

The Sudbury Conservation Commission will hold a public hearing to review the Notice of Intent filing to replace the septic system and shed within the 100-foot Buffer Zone, pursuant to the Wetlands Protection Act and Sudbury Wetlands Administration Bylaw, at 438 Concord Road, Sudbury, MA. Raffi & Silva Kotikian, Applicant. The hearing will be held on Monday, June 5, 2023 at 7:00 pm, via remote participation.

Please see the Conservation Commission web page for further information.

https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-june-5-2023/

SUDBURY CONSERVATION COMMISSION 5/17/2023

MATTHEW S. MARRO ENVIRONMENTAL CONSULTING

45 Lisa Drive Leominster, Ma Phone (978) 314-7858 Fax (888) 435-5999 www.marro-consulting.com

A Notice of Intent 438 Concord Road Sudbury, MA 01776

Environmental Analysis Submitted on Behalf of Raffi &Silva Kotikian

Matthew S. Marro
Environmental
Consulting
(MSMEC)
45 Lisa Drive
Leominster, MA
01453
matt@marroconsulting.com
irene@marro-consulting.com
www.marro-consulting.com

May 2023

Table of Contents

Introduction	3-4
Proposed Construction and Mitigation Sequencing	
Exhibits	
WPA form 3	12-23
Abutter Notification Materials	24-25
Plans by Innovative Septic Design	26

Introduction

Summary

438 Concord Road is a single-family home sitting on a 0.50-acre lot. The project proposal is for the construction of a septic system and minor regrading within the 100-foot buffer zone. Analysis of the lot reveals some excavation and minimal grading to accommodate a leach field and components which are within the limits of the 100-foot buffer zone. Included in the scope of the proposed work is minor re-grading of the rear yard to level the yard. Work also includes the removal of the existing shed on the northerly corner with a replacement shed placed on the southerly corner. No work is proposed within the limits of a bordering vegetated wetland. There will be no trees to be removed in the buffer zone. This proposed scope of work within the buffer zone, necessitates the filing of a Notice of Intent.

Specifics of the lot

The lot is a 0.50-acre lot consisting of approximately 45% of the lot being developed. The lot does not contain flood plain and does not contain certified vernal pools an area of Critical Environmental Concern nor rare species habitat. The system and components have been optimally sited to allow for compliance with Title V. The total disturbance is 250 square feet for the sewer and force main, 50 square feet for the tank and pump chamber (the chamber will remain with only some of the components replaced), and 700 square feet for the leach field for a total of 1000 square feet within the buffer zone. There will be minimal disturbance within the 50 foot buffer zone consisting of grading to accommodate the leveling of the lawn (currently lawn to be restored as lawn). Erosion protection will be placed to the immediate rear of the limit of grading labeled "elevation 94" to ensure no further intrusion into the 50 foot zone.

Grading proposed for the rear yard is for leveling purposes. Grading will change the 96 contours to a 98 contour. The 94 contours will be graded to 96. The total square footage of the rear yard is 2,445 square feet. The area will be maintained as lawn. Lawn is the existing condition. Total impact is as follows:

Rear Yard Grading: 2,445 Sq. Ft
 Septic work in total: 1,000 Sq. Ft.

Total sitework impact is 3,445 Sq. Ft.

Bordering Vegetated Wetland

The following outlines the mix of BVW vegetation that was noted on the site throughout the entirety of the delineated portion noted on the plan as WF 1 through WF 8:

Botanical Name	Common Name	Wetland Indicator Status ⁱ
Onoclea sensibilis	Sensitive Fern	FACW
Osmundastrum	Cinnamon Fern	FACW
cinnamomeum		
Solidago altissima	Canada Golden Rod	FACU
Acer Rubrum	Red Maple	FAC
Symplocarpus foetidus	Skunk Cabbage	OBL
Quercus rubra	Northern Red Oak	FACU
Vaccinium corymbosum	High Bush Blueberry	OBL
Rosa Multiflora	Multiflora Rose	FACU

Commencement of Construction Activities and Timelines:

All proposed construction is estimated to be completed through stabilization in a fourweek maximum construction schedule. This schedule of course, may be adjusted due to weather related conditions.

Proposed Construction Mitigation and Sequencing

The formal plan submitted with this Notice of Intent is entitled "438 Concord Rd. "by Innovative Septic Design dated 5.1.23, 1 inch = 20 feet scale.

The plan details outline a sequence of work as follows:

- Placement of erosion controls proposed in a manner to maximize protection to the resource area. Erosion Protection will be placed at the limit to the grading line elevation 94 within the 50 foot zone to ensure work does not traverse further into that zone or over the slope.
- Limited Vegetation (lawn area) removal in the area of the septic with components and lawn. Lawn area will be replanted.
- Excavate site for placement of tank, main and leach field.
- Re-grading of the rear yard outline on the accompanying plans.
- Restore disturbed lawn areas.
- Remove erosion controls once areas are stabilized.

Mitigation Measures:

The following mitigation measures are proposed and noted on the accompanying plans:

- Minimize newly disturbed areas to limit of work area.
- Maintain all structures and permanent work to ensure no further encroachment to the 50 foot zone.
- Erosion control installed prior to ground disturbance.
- Minimize construction duration to within four weeks as a maximum.

Conclusion.

With the considerations of a limited and minimized work area, optimally located and proposed mitigation for the protection of the resource areas, it is the opinion of MSMEC, the proposal protects the resource areas from alteration. It is noteworthy, the work is within a limited area of the lot and the remainder of the lot will remain in the same condition as pre development, a standard Order of Conditions, adopting the construction sequence and mitigation noted on the accompanying plans is, in our opinion, sufficient to protect the interests of the resource areas and we hope the commission will agree with this assertion and, respectfully on behalf of Raffi &Silva Kotikian, will approve a standard Order of Conditions.

Thank you for your consideration of this Notice of Intent.

Respectfully Submitted,

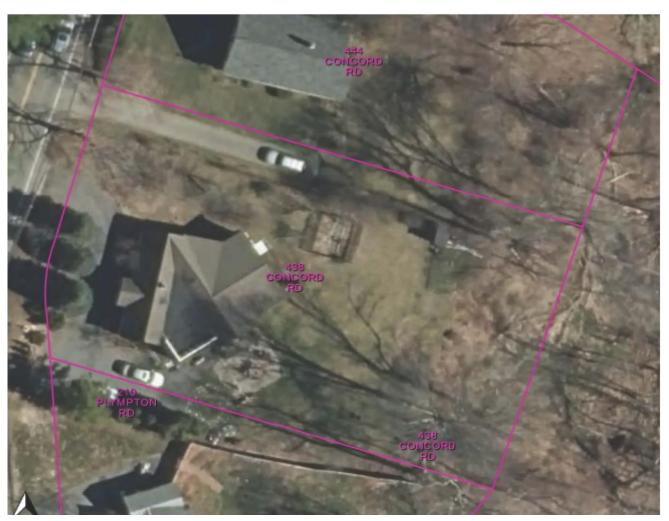
12/h __

Matthew S. Marro, Consulting Agent/Principal Cc: File

Client file Mass DEP

6

EXHIBITS AND WPA FORM 3



```
Q3 Flood Zones (from Paper FIRMs, whe1 NFHL Unavailable)

13 AE

AE Roodway

13 AH 13 Ao 13 D

13 VE

E3 Area Not Included

M x500

FEMA National Flood Hazard Layer Polygons

A: 1% Annual Chance of Flooding, no BFE AE: 1% Annual Chance of Flooding, with BFE

II AE: Regulatory Floodway

AH: 1% Annual Chance of 1-3t Ponding, with BFE

AO: 1% Annual Chance of 1-3t Sheet Flow Flooding, witl VE: High Risk Coastal Area

1: Possible But Undetermined Hazard

X: C.0.2% Annual Chance of Flooding

X: Reduced Flood Risk due to Levee

D Area Not Included

D Area With no FIRM - Paper FIRMs in Effect

Potential Vernal Pools

0

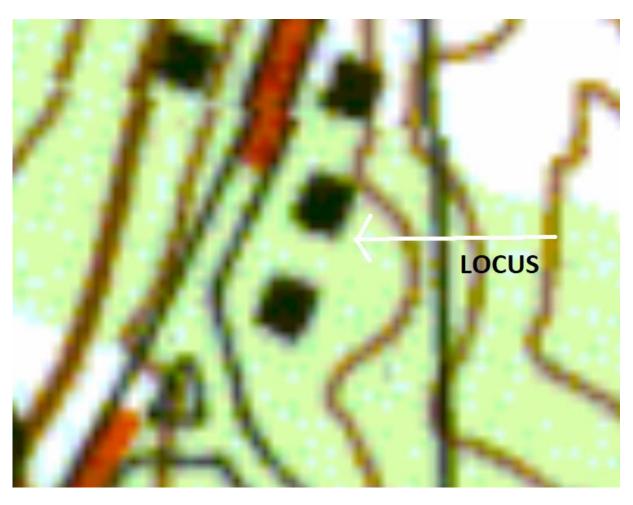
NHESP Natural Communities

[I

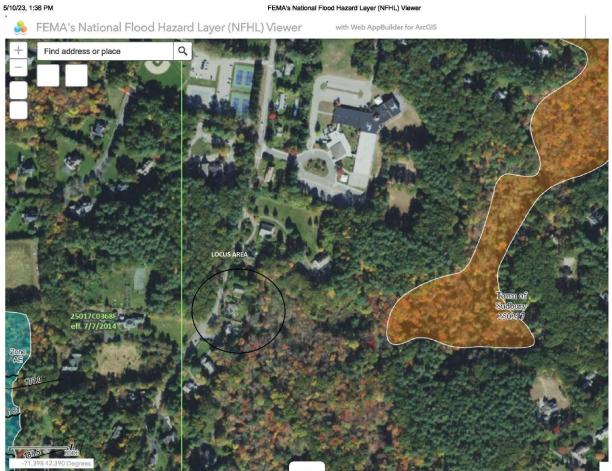
NHESP Estimated Habitats of Rare Wildlife

UNHESP Estimated Habitats of Rare Wildlife
```

USGS MAP



FEMA FIRMETTE



https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=~71.41571766296677,42.38518018906952,~71.3949466363549,42.39310432...



