

Commonwealth of Massachusetts

City/Town of Bolton

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

## A. Facility Information

	James Morin			
	Owner Name			
	Mallard Lane		2c/15.1	
	Street Address		Map/Lot #	
	Bolton	MA	01740	
	City	State	Zip Code	
Β.	Site Information			
1.	(Check one) 🛛 New Construction 🗌 Up	grade		
2	Soil Survey Web Soil Survey	Pits, Gravel	Worcester	County Northeastern Part
	Source	Soil Map Unit	Soil Series	
	Base Slope	None		
	Landform	Soil Limitations		
	Loose Sandy and Gravelly Glaciofluvial Deposits			
	Soil Parent material			
3	Surficial Geological Report Version 16, Sept	3 2021	600	
	Yeisien repert Year Published/Sour		Map Unit	
	Pits, Gravel			
	Description of Geologic Map Unit:			
1	Flood Rate Insurance Map Within a regulator	y floodway? 🗌 Yes 🛛 No		
<b>+</b> .	FIDOU Rate insurance map within a regulator		5	
5.	Within a velocity zone? 🗌 Yes 🛛 No			
6.	Within a Mapped Wetland Area?	No If yes, Mass	GIS Wetland Data Layer:	Motord Turne
7				Wetland Type
	Current Water Resource Conditions (USGS):	4/8/2022 Month/Day/ Year	Range: 🔲 Above Normal	🛛 Normal 🔲 Below Normal
5	Other references reviewed: USGS m	-		
3.	Other references reviewed: USGS m (Zone II, IWPA, Zone A, EEA Data Portal, etc.)	aha		

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## C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)

C	Deep Obs	servation	Hole Numb	er: <u>TH-1</u> Hole #	4/8/20 Date	022	10:00 A.M. Time		Sunny 60F		42 24'24" Latitude	<u>71 36' 78''</u> Longitude
1. L	and Use:		ant Lot woodland, agric	ultural field, vacant le	ot. etc.)	grass Vegetation		None		cobbles, sto	nes, boulders, etc.)	3%
C	Descriptio	n of Loca		Open Meadow Lot	-	-					,	=
2. S	Soil Paren	nt Materia	l: Sand				k Slope form		BS Besitien en	Landasana		
3. C	Distances	from:	Oper	n Water Body ≥	100 feet			e Way ≧	100' feet	Landscape	(SU, SH, BS, FS, T Wetland	s, Plain) s <u>&gt;100'</u> feet
			F	Property Line	10 feet		Drinking Wate	r Well 🛓	100 feet		Othe	r feet
4. Un	isuitable l	Materials	Present: 🗌	Yes 🛛 No 🛛	f Yes: [	Disturbed Soi	I/Fill Material		Weathered/Fr	actured Ro	ck 🗌 Bedrocl	ĸ
5. G	Groundwa	ater Obse	erved: 🗌 Yes	🖂 No			lfyes:	_ Depth to	Weeping in Ho	le _	Depth Stand	ling Water in Hole
			V				Soil Log	<u> </u>			d	
Dent	h (in)	il Horizon		Soil Matrix: Color-	Redoximorphic F		eatures	Coarse Fragments % by Volume		Soil	Soil Consistence	Other
Dept	()	/Layer	(USDA)	Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	Structure	(Moist)	other
0-	-6''	А	SL	10 YR2/2		Cnc : Dpl:						
6-1	18"	В	SL	7.5YR5/4		Cnc : Dpl:						
18-1	156"	С	SAND	7.5YR5/4		Cnc : Dpl:						
						Cnc :						
						Dpl:						
						Cnc:						
			· · · · · · · · · · · · · · · · · · ·			Dpl: Cnc:						
						Dpl:						
Δ	dditional	Notos:				10 p.n.						

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### **C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

