elmwood Avenue  
Sudbury, MA  
January 05, 2023**



Sudbury




PH 1400

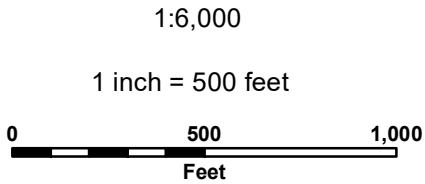
EH 995

Approx.  
Site Locus

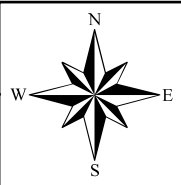


**Legend**

-  NHESP Estimated Habitat
-  NHESP Priority Habitat
-  Property Boundary

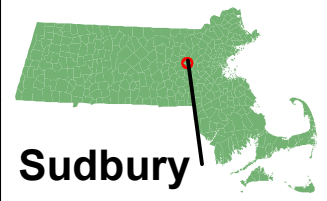


**NHESP Habitat  
Notice of Intent  
15 Elmwood Avenue  
Sudbury, MA  
January 05, 2023**



Zone X

Zone X



Sudbury






Approx.  
Site Locus

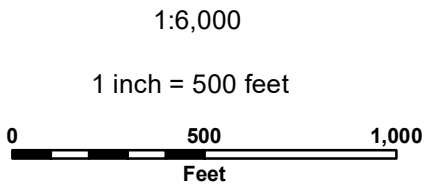


**Legend**

**FEMA Flood Zones**

-  Zone AE
-  Zone X
-  Property Boundary

Zone AE



**FEMA Flood Zones  
Notice of Intent  
15 Elmwood Avenue  
Sudbury, MA  
January 05, 2023**

# National Flood Hazard Layer FIRMMette



71°27'36"W 42°24'1"N



71°26'59"W 42°23'34"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

## 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
		Area of Undetermined Flood Hazard <i>Zone D</i>

GENERAL STRUCTURES		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
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

MAP PANELS		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 **1/5/2023 at 1:19 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.