438 Concord Road





Estuarine and Marine Deepwater Estuarine and Marine Wetland

Freshwater Forested/Shrub Wetland Other Freshwater Pond Riverine This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wellands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI) This page was produced by the NWI mapper

WPA FORM 3



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury

City/Town

4

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

438 Concord Road	Sudbury	01776
a. Street Address	b. City/To	
Latitude and Longitude:	42.3891	
Latitude and Longitude.	d. Latitude	e. Longitude
G10	0006	
f. Assessors Map/Plat Number	g. Parcel /	Lot Number
Applicant:		
Raffi &Silva	Kotiki	an
a. First Name	b. Last	Name
c. Organization		
438 Concord Road		
d. Street Address		
Sudbury	MA	01776
e. City/Town	f. State	g. Zip Code
617-448-9499	raffi@kotikia	ın.com
	ax Number j. Email Addres	
Property owner (required a. First Name	b. Last	Check if more than one owner Name
a. First Name		
a. First Name c. Organization		
a. First Name c. Organization d. Street Address e. City/Town	b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town	b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number i. I	b. Last	g, Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any):	f. State Fax Number j. Email address	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name	f. State Fax Number j. Email addres Marro b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S.	f. State Fax Number j. Email addres Marro b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ	f. State Fax Number j. Email addres Marro b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company	f. State Fax Number j. Email addres Marro b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive	f. State Fax Number j. Email addres Marro b. Last	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive d. Street Address	f. State Fax Number j. Email addres Marro b. Last mental Consulting	g. Zip Code
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive d. Street Address Leominster e. City/Town	f. State f. State j. Email address Marro b. Last mental Consulting MA f. State	g. Zip Code s Name 01453
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive d. Street Address Leominster e. City/Town 978-314-7858	f. State f. State j. Email address Marro b. Last mental Consulting MA f. State	g. Zip Code g. Zip Code s Name 01453 g. Zip Code p-consulting.com/irene@marro-
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive d. Street Address Leominster e. City/Town 978-314-7858 h. Phone Number	f. State f. State j. Email address Marro b. Last mental Consulting MA f. State 75-521-7083 matt@marro	g. Zip Code g. Zip Code s One of the control of
a. First Name c. Organization d. Street Address e. City/Town h. Phone Number Representative (if any): Matthew S. a. First Name Matthew S. Marro Environ c. Company 45 Lisa Drive d. Street Address Leominster e. City/Town 978-314-7858 h. Phone Number	f. State f. State j. Email address Marro b. Last mental Consulting MA f. State 75-521-7083 matt@marro consulting.co	g. Zip Code g. Zip Code s One of the control of

wpaform3.doc • rev. 6/18/2020

Page 1 of 9

Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

WPA Form 3 - Notice of Intent

ro	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	City/Town

Ma	issachusetts Wetlands Protection Act M.G.L	c. 131, §40	Sudbury
_	O		City/Town
Α.	General Information (continued)		
6.	General Project Description:		
	Refer to Narrative		
7a.	Project Type Checklist: (Limited Project Types see	Section A. 7b.)	
	1. Single Family Home	2. Residential S	Subdivision
	3. Commercial/Industrial	4. Dock/Pier	
	5. Utilities	6. Coastal eng	ineering Structure
	7. Agriculture (e.g., cranberries, forestry)	8. Transportation	on
	9. Dther		
7b.	Is any portion of the proposed activity eligible to be Restoration Limited Project) subject to 310 CMR 10		
	1. ☐ Yes ☐ No If yes, describe which limite 10.24 and 10.53 for a comp	ed project applies to th	nis project. (See 310 CMR
	2. Limited Project Type		
	If the proposed activity is eligible to be treated as ar CMR10.24(8), 310 CMR 10.53(4)), complete and at Project Checklist and Signed Certification.		
8.	Property recorded at the Registry of Deeds for:		
	Middlesex a. County	h Continue # (if an airtean	- d (- v d)
	25338	b. Certificate # (if register) 451	eu iaiiu)
	c. Book	d. Page Number	
В.	Buffer Zone & Resource Area Impa	acts (temporary	& permanent)
1.	⊠ Buffer Zone Only – Check if the project is located to the project to the project is located to the project is l		one of a Bordering
2.	Vegetated Wetland, Inland Bank, or Coastal Re ☐ Inland Resource Areas (see 310 CMR 10.54-10		go to Section B.3,
	Coastal Resource Areas).		The same and the s

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.

Page 2 of 9 wpaform3.doc • rev. 6/18/2020



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

0\	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	City/Town

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

	Resour	ce Area	Size of Proposed Alteration	Proposed Replacement (if any)
For all projects	a. 🗌	Bank	1. linear feet	2. linear feet
For all projects affecting other Resource Areas,	b. 🗌	Bordering Vegetated Wetland	1. square feet	2. square feet
please attach a narrative explaining how	c. 🗌	Land Under Waterbodies and	1. square feet	2. square feet
the resource area was delineated.		Waterways	3. cubic yards dredged	
delineated.	Resour	ce Area	Size of Proposed Alteration	Proposed Replacement (if any)
	d. 🗌	Bordering Land Subject to Flooding	1. square feet	2. square feet
	e. \square	Isolated Land	3. cubic feet of flood storage lost	4. cubic feet replaced
	e. 🗀	Subject to Flooding	1. square feet	
			2. cubic feet of flood storage lost	3. cubic feet replaced
	f. 🔲	Riverfront Area	Name of Waterway (if available) - speci	fy coastal or inland
	2.	Width of Riverfront Area (check one):	
		25 ft Designated De	nsely Developed Areas only	
		☐ 100 ft New agricultu	ıral projects only	
		☐ 200 ft All other proje	ects	
	3 -	Total area of Riverfront Area	a on the site of the proposed project	
				square feet
	4. 1	Proposed alteration of the R	Riverfront Area:	
	a.t	otal square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
	5. l	Has an alternatives analysis	s been done and is it attached to this	NOI? Yes No
	6. \	Was the lot where the activit	ty is proposed created prior to Augu	ıst 1, 1996? ☐ Yes ☐ No
3	B. Coa	astal Resource Areas: (See	310 CMR 10.25-10.35)	
	Noto	for coastal riverfront areas	places complete Section R 2 f. abo	WO.

Page 3 of 9 wpaform3.doc • rev. 6/18/2020



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

WPA Form 3 – Notice of Intent Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

01	vided 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.

4.

5.

Resou	irce Area	Size of Proposed Alteration	Proposed Replacement (if any)
а. 🗌	Designated Port Areas	Indicate size under Land U	Inder the Ocean, below
b. 🗌	Land Under the Ocean	1. square feet	
		2. cubic yards dredged	
c. 🔲	Barrier Beach	Indicate size under Coastal	Beaches and/or Coastal Dunes below
d. 🔲	Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. 🗌	Coastal Dunes	1. square feet	2. cubic yards dune nourishment
		Size of Proposed Alteration	Proposed Replacement (if any)
f. 🗌	Coastal Banks	1. linear feet	
g. 🗌	Rocky Intertidal Shores	1. square feet	
h. 🗌	Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. 🗌	Land Under Salt Ponds	1. square feet	
		2. cubic yards dredged	<u> </u>
j. 🔲	Land Containing Shellfish	1. square feet	
k. 🗌	Fish Runs		Banks, inland Bank, Land Under the Under Waterbodies and Waterways,
		1. cubic yards dredged	
1. 🔲	Land Subject to Coastal Storm Flowage	1. square feet	
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.			
	re feet of BVW	*	et of Salt Marsh
☐ Pr	oject Involves Stream Cros	ssings	
a. numb	er of new stream crossings	b. number of	replacement stream crossings

Page 4 of 9 wpaform3.doc • rev. 6/18/2020

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

WPA Form 3 – Notice of Intent Massachusetts Wetlands Protection Act M.G.L. c. 131, 840.

0	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	City/Town

VIZ	issachusells Wellands Protection Act M.G.	Sudbury			
_	00 4 1 1 0 1 1 1	City/Town			
C.	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).				
Str	eamlined Massachusetts Endangered Spec	ies Act/Wetlands Protection Act Review			
1.	Is any portion of the proposed project located in E the most recent Estimated Habitat Map of State-Li Natural Heritage and Endangered Species Progra Massachusetts Natural Heritage Atlas or go to http://maps.massgis.state.ma.us/PRI EST HAB/W	m (NHESP)? To view habitat maps, see the			
	a. Yes No If yes, include proof of n	nailing or hand delivery of NOI to:			
	May 2023 MassGIS				
	If yes, the project is also subject to Massachusetts CMR 10.18). To qualify for a streamlined, 30-day, complete Section C.1.c, and include requested macomplete Section C.2.f, if applicable. If MESA supby completing Section 1 of this form, the NHESP up to 90 days to review (unless noted exceptions in	MESA/Wetlands Protection Act review, please aterials with this Notice of Intent (NOI); OR columntal information is not included with the NOI, will require a separate MESA filing which may take			
	c. Submit Supplemental Information for Endangere	ed Species Review*			
	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 o	fsite			
2.	Project plans for entire project site, including wetlands jurisdiction, showing existing and propos tree/vegetation clearing line, and clearly demarcat	ed conditions, existing and proposed			
	(a) Project description (including description buffer zone)	on of impacts outside of wetland resource area &			
	(b) Photographs representative of the site				

wpaform3.doc • rev. 6/18/2020

Page 5 of 9

^{*} Some projects not in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/maendangered-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.

May 2023 438 Concord Rd

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

WPA Form 3 – Notice of Intent Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

0\	rided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	Citv/Town

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 <i>mail to NHESP</i> 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 & Estima	ted Habitat boundaries					
	(f) OF	R Check One of the Following						
	1. 🗆	https://www.mass.gov/service-details/e	MESA exemption applies. (See 321 CMR 10.14, xemptions-from-review-for-projectsactivities-in-nt to NHESP if the project is within estimated if 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" dete Permit with approved plan.	rmination or valid Conservation & Management					
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 a	applicable – project is in inland resource	area only b. 🗌 Yes 🔲 No					
	If yes, inclu	ude proof of mailing, hand delivery, or ele	ectronic delivery of NOI to either:					
	South Shore the Cape &	e - Cohasset to Rhode Island border, and Islands:	North Shore - Hull to New Hampshire border:					
Division of Marine Fisheries - Southeast Marine Fisheries Station Attn: Environmental Reviewer 836 South Rodney French Blvd. New Bedford, MA 02744 Email: dmf.envreview-south@mass.gov Division of Marine Fisheries - North Shore Office Attn: Environmental Reviewer 30 Emerson Avenue Gloucester, MA 01930 Email: dmf.envreview-north@mass.gov								
	Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.							
	c. 🗌 Is	this an aquaculture project?	d. ☐ Yes ☐ No					
	If yes, inclu	ude a copy of the Division of Marine Fish	eries Certification Letter (M.G.L. c. 130, § 57).					

wpaform3.doc • rev. 6/18/2020

18

Page 6 of 9

May 2023 438 Concord Rd



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

WPA Form 3 – Notice of Intent Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

)(rided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	City/Town

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

	4.	Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?			
Online Users: Include your document		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.			
transaction		b. ACEC			
number (provided on your receipt page) with all	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?			
supplementary		a. 🗌 Yes 🛛 No			
information you submit to the Department.	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			
		2. A portion of the site constitutes redevelopment			
		3. Proprietary BMPs are included in the Stormwater Management System.			
		b. Mo. 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.			

wpaform3.doc • rev. 6/18/2020 Page 7 of 9

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

ro\	vided by MassDEP:
	MassDEP File Number
	Document Transaction Number
	Sudbury
	City/Town

D. Add	D. Additional Information (cont'd)					
3. 🗌	Identify the method for BVW and other resource area boundary delineations (MassDEP BW 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.					

438	438 Concord Road				
a. P	lan Title				
Inn	ovative Spetic Design	Evan Carloni			
b. P	repared By	c. Signed and Stamped by			
5.1	.2023	20			
d. F	inal Revision Date	e. Scale			
f. Ad	dditional Plan or Document Title	g. Date			
5. 🗌	If there is more than one property owner, plisted on this form.	ease attach a list of these property owners not			
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

of the Commonwealth, federally recogniz authority, or the Massachusetts Bay Trai	zed Indian tribe housing authority, municipal housing nsportation 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:				
Municipal Check Number	3. Check date			

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district

4. State Check Number 5. Check date Matthew Marro 6. Payor name on check: First Name 7. Payor name on check: Last Name

wpaform3.doc • rev. 6/18/2020 Page 8 of 9

438 Concord Rd

May 2023



Massachusetts Department of Environmental Protection Provided by MassDEP:

Bureau of Resource Protection - Wetlands WPA Form 3 - Notice of Intent

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

Sudbury

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 at 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.

n. That Signature of Applicant

3. Signature of Property Owner (if different)

5. Signature of Representative (if any)

4. Date

5.10.2023 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

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.

wpaform3.doc • rev. 6/18/2020

Page 9 of 9

Matthew S. Marro Environmental Consulting (MSMEC)

21



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





A. Applicant Information

Location of Project:		
438 Concord Road	Sudbury	
a. Street Address	b. City/Town	
	42.50	
c. Check number	d. Fee amount	
Applicant Mailing Address:		
Raffi &Silva	Kotikian	
a. First Name	b. Last Name	
c. Organization 438 Concord Road d. Mailing Address Sudbury	MA	01776
e. City/Town	f. State	g. Zip Code
617-448-9499	raffi@kotikian.com	
h. Phone Number i. Fax Numb	er j. Email Address	
Property Owner (if different):		
a. First Name	b. Last Name	
c. Organization		

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

d. Mailing Address

h. Phone Number

e. City/Town

3.

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

f. State

i. Email Address

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.

i. Fax Number

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.

noifeetf.doc • Wetland Fee Transmittal Form • rev. 10/11

Page 1 of 2

g. Zip Code



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 Septic replacement	1	110			
		otal Project Fee Fee Payments:	:		
	Total	Project Fee:	a. Total Fee from Step 5		
	State share	of filing Fee:	42.50 b. 1/2 Total Fee less \$12.50		
	City/Town share	e of filling Fee:	67.50 c. 1/2 Total Fee plus \$12.50		

C. Submittal Requirements

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

> Department of Environmental Protection Box 4062 Boston, MA 02211

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

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

noifeetf.doc • Wetland Fee Transmittal Form • rev. 10/11

Page 2 of 2

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:

	Section 40, you are nereby notified of the following:
A.	The name of the Applicant is Raffi and Silva Kotikian
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 <u>address</u> of the lot where the activity is proposed: 438 Concord Road
D.	The proposed activity is: Replacement of a subsurface Sewage Disposal System within the Buffer Zone
	& light grading in the rear yard
E.	A Public Hearing regarding this Notice of Intent will be held on: Monday, June 5, 2023 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: • https://us02web.zoom.us/j/84085992361 • Meeting ID: 840 8599 2361 • From your phone: 978-639-3366 or 470 250 9358
Н	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 irene@marro-consulting.com , by calling this telephone number between the hours of 9 am to 3 PM

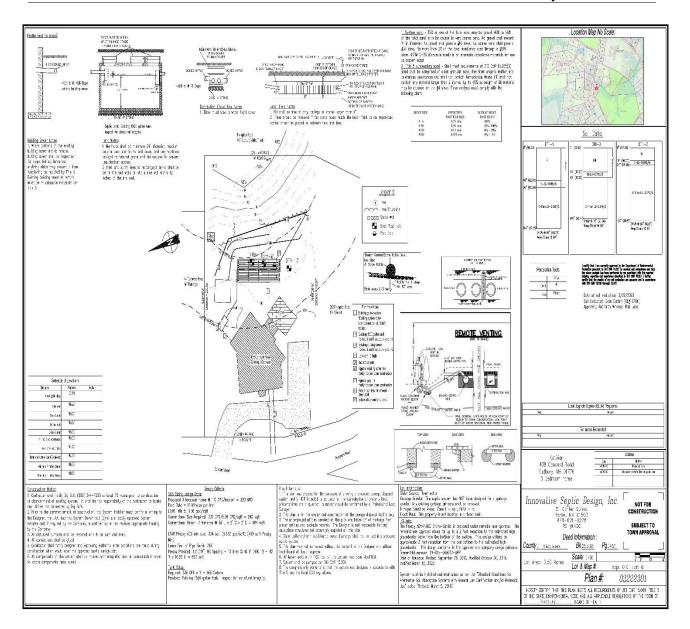
Note: Public Hearing Notice, including its date, time, and place, will be published at least 5 days in advance in the MetroWest newspaper (at the applicant's expense).

Assessor Record

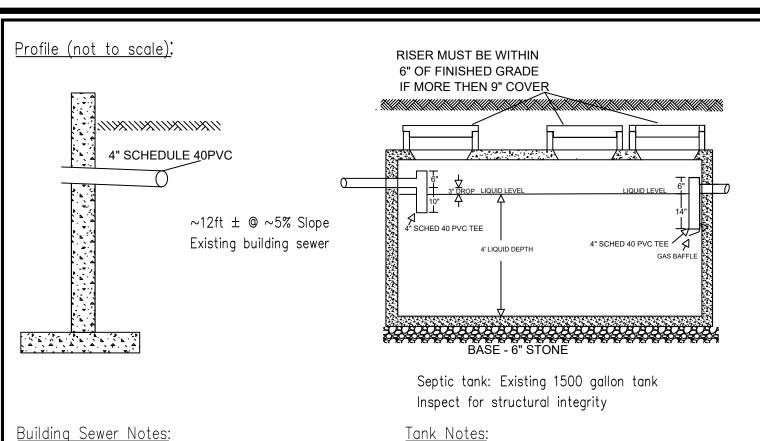
abutters_id_field	abutters_owner1	abutters_owner2	abutters_address	abutters_town	abutters_state	abutters_zip	abutters_bookpage	abutters_location
G10-0001	SAINT ELIZABETH'S CHURCH		1 MORSE RD	SUDBURY	MA	01776	15372-324	435 CONCORD RD
G10-0002	ST ELIZABETHS CHURCH OF	SUDBURY	1 MORSE RD	SUDBURY	MA	01776	10776-289	1 MORSE RD
G10-0005	RUTLEDGE NADINE G &	BENSEL CAROLYN K	444 CONCORD RD	SUDBURY	MA	01776	28457-529	444 CONCORD RD
G10-0006	KOTIKIAN RAFFI STEPAN & SILVA		438 CONCORD RD	SUDBURY	MA	01776	25338-451	438 CONCORD RD
G10-0007	WENNIK KELLY F		210 PLYMPTON RD	SUDBURY	MA	01776	69875-215	210 PLYMPTON RD
G10-0300	SUSSMAN MATTHEW S & JAMIE M		452 CONCORD RD	SUDBURY	MA	01776	62927-512	452 CONCORD RD
G10-0302	MASSIMO RYAN & LAUREN		460 CONCORD RD	SUDBURY	MA	01776	74107-233	460 CONCORD RD
G10-0400	SUDBURY VALLEY TRUSTEES INC		18 WOLBACH RD	SUDBURY	MA	01776	14500-230	PLYMPTON RD
G09-0501	KAITZ STEVEN S TRS	MIDDLESEX AND PLYMOUTH TRUST	71 MAPLE ST	MANSFIELD	MA	02048	49033-144	16 WHITEHALL CIR

Gnthi Lerry 5/12/2023

SITE PLAN OF 438 Concord Road (reduced version for reference purposes – please consult full version for more specific details)



OBL= Obligate. Fac= Facultative. UP = Upland Notation: FACW = Facultative wetland species



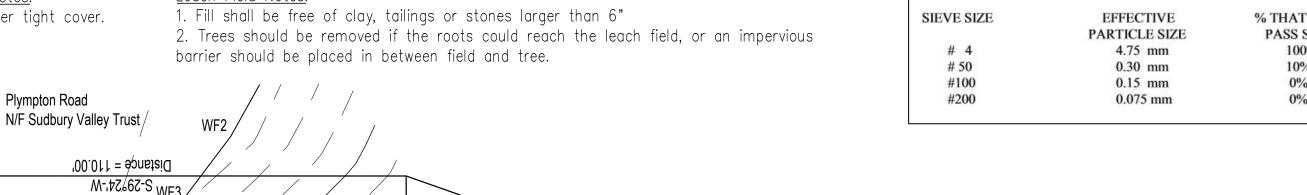
Building Sewer Notes: . Where portions of the existing building sewer are to remain, building sewer shall be inspected for slope, bellies, turns and anything which may prevent it from functioning as required by Title 5. Existing building sewer to remain must be of adequate materials per

Title 5.

1. Manholes shall be minimum 24" diameter, medium duty or cast iron frame and cover, and any manholes brought to finished grade shall be secured to prevent unauthorized access.

2. Inlet and outlet tees to rectangular tanks shall be set in the end walls or into a side wall within 12 inches of the end wall.

RISER W/6" OF FINISHED GRADE VENT TO BE SUPPORTED AT BASE 9" MIN COVER TO MAINTAIN VENT IN UPWARD MIN 2% SLOPE OVER LEACH FIELD LOW VENT 36" MAX COVER ORIENTATION PKIIPKIIPKIIPKIIPKIIPKI MIN 2" DROP FROM INSP. PORT W/IN 36" MIN ABOVE GRADE 3 INCHES OF GRADE D-BOX TO INLET INVERT MIN 4" OF CLEAN FILL OVER SYS SAND MAX 36" FILL OVER SYSTEM SCHED 40 PVC SCHED 40 PVC RAISED CONNECTION FLUSH WITH TOP OF AES PIPE ~30ft ± @ 1% Slope PIPE MUST EXTEND 2-4" BASÈ - 6" STONE INSIDE AES PIPE BOTTOM OF SYSTEM AT BOTTOM OF SYSTEM SAND Leach Field Notes: Distribution (Dbox) Box Notes: 1. Fill shall be free of clay, tailings or stones larger than 6" 1. Dbox must have a water tight cover.



₹¥} Tree

O Stone Wall

"Straw Wattle~

Stake every 2-3 feet(/

Plan View Notes

Existing galley system

*Existing system to be abandonded per 310 CMR

2 Existing 1500 gallon tank

210 Plympton Road

Tree/Shurbline

Deep Test Hole

Frosion Control/Straw Wattle Detail

Wattle min 2" deep

Min 12" deep

Perc Hole

REMOTE VENTING To be utilized if structurally sound Existing building sewer
 To be utilized if structurally sound 4 Low vent - 3' high -DISGUISE LOW VENT IN 438 Concord Road 5 Inspection port SHRUBS 2" MIN OVER ENVIRO-SEPTIC PIPE Approx. existing water-line Existing 3 Bedroom Verify location upon construction 7 Approx. gas line Verify location upon construction Schedule of Elevations 8 Erosion control/limit of work As-Built Elevation Extent of conventional SAS ENVIRO-SEPTIC -PLACE CONCRETE AROUND ELBOW Invert @ Building Shed to be removed Approx. proposed new shed Tank Inlet PLACE WASHED STONE AROUND ELBOW HIGH GROUND WATER TABLE DRILL SEVERAL 1/4"ø HOLES AT LOW POINT OF ELBOW TO DRAIN CONDENSATION. LOW POINT MUST BE ABOVE SEASONAL HIGH WATER TABLE. Tank Outlet D-Box Inlet: 95.50 D-Box Outlet: Distance = 80.93' TOP VIEW SIDE VIEW 95.33 4" PVC Inlet into Presby: N-29°24'-E ENVIRO-SEPTIC PIPE 94.75 Invert of Presby Tube: 94.25 Bottom of System Sand (Breakout) 96.33

Plympton Road

WF6

Construction Notes:

Minimum Finished Grade:

Maximum Finished Grade:

. Contractor shall notify Dig Safe (888) 344—7233 at least 72 hours prior to construction or abandonment of existing system. It shall be the responsibility of the contractor to locate any utilities not delineated by Dig Safe.

2. Prior to the commencement of construction, the System Installer must certify in writing to the Designer, the LAA, and the System Owner that (s)he is a locally approved System Installer and, if required by the Company, is certified by or has received appropriate training

- by the Company. 3. All disturbed surfaces shall be restored with 4" of loam and seed.
- 4. All connections shall be glued.
- 5. Contractor shall notify designer and Approving Authority when conditions are found during construction which would alter the approved septic design plan.
- 6. All components of this system shall be marked with magnetic tape or comparable in order to locate components once buried.

<u>Design Criteria</u>

SAS Sizing Design Data: Proposed 3 bedroom home @ 110 GPD/bedrom = 330 GPD

Perc Rate = 11 Minutes per inch LTAR Title 5: 0.56 gpd/sqft

444 Concord Road

N/F Rutledge

Conventional Size Required: 330 GPD/0.56 GPD/sqft = 590 sqft Conventional Shown: 3 trenches @ 38' L x 2' W x 2' D = 684 sqft

LTAR Presby AES min size: 354 sqft (0.933 gpd/sqft) (400 sqft Presby

Concord Road

Linear Feet of Pipe Reg'd: 210'

Presby Provided: 1.5 (18") OC Spacing - 10 lines @ 40 ft (400 lf) - 42 $ft \times 16.50 \ ft = 693 \ sqft$

Required: $330 \text{ GPD } \times 2 = 660 \text{ Gallons}$ Provided: Existing 1500 gallon tank. Inspect for structural integrity.

Plan Information:

1. This plan was created for the purposes of showing a proposed sewage disposal system and is NOT intended to be used for the reproduction of property lines. If property lines are in question, a survey should be performed by a Professional Land

- 2. This plan is for the design and construction of the sewage disposal facility only. 3. The underground utilities denoted on this plan are based off of markings from proper entities and available records. The Designer is not responsible for any
- subsurface structures not accurately depicted on this plan. 4. Water softener/roof runoff/sump pump discharge shall not be tied into proposed septic system.
- 5. This plan may not be revised without the consent of the Designer and without local Board of Health approval.
- 6. All known wells within 150 feet of this system have been identified. 7. System shall be pumped per 310 CMR 15.351.
- 8. The designers only warranty is that the system was designed in accordance with

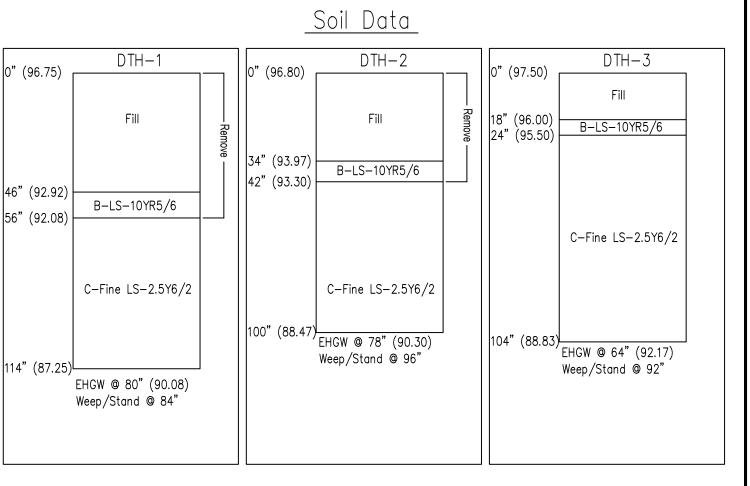
Title 5 and the local BOH regulations.

1. System sand - 35% or less of the total sand may be gravel. 40% to 90% of the total sand is to be coarse to very coarse sand. No gravel shall exceed 3/4" in diameter. No gravel shall pass a #10 sieve. No coarse sand shall pass a #35 sieve. No more than 2% of the total sand may pass through a #200 sieve. ASTM C-33 (Concrete sand) is an alternate acceptable materials for use as system sand.

2. Title 5 surrounding sand — Shall meet requirements of 310 CMR 15.255(3). Sand shall be comprised of clean granular sand, free from organic matter and deleterious substances and shall not contain Remediation Waste. Fill shall not contain any material larger than 2 inches. Up to 45% by weight of fill material may be retained on the #4 sieve. Sieve analysis must comply with the following chart:

SIEVE SIZE	EFFECTIVE	% THAT MUST
	PARTICLE SIZE	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%

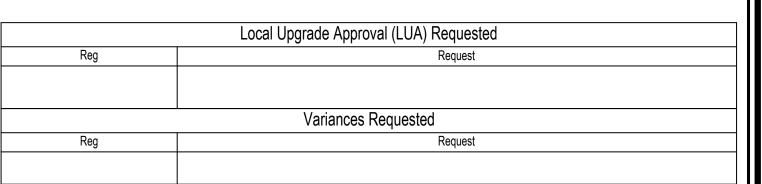
Location Map No Scale:



Percolation Tests		
	PT-A	
Depth	56"	
Rate	11 mpi	

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation are accurate and in accordance with 310 CMR 15.100 through 15.107.

Date of soil evaluation: 3/22/2023 Soil Evaluator: Evan Carloni (SE#13784) Approving Authority Witness: Rob Lazo



Kotikian	Updates	
	Date	Update
438 Concord Road	4/10/2023	Proposed Plan
Sudbury, MA 01776	5/1/2023	FG lines, remove old shed, add new shed
3 bedroom home		



51 Carter Street Berlin, MA 01503 978-621-8278 RS #1400

NOT FOR CONSTRUCTION

SUBJECT TO TOWN APPROVAL

Deed Information :

Pg.:451 **Bk.**25338 County: Middlesex Scale: 1"=20' Lot Area: 0.50 Acres Lot & Map #: Map: G10 Lot: 6 Plan #: 03222301

HEREBY CERTIFY THAT THIS PLAN MEETS ALL REQUIREMENTS OF 310 CMR 15.000, TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ALL APPLICABLE REGULATIONS OF THE TOWN OF Sudbury BOARD OF HEALTH.

Water Source: Town water Garbage Grinder: This septic system has NOT been designed for a garbage grinder. Any existing garbage grinders shall be removed.

FINAL GRADE

DISTRIBUTION BOX

END VIEW

-90° PVC Bend

Nitrogen Sensitive Areas: Zone II — no ; IWPA — no | Flood Plain: This property is not located in a flood plain.

Lot Information:

4" PVC Pipe

The Presby ADVANCED Enviro—Septic is proposed under remedial use approval. The remedial use approval allows for up to a 2 foot reduction to the estimated high groundwater table from the bottom of the system. This design utilizes an approximate 2 foot reduction from the bed bottom to the estimated high groundwater. This design conforms to the approval and company design guidance. Transmittal number: 21-CLM-000073-APP

Date of Issuance: Revised September 26, 2013, Modified October 30, 2019, Modified March 15, 2022

System must be installed and maintained as per the "Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Remedial Use" dated "Revised: March 5, 2018".