Dee	p Observatio	n Hole Numb	er: <u>TH-2</u> Hole #	4/8/20 Date	Terrational Control of	0:00 A.M. me		SUNNY 60 F Weather	-	42 24' 24'' Latitude	71 36' 78'' Longitude
1. Land	Use Vacar		field a second lab		grass		Non	е			3%
Descript	ion of Locatio	-	ural field, vacant lot, e pen Meadow Lot#0 S		-		Suna	ce Stones (e.g.,	CODDIES, STO	ones, boulders, e	tc.) Slope (%)
2. Soil	Parent Materi	al: Sand			Back s			BS Position on	Landscape		TS Diain)
3. Dista	ances from:	Ope	n Water Body	<u>&gt;100</u> fee	Landform     Position on Landscape (SU, SH, BS, FS,       feet     Drainage Way     >100     feet     Wetland				-	nds <u>&gt;100</u> feet	
			Property Line	> <u>10</u> feet	t Drinking Water Well <u>&gt;100</u> feet Othe				er feet		
4. Uns	uitable Mater	ials Present:	🗌 Yes 🖾 No	If Yes:	Disturbed Soil	Fill Material	۵	] Weathered/	Fractured	Rock 🗌 Be	drock
5. Grou	undwater Obs	erved: 🗌 Yes	s 🛛 No		If yes:	Depth	to Weepin	g in Hole		Depth to Sta	anding Water in Hole
					Soi	l Log					
Depth (in	Soil Horizon			Redoximorphic Features		res	Coarse Fragments % by Volume		Soil	Soil	
Dopti (iii	/Layer							-		Consistence	Other
	/Edyci	(USDA	Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	Structure	Consistence (Moist)	Other
0-9"	A	(USDA SL	Moist (Munsell)		Color Cnc : Dpl:	Percent		Cobbles &			Other
0-9" 9-24"					Cnc :	Percent		Cobbles &			Other
	A	SL	10YR2/2		Cnc : Dpl: Cnc : Dpl: Cnc :	Percent		Cobbles &			Other
9-24"	A	SL SL	10YR2/2 7.5 YR5/6		Cnc : Dpl: Cnc : Dpl: Cnc : Dpl: Cnc :	Percent		Cobbles &			Other
9-24"	A	SL SL	10YR2/2 7.5 YR5/6		Cnc : Dpl: Cnc : Dpl: Cnc : Dpl: Cnc : Dpl: Cnc :	Percent		Cobbles &			Other
9-24"	A	SL SL	10YR2/2 7.5 YR5/6		Cnc : Dpl: Cnc : Dpl: Cnc : Dpl: Cnc : Dpl: Cnc : Dpl:	Percent		Cobbles &			Other

Additional Notes:

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### **C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

D	eep Ob	servation	Hole Numb	er: <u>TH-3</u> Hole #	34/8/2 Date	2022	10:00 A.M. Time		Sunny 60F Veather		42 24'24" Latitude	<u>71 36' 78''</u> Longitude
1. La	and Use		ant Lot woodland, agric	ultural field, vacant l		grass Vegetation		None		cobbles, sto	nes, boulders, etc.	3%
D	escriptio	on of Loca		Open Meadow Lot								
2. S	oil Parei	nt Materia	I: Sand		Back Slope				BS Position on	TS Diain)		
3. D	istances	s from:	Oper	Water Body _	• <u>100</u> feet			e Way_≥	<u>·100'</u> feet	Lanuscape		ds <u>&gt;100'</u> feet
			F	Property Line 2	•10 feet		Drinking Wate	r Well _≥	100 feet		Othe	er feet
4. Uns	suitable	Materials	Present:	Yes 🛛 No	If Yes: [	Disturbed Soi	I/Fill Material		Weathered/Fr	actured Ro	c <b>k</b> 🗌 Bedroo	k
5. G	roundwa	ater Obse	erved: 🗌 Yes	🛛 No			If yes:	_ Depth to	Weeping in Ho	le _	Depth Stan	ding Water in Hole
r					1		Soil Log					
Depti	(in) So	oil Horizon	Soil Texture	Soil Matrix: Color-	or-		orphic Features		e Fragments y Volume	Soil	Soil Consistence	Other
Depti	. ()	/Layer	(USDA)	Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	Structure	(Moist)	ottici
0-9	9''	А	SL	10 YR2/2	1	Cnc : Dpl:						
9-2	24"	В	SL	7.5YR5/4		Cnc: Dpl:						
18-1	56"	С	SAND	7.5YR5/4		Cnc : Dpl:						
						Cnc: Dpl:						
						Cnc :						
						Dpl: Cnc:						
						Dpl:						
A	dditiona	I Notes:					,I					



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### **C. On-Site Review** (minimum of two holes required at every proposed primary and reserve disposal area)

