

July 16, 2019

Sudbury Conservation Commission  
Department of Public Works Building  
275 Old Lancaster Road  
Sudbury, MA 01776

**Re: Notice of Intent Application  
604 Peakham Road, Sudbury MA**

**1. Introduction**

Goddard Consulting, LLC (GC) is pleased to submit this Notice of Intent (NOI) on behalf of Michael Audette of Nu-Home Contractors of for the proposed single-family home and septic system to a parcel known as 604 Peakham RD, MA (Map H08, Lot 0017). This application is a joint filing under the MA Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw.

Three hard copies of the NOI application are enclosed, and the titles of all the documents enclosed are as follows:

- WPA Form 3 with Wetland Fee Transmittal Form
- Copy of Checks
- Abutter's list and Map
- Notification to Abutters, Affidavit of Service
- *Wetland Border Report*, Goddard Consulting LLC, 06/11/19
- *Septic System Design for Applicant: Nu-Home Remodeling 604 Peakham RD, Sudbury Mass*, Capstone Design Build, INC, 06/07/19

**1. Existing Conditions**

The northern side of the property is currently developed into a single-family home with an associated driveway. The on-site sewer waste management system consists of a non- Title V compliant and failing cess-pool. There are no wetland resources located on-site, however, the southern end of the property is located within the 100' and 50' buffer zones to an off-site BVW.

According to Mass GIS Data Layers for NHESP, the site is not located within an Estimated Habitat of Rare Wildlife / Priority Habitat of Rare Species. FEMA 100-year floodplain (Zone A or AE) is not mapped within the property.

The off-site wetland resources were delineated by Goddard Consulting on June 11, 2019. The wetland border was flagged using the criteria in the most recent edition of the MA Wetlands Protection Act (WPA) and Regulations (310 CMR 10.00 et al.) and Sudbury Wetlands Administration Bylaw. Hydric soil indicators, vegetational changes, hydrological indicators, and topography were all considered for delineation purposes. For more information refer to the attached Wetland Border Report.

### **3. Proposed Conditions**

The applicant proposes to demolish an existing house and build a new single-family home, with an associated deck and Title V compliant septic system. The Title V compliant septic system, which is an improvement to the non-compliant cess-pool, will be built within the 100' buffer zone while only ±30 s.f of the proposed house structure will be built within the 100' buffer zone. The proposed work will mostly take place within the current limit of lawn (see attached plan) and the footprint of the area of a former garage. No work is being proposed within BVW. An erosion control barrier will be constructed around the proposed construction to prevent runoff into the off-site BVW.

### **4. Resource Area Performance Standards Analysis**

#### ***4.1 Under the WPA:***

The proposed work will occur in Buffer Zone to BVW only and will fall under standard 310 CMR 10.02(3) of the WPA, which states the following:

*“3. Activities within the buffer zone which do not meet the requirements of 310 CMR 10.02(2)(b)1. and 2. are subject to preconstruction review through the filing of a Determination of Applicability to clarify jurisdiction or a Notice of Intent under the provisions of 310 CMR 10.05(4) and 10.53(1).”*

This submittal is a Notice of Intent application.

The septic system will be the closest structure to the off-site BVW system, and the septic will not be located within 50 feet of the BVW. The proposed septic system is in compliance with Title V, and therefore in compliance with the interests of the Wetland Protection Act. As stated under 310 CMR 10.03(3)'s presumption of protection standard, which outlines the following:

*“A subsurface sewage disposal system that is to be constructed in compliance with the requirements of 310 CMR 15.000: The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage, or more stringent local board of health requirements, shall be presumed to protect the eight interests identified in M.G.L. c. 131, § 40, but only if none of the components of said system is located within... resource areas.”*

#### ***4.2 Under the Bylaw:***

Section 7.2 of the Bylaw Regulations provides performance standards for work within the AURA.

##### The Character of the Work and Alternatives

The proposed project consists of the re-development of an already developed single family lot including the replacement of a non- Title V-compliant cess-pool sewage system with a Title V compliant septic system. The proposed project has been designed to minimize and limit disturbance to the already developed areas of the lot to the greatest extent feasible. Minor grading and expansion of lawn, associated with the proposed septic, will take place within the 50' buffer zone. All of the proposed structures will be built outside of the 50' buffer zone to the off-site BWV. Erosion and sediment controls will be placed at the limit of work.

##### Setting Disturbance Restrictions

Portions of the project will be located within the Buffer Zone/AURA. However, the majority of the proposed work will take place within the existing limit of lawn and already disturbed areas. The vast majority of the 50' buffer zone will remain undeveloped with only ±85 sf of disturbance occurring within the 50' buffer zone. An erosion control barrier will be placed around the proposed construction to protect the BVW.

##### No Significant Adverse Impact of Wildlife Habitat

The project will not have an adverse impact to wildlife. The site consists of a developed single-family lot and the site is not located within an Estimated Habitat of Rare Wildlife / Priority Habitat of Rare Species. There are no potential or mapped vernal pools on site. The majority of the proposed work will take place within the already developed portion/limit of lawn of the buffer zone. The limit of lawn will be expanded in the southern end of the lot, extending ±85 ft in to the 50' buffer zone.

#### **5-Conclusions**

Goddard Consulting believes that the proposed project meets all regulatory compliance standards under the WPA and the local Bylaw and the project will not have an adverse impact on the on-site resource areas. No work is being proposed within the BVW. Erosions and sediment controls will be placed at the limit of work. As such, GC respectfully requests that the Commission issues an Order of Conditions (OOC) approving the project.

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

Very truly yours,

A handwritten signature in black ink, appearing to read "Scott Goddard". The signature is fluid and cursive, with a large initial "S" and "G".

Scott Goddard,  
Principal & PWS

CC: Michael Audette, Nu-Home Contractors, 140 Hopkinton Road, Upton MA, 01568  
MassDEP, NERO, 205B Lowell Street, Wilmington, MA 01887



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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

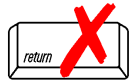
Document Transaction Number

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):

<u>604 Peakham Road</u>	<u>Sudbury</u>	<u>01776</u>
a. Street Address	b. City/Town	c. Zip Code
<u>Latitude and Longitude:</u>	<u>42.381588</u>	<u>-71.416824</u>
	d. Latitude	e. Longitude
<u>H-08</u>	<u>17</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Michael</u>	<u>Audette</u>	
a. First Name	b. Last Name	
<u>Nu-Home Contractors</u>		
c. Organization		
<u>140 Hopkinton Road</u>		
d. Street Address		
<u>Upton</u>	<u>MA</u>	<u>01568</u>
e. City/Town	f. State	g. Zip Code
<u>508-560-8900</u>	<u>michael@nu-home.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>Maryl</u>	<u>Thompson</u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u>604 Peakham Road</u>		
d. Street Address		
<u>Sudbury</u>	<u>MA</u>	<u>01776</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>Scott</u>	<u>Goddard</u>	
a. First Name	b. Last Name	
<u>Goddard Consulting, LLC</u>		
c. Company		
<u>291 Main Street Suite #8</u>		
d. Street Address		
<u>Northborough</u>	<u>MA</u>	<u>01532</u>
e. City/Town	f. State	g. Zip Code
<u>(508) 393-3784</u>	<u>scott@goddardconsultingllc.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$500</u>	<u>\$237.50</u>	<u>\$262.50 (+\$25 bylaw fee)</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

**WPA Form 3 – Notice of Intent**

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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

**A. General Information (continued)**

6. General Project Description:

Construction of a single family house and replacement of an existing cess-pool with a Title V compliant septic system on a previously developed single family house lot.

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:

Middlesex South

a. County

12548

c. Book

b. Certificate # (if registered land)

362

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.



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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

**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.



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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

**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





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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

### C. Other Applicable Standards and Requirements

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

#### Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

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**

August 1, 2017

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 <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

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



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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

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

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

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

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

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

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

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

North Shore - Hull to New Hampshire border:

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

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



**Massachusetts Department of Environmental Protection**  
Bureau of Resource Protection - Wetlands

## WPA Form 3 – Notice of Intent

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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

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

**Online Users:**

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

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

**WPA Form 3 – Notice of Intent**

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

And Sudbury Wetland Protection Bylaw

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

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.

"Septic System Design for: Applicant Nu-Home Remodeling 604 Peakham Rd Sudbury Mass"

a. Plan Title

Capstone Design Build, Inc

b. Prepared By

06/7/2019

d. Final Revision Date

c. Signed and Stamped by

1=20'

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:

473

2. Municipal Check Number

07/16/19

3. Check date

475

4. State Check Number

07/16/19

5. Check date

Michael

6. Payor name on check: First Name

Audette

7. Payor name on check: Last Name



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Wetlands**

Provided by MassDEP:

**WPA Form 3 – Notice of Intent**

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

MassDEP File Number \_\_\_\_\_

Document Transaction Number \_\_\_\_\_

Sudbury  
City/Town

**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 ( )	<i>Michael A. Andette</i>	2. Date	<i>7/16/19</i>
3. Signature of Property Owner ( )	<i>Carolyn</i>	4. Date	<i>7/16/19</i>
5. Signature of Representative (Scott Goddard, Goddard Consulting, LLC)	<i>Scott Goddard</i>	6. Date	<i>7/16/19</i>

**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.

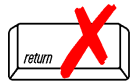
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



**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

And Sudbury Wetland Protection Bylaw

**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:

604 Peakham Road	Sudbury
a. Street Address	b. City/Town
475	\$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Michael	Audette	
a. First Name	b. Last Name	
Nu-Home Remodeling		
c. Organization		
140 Hopkinton Road		
d. Mailing Address		
Upton	MA	01568
e. City/Town	f. State	g. Zip Code
(508) 560-8900	michael@nu-home.com	
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

Mary	Thompson	
a. First Name	b. Last Name	
c. Organization		
604 Peakham Road		
d. Mailing Address		
Sudbury	MA	01776
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	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

And Sudbury Wetland Protection Bylaw

**B. Fees** (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
2a	1	\$500	\$500
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**Step 5/Total Project Fee:** \$500

**Step 6/Fee Payments:**

Total Project Fee:	\$500
State share of filing Fee:	a. Total Fee from Step 5 \$237.50
City/Town share of filing Fee:	b. 1/2 Total Fee <b>less</b> \$12.50 \$262.50
	c. 1/2 Total Fee <b>plus</b> \$12.50

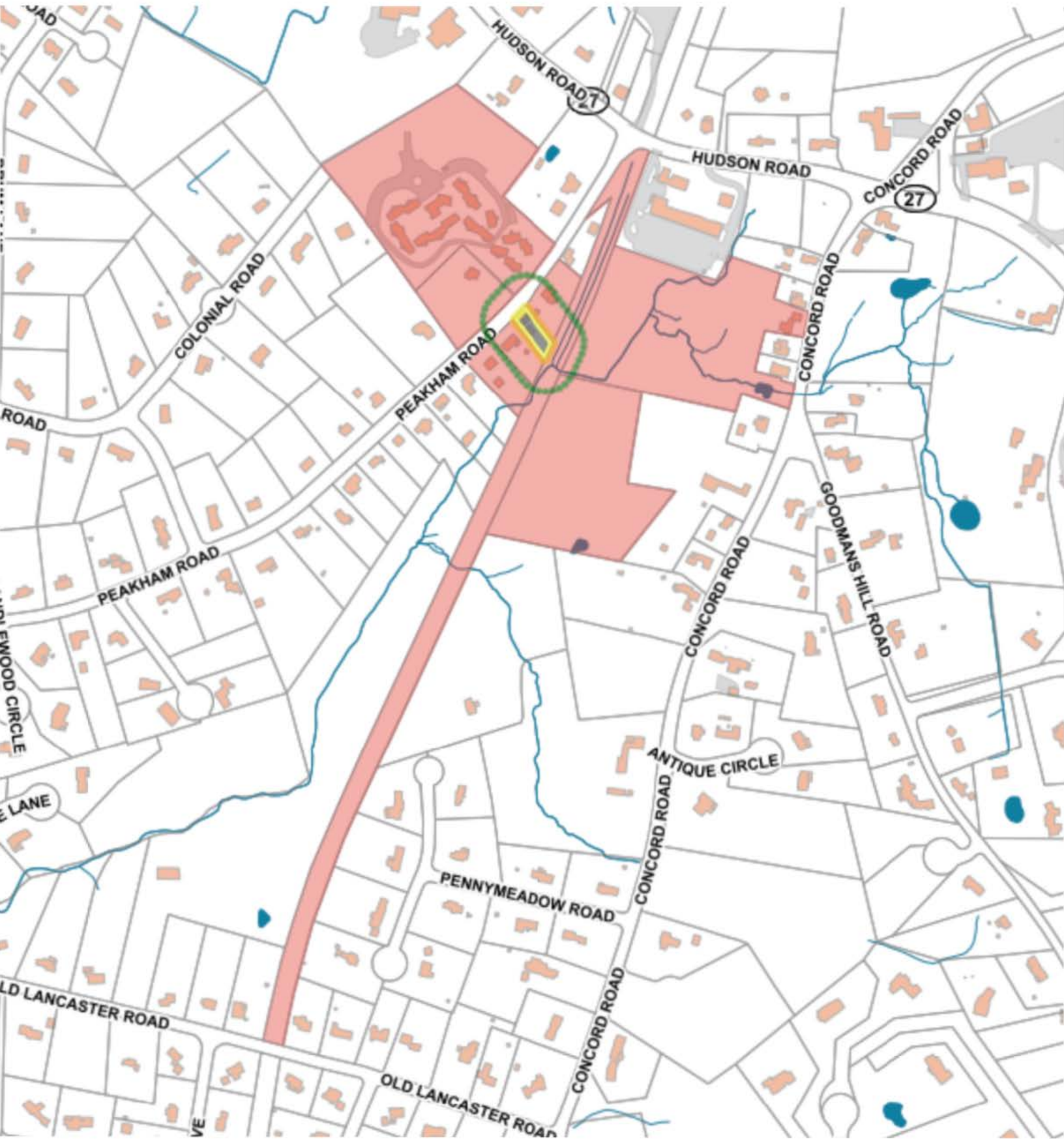
**C. Submittal Requirements**

- 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.)





abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
H08-0015	ENSLEY MICHAEL T & LAURIE A		598 PEAKHAM RD	SUDBURY	MA	01776	32069-415	598 PEAKHAM RD
H08-0016	HART JON L & BRENDA K		602 PEAKHAM RD	SUDBURY	MA	01776	71382-371	602 PEAKHAM RD
H08-0017	THOMPSON MARY L		604 PEAKHAM RD	SUDBURY	MA	01776	12548-362	604 PEAKHAM RD
H08-0018	NUSINOW DAVID P &	NEUMAN NICOLE A	610 PEAKHAM RD	SUDBURY	MA	01776	72671-130	610 PEAKHAM RD
H08-0040	STEVENSON BENJAMIN D & JANE K		601 PEAKHAM RD	SUDBURY	MA	01776	41495-422	601 PEAKHAM RD
H08-0041	SUDBURY HOUSING AUTHORITY		55 HUDSON RD	SUDBURY	MA	01776	12956-456	55 HUDSON RD
H09-0007	ANDREWS JAMES & ELIZABETH		293 CONCORD RD	SUDBURY	MA	01776	58928-173	293 CONCORD RD
H09-0012	SUDBURY VALLEY TRUSTEES INC		18 WOLBACH RD	SUDBURY	MA	01776	14337-1	0 CONCORD RD
H08-5100	EOT	MASS BAY TRANSPORTATION	10 PARK PLAZA	BOSTON	MA	02116	13117-113	RAILWAY

*Guthrie Perry*  
7/16/2019

Notification to Abutters Under the  
Massachusetts Wetlands Protection Act and  
the Town of Sudbury Wetlands Administration Bylaw

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40 and the Town of Sudbury Wetlands Administration Bylaw you are hereby notified of the following:

The Applicant: Michael Audette of Nu-Home Contractors.

Address: 140 Hopkinton Road, Upton MA 01568

Has filed a Notice of Intent with the **Sudbury Conservation Commission** seeking permission to remove, fill, dredge, or alter an Area Subject to Protection under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw.

Applicant's Representative: Scott Goddard, Goddard Consulting LLC.

Address: 291 Main Street, Suite 8, Northborough, MA 01532 Phone: (508) 393-3784

The address of the property where the activity is proposed: 604 Peakham Road, Sudbury, MA.

Town Atlas Plat/Map: H-08 Parcel/Lot: 17

Project description: Construction of new single family dwelling, and the replacement of a cess-pool with a new, Title V compliant, septic system.

Copies of the Notice of Intent may be examined at the **Conservation Office, Department of Public Works Building, 275 Old Lancaster Road, Sudbury** between the hours of **9:00am to 2:00pm Monday through Wednesday, 10:00am to 4:00pm on Thursdays, and 9:00am to 2:00pm on Fridays.** For more information, please call the Conservation office at **(978) 440-5471** or email at [concom@sudbury.ma.us](mailto:concom@sudbury.ma.us).

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Sudbury Town Crier.**

NOTE: Notice of the public hearing, including the date, time, and place, will be posted in the Dept. of Public Works Building not less than forty-eight (48) hours in advance.

NOTE: You may also contact your local conservation commission or the nearest Department of Environmental Protection Regional Office\* for the information about this application or, the Wetlands Protection Act. Sudbury is in the Northeast Region of DEP. To contact DEP, call:

**\*DEP Northeast Region: (978) 694-3200  
205B Lowell Street, Wilmington, MA 01887**

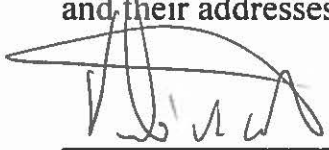
AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act and  
the Town of Sudbury Wetlands Administration Bylaw

I, Valovia Costa hereby certify under the pains and penalties of perjury that on 07/17/19 I gave notification to abutters in Compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dating April 8, 1994 in connection with the following matter:

A Notice of Intent was filed under the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw by Michael Audette of Nu- Home Contractors with the Sudbury Conservation Commission on July 16, 2019 for a property located at 604 Peakham Road, Sudbury MA.

The form of the notification, and the list of abutters to whom it was given, and their addresses, are attached to this Affidavit of Service.

  
\_\_\_\_\_  
(Name)

07/17/19  
\_\_\_\_\_  
(Date)

June 11, 2019

Nu-Home Contractors  
140 Hopkinton Road  
Upton, MA 01568

Re: 604 Peakham Road, Sudbury

Dear Mr. Audette

On June 11, 2019 the wetland resources were delineated on a portion of land located at the above referenced site. The wetland border was flagged using the criteria in the most recent edition of MA Wetland Protection Act (WPA) and Regulations 310 CMR 10.00 et al and the Town of Sudbury Wetland Bylaw. Hydric soil indicators, vegetation changes, hydrological indicators, and topography were all considered for delineation purposes.

The resources on/or near the site consist of two intermittent stream channels and associated Bordering Vegetated Wetland (BVW). The channels located closest to the site were flagged with series S1-8; where flags S1 and S2 delineate the top of bank of a mapped intermittent stream channel and S3-S8 delineates top of Bank of a non-mapped intermittent stream channel located along the back rail of the adjacent railroad bed which feeds into the mapped stream. The smaller of the two channels is located closest to the site (parallel) to the back-property line. The channel is 2-3 feet wide with 1-3 inches of flowing water and has 6-inch banks vegetated with touch-me-nots. The mapped stream channel corner (flagged with S1 and S2) which continues to flow south east away from the site is 3-6 feet wide, with 3-6 inches of flowing water and 6-12-inch banks.

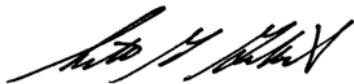
Wetland up-gradient of both channels (located within the old railroad bed) was flagged with series GC1-6. The wetland was dominant in touch-me-nots, poison ivy, elm, red maple buckthorn and ilex. Department of Environmental Protection BVW field data forms were documented at wetland flag GC-3 (see attached forms).

According to the Mass GIS data layers for NHESP, this site is not located within Estimated and/or Priority Habitat of Rare Wildlife, and no mapped vernal pools are located on or near the site. The site is not located in a jurisdictional FEMA Flood Zone or within 200-ft of a mapped perennial river.

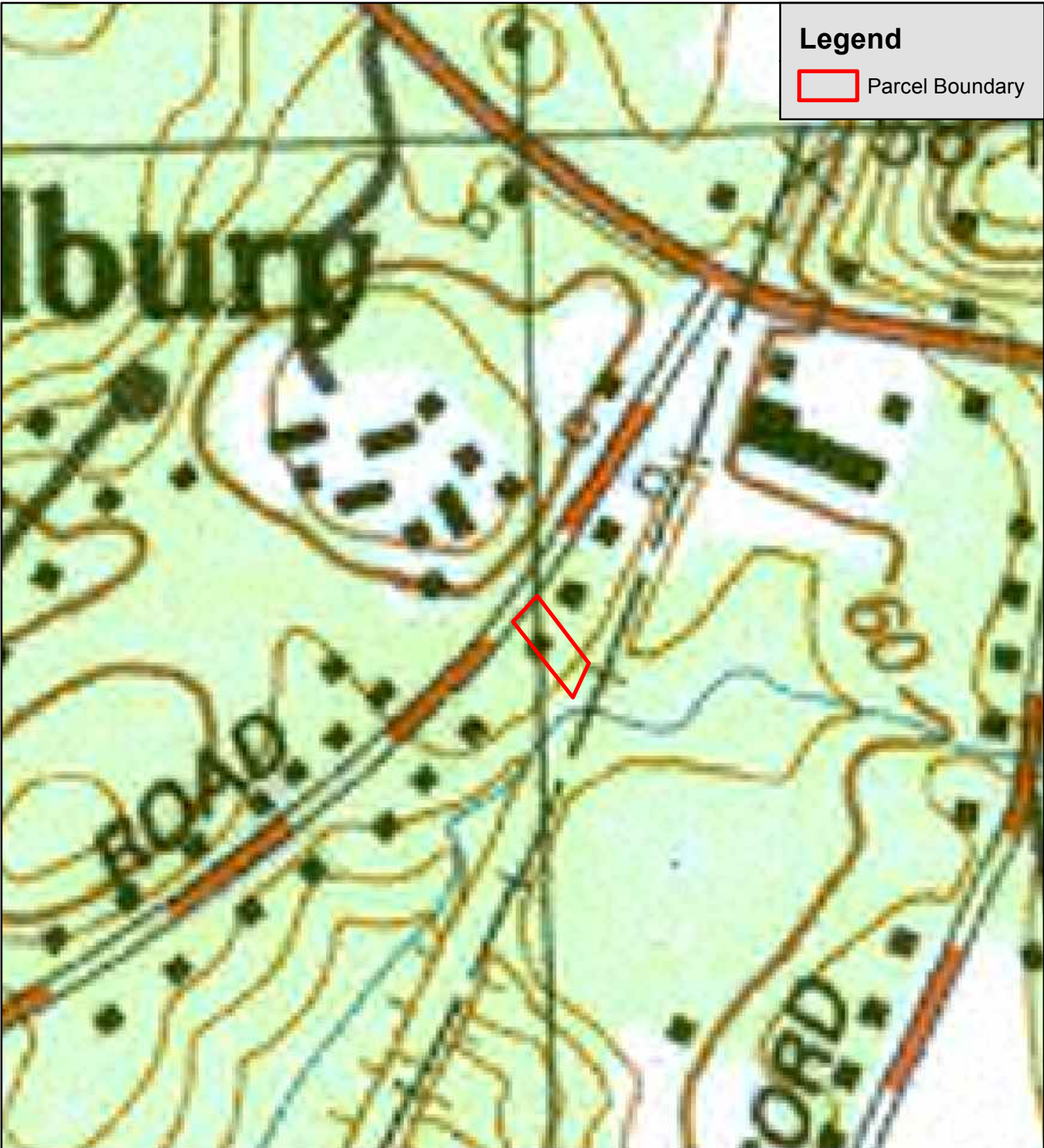
The MA Wetlands Protection Act and the local bylaw takes jurisdiction over BVW and Bank resources and their jurisdictional 100-foot Buffer Zones.

Any work within the resource areas and/or 100-foot buffer zone requires a Request for Determination (RDA) or Notice of Intent (NOI) be filed with the Conservation Commission. If you need further assistance with permitting, please call us we would be happy to assist.


Very truly yours,



Scott Goddard,  
Principal & PWS



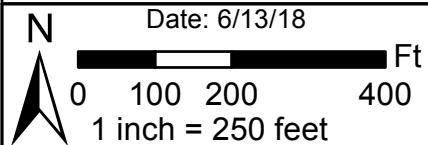
**Legend**

 Parcel Boundary

# USGS Site Locus

604 Peakham Rd. - Sudbury, MA

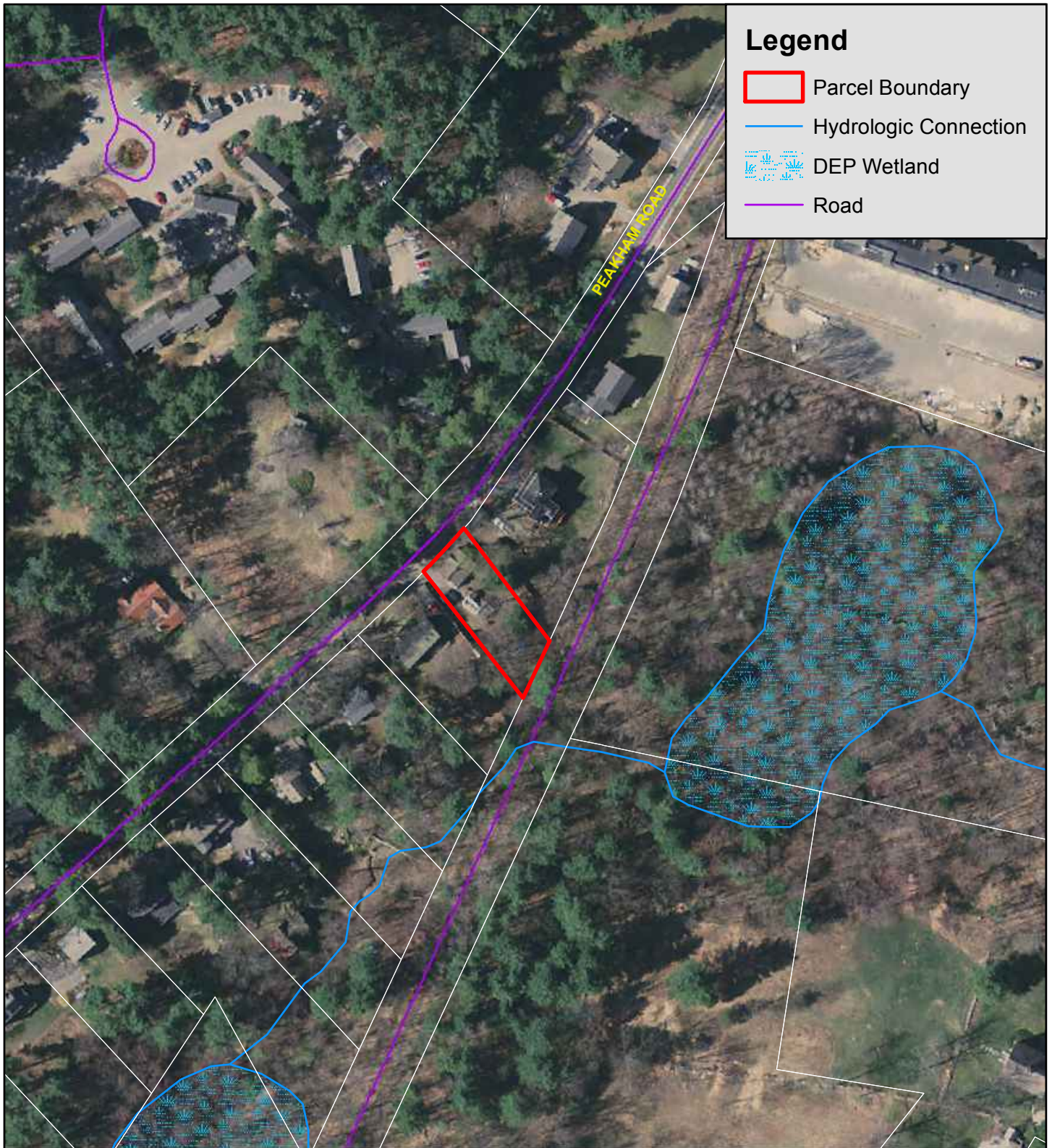
(PID: H08-0017)



Date: 6/13/18

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





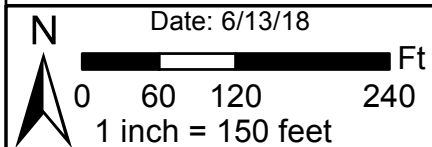
**Legend**

- Parcel Boundary
- Hydrologic Connection
- DEP Wetland
- Road

## Orthophoto View of Site

604 Peakham Rd. - Sudbury, MA

(PID: H08-0017)



Date: 6/13/18

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



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

Applicant: \_\_\_\_\_ Prepared by: Goddard Consulting LLC Project location: 604 Peakham Road, Sudbury DEP File #: \_\_\_\_\_

Check all that apply:  Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only  
 Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II  
 Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: <b>GC-3</b>	Transect Number: <b>Upgradient</b>	Date of Delineation: <b>11-Jun-19</b>	
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<b><u>Tree Layer</u></b>					
Red Maple	<i>Acer rubrum</i>	10%	6.3%	No	FAC*
Black Oak	<i>Quercus velutina</i>	36%	22.8%	Yes	UPL
White ash	<i>Fraxinus americana</i>	20%	12.7%	No	FACU
Norway Maple	<i>Acer platanoides</i>	36%	22.8%	Yes	UPL
Sugar Maple	<i>Acer saccharum</i>	36%	22.8%	Yes	FACU
Eastern hemlock	<i>Tsuga canadensis</i>	20%	12.7%	No	OBL*
<b><u>Sapling Layer</u></b>					
Red Oak	<i>Quercus rubra</i>	10%	100.0%	Yes	FACU
<b><u>Shrub Layer</u></b>					
Honeysuckle	<i>Lonicera sp.</i>	63%	86.3%	Yes	FACU
Winterberry	<i>Ilex verticillata</i>	10%	13.7%	No	FACW*
<b><u>Climbing Woody Vine</u></b>					
American bittersweet	<i>Celastrus scandens</i>	36%	100.0%	Yes	FACU
<b><u>Ground Cover</u></b>					
Pale touch-me-not	<i>Impatiens pallida</i>	10%	25.0%	Yes	FACW*
American bittersweet	<i>Celastrus scandens</i>	20%	50.0%	Yes	FACU
Virginia-creeper	<i>Parthenocissus quinquefolia</i>	10%	25.0%	Yes	FACU
<b>Remarks:</b> * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
<b>Morphological Adaptations:</b> 0		<b>Description:</b> _____			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
<b>Vegetation conclusion:</b>					
<b>Number of dominant wetland indicator plants: 1</b>			<b>Number of dominant non-wetland indicator plants: 8</b>		
<b>Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no</b>					

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

**Section II. Indicators of Hydrology**

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site?  yes  no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: \_\_\_\_\_

soil type mapped: Deerfield Loamy sand

hydric soil inclusions: \_\_\_\_\_

Are field observations consistent with soil survey?  yes  no

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-4"	10YR2/2	
B	4-12"	10YR4/4	
B2	12-20	10YR5/4	

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Other: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Conclusion: Is soil hydric?  yes  no

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated: \_\_\_\_\_
- Depth to free water in observation hole: \_\_\_\_\_
- Depth to soil saturation in observation hole: \_\_\_\_\_
- Water marks: \_\_\_\_\_
- Drift Lines: \_\_\_\_\_
- Sediment deposits: \_\_\_\_\_
- Drainage patterns in BVW: \_\_\_\_\_
- Oxidized rhizospheres: \_\_\_\_\_
- Water-stained leaves: \_\_\_\_\_
- Recorded data (stream, lake, or tidal gauge; aerial photo; other):  
 \_\_\_\_\_
- Other: \_\_\_\_\_

<b>Vegetation and Hydrology Conclusion for Upgradient of GC-3</b>		
	<u>yes</u>	<u>no</u>
<b>Number of wetland indicator plants</b>		
<b>&gt;= number of non-wetland plants</b>		<b>X</b>
<b>Wetland hydrology present:</b>		
hydric soils present		<b>X</b>
other indicators of hydrology present		<b>X</b>
<b>Sample location is in a BVW</b>		<b>X</b>

*Submit this form with the Request for Determination of Applicability or Notice of Intent*



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

Applicant: \_\_\_\_\_ Prepared by: Goddard Consulting LLC Project location: 604 Peakham Road, Sudbury DEP File #: \_\_\_\_\_  
 Check all that apply:
 

<input type="checkbox"/>	Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
<input checked="" type="checkbox"/>	Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
<input type="checkbox"/>	Method other than dominance test used (attach additional information)

**Section I. Vegetation**      Observation Plot Number: **GC-3**      Transect Number: **Downgradient**      Date of Delineation: **11-Jun-19**

Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<b><u>Tree Layer</u></b>					
Red Maple	<i>Acer rubrum</i>	36%	64.3%	Yes	FAC*
American elm	<i>Ulmus americana</i>	20%	35.7%	Yes	FACW*
<b><u>Sapling Layer</u></b>					
Red Maple	<i>Acer rubrum</i>	10%	100.0%	Yes	FAC*
<b><u>Shrub Layer</u></b>					
<b><u>Climbing Woody Vine</u></b>					
<b><u>Ground Cover</u></b>					
Pale touch-me-not	<i>Impatiens pallida</i>	63%	100.0%	Yes	FACW*

**Remarks:** \* An asterisk after common plant name indicates stunted growth; \*\* indicates extremely stunted growth

**Morphological Adaptations:** 0      **Description:** \_\_\_\_\_

\* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.

**Vegetation conclusion:**  
 Number of dominant wetland indicator plants: **4**      Number of dominant non-wetland indicator plants: **0**  
**Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes**

**Section II. Indicators of Hydrology**

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site?  yes  no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: \_\_\_\_\_

soil type mapped: Deerfield loamy sand

hydric soil inclusions: Wareham

Are field observations consistent with soil survey?  yes  no

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
O	0-12"	10YR2/1	
C	12-20	10YR6/1	

Remarks: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Other: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Conclusion: Is soil hydric?  yes  no

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated: \_\_\_\_\_

Depth to free water in observation hole: \_\_\_\_\_

Depth to soil saturation in observation hole: \_\_\_\_\_

Water marks: \_\_\_\_\_

Drift Lines: \_\_\_\_\_

Sediment deposits: \_\_\_\_\_

Drainage patterns in BVW: \_\_\_\_\_

Oxidized rhizospheres: \_\_\_\_\_

Water-stained leaves: \_\_\_\_\_

Recorded data (stream, lake, or tidal gauge; aerial photo; other):  
 \_\_\_\_\_

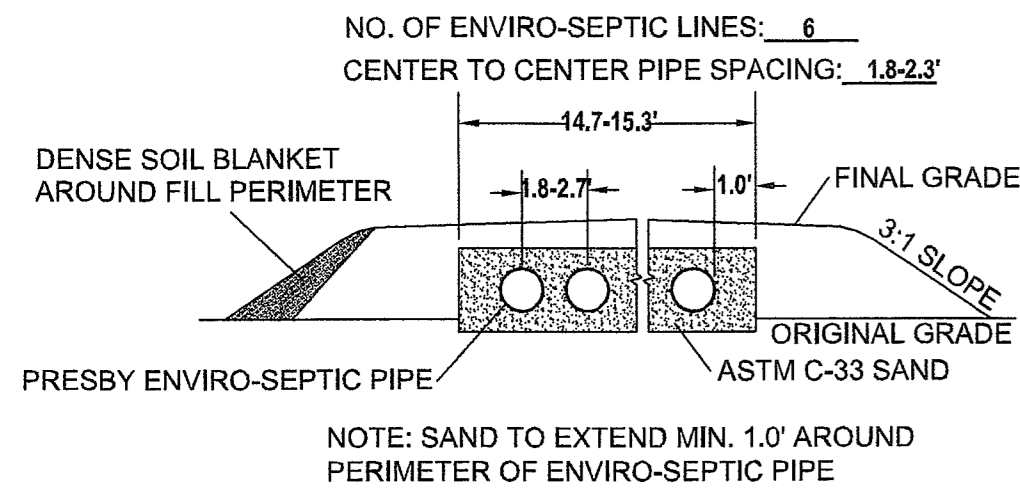
Other: Streams

<b>Vegetation and Hydrology Conclusion for Downgradient of GC-3</b>		
	<u>yes</u>	<u>no</u>
<b>Number of wetland indicator plants</b>		
<b>&gt;= number of non-wetland plants</b>	X	
<b>Wetland hydrology present:</b>		
hydric soils present	X	
other indicators of hydrology present		X
<b>Sample location is in a BVW</b>		X