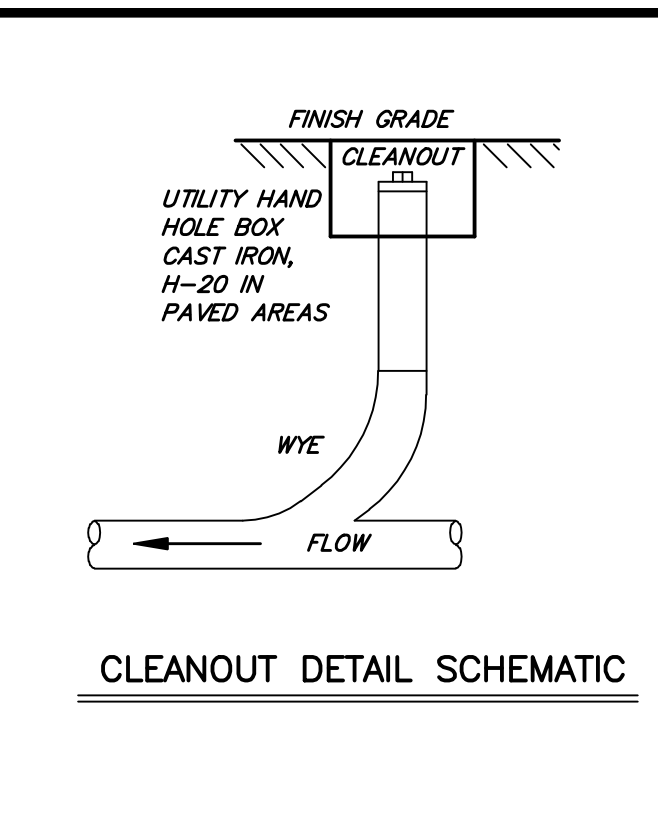
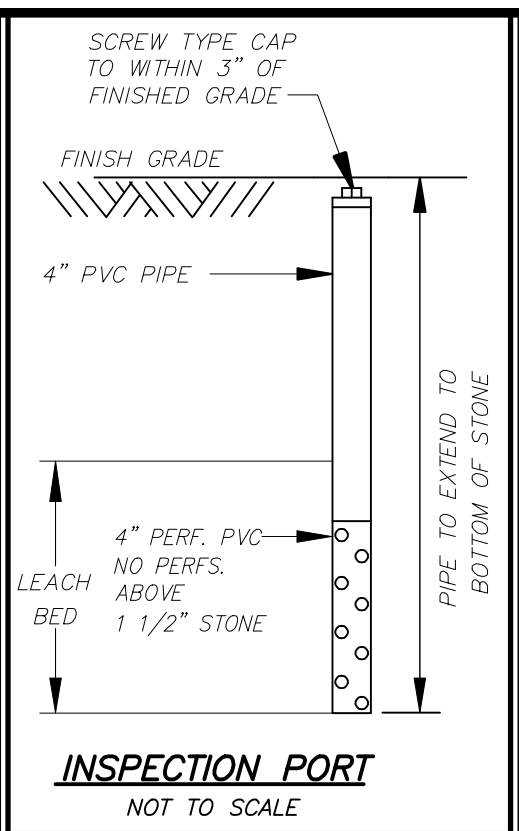
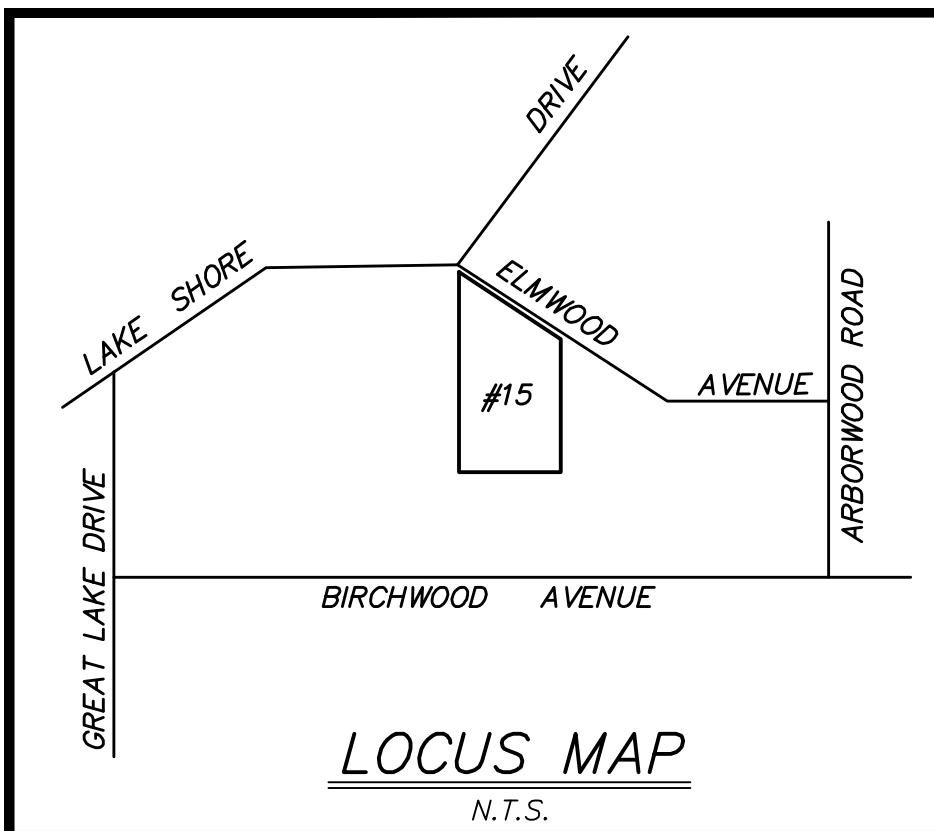
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F04-0410	TOWN OF SUDBURY	TREASURERS OFFICE	278 OLD SUDBURY RD		SUDBURY	MA	01776	58958-79	ELMWOOD AVE
F04-0411	CHITTOCK CAMERON WINSTON TAYLO R	CHITTOCK REBECCA HYERS TAYLOR	31 LAKE SHORE DR		SUDBURY	MA	01776	75920-434	31 LAKE SHORE DR
F04-0415	TOWN OF SUDBURY	CONSERVATION	278 OLD SUDBURY ROAD		SUDBURY	MA	01776		BIRCHWOOD AVE
F04-0416	HALEY STERNS D & JAYNE J		24 BIRCHWOOD AVE		SUDBURY	MA	01776	27176-323	24 BIRCHWOOD AVE
F04-0417	SHAFRAN DAVID & ENDYKE ERICA	TRUSTEES OF THE SHAFRA ENDYKE	30 BIRCHWOOD AVE		SUDBURY	MA	01776	72557-134	30 BIRCHWOOD AVE
F04-0419	TOWN OF SUDBURY	TAX POSSESSION # 170	278 OLD SUDBURY ROAD		SUDBURY	MA	01776	13356-427	ELMWOOD AVE
F04-0420	DIMAURO RUSSELL & MIMI		588 PEAKHAM RD		SUDBURY	MA	01776	51947-373	ELMWOOD AVE
F04-0421	AJEF LLC		72 FRENCH RD		SUDBURY	MA	01776	55439-200	15 ELMWOOD AVE
F04-0422	TOWN OF SUDBURY	TREASURERS OFFICE	278 OLD SUDBURY RD		SUDBURY	MA	01776	49650-383	7 ELMWOOD AVE
F04-0423	TOWN OF SUDBURY	TREASURERS OFFICE	278 OLD SUDBURY RD		SUDBURY	MA	01776	49650-383	ELMWOOD AVE
F04-0501	TOWN OF SUDBURY	CONSERVATION	278 OLD SUDBURY ROAD		SUDBURY	MA	01776	12895-587	LAKE SHORE DR

**Notification to Abutters**  
**Under the Massachusetts Wetlands Protection Act**  
**and the Sudbury Wetlands Administrative 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 \_\_\_\_\_
- B. The Applicant has filed a Notice of Intent with the Sudbury Conservation Commission seeking permission to work in an Area Subject to Protection (Wetland Resource Area and/or Buffer Zone) under the Massachusetts Wetlands Protection Act (General Laws Chapter 131, Sec.40) and the Town of Sudbury Wetlands Administrative Bylaw.
- C. The **address** of the lot where the activity is proposed: \_\_\_\_\_
- D. The **proposed activity** is: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- E. A **Public Hearing** regarding this Notice of Intent will be held on:  
**Monday, \_\_\_\_\_ at 6:45 PM.**
- F. **Public Participation will be via Virtual Means Only** - In light of the ongoing COVID-19 coronavirus outbreak, Governor Baker issued an emergency Order on March 12, 2020, allowing public bodies greater flexibility in utilizing technology in the conduct of meetings under the Open Meeting Law. The Town of Sudbury Conservation Commission greatly values the participation of its citizens in the public meeting process, but given the current circumstances and recommendations at both the state and federal levels to limit or avoid public gatherings, including Governor Baker’s ban on gatherings of more than 10 people, together with the present closure of Sudbury Town Hall and other public buildings to the public, the Town has decided to implement the “remote participation” procedures allowed under Governor Baker’s emergency Order for all boards, committees, and commissions.
- G The public may participate in this meeting via Remote Participation:**
- From your computer, smart phone or tablet:
- \_\_\_\_\_
  - Meeting ID: \_\_\_\_\_
  - From your phone: **978-639-3366** or **470 250 9358**
- H Copies of the Notice of Intent may be examined by visiting this Website:  
<https://sudbury.ma.us/conservationcommission/meetings/>
- I. Copies of the Notice of Intent may be obtained from either The Applicant, or the Applicant’s representative \_\_\_\_\_, by calling this telephone number: \_\_\_\_\_ between the hours of \_\_\_\_\_

Note: Public Hearing Notice, including its date, time, and place, will be published at least 5 days in advance in the MetroWest newspaper (at the applicant’s expense).