D	eep Obs	servation	Hole Numb	er: <u>TH-4</u> Hole #	4/8/20 Date		0:00 A. <b>M</b> . ime		SUNNY 60 F Veather		42 24' 24" Latitude	71 36' 78'' Longitude
1. La	and Use	Vacant (e.g., woo	Lot odland, agricult	ural field, vacant lot,	etc.)	grass Ve geation		None		cobbles, sto	ones, boulders, et	3%
Descr	iption of	Location:		oen Meadow Lot#0 S						_		
2. S	oil Parer	nt Material	I: Sand			Back s			BS			
						Landforr				Landscape	(SU, SH, BS, FS,	
3. D	istances	from:	Ope	n Water Body	<u>&gt;100</u> feet	t	Drainag	e VVay >	<u>100</u> feet		Wetlan	ds <u>&gt;100</u> feet
				Property Line	<u>&gt;10</u> feet	Dr	inking Wate	er Well _≥	100 feet		Othe	er feet
4. U	nsuitabl	e Materia	als Present:	🗌 Yes 🖾 No	If Yes:	Disturbed Soil	Fill Material		Weathered	Fractured	Rock 🗌 Beo	Irock
5. G	roundwa	ater Obsei	rved: 🗌 Yes	s 🛛 No				to Weeping	in Hole		Depth to Sta	nding Water in Hole
				1	1	Soi	I Log			1		
Depth	(in)	Horizon Soil Texture		Redoximorphic Features		ires	Coarse Fragments % by Volume		Soil	Soil Consistence	Other	
		Layer	(USDA	Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	Structure	(Moist)	
0-9		А	SL	10YR2/2		Cnc : Dpl:	-					
9-24	4''	В	SL	7.5 YR5/6		Cnc : Dpl:						
24-14	44"	С	SAND	7.5 YR5/4		Cnc : Dpl:	-					
						Cnc :						
						Dpl:						
						Cnc :	_					
						Dpl:						
						Cnc :	-					
						Dpl:						

Additional Notes:



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### D. Determination of High Groundwater Elevation

Method Used (Choose one):	Obs. Hole # <u>TH-2</u> <u>144</u> inches	Obs. Hole # inches	56
Depth to observed standing water in observation hole	inches	inches	
<ul> <li>Depth to adjusted seasonal high groundwater (S<sub>h</sub>) (USGS methodology)</li> </ul>	inches	inches	
Index Well Number Reading Date			
$S_h = S_c - [S_r \times (OW_c - OW_{max})/OW_r]$			
Obs. Hole/Well# Sc Sr	OWc	OWmax OWr	Sh

### E. Depth of Pervious Material

- 1. Depth of Naturally Occurring Pervious Material
  - a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?
    - 🛛 Yes 🗌 No
  - b.
     If yes, at what depth was it observed (exclude O, A, and E Horizons)?
     Upper boundary:
     18"
     Lower boundary:
     144"

     c.
     If no, at what depth was impervious material observed?
     Upper boundary:
     18"
     Lower boundary:
     144"



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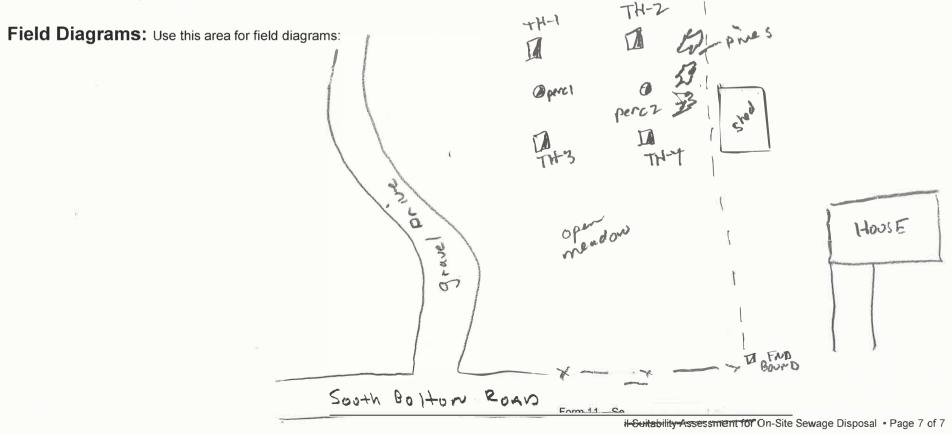
## Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

### F. Certification

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, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

M~	4/15/2022
Signature of Soil Evaluator	Date
James Morin #12907	6/30/2024
Typed or Printed Name of Soil Evaluator / License #	Expiration Date of License
William Brookings	Nashoba Board of Health
Name of Approving Authority Witness	Approving Authority

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.





### Commonwealth of Massachusetts City/Town of Bolton **Percolation Test** Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

#### A. Site Information

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



James Morin			
Owner Name			
Mallard Lane			
Street Address or Lot #			
Bolton	MA	01740	
City/Town	State	Zip Code	
	774-696-2246		
Contact Person (if different from Owner)	Telephone Number		

### B. Test Results

4/8/2022	10:00	4/8/2022	10:00
Date	Time	Date	Time
Perc-1		Perc-2	
40"		42"	
2 MPI		2 MPI	
Test Passed: Test Failed:	$\square$	Test Passed: Test Failed:	$\square$
ate 2MPI			
	Date Perc-1 40" 2 MPI Test Passed: Test Failed:	Date   Time     Perc-1   40"     40"	Date Time Date   Perc-1 Perc-2   40" 42"     40" 42"     2 MPI 2 MPI   Test Passed: Test Passed:   Test Failed: Test Failed: