

A. Facility Information

	TOILIN OF SOUTHBORAUGH
	Owner Name <u>17 COTTITION</u> STREET Street Address Map/Lot #
	SauTHBOROUGH <u>15A</u> City State Zip Code
	53 PARICEPULLE KORD
Β.	Site Information
1.	(Check one) 🖸 New Construction 🗌 Upgrade 🗌 Repair
2.	Soil Survey Available? Yes No If yes: MIRCS Soil SURJE-(Source Soil Map Unit .
	Soil Name Soil Limitations
3.	Soil Parent material Landform Surficial Geological Report Available? Yes No If yes: Year Published/Source Map Unit
	Description of Geologic Map Unit:
4.	Flood Rate Insurance Map Within a regulatory floodway? 🔲 Yes 🔄 No
5.	Within a velocity zone? 🗌 Yes 🔄 No
6.	Within a Mapped Wetland Area? Yes No If yes, MassGIS Wetland Data Layer:
7.	Current Water Resource Conditions (USGS):
8.	Other references reviewed: <u>Surkular Kaler</u>



Additional Notes:

ILLEEPAGE 72"

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

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)													
Deep	Observatio	n Hole Num	ber: 7 <u>24-2</u> Hole #	- 7	124/24 _	<u>کر</u> Time	K CLOW	ather	Latitude	99	<u>-71.</u> 541 Longitude:		
1. Land Use: Lat difference Cultoss If a If a 1. Land Use: (e.g., woodland, agricultural field, vacant lot, etc.) Cultoss Surface Stories (e.g., cobbles, stores, boulders, etc.) Slope (%)													
Description of Location:													
2. Soil Parent Material: Samo Loars Loars Landform Landform Position on Landscape (SU, SH, BS, FS, TS)													
3. Distan	ces from:	Open Wate	r Body	feet		Drain	age Way _	feet	Wetla	nds fe	et		
Property Linefeet Drinking Water Wellfeet Otherfeet 4. Unsuitable Materials Present: Yes No If Yes: Disturbed Soil Fill Material Weathered/Fractured Rock Bedrock Groundwater Observed: Yes No If Yes: Disturbed Soil If Yes: Depth Weeping from Pit Depth Standing Water in Hole													
Soil Log													
Denth (in)	Soil Horizon	Soil Texture	Soil Matrix:	Redo	ximorphic Fea	atures	Coarse F % by V	ragments /olume	Soil Structure	Soil Consistence	Other		
Depth (m)	/Layer	(USDA)	Color-Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	oon on dealer	(Moist)	o litor		
0-17	SP	SOLOY LOBER	10-1123/2										
17-94	Ľ	4	25-(4/4	42"	7.541851	3		51/0					
L													

Additional Notes: <u>LIEEPAGE AT 86</u> NO 13- LIORIZON

City/Town of SountBOROULIN

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

C. On-Site Review (minimum of two holes required at every proposed primary and reserve disposal area)											
Deep Observation Hole Number: $724-3$ Hole # $7/24/24$ Time Arg Chouse 603 42.299 -71.54/ Weather Latitude Latitude Longitude:											
1. Land Use: 1. Land Use: 1. Land Use: 1. Certification Certification Ma 2-857 Surface Stones (e.g., cobbles, stones, boulders, etc.) Vegetation Surface Stones (e.g., cobbles, stones, boulders, etc.) Slope (%)											
Description of Location:											
2. Soil Parent Material: Sacro Loars <u>IKAME</u> Landform <u>SIPE SLOPE</u> Position on Landscape (SU, SH, BS, FS, TS)											
3. Distan	ces from:	Open Wate	r Body	feet		Drain	age Way _	feet	Wetla	nds fe	eet
		Proper	ty Line	feet	D	rinking W	ater Well	feet	Ot	her fe	et
4. Unsuitat Material	ble s Present: [] Yes 🗍	No If Yes:	Distu	rbed Soil [] Fill Mate	erial [] Weathered/	Fractured Rock	Bedrock	
5. Ground	dwater Obse	erved: 🗌 Ye	s 🗔 No			ľ	f yes:	_ Depth Weepin	g from Pit	Depth 3	Standing Water in Hole
7			r			So	il Log				
Denth (in)	Soil Horizon	Soil Texture	Soil Matrix:	Redox	cimorphic Fea	atures	Coarse F % by V	ragments /olume	Soil Structure	Soil Consistence	Other
Depth (In)	/Layer	(USDA)	Color-Moist (Munsell)	Depth	Color	Percent	Gravel	Cobbles & Stones	Son Structure	(Moist)	
0-11'	AP	LUGER	10-123/2								
11:27	Biy	\rightarrow	10-125/6								
27-87	U	4	25-14/4	45"	7.5-105/			st			
		-									

Additional Notes: <u>MO GRAUNITS MATER</u> NO INTERPORTE

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

D. Determination of High Groundwater Elevation

1.	Method Used:	Obs. Hole #	Obs. Hole #		
	Depth observed standing water in observation hole	inches	inches		
	Depth weeping from side of observation hole	inches	inches		
	Depth to soil redoximorphic features (mottles)	inches	inches		
	 Depth to adjusted seasonal high groundwater (S_h) (USGS methodology) 	inches	inches		
	Index Well Number Reading Date				
	$S_h = S_c - [S_r \times (OW_c - OW_{max})/OW_r]$				
	Obs. Hole/Well# S _c S _r	OW _c OW _{max}	OW _r S _h		
2 F	stimated Depth to High Groundwater: inches				

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
syste	em? /	

Yes 🗌 No

b. If yes, at what depth was it observed (exclude A and O Horizons)?

Upper boundary:

Upper boundary:

INRIGHLE