**SCHEDULE OF ELEVATIONS**

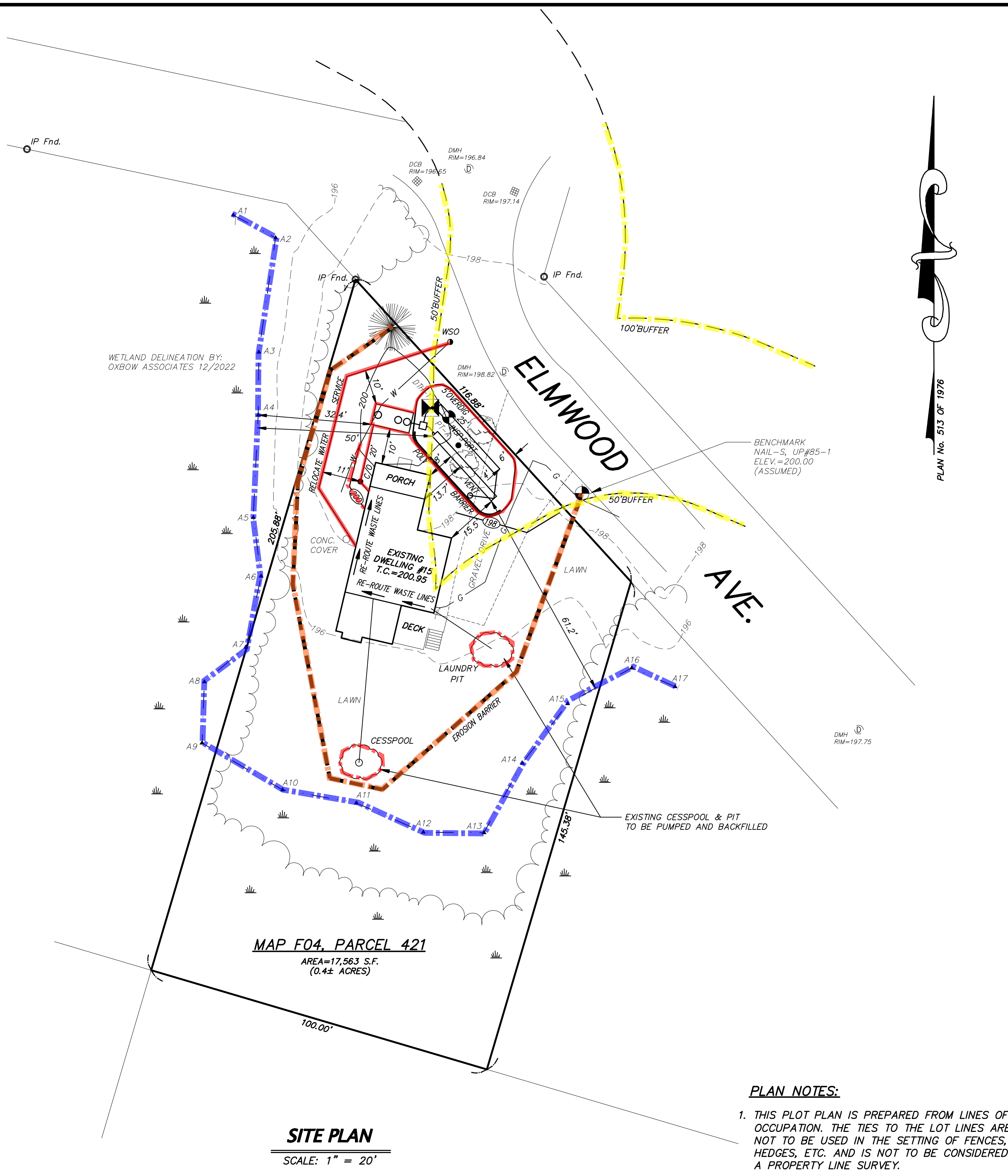
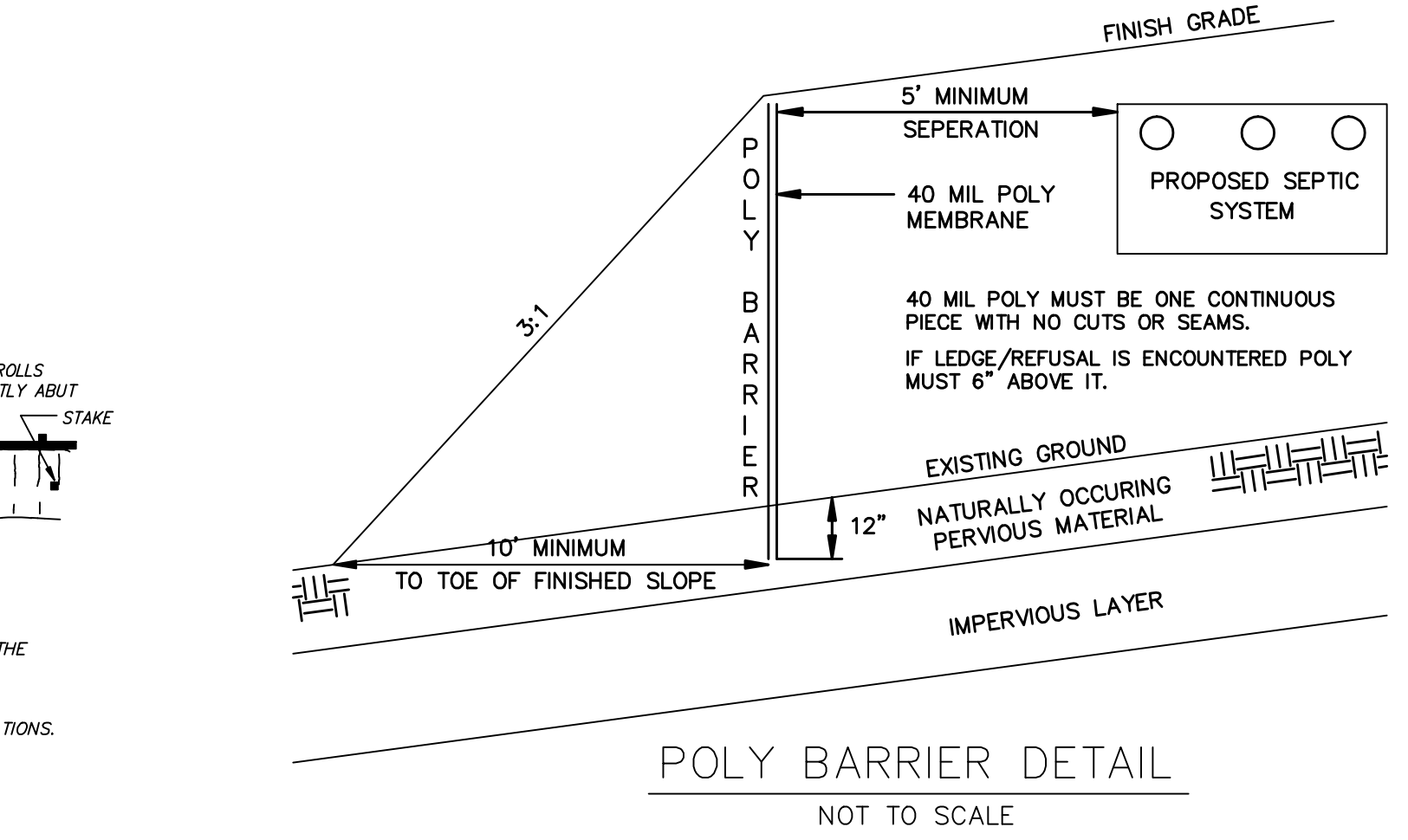
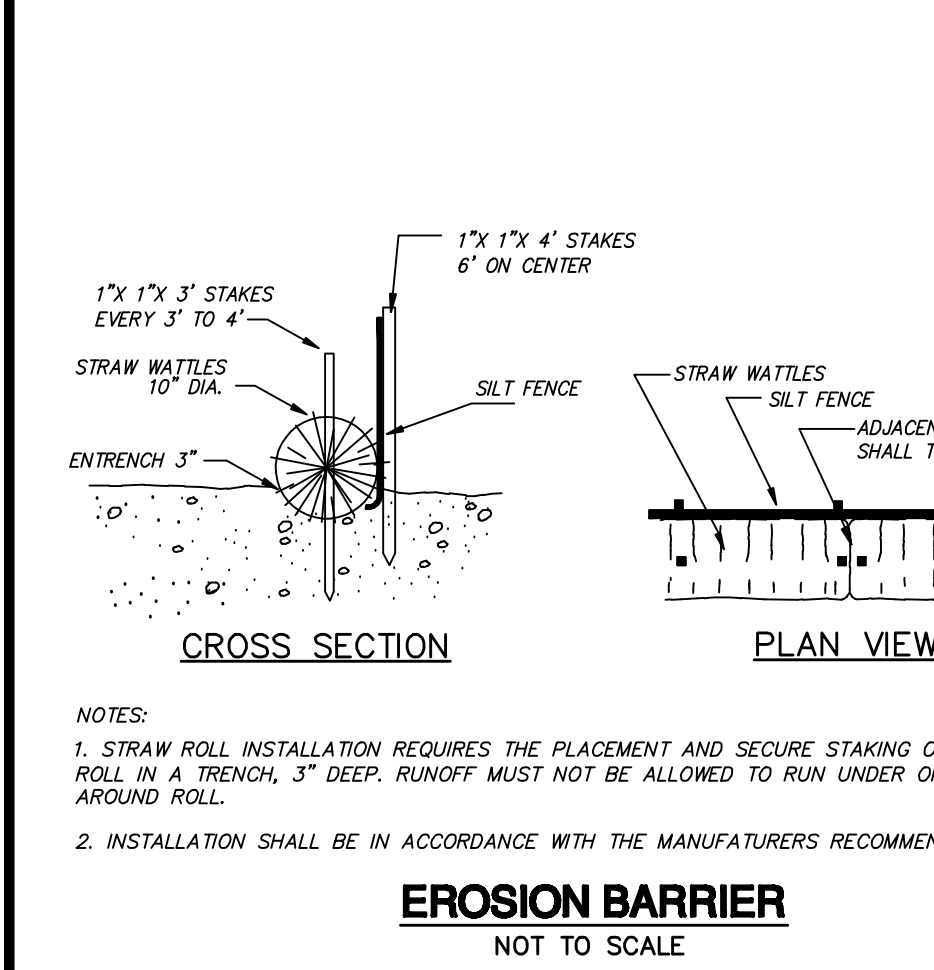
TOP OF FOUNDATION T.C. =	200.95
BASEMENT FLOOR FIN. C.F. =	193.9±
INVERT OF PIPE AT FOUNDATION =	198.4
INVERT AT SEPTIC TANK INLET =	198.0
INVERT AT SEPTIC TANK OUTLET =	197.8
INVERT AT DISTRIBUTION BOX INLET =	197.6
INVERT AT DISTRIBUTION BOX OUTLET =	197.4
INVERT AT LEACHING LINES (BEGINNING) =	197.2
INVERT AT LEACHING LINES (END) =	197.0
ELEVATION OF TRENCH BOTTOM =	195.0
FINISH GRADE OVER LEACHING AREA =	200-198

**DESIGN CRITERIA WITH DEED RESTRICTION**

- ESTIMATED FLOW = 2 BDRMS X 110 GPD/BR=220 GPD
- DESIGN PERCOLATION RATE = 2 MPI
- LEACHING AREA CALCULATION =  
 $SA=4(2 \times 25) = 200 \text{ SF} > 300 \text{ SF}(0.74 \text{ GPD/SF})=222 \text{ GPD}$   
 $BA=2(2 \times 25) = 100 \text{ SF}$

- LOCAL UPGRADE APPROVALS REQUIRED:**
- SYSTEM SEPARATION TO LOT LINES LESS THAN 10' (6' PROPOSED).
  - SYSTEM SEPARATION TO FOUNDATION LESS THAN 20' (13.7' PROPOSED).
  - SYSTEM SEPARATION TO SLAB LESS THAN 10' (8' PROPOSED).

- VARIANCE TO LOCAL BYLAWS REQUIRED:**
- SYSTEM LOCATION LESS THAN 100' TO WETLANDS (50' PROPOSED).



- GENERAL NOTES:**
- Contractor shall call Digsafe at (888) 344-7233 a minimum of 72 hours prior to commencing any construction activities on site.
  - Inspections by Design Engineer and Board of Health are as required by the Board of Health.
  - This plan was prepared for the design of the subsurface sewage disposal system only and is based on the subsurface explorations and percolation tests listed below.
  - System was designed only to accommodate sanitary sewage associated with normal domestic usage, consisting of water carried putrescible waste, and for flows indicated in the design criteria.
  - The system must be vented through the buildings plumbing in accordance with the state building code.
  - Plans show only features that were visually apparent on the date of the topographic survey, and the absence of subsurface structures, utilities, etc. is not guaranteed.
  - Contractor to determine if site conditions are suitable for construction of proposed system, and must promptly notify the Design Engineer and Owner, in writing, of any plan deficiencies, unforeseen subsurface conditions, or required changes.
  - There are no wells located within 100 feet of the proposed leaching area or within 100 feet of the proposed septic tank (except as shown).
  - The subject property is not located within a Zone II of a public drinking water supply well.
  - All construction is to conform to the requirements of the Massachusetts Environmental Code, Title V, and the town of Sudbury Board of Health regulations.
  - There are no surface or subsurface drains which are used to lower the ground water.
  - All elevations refer to TBM NAIL IN UP#85-1, EL.=200.0
  - For proper performance, septic tank should be pumped annually.
  - System cannot be backfilled or concealed until design firm and board of health have inspected the system and permission to backfill has been given.
  - Design firm must prepare and submit "As-Built" plan to Board of Health. This plan must certify that the system was installed in accordance with state and local regulations and that it complies with the proposed plan.
  - Property lines are approximate and are not to be used for boundary survey purposes. Surface features and topography outside of work area are approximate.
  - System is not designed to accommodate a garbage grinder.

- TECHNICAL NOTES:**
- Building sewer shall be in accordance with state plumbing code and have a minimum of 4" of cover in landscaped areas. A minimum of 12" of cover and/or appropriate sleeving shall be used in areas subject to vehicular traffic.
  - All tanks, including septic tanks, distribution boxes, dosing chambers, and grease traps shall be either watertight through manufacturer's specification and warranty, or made watertight by the manufacturer or other individual by means and persons as approved in 310 CMR 15.221. Septic tank shall be constructed and placed in accordance with 310 CMR 15.223 through 310 CMR 15.228.
  - Septic tanks shall have at least three (3) 20" manholes with at least one (1) of these manholes located no more than 6" below finish grade. (Systems over 1,000 gpd shall have access ports at both the inlet and outlet tees.)
  - Distribution box ("d-box") shall be of watertight construction, installed level on a firm base, and installed in accordance with 310 CMR 15.232.
  - Septic tank covers and d-box are to be brought within 6" and 9" of finish grade respectively by the use of riser sections.
  - When the soil absorption system (SAS) is to be dosed or the slope of the inlet pipe exceeds 0.08 feet per foot, an inlet tee, baffle or splash plate extending to one inch above the outlet invert elevation shall be provided to dissipate velocity of the influent.
  - When the SAS is installed within the top and subsoil layers or above natural grade, all topsoil and subsoil shall be removed below and laterally a minimum of 5 feet surrounding the SAS. Removed material shall be replaced with clean granular material in accordance with 310 CMR 15.255(3).
  - All disturbed areas shall be loamed, seeded, and maintained so as to prevent erosion.
  - All native soil interfaces which will contact the SAS shall be scarified prior to placement of stone.

**PERCOLATION TESTS**

HOLE NO. & DATE	TOP ELEVATION	DEPTH (in.)	SATURATION (Min.)	12"-9" DROP (Min.)	9"-6" DROP (Min.)	PERC. RATE (Min./In.)
PT-A 12/20/22	200.0	70"			COULD NOT SATURATE	<2 MIN/IN

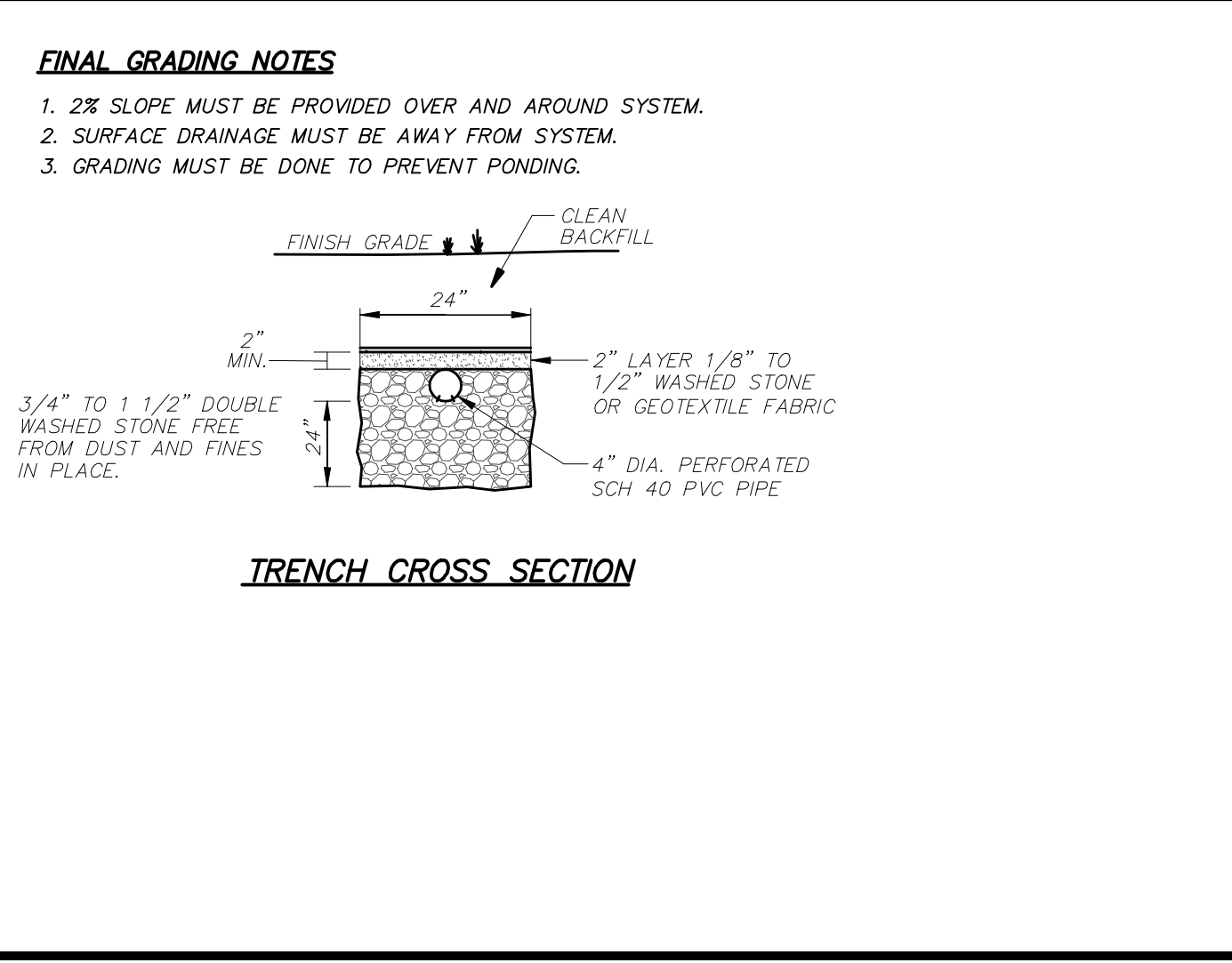
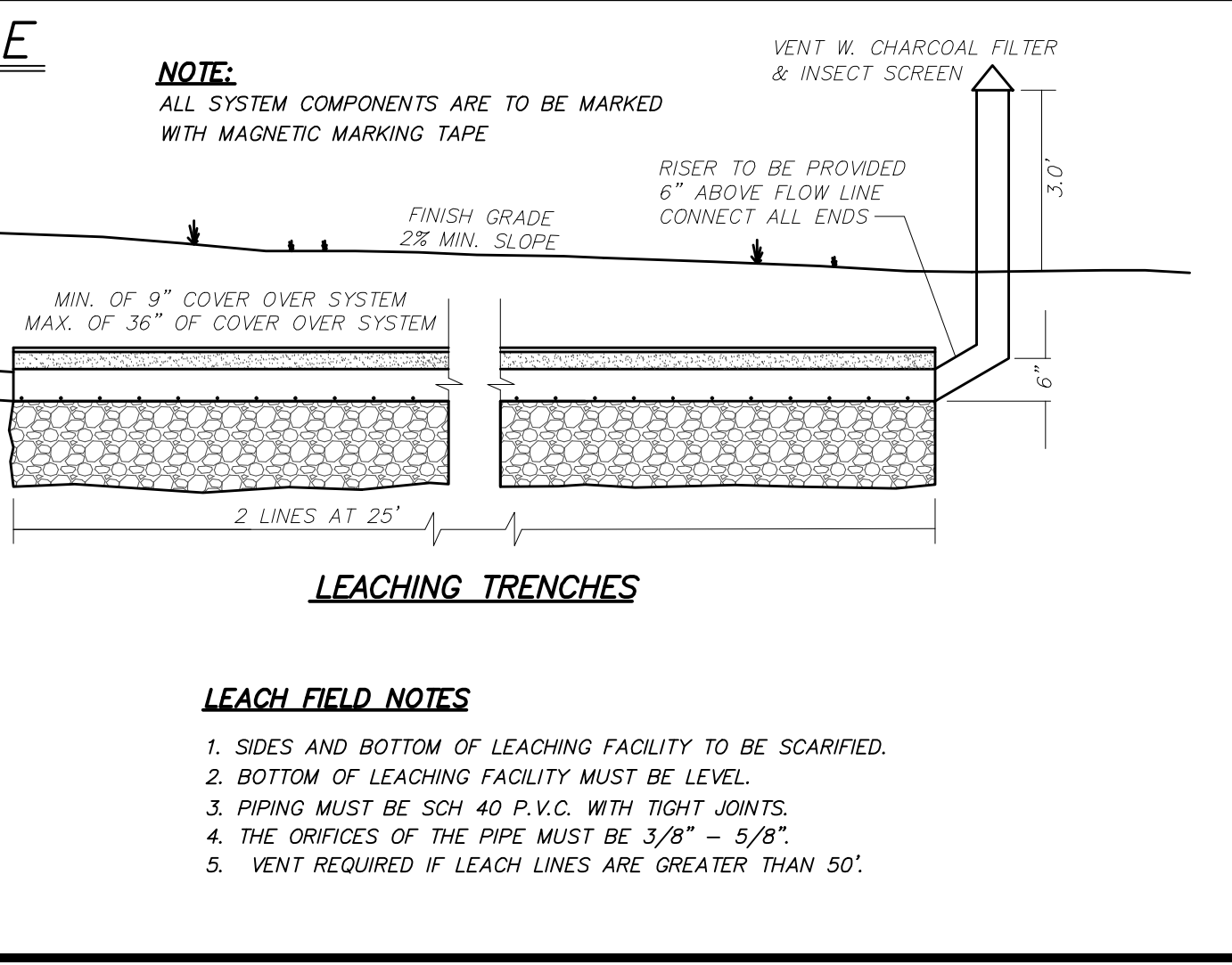
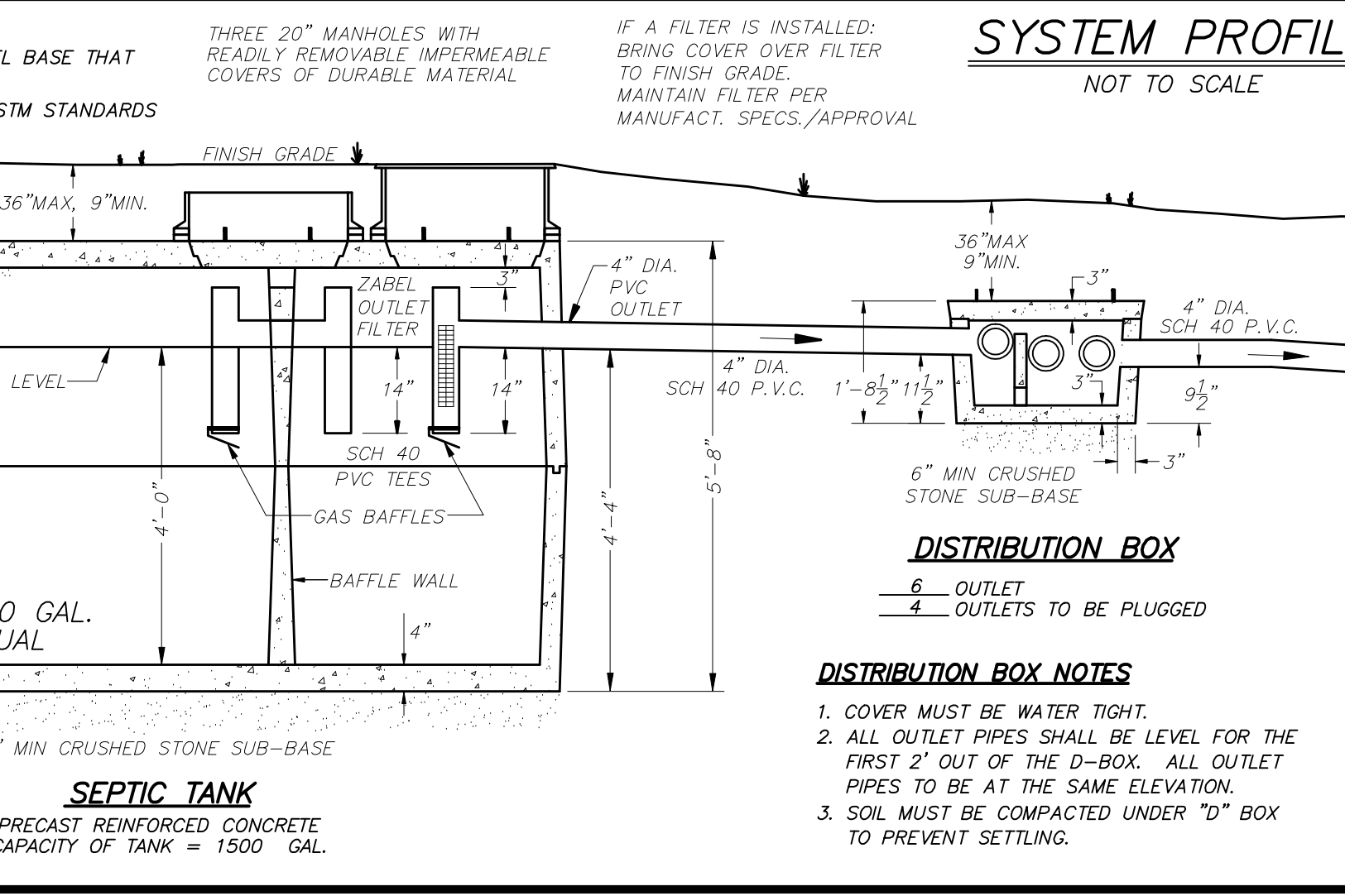
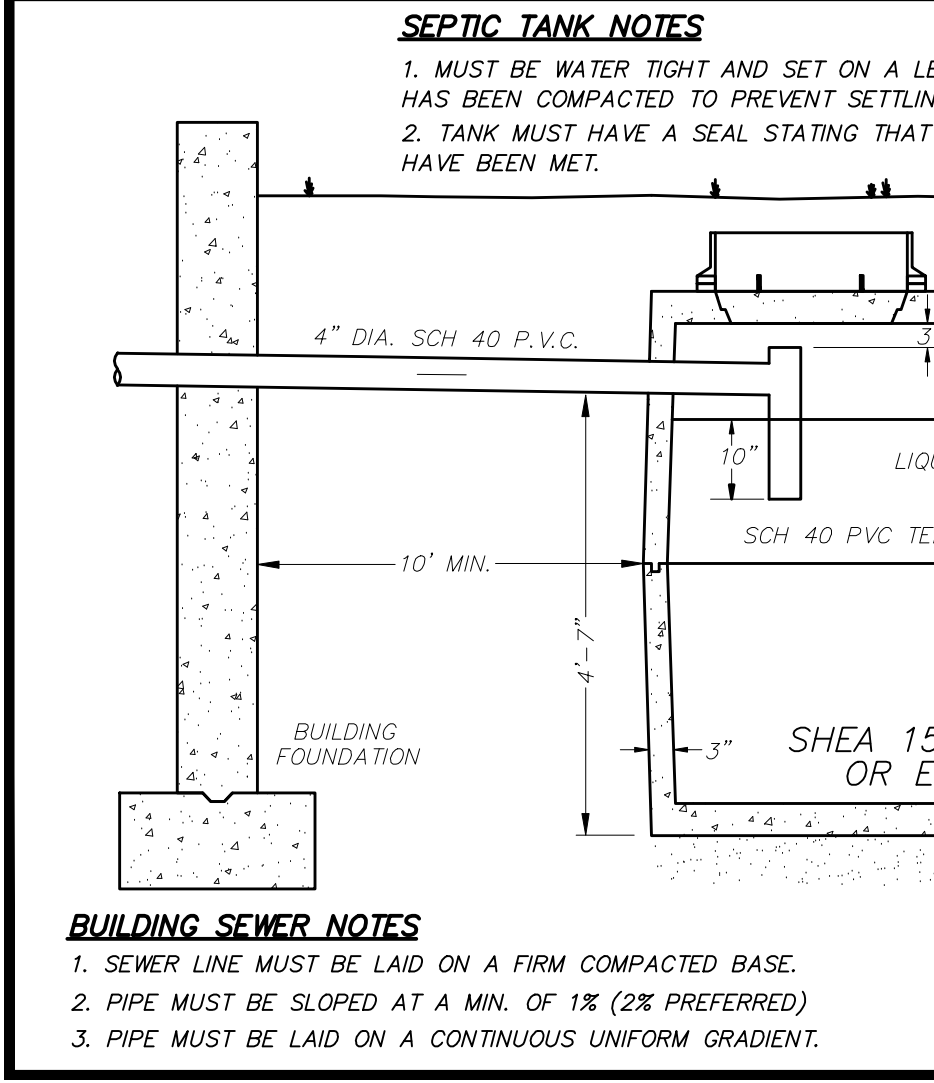
**DEEP OBSERVATION HOLE LOG**

NO., DATE & ELEV.	DEPTH (in.)	SOIL HORIZON	TEXTURE (USDA)	COLOR (MUNSELL)	SOIL MOTTLING	OTHER
DTH-1 12/20/22	0-52"		FILL	10YR6/4	NONE	
200.3	52-132"	C1	COARSE SAND			

DEPTH TO BEDROCK: - STANDING WATER: - WEEPING FROM PIT FACE: - ESHWT: 189.3

TESTS CONDUCTED BY: MIKE SULLIVAN  
 TESTS OBSERVED BY: ROB LAZO  
 DATE: 12/20/22

I certify that I have passed the examination approved by the department of Environmental Protection and that the above analysis has been performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.018(2).  
 Certified:



- BUILDING SEWER NOTES**
- SEWER LINE MUST BE LAID ON A FIRM COMPACTED BASE.
  - PIPE MUST BE SLOPED AT A MIN. OF 1% (2% PREFERRED)
  - PIPE MUST BE LAID ON A CONTINUOUS UNIFORM GRADIENT.

- SEPTIC TANK**  
 PRECAST REINFORCED CONCRETE  
 CAPACITY OF TANK = 1500 GAL.
- DISTRIBUTION BOX NOTES**
- COVER MUST BE WATER TIGHT.
  - ALL OUTLET PIPES SHALL BE LEVEL FOR THE FIRST 2' OUT OF THE D-BOX. ALL OUTLET PIPES TO BE AT THE SAME ELEVATION.
  - SOIL MUST BE COMPACTED UNDER "D" BOX TO PREVENT SETTLING.

- LEACH FIELD NOTES**
- SIDES AND BOTTOM OF LEACHING FACILITY TO BE SCARIFIED.
  - BOTTOM OF LEACHING FACILITY MUST BE LEVEL.
  - PIPING MUST BE SCH 40 P.V.C. WITH TIGHT JOINTS.
  - THE ORIFICES OF THE PIPE MUST BE 3/8" - 5/8"
  - VENT REQUIRED IF LEACH LINES ARE GREATER THAN 50'.

- FINAL GRADING NOTES**
- 2% SLOPE MUST BE PROVIDED OVER AND AROUND SYSTEM.
  - SURFACE DRAINAGE MUST BE AWAY FROM SYSTEM.
  - GRADING MUST BE DONE TO PREVENT PONDING.

**APPLICANT**  
EUGENE WARNER

**LOCATION**  
15 ELMWOOD AVENUE  
SUDBURY, MA  
ASSESSORS MAP F04 & PARCEL 421

**DIGSAFE**  
1-888-344-7233

NO.	DATE:	REVISION:	BY:

**PROPOSED SEWAGE DISPOSAL SYSTEM**  
**CONNORSTONE ENGINEERING**  
 CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS  
 10 SOUTHWEST CUTOFF, SUITE 7  
 NORTHBOROUGH, MASSACHUSETTS 01532  
 PHONE: 508-393-9727 WWW.CSEI.NET  
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 PHONE: 978-443-9566 WWW.SULLIVANCONNORS.COM

DATE: 12/28/2022 SHEET 1 OF 1