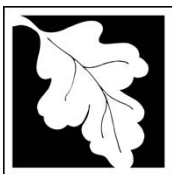


**NOTICE OF PUBLIC MEETING
SUDBURY CONSERVATION COMMISSION**

The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing, under the State Act and Town Wetlands Bylaw, to construct an addition within the 100-foot Buffer Zone, at 798 Concord Road in Sudbury, MA. Timothy Butler, Applicant. The hearing will be held on Monday, August 9, 2021 at 6:45 pm, via remote participation.

Copies of the application may be reviewed at the Conservation Department web page at: <https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-august-9-2021/>.

SUDBURY CONSERVATION COMMISSION
July 29, 2021



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Sudbury
City/Town

WPA Form 1- Request for Determination of Applicability

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

A. General Information

Important:

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



1. Applicant:

Timothy Butler

Name

Timothyjohnbutler@gmail.com

E-Mail Address

798 Concord Road

Mailing Address

Sudbury

City/Town

MA

State

01776

Zip Code

(978)821-4434

Phone Number

Fax Number (if applicable)

2. Representative (if any):

Firm

Contact Name

E-Mail Address

Mailing Address

City/Town

State

Zip Code

Phone Number

Fax Number (if applicable)

B. Determinations

1. I request the Sudbury make the following determination(s). Check any that apply:
Conservation Commission

- ☐ a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- ☐ b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- ☒ c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- ☒ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Sudbury

Name of Municipality

- ☐ e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

798 Concord Road

Street Address

Sudbury MA 01776

City/Town

D11

Assessors Map/Plat Number

0016

Parcel/Lot Number

- b. Area Description (use additional paper, if necessary):

1,838 SF single family ranch style home. Residentially zoned neighborhood. 1.048 acre lot. Poured concrete foundation, Town water, private septic/ leaching field. The proposed addition is to be constructed in the back right/ rear of existing structure. Existing conditons of proposed area is grassy lawn with a slightly descending slop away from building. Outermost edge of new structure would be approximatley 38' from the most recent Wetlands Delineation (David Burke 2004).

- c. Plan and/or Map Reference(s):

See attached.

Title

Date

Title

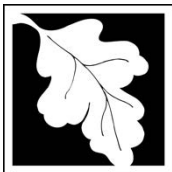
Date

Title

Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Home Renovation project to an existing structure. Objective is to add an "additon" bump out to existing structure. A 16'x18' additon with an excavated basement beneath. New foundation will be poured concrete to match existing depths and footing specification. New additon will add living space to existing master bedroom. A full bathroom will be added to the master bathroom as well as a 1 1/2 bath in basement. Erosion controls will be installed to protect wetlands resource area during construction. Straw wattles will be placed 15' from edge of wetlands in a U-shape around the work area.



Massachusetts Department of Environmental Protection

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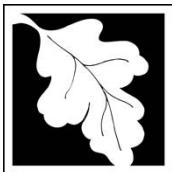
C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- ☐ Single family house on a lot recorded on or before 8/1/96
- ☐ Single family house on a lot recorded after 8/1/96
- ☐ Expansion of an existing structure on a lot recorded after 8/1/96
- ☐ Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- ☐ New agriculture or aquaculture project
- ☐ Public project where funds were appropriated prior to 8/7/96
- ☐ Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- ☐ Residential subdivision; institutional, industrial, or commercial project
- ☐ Municipal project
- ☐ District, county, state, or federal government project
- ☐ Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



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D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Timothy Butler

Name

798 Concord Road

Mailing Address

Sudbury

City/Town

MA

State

01776

Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Timothy Butler

Signature of Applicant

7/28/21

Date

Signature of Representative (if any)

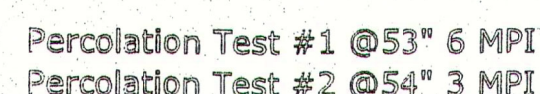
Date

AS-BUILT ELEVATIONS

at Foundation 97.14
 Septic Tank Inlet Invert 96.32
 Septic Tank Outlet Invert 96.12
 Pump Chamber Inlet Invert 96.00
 Pump Chamber Outlet Invert 95.03
 D-Box Inlet Invert 101.68
 D-Box Outlet Invert 101.51
 Leaching Trench Beg. Invert 101.32
 Leaching Trench End Invert 101.13
 Leaching Trench Bottom Invert 99.02
 Design Groundwater Elevation 95.13

SCHEDULE OF TIES

	<u>A</u>	<u>B</u>	<u>C</u>
<u>1</u>	53'5"	40'	
<u>2</u>	50'8"	42'	
<u>3</u>	49'	44'5"	
<u>4</u>	40'8"	51'	
<u>5</u>	63'6"		31'3"



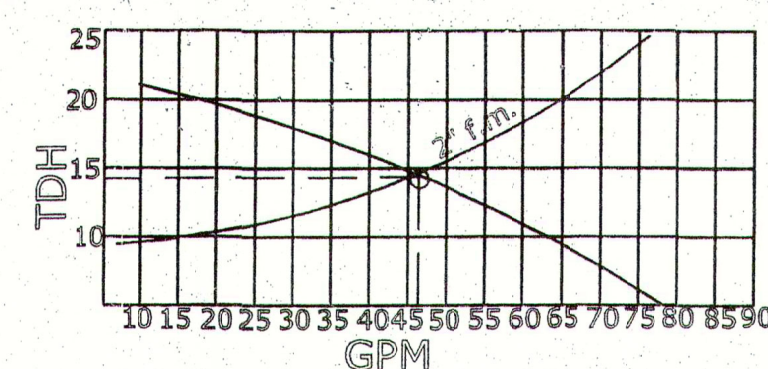
Pump Calculations

1. TDH= Static Head (9.14') + Friction Loss (4.00') = 13.14 feet
 2. Sose = Daily Flow (550 gallons) ÷ force main volume (7 gallons) = 557 gallons
 Dose 4 Time Per Day = 139 gallons /dose
 3. Pump on eff. 93.11 - Pump off eff. 92.53 = .58'
 .58feet(height) x 7.48feet(tank length) x 4.17(tank width) = 18.57 cubic feet
 18.57 cubic feet ÷ 7.48feet(cubic feet = 139 gallons
 4. Emergency Stop = Pump Chamber Alarm On 93.60 = 2.6 feet
 7.68 ft (tank length) x 4.17 ft (tank width) x 2.6 ft (height) = 83.26 cubic feet
 83.26 cubic feet ÷ 7.48 cubic feet/gallon = 622 gallons

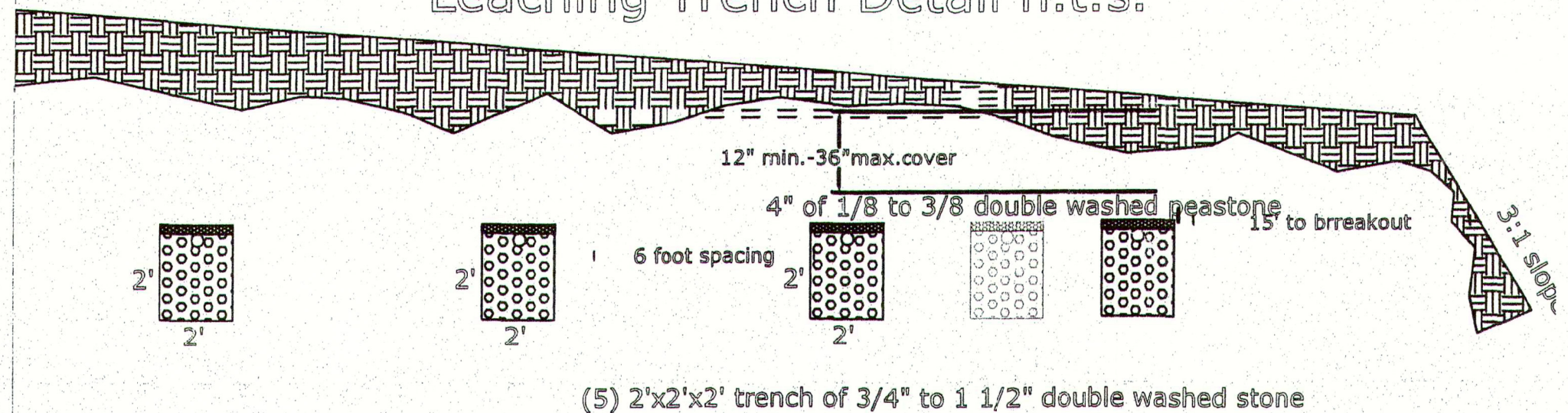
Pump Notes

1. The contractor shall be responsible for installing the following: submersible pump, single force main, and the electrical panel.
2. The pump shall be a Myers 4 HP submersible w/ 2" flanges, AMS-1 level control (mercury switch), ANPLCA alarm controls, NEHA 1 control box, 2" check valve, 2" discharge pipe (45' length), 1" discharge pipe (10' length), and 1" discharge pipe (10' length).
3. The high water alarm shall consist of a mercury float switch w/FLCA alarm control w/separate circuit for pump.
4. Equipment shall be installed in accordance w/ manufacturers specifications.
5. The alarm shall be readily observable by the occupants.
6. Flood balls shall be installed to prevent antenclatements.

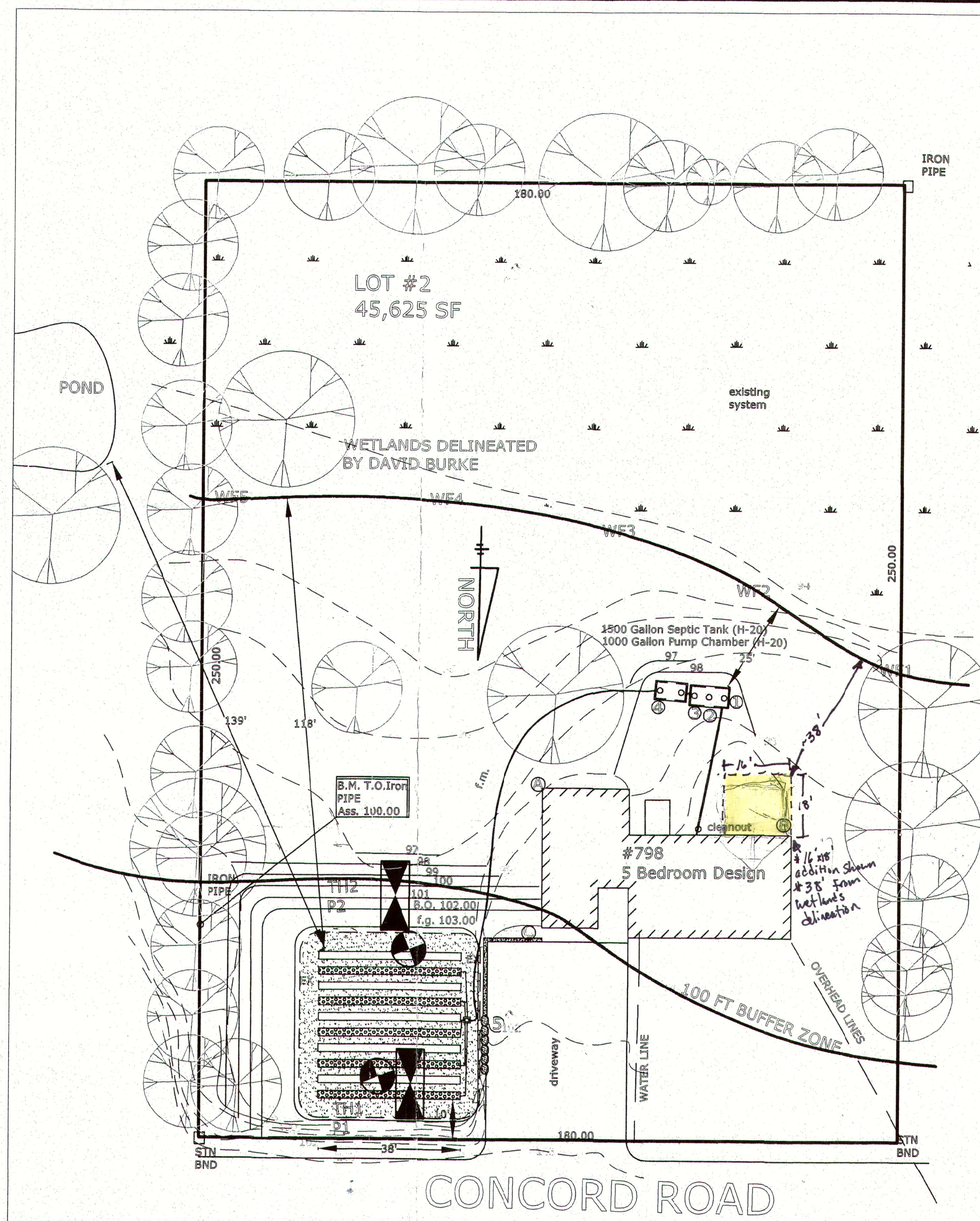
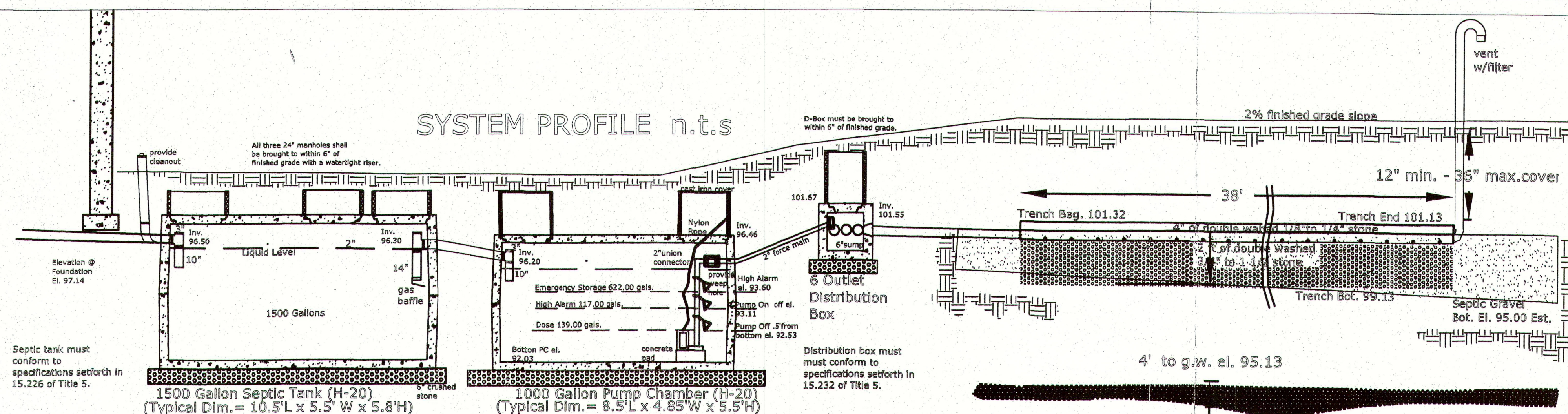
Pump Curve



Leaching Trench Detail n.t.s.



SYSTEM PROFILE n.t.s



General Notes

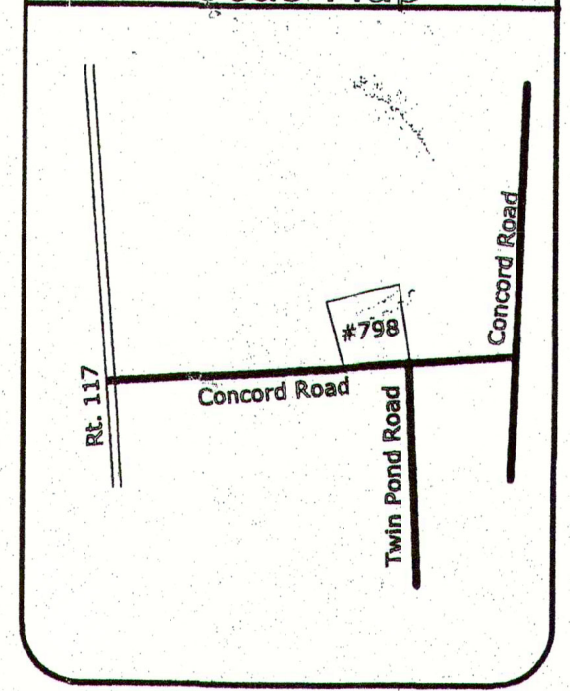
Soil Class: I

Effluent Loading Rate: .68
Gal./Day/Sq.Ft.
Type of Soil Absorption System
(SAS): Leaching Trenches
Garbage Disposal Allowance? NO
(The use of garbage disposals
may cause the premature failure
of the SAS) Increase Leaching
150%
Leaching Area Required: 150 SF
Sidewall/Bedroom x 5 = 750 SF
Sidewall
Leaching Area Provided: 1140 SF
5 Trenches (2'x2'x2') 38 ft
long = Total = 1140 SF
Sidewall = 760 SF

Other Notes






1. The contractor shall notify the engineer of any site plan modifications.
2. The property is not located within a ZONE 1

Locus Map



William C. Murphy, R.S. # 1090

Legend

- | | |
|---|---------------------|
|  | Ex. Contour |
|  | Prop. Contour |
| f.g. | finished grade |
| ex | limit of excavation |
|  | deep test hole |
|  | percolation test |
|  | tree |

AS-BUILT CERTIFICATION
I, William Murphy, certify that the septic system installed at #798 Concord Road, Sudbury, by David Poor was installed in accordance with the design plan dated 2/2/04. The septic system installed conforms with Title 5 and falls within all acceptable tolerances set forth by Title 5 and the Sudbury Health Department regulations.

1. All engineering and installation of the septic system shall be in accordance with Title 5 and the Subdory Board of Health Regulations.
2. The contractor must have a valid license in the Town of Sudbury.
3. All survey information was obtained from owner. The plot plan for the septic design purposes only and shall not be used to establish lot lines.
4. The contractor is responsible for contacting DigSafe 1-888-364-7233.
5. The contractor shall assume an assumed datum unless otherwise noted.
6. The design is based upon soil being consistent throughout the area. Any observation that differs from the test holes must be brought to the attention of the designer. The designer is not responsible for untested soil.
7. The contractor is responsible for contacting the design engineer and the local Board of Health 48 hours prior to installation of the inspection pipe.
8. After the installation and prior to backfilling, the contractor must stake and flag the outer boundaries of the soil absorption system. These markings must remain in place until the Certificate of Compliance is issued by the Board of Health. No heavy equipment shall pass over the system.
9. The existing system shall be pumped, collapsed, and filled with clean sand.
10. It is recommended that the septic tank be pumped a minimum of every two years, annually with a garbage

System Notes

- ### System Notes
1. All piping shall be schedule 40 pipe unless otherwise specified.
 2. All piping (with the exception of the soil absorption system) shall be bedded in fill free from stones and gravel. The lettering on the pipes shall be visible to verify pipe specifications.
 3. Extension manholes will be required for all the septic tank covers to extend within 6 inches of finished grade. The extension shall have a 4" x 4" x 4" manhole.
 4. An extension manhole for the distribution box shall be brought to within 6 inches of finished grade.
- ### Construction In Fill
- The septic system shall be comprised of clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different soil classes shall not be used. The fill shall not contain any material larger than two (2) inches in analysis. The analysis 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 analysis shall also be performed on a fraction of the fill sample passing through the #4 sieve, such that the analysis shall be performed on a sample that meets each of the specifications of 310 CTR.15.255 (3).

6. Where fill is required to replace unsuitable or impermeable soils, the excavation of the unsuitable material (topsoil, subsoil, and any deleterious material) shall extend a minimum of five feet laterally in all directions beyond the outer perimeter of the soil absorption system to a depth of 6 inches into the naturally occurring pervious material as required by 310 CWR 15.24 and replaced with the fill specified above.

7. The bottom of the excavation shall be scarified and relatively dry. Fill shall not be placed in rain or snow storms. If the water table elevation is above the elevation to the bottom of the excavation, the excavation shall be dewatered.

Soil Absorption System

- Sedimentation System**
 8. The adsorption shall be designed for 40 pvc and shall be constructed with joints that are watertight and in sound condition.
 9. The first two feet of the distribution lines (from D-Box) shall be level.
 10. The distribution lines shall be evenly spaced along two rows running the length of the line, on each side, midway between the Invert, and the centerline which separates the upper and lower halves of the pipe. For gravity systems, the orifices shall be no smaller than $\frac{1}{8}$ inch and no larger than $\frac{1}{2}$ inch in diameter.
 11. The pipe must be maintained over the SAS for a finished grade so that the water will drain away.
 12. No permanent structures must be placed over the SAS or 100% reverse area.
 13. The ends of the distribution lines must be capped or plugged if inverted.
- Stone**
 14. Only double washed stone is permitted to be used for the adsorption system (less than .2% material finer than the number 20 sieve as determined by AASHTO method T-11 and T-27).

1.	AS- BUILT	2/5/05
No.	Revision/Issue	Date

Firm Name and Address

PureGround, Inc.
William C. Murphy
P.O. Box 312
Weston, MA
(781) 259-9900

Project Name and Address

AS-BUILT
SEPTIC SYSTEM
at
#798 Concord Rd
Sudbury, MA
Map D11 Parcel
Lou Gianetti
(978) 443-2941

Project	798 Concord Road
Date	2/2/04
Scale	1"=20 feet

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