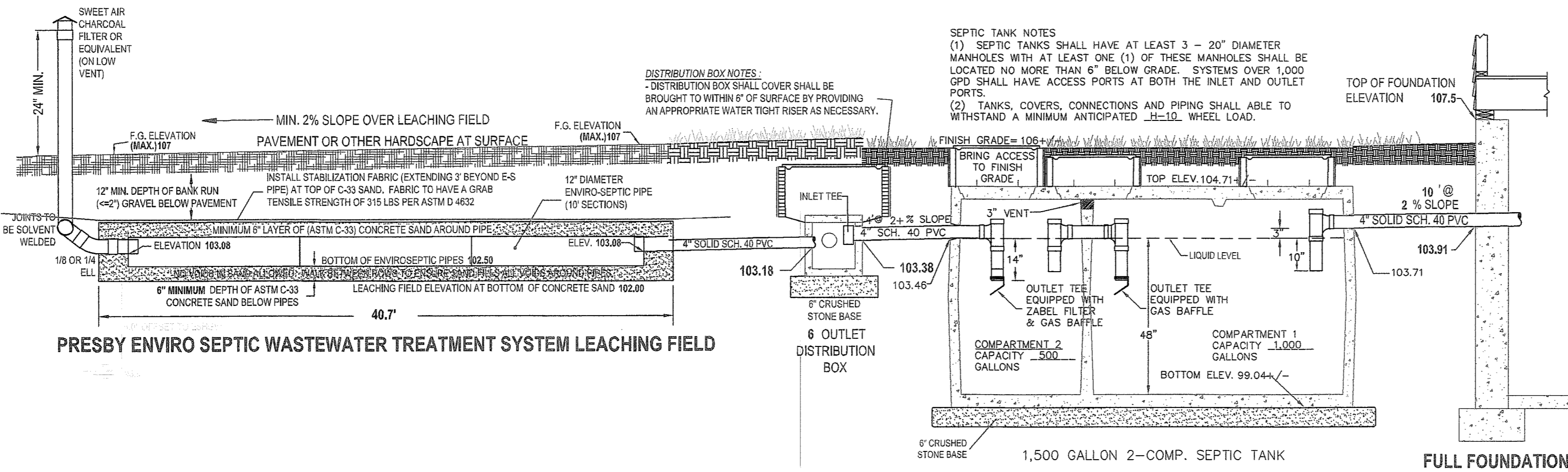
*Submit this form with the Request for Determination of Applicability or Notice of Intent*



**PRESBY CROSS SECTION NOT TO SCALE**



**PROFILE (NOT TO SCALE)**



**PRESBY ENVIRO-SEPTIC NOTES**

1. SYSTEM TO BE INSTALLED IN ACCORDANCE WITH PRODUCT DESIGN & INSTALLATION MANUAL, STATE AND LOCAL RULES.
2. MIN. 6" OF MEDIUM TO COARSE SAND WITH LESS THAN 5% PASSING A #200 SIEVE REQ. AROUND ENVIRO-SEPTIC PIPES. (SEE DESIGN AND BELOW FOR COMPLETE SAND AND FILL SPECIFICATIONS.)

**PERCENTAGE RESTRICTIONS**  
35% OR LESS OF THE TOTAL SYSTEM SAND MAY BE GRAVEL.  
40% - 90% OF THE TOTAL SAND IS TO BE COARSE AND VERY COARSE SAND.

**GRAVEL QUALITY RESTRICTIONS**  
NO GRAVEL IS TO EXCEED 3/4" IN DIAMETER.  
NO GRAVEL IS TO BE SMALLER THAN 2mm/0.0787" IN DIAMETER (IT MUST NOT PASS THROUGH A #10 SIEVE).  
COARSE SAND QUALITY RESTRICTIONS  
NO COARSE SAND IS SMALLER THAN 0.5mm/0.0196" IN DIAMETER (IT MUST NOT PASS THROUGH A #35 SIEVE).  
FINES QUALITY RESTRICTIONS  
NO MORE THAN 2% OF THE TOTAL SAND MAY PASS THROUGH A #200 SIEVE.  
ASTM C-33 CONCRETE SPECIFICATION SAND MEETS THE ABOVE REQUIREMENTS.

**15.255: CONSTRUCTION IN FILL**

(3) FILL MATERIAL FOR SYSTEMS CONSTRUCTED IN FILL SHALL CONSIST OF SELECT ON-SITE OR IMPORTED SOIL MATERIAL. THE FILL SHALL BE COMPRISED OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT CLASSES OF SOIL SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL. UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSES ALSO SHALL BE PERFORMED ON THE FRACTION OF THE FILL SAMPLE PASSING THE #4 SIEVE, SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
#4	4.75 mm	100%
#50	0.30 mm	10% - 100%
#100	0.15 mm	0% - 20%
#200	0.075 mm	0% - 5%

**SOIL EVALUATION / DEEP HOLE TEST DATA**



I certify that in the Fall of 1996 I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training and expertise described in 310 CMR 15.017.

Signature: *David Schofield* Date: 8/1/2019

DAVID A. SCHOFIELD (SE: 3241)

Deep Hole Number: 05-19-01 Date: 5/23/2019  
Performed by: JAY THRASHER  
Witnessed by: BILL MURPHY Health Agent, Town of SUDBURY  
Surface Elevation: 98.04

Depth from Surface	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Consistence (Loose, Friable, Firm), % Gravel, Stones, Boulders)
0-12	Ap	SANDY LOAM	10YR3/2	-	GRANULAR, V. FRIABLE, 5% GRAVEL
12-48	B	SANDY LOAM	7.5YR5/6	-	MASSIVE, V. FRIABLE, 10% GRAVEL
48-96	C	LOAMY SAND	10YR6/1	>5%#62"	MASSIVE, LOOSE, 20% GRAVEL, LARGE BLDRS.

Parent Material (geologic): \_\_\_\_\_ Depth to Bedrock: >96"  
Depth to Groundwater: Standing Water Depth: Weeping from Pit Face: 80"  
Estimated Seasonal High Ground Water: 62" ELEVATION = 92.87

Deep Hole Number: 05-19-02 Date: 5/23/2019  
Performed by: JAY THRASHER  
Witnessed by: BILL MURPHY Health Agent, Town of SUDBURY  
Surface Elevation: 98.11

Depth from Surface	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Consistence (Loose, Friable, Firm), % Gravel, Stones, Boulders)
0-10	Ap	SANDY LOAM	10YR3/2	-	GRANULAR, V. FRIABLE, 5% GRAVEL
10-24	B	SANDY LOAM	7.5YR5/6	-	MASSIVE, V. FRIABLE, 10% GRAVEL
24-98	C	LOAMY SAND	10YR6/1	>5%#80"	MASSIVE, LOOSE, 15% GRAVEL

Parent Material (geologic): \_\_\_\_\_ Depth to Bedrock: >96"  
Depth to Groundwater: Standing Water Depth: Weeping from Pit Face: 80"  
Estimated Seasonal High Ground Water: 62" ELEVATION = 92.84

Deep Hole Number: 17-19-3 Date: 8/1/2019  
Performed by: DAVID SCHOFIELD  
Witnessed by: BILL MURPHY Health Agent, Town of SUDBURY  
Surface Elevation: 104.9

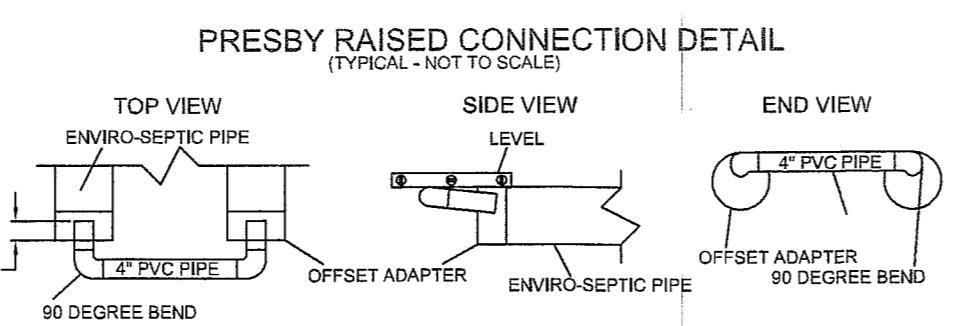
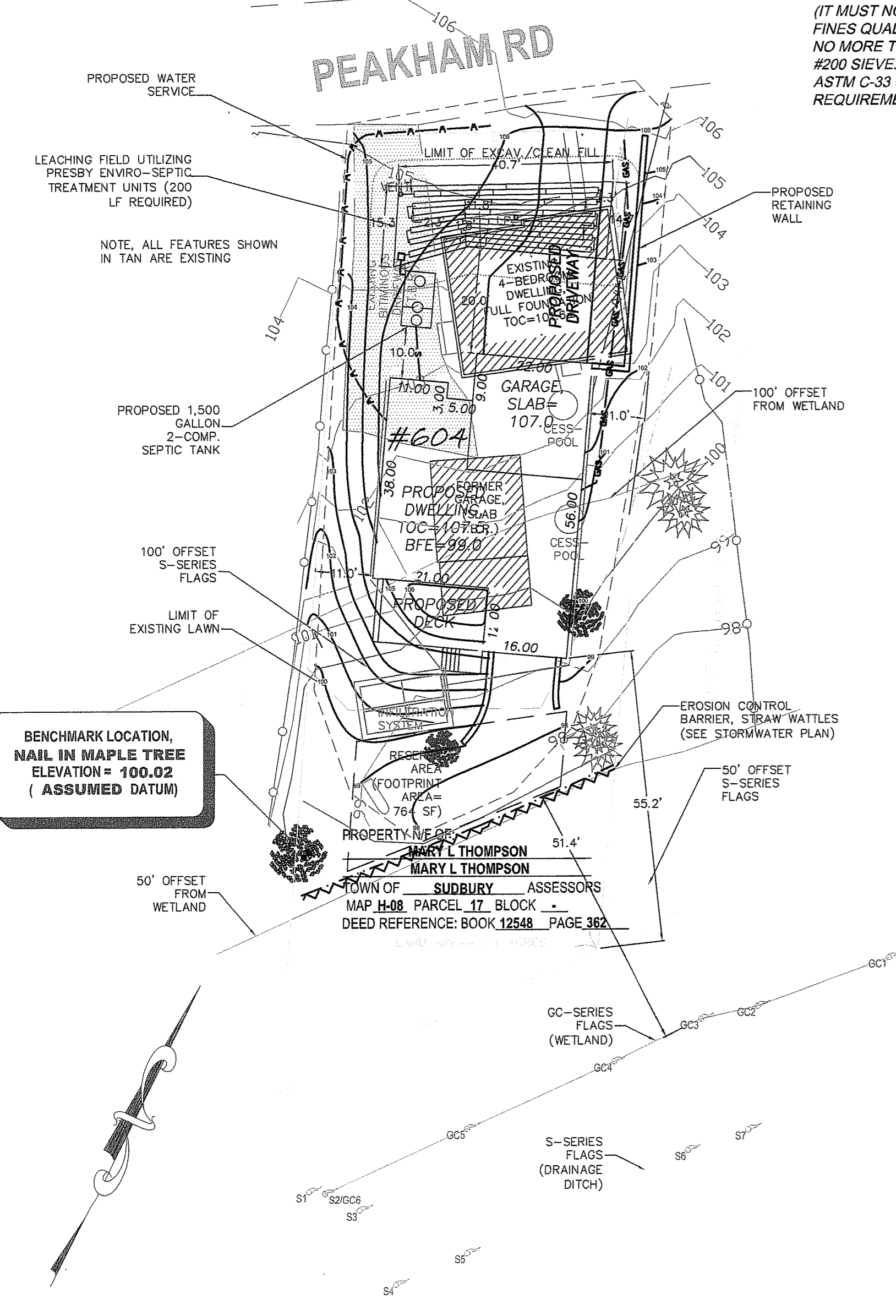
Depth from Surface	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Consistence (Loose, Friable, Firm), % Gravel, Stones, Boulders)
0-20	A	SANDY LOAM	10YR3/2	-	GRANULAR, V. FRIABLE, 5% GRAVEL
20-40	B	SANDY LOAM	7.5YR5/6	-	MASSIVE, V. FRIABLE, 10% GRAVEL
40-96	C	LOAMY SAND	2.5Y6/4	NONE	MANY BOULDERS, 10% GRAVEL

Parent Material (geologic): \_\_\_\_\_ Depth to Bedrock: >96"  
Depth to Groundwater: Standing Water Depth: Weeping from Pit Face: NONE  
Estimated Seasonal High Ground Water: >96" ELEVATION = 96.9

Deep Hole Number: 17-19-4 Date: 8/1/2019  
Performed by: DAVID SCHOFIELD  
Witnessed by: BILL MURPHY Health Agent, Town of SUDBURY  
Surface Elevation: 105.1

Depth from Surface	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Consistence (Loose, Friable, Firm), % Gravel, Stones, Boulders)
0-16	A	SANDY LOAM	10YR3/2	-	GRANULAR, V. FRIABLE, 5% GRAVEL
16-38	B	SANDY LOAM	7.5YR5/6	-	MASSIVE, V. FRIABLE, 10% GRAVEL
38-100	C	LOAMY SAND	2.5Y6/4	NONE	BOULDERS, 10% GRAVEL

Parent Material (geologic): \_\_\_\_\_ Depth to Bedrock: >100"  
Depth to Groundwater: Standing Water Depth: Weeping from Pit Face: NONE  
Estimated Seasonal High Ground Water: >100" ELEVATION = 96.77



**310 CMR 15.354 Abandonment of Systems**

(1) Whenever the use of a system is discontinued following connection to a municipal or private sanitary sewer or shared on-site system or following condemnation or demolition of a building served by the system, the system shall be considered abandoned and any further use of the system for any purpose shall be prohibited unless, after inspection, the Approving Authority determines the system is in compliance or can be brought into compliance with 310 CMR 15.000.

(2) Continued use of a septic tank where the tank is to become an integral part of a sanitary sewer system requires the prior written approval from the local municipal authority responsible for the operation of the sanitary sewer system.

(3) The following procedure shall be used to abandon a system:  
(a) Within 14 days prior to discontinuance of use of a system, the facility owner shall apply to the Approving Authority to abandon the existing system citing the reason(s) abandonment is necessary, and where connection to municipal or private sanitary sewer has been made, a copy of the sewer connection permit shall be submitted with the application;  
(b) Upon receipt of the Approving Authority's written approval to abandon the system, the septic tank shall be pumped of its entire contents by a licensed septic hauler; and  
(c) The tank shall be excavated and removed from the site, or the bottom of the tank shall be opened or ruptured after being pumped of its content so as to prevent retention of water and the tank shall be completely filled with clean sand or other suitable material approved in writing by the Approving Authority.

**310 CMR 15.246: EXCAVATION AND FLAGGING OF SOIL ABSORPTION SYSTEM**

- (1) EXCAVATION FOR CONSTRUCTION OF A SOIL ABSORPTION SYSTEM MAY BE BY MECHANICALS MEANS, PROVIDED CARE IS TAKEN TO ASSURE THAT THE SOIL AT THE BOTTOM OF THE EXCAVATION IS NOT COMPACTED OR SMEARED. THE BOTTOM AND SIDES OF THE EXCAVATION SHALL BE LEVEL AND SCARIFIED. VEHICULAR TRAFFIC AND PARKING OF VEHICLES OR EQUIPMENT IN OR ON THE AREA OF THE SOIL ABSORPTION SYSTEM SHOULD BE AVOIDED AT ALL TIMES PRIOR, DURING AND AFTER CONSTRUCTION OF THE SYSTEM.
- (2) PRIOR TO THE INSTALLATION OF THE SOIL ABSORPTION SYSTEM AND UNTIL THE RECEIPT OF A CERTIFICATE OF COMPLIANCE FROM THE APPROVING AUTHORITY IN ACCORDANCE WITH 310 CMR 15.021, THE PERIMETER OF THE SAS SHALL BE STAKED AND FLAGGED TO IDENTIFY THE LOCATION OF THE SOIL ABSORPTION SYSTEM AND PREVENT THE USE OF SUCH AREA FOR ALL ACTIVITIES WHICH MIGHT DAMAGE THE SOIL ABSORPTION SYSTEM. SUCH FLAGGING IS NOT INTENDED TO PRECLUDE FINAL GRADING AND LANDSCAPING OF THE AREA OF THE SOIL ABSORPTION SYSTEM. STOCKPILING OF MATERIALS OR EQUIPMENT WITHIN THE AREA IS PROHIBITED.

INLINE INVERT ELEVATIONS	PROPOSED	A.B.
TOP OF CONCRETE	107.5	
BUILDING SEWER @ FOUNDATION	(MIN.) 103.91	
SEPTIC TANK INLET	103.71	
SEPTIC TANK OUTLET	103.46	
PUMP CHAMBER INLET	N/A	
PUMP CHAMBER OUTLET	N/A	
DISTRIBUTION BOX INLET	103.38	
DISTRIBUTION BOX OUTLET	103.18	
SOIL ABSORPTION SYSTEM (SAS) ORIGIN	103.08	
SOIL ABSORPTION SYSTEM (SAS) END	103.08	
SOIL ABSORPTION (SAS) BOTTOM	102.00	
PROPOSED F.G. ELEVATION OVER SAS	SEE PLAN	
DEEP TEST HOLE ELEVATIONS:		SEE PLAN
MIN. G.W. OFFSET	4.0'	
ESHGW ELEVATION	96.9	

**DESIGN CRITERIA**

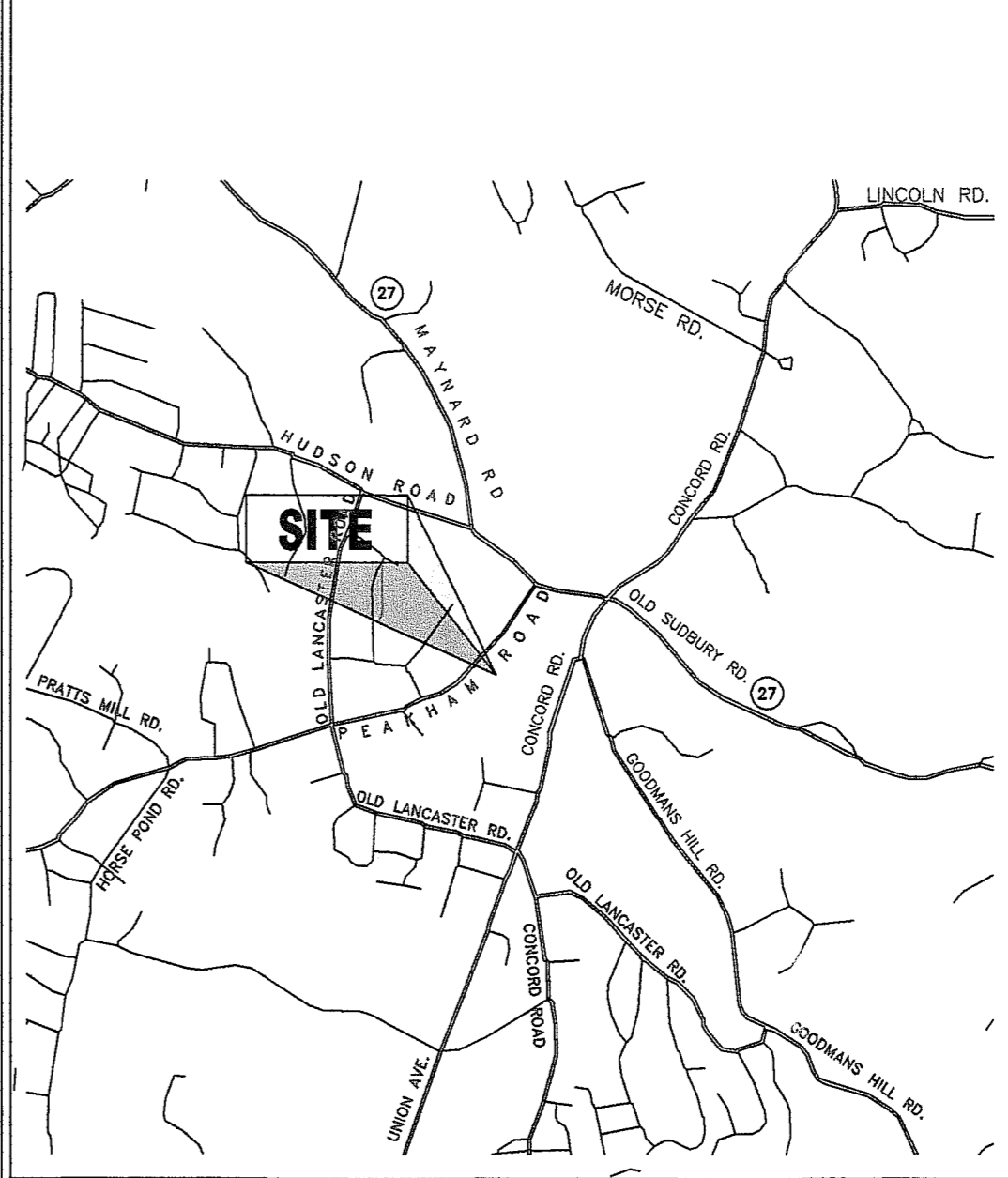
1. FLOW: 4 BDRMS @ 110 GPD / BDRM = 440 GPD
  2. SEPTIC TANK DESIGN CRITERIA (MIN. CAPACITIES)
    - A. COMPARTMENT 1 CAPAC. 880 GALLONS
    - B. COMPARTMENT 2 CAPAC. 440 GALLONS
    - C. TOTAL CAPACITY: 1,500 GALLONS
  3. SAS DESIGN CRITERIA: **PRESBY FIELD**
    - A. DESIGN PERCOLATION RATE: 5 MPI MIN / IN
    - B. EFFLUENT LOADING RATE: 0.74 GPD/SF
    - C. NEC. LEACHING AREA 891.9 SF
    - D. BOTTOM AREA PROVIDED: 900 SF
    - E. SIDEWALL PROVIDED: - SF
    - F. TOTAL AREA PROVIDED: 900 SF
    - G. DESIGN CAPACITY: (MA) 666 GPD
- SYSTEM IS DESIGNED FOR GARBAGE GRINDER. THE USE OF A GARBAGE GRINDER MAY SHORTEN THE LIFE OF THE SEPTIC SYSTEM.

**PERC HOLE TEST DATA**

PERC TESTING  
PERFORMED BY: JAY THRASHER/D. SCHOFIELD  
WITNESS: BILL MURPHY SUDBURY BOARD OF HEALTH AGENT(S)  
DATE(S): 5/23/2019 8/1/2019

HOLE #	SOIL CLASS	PERC RATE	EFFLUENT LOAD RATE	DEPTH
A	I	3.33 MPI	0.74	42"
B	I	4.33 MPI	0.74	30"
C	I	5 MPI	0.74	58"

**LOCUS MAP**



**VARIANCES REQUESTED**

-NONE REQUESTED

**LEGEND**

- EXISTING CONTOUR
- PROPOSED CONTOUR
- STONEM WALL
- FENCELINE
- EDGE OF PAVEMENT
- PROPERTY LINE
- PERCOLATION TEST
- DEEP HOLE TEST

**General Notes**

- General Notes:  
1. All utility locations shown are to be verified by Contractor prior to work commencement.  
2. Inspections by Design Engineer and Board of Health are as required by the Board of Health.  
3. This plan was prepared for the design of the subsurface sewerage system only and is based on the subsurface exploration and percolation tests listed.  
4. 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.  
5. The system must be vented through the buildings plumbing in accordance with state building and plumbing codes.  
6. Owner shall verify effective zoning regulations prior to construction.  
7. Plans show only those features that were visually apparent on the date of topographic survey, and the absence of subsurface structures, utilities, etc. is not guaranteed.  
8. Contractor to determine if site conditions are suitable for construction of proposed system of mobilization, and must promptly notify the Design Engineer and Owner, in writing, of any plan deficiencies, unforeseen subsurface conditions, or required changes.  
9. There are no wetlands located within 100' of the proposed SAS or within 50' of the proposed septic tank.  
10. There are no wetlands located within 100' of the proposed leaching area or within 100' of the proposed septic tank.  
11. The subject property is NOT located within a Zone II of a public drinking water supply well.  
Technical Notes:  
1. 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 utilized in areas subject to vehicular traffic.  
2. 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.  
3. Septic Tanks shall have at least three (3) 20" man holes with at least one (1) of these manholes shall be located no more than 6" below finish grade. (Systems over 1,000 gpd shall have access ports at both the inlet and outlet.)  
4. Distribution box (d-box) shall be of water tight construction, installed level on a firm base, and installed in accordance with 310 CMR 15.232.  
5. d-box outlet lines shall be installed level for a minimum of the first 2' in order to equalize flow to the distribution lines.  
6. The minimum inside dimension of the d-box shall be 12" with a minimum wall thickness of 2" for reinforced concrete units.  
7. Septic Tank covers and d-box to be brought to within 6" of finish grade by the use of watertight risers.  
8. When an effluent pump is utilized or the slope of the d-box inlet pipe exceeds 3% on inlet tee, baffle or splash plate extending to one inch above the outlet invert elevation shall be provided.  
9. When the SAS is installed within unsuitable soil layers or above natural grade, all unsuitable soil shall be removed below and laterally for a minimum of 5' surrounding the SAS. Removed material shall be replaced with clean granular material in accordance with 310 CMR 15.255(3).  
10. All disturbed areas shall be loamed, seeded, and maintained so as to prevent erosion.  
11. All native soil interfaces which will contact SAS shall be scarified prior to placement of SAS sand or stone.  
Additional Notes:  
-MARK ALL SYSTEM COMPONENTS WITH MAGNETIC MARKING TAPE FOR FUTURE LOCATION PURPOSES.  
-SYSTEM DESIGNED UNDER THE PRESBY GENERAL USE APPROVAL, Date of Issuance: Revised March 19, 2015.  
-SYSTEM ALSO SUBJECT TO DEEP'S STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS, REVISED 3/5/2016.  
-INSTALLER MUST BE TRAINED BY PRESBY FOR THE INSTALLATION OF THE ENVIRO-SEPTIC SYSTEM.

No.	Revision/Issue	Date
1	MOVE SAS TO FRONT OF LOT	8/1/2019
2	CENTER HOUSE ON LOT	8/13/2019

Firm Name and Address  
**Capstone Design Build, Inc.**  
Wayland, MA 01778  
(508) 358-5763

Project Name and Address  
**SEPTIC SYSTEM DESIGN FOR:**  
APPLICANT:  
NU-HOME REMODELING  
604 PEAKHAM RD  
SUDBURY, MASS

Project	Sheet
19-122	1
Date	6/7/2019
Scale	1" = 20'

LOCATION OF PROPOSED DWELLING AND PROPERTY BOUNDARIES PROVIDED BY APPLE SURVEY CO. ON DRAWING TITLED "PROPOSED PLOT PLAN- 604 PEAKHAM RD" DATED 7 AUGUST 2019.

EXISTING CONDITIONS, SOIL DATA AND LOCATION OF TITLE 5 COMPONENTS PROVIDED BY CAPSTONE DESIGN BUILD INC. ON DRAWING TITLED "SEPTIC SYSTEM DESIGN FOR APPLICANT: 604 PEAKHAM RD" DATED 1 AUGUST 2019.

BUILDING PLANS PROVIDED AND STAMPED BY AARON M. SOCRAT, REGISTERED ARCHITECT ON DRAWING TITLED "PROPOSED NEW HOME TO REPLACE EXISTING: 604 PEAKHAM RD" DATED 11 JUNE 2019.

BUILDING HEIGHT AND TOP OF FOUNDATION ELEVATIONS PROVIDED BY MICHAEL AUDETTE, BUILDER ON 5 AUGUST 2019.

# PEAKHAM ROAD

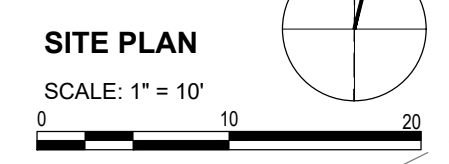
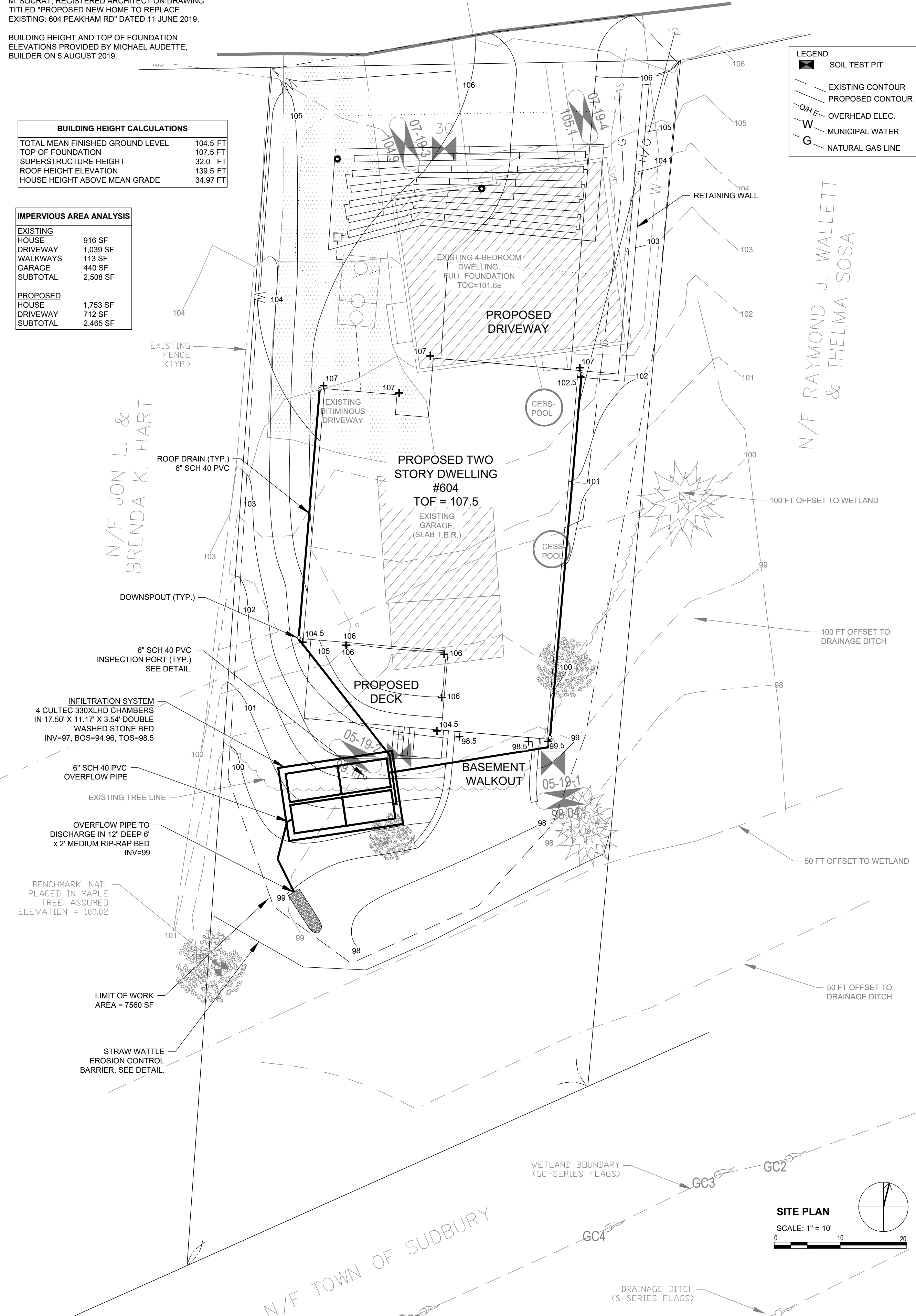
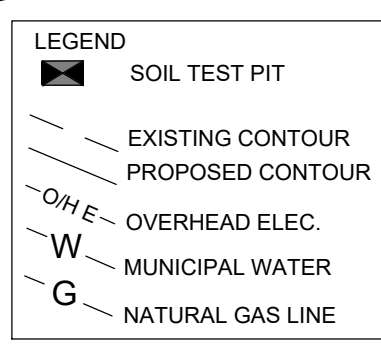
PROPERTY N/F OF:  
**MARY L THOMPSON**  
**MARY L THOMPSON**  
 TOWN OF **SUDBURY** ASSESSORS  
 MAP **H-08** PARCEL **17** BLOCK **-**  
 DEED REFERENCE: BOOK **12548** PAGE **362**

**BUILDING HEIGHT CALCULATIONS**

TOTAL MEAN FINISHED GROUND LEVEL	104.5 FT
TOP OF FOUNDATION	107.5 FT
SUPERSTRUCTURE HEIGHT	32.0 FT
ROOF HEIGHT ELEVATION	139.5 FT
HOUSE HEIGHT ABOVE MEAN GRADE	34.97 FT

**IMPERVIOUS AREA ANALYSIS**

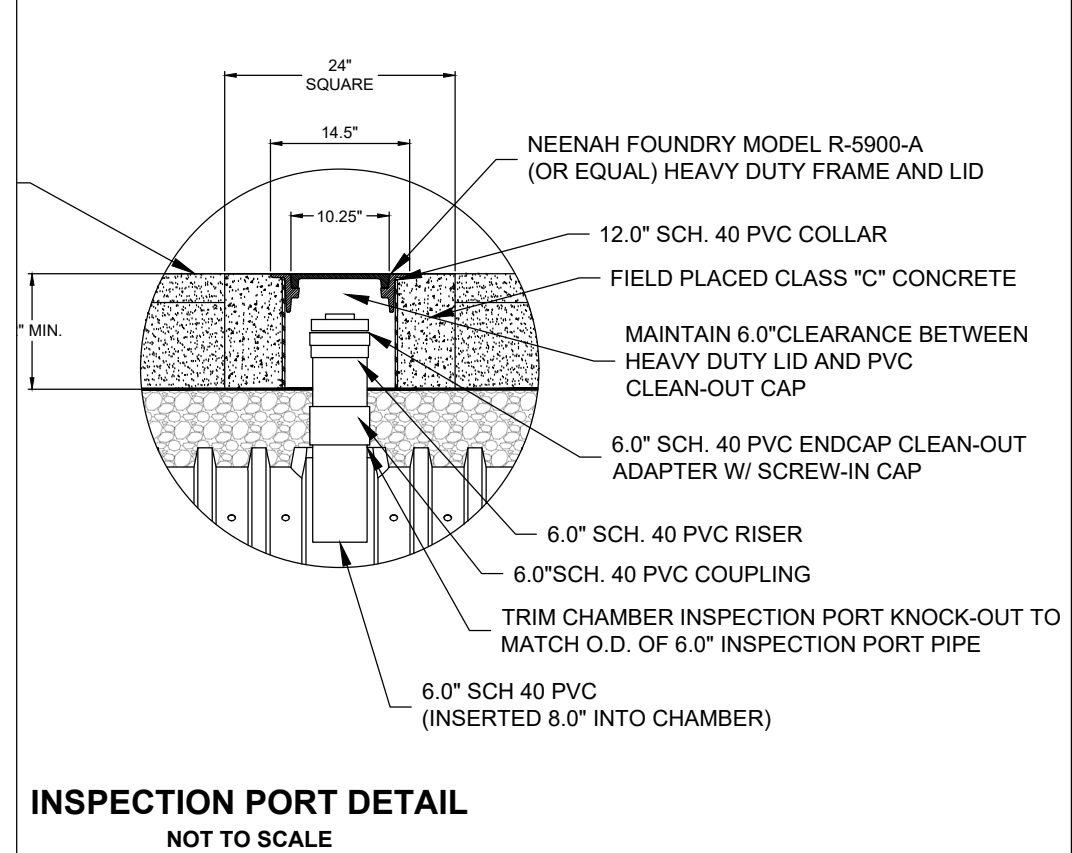
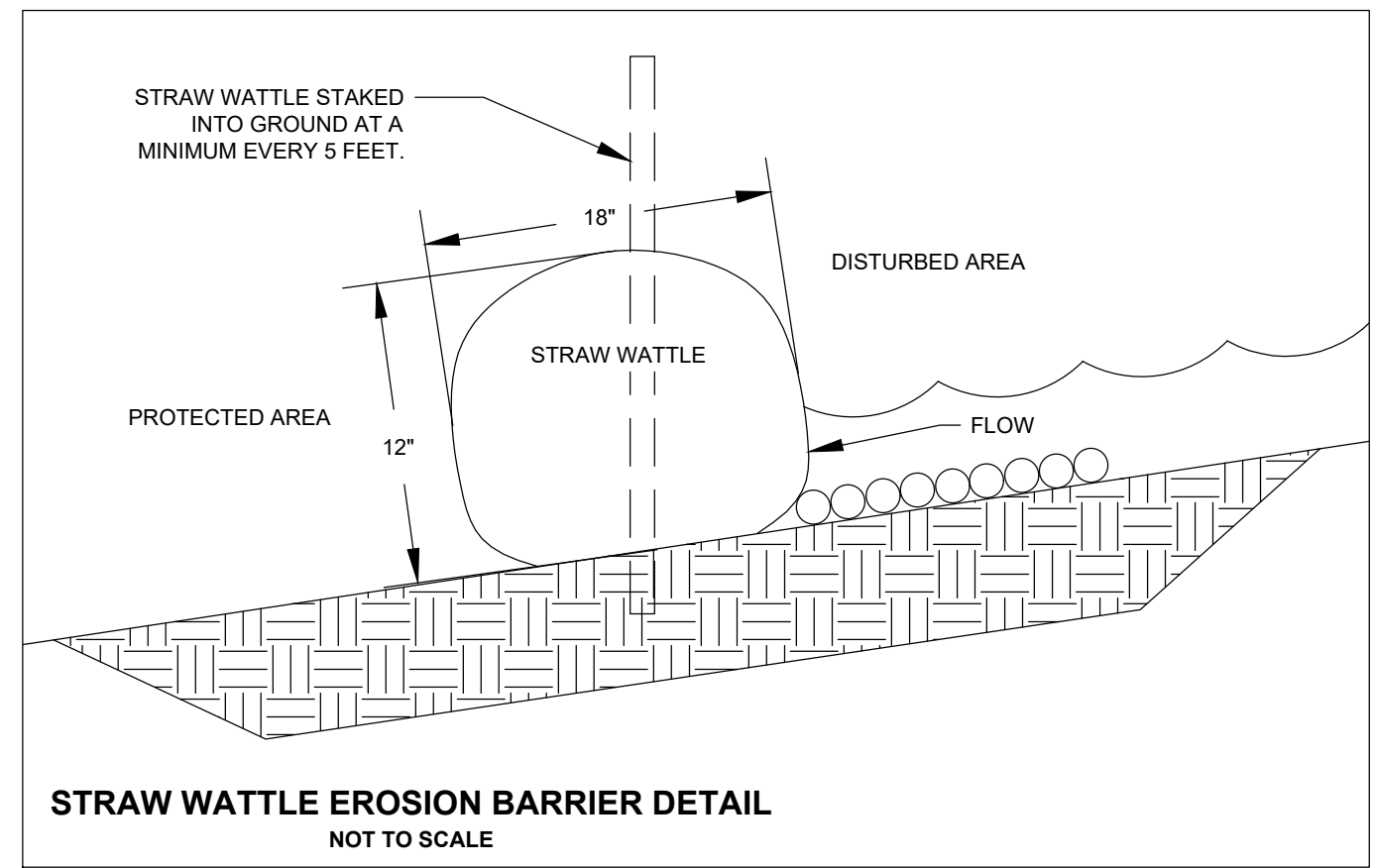
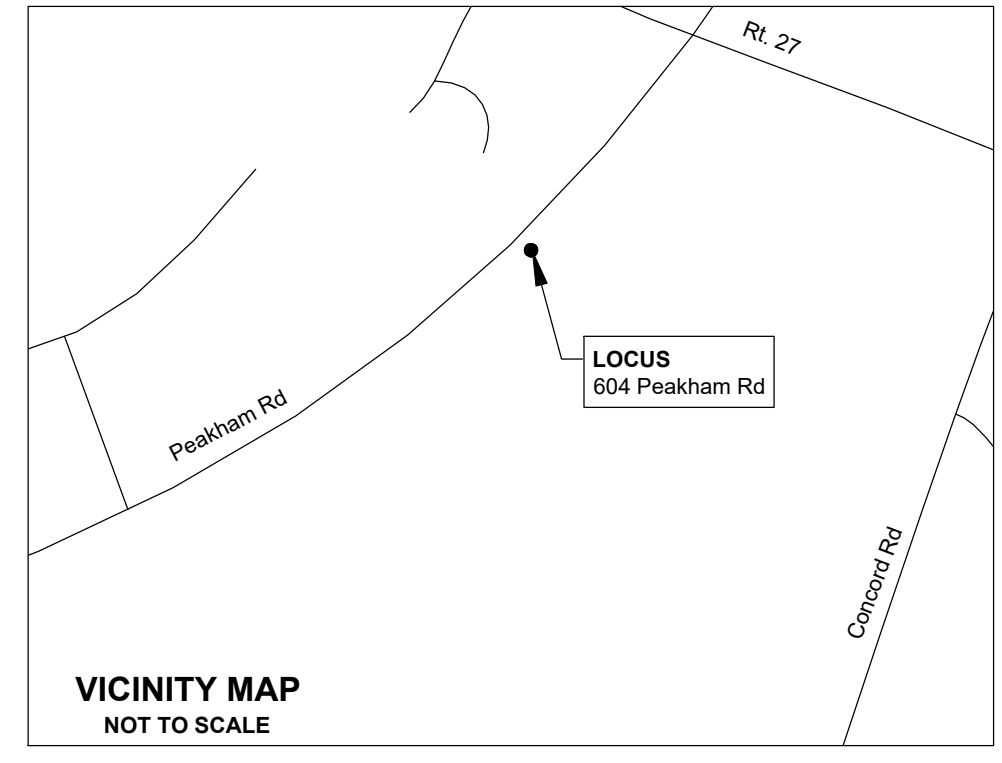
EXISTING HOUSE	916 SF
EXISTING DRIVEWAYS	1,039 SF
EXISTING WALKWAYS	113 SF
EXISTING GARAGE	440 SF
EXISTING SUBTOTAL	2,508 SF
PROPOSED HOUSE	1,753 SF
PROPOSED DRIVEWAYS	712 SF
PROPOSED SUBTOTAL	2,465 SF



- GENERAL NOTES**
- THIS PLAN IS FOR CONSTRUCTION OF THE PROPOSED STORM DRAINAGE SYSTEM, SITE RE-GRADING AND BUILDING HEIGHT CALCULATIONS ONLY AND IS NOT INTENDED TO BE USED TO ESTABLISH PROPERTY BOUNDARIES.
  - BUILDING PLANS AND TITLE 5 DESIGN BY OTHERS.
  - INSTALLATION OF THE PROPOSED DRAINAGE SYSTEM SHALL BE IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS AND LOCAL BOARD OF HEALTH REGULATIONS.
  - THE CONTRACTOR MUST HOLD A VALID INSTALLER LICENSE IN THE TOWN OF SUDBURY.
  - THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIGSAFE AT 1-888-344-7233 PRIOR TO CONSTRUCTION.
  - THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AND THE TOWN ENGINEER OF ANY CHANGES TO THESE PLANS.
  - EXISTING FINISHED GRADE ELEVATIONS SHALL BE CONFIRMED PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES +/- 0 INCHES.
  - THE RESPONSIBILITY, OWNERSHIP AND MAINTENANCE OF THE PROPOSED DRAINAGE SYSTEM ON PRIVATE PROPERTY SHALL REMAIN THAT OF THE OWNER.
  - CONTRACTOR SHALL CALL FOR INSPECTIONS AND APPROVALS FROM THE DESIGNATED TOWN STORMWATER INSPECTOR AND THE DESIGN ENGINEER:
    - PRIOR TO CONSTRUCTION
    - AFTER EXCAVATION PRIOR TO INSTALLATION
    - AFTER COMPLETE INSTALLATION OF ALL SYSTEM COMPONENTS
  - ASSUMED SOIL HSG SOIL GROUP A AND RAWL'S RATE OF 2.41 IN./HR FOR STORMWATER CALCULATIONS BASED ON SOIL DATA.

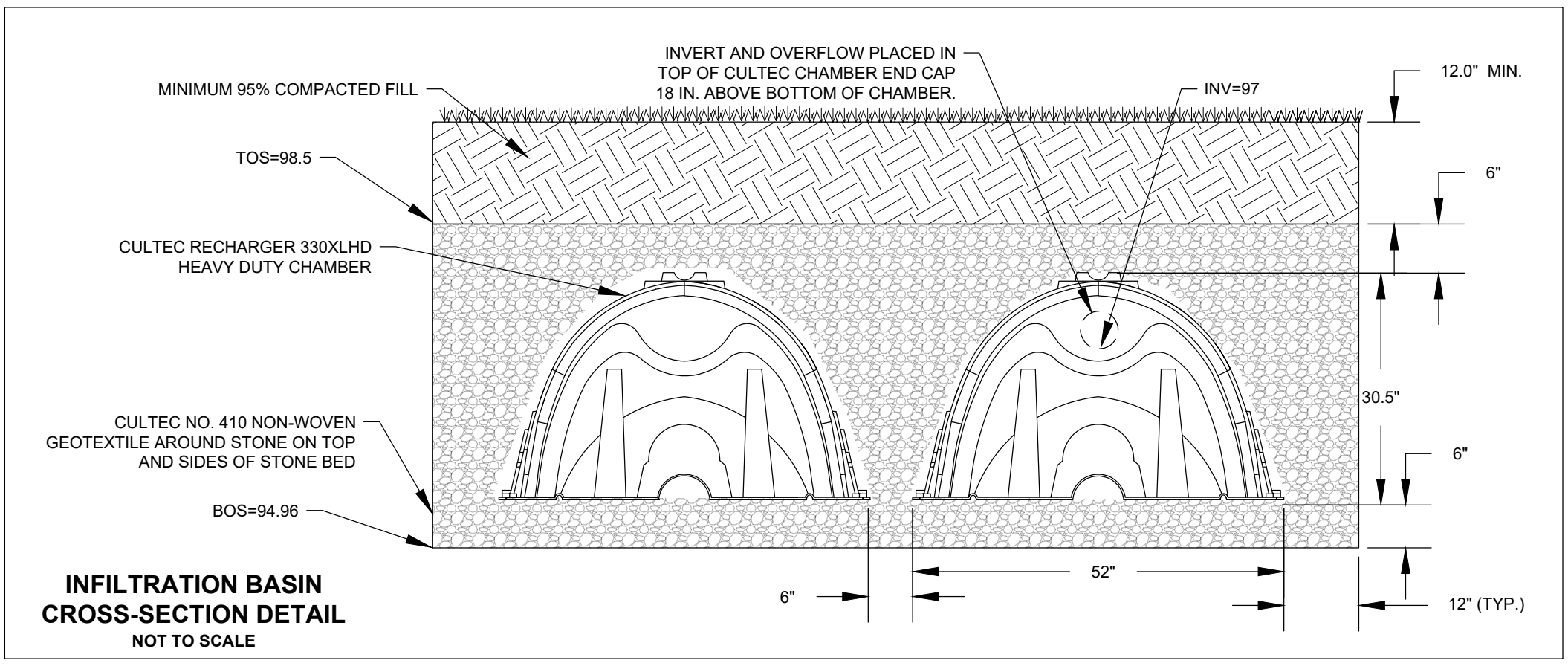
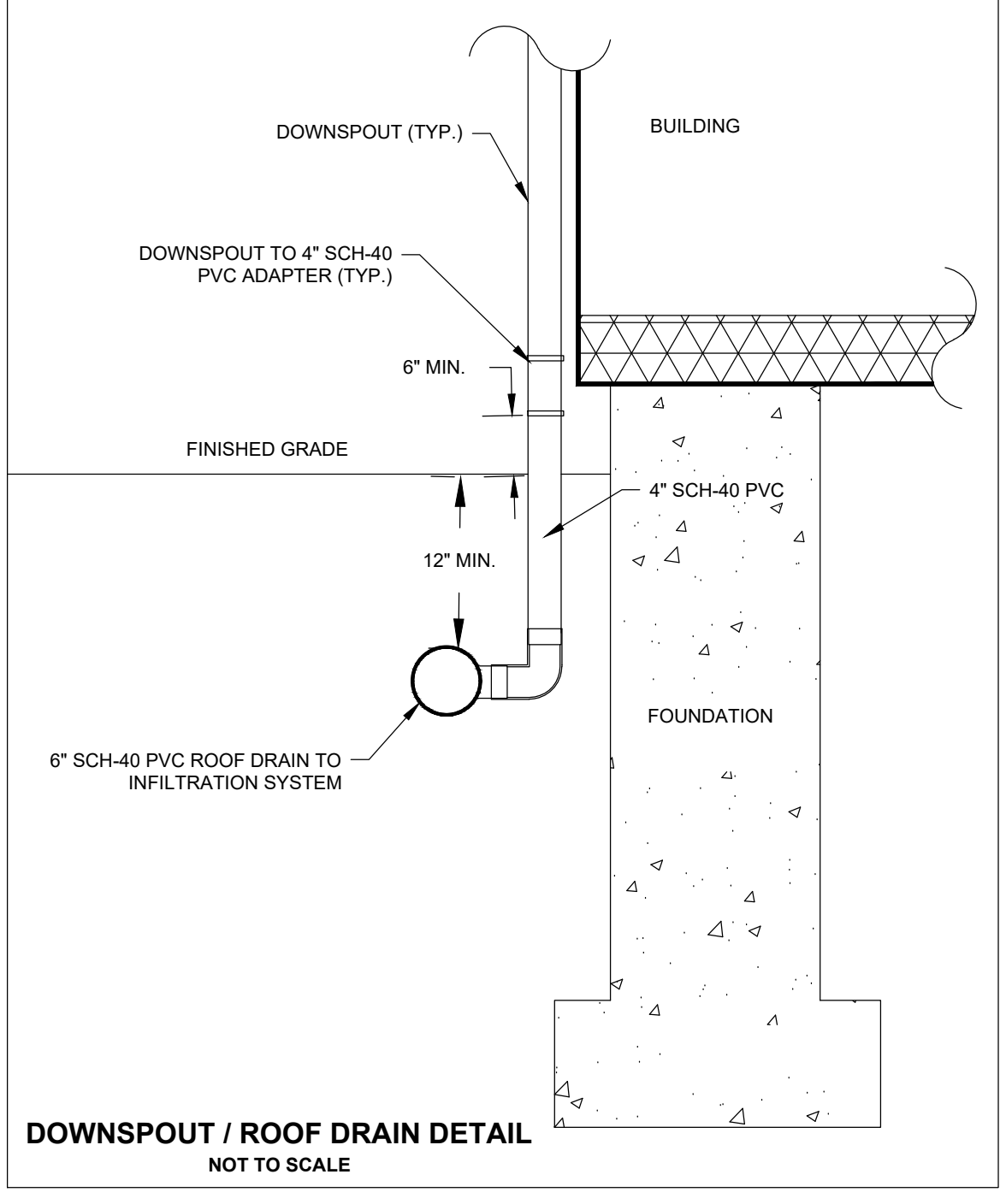
- CONSTRUCTION NOTES:**
- ALL DRAINAGE PIPING TO BE SCHEDULE 40 PVC UNLESS OTHERWISE SPECIFIED.
  - ALL PIPE ROUTING SHOWN ON SITE LAYOUT IS APPROXIMATE. CONTRACTOR SHALL DETERMINE MOST EFFICIENT ROUTING IN THE FIELD MAINTAINING A MINIMUM SLOPE OF 1 PERCENT BETWEEN CONNECTION OF DOWNSPOUTS TO ROOF DRAINS AND THE AND INFILTRATION SYSTEM INLET INVERT.
  - TRENCHES MUST BE ADEQUATELY BRACED DURING CONSTRUCTION TO PROTECT AGAINST CAVE-IN DURING EXCAVATION AND CONSTRUCTION OF PIPES AND STRUCTURES.
  - TRENCHES SHOWN ON THIS PLAN ARE TO THE EXTERIOR OF THE BUILDING FOUNDATION ONLY. UTILITIES THROUGH THE FOUNDATION AND INSIDE THE BUILDING ARE THE RESPONSIBILITY OF A LICENSED PLUMBER OR MECHANICAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND RECORDING THE EXACT LOCATION OF EACH UTILITY CONNECTION.
  - THE CONTRACTOR SHALL COORDINATE THE FINAL ROOF LEADERS WITH ARCHITECTURAL PLANS AND THE ROOF LEADERS INTO THE DRAINAGE SYSTEM. LOCATIONS OF DOWNSPOUTS MAY DIFFER FROM LOCATIONS SHOWN ON PLAN.
  - THE CONTRACTOR MUST RECORD ALL INVERT ELEVATIONS AND PIPE LOCATIONS FOR DEVELOPMENT OF AN AS-BUILT PLAN. RECORDED INVERT ELEVATIONS SHALL INCLUDE BOTTOM OF BASIN, BASIN RIM, BASIN INLET PIPE AND BASIN OUTLET PIPE.
  - THE SEASONAL HIGH GROUNDWATER (SHGW) IS FOR USE IN DESIGN OF THE DRAINAGE SYSTEM AND NOT INTENDED TO ESTABLISH SEASONAL HIGH GROUNDWATER ELEVATIONS TO THE PROPOSED HOUSE FOUNDATION AND BASEMENT SLAB ELEVATIONS.
  - WHERE DEEMED NECESSARY, THE CONTRACTOR SHALL DIG A DEEP HOLE TEST PIT IN THE AREA OF EACH RECHARGE BASIN PRIOR TO ITS INSTALLATION FOR EVALUATION OF SHGW. THE ENGINEER WILL VERIFY THE SOIL CONDITIONS AND GROUNDWATER ELEVATION AND CERTIFY THAT THERE IS AT LEAST A 2-FOOT SEPARATION BETWEEN THE BOTTOM OF THE RECHARGE BASIN AND THE SHGW.
  - THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.
  - ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH CLEAN GRANULAR FILL FOR A DISTANCE OF 2 FEET IN ALL DIRECTIONS.
  - BOTTOM OF STONE BED SHALL BE A MINIMUM OF 2 FEET ABOVE SHGW (SEE SEWAGE DISPOSAL SYSTEM DESIGN FOR SOIL DATA).

- EROSION AND SEDIMENT CONTROL NOTES:**
- CONTRACTOR TO CALL ENGINEER AND TOWN STORMWATER ENGINEER FOR INSPECTION OF THE EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO ANY SEWAGE DISPOSAL SYSTEM CONSTRUCTION. CONTRACTOR TO PROVIDE 2 DAYS NOTICE OF INSPECTION.
  - A 12 INCH STRAW WATTLE OR APPROVED SEDIMENT CONTROL EQUIVALENT TO BE PLACED ON THE DOWN-SLOPE SIDE OF THE PROPOSED LIMIT OF WORK.
  - ALL DISTURBED AREA TO BE STABILIZED WITH LOAM AND DEED AFTER FINAL BACKFILLING.
  - CONTRACTOR TO ENSURE STREET AND SIDEWALK IS KEPT CLEAN. STREET AND SIDEWALK TO BE SWEEPED CLEAN AFTER EVERY WORK DAY AS NECESSARY.
  - CONTRACTOR TO REPAIR OR REPLACE ANY ROAD OR SIDEWALK DAMAGED AS A RESULT OF THE PROPOSED CONSTRUCTION AND DISTURBANCE BEFORE PROJECT COMPLETION.



**STORMWATER RUNOFF ANALYSIS**

Storm Event	Existing Conditions		Proposed Conditions	
	Runoff Rate (cfs)	Runoff Volume (cu. ft)	Runoff Rate (cfs)	Runoff Volume (cu. ft)
2-Year	0.00	76	0.00	31
10-Year	0.05	406	0.03	245
25-Year	0.19	846	0.09	560
100-Year	0.55	1,973	0.53	1,633

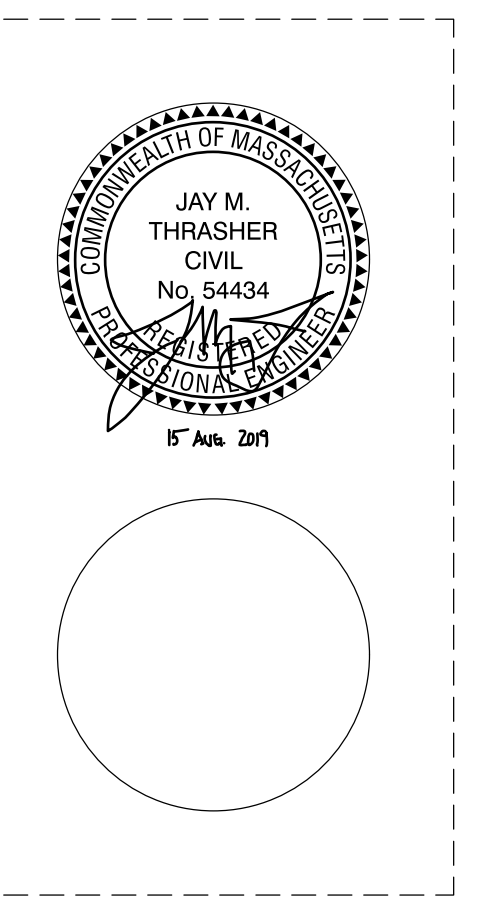


**ROBIAL WATER LTD**  
 ENGINEERING SERVICES

131 CLAY STREET STUDIO 325  
 CENTRAL FALLS, RHODE ISLAND 02863

TELEPHONE: +1 (508) 954 0677  
 EMAIL: JAY@ROBIALWATER.COM

**CONSULTANTS:**



**PROJECT:**

**STORMWATER INFILTRATION SYSTEM DESIGN**

**New Construction**

604 Peakham Rd  
 Sudbury, MA 01776

3	TITLE 5 ADJUSTMENTS	08/15/2019
2	REVISED STORMWATER CALCS	08/12/2019
1	CONSTRUCTION DRAWINGS	08/12/2019
No	REVISION/SUBMISSION	DATE

COPYRIGHT 2019 - Robial Water Ltd. This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of Robial Water Ltd.

PROJECT No: SW.2019002

**CONSTRUCTION DRAWINGS**  
 PENDING TOWN APPROVAL

**SHEET TITLE:**

**STORMWATER SYSTEM AND SITE GRADING**

SHEET SIZE: 24 IN. X 36 IN. (ARCH D)  
 DATE: 12 AUGUST 2019  
 SHEET NUMBER:

**SHEET 1 OF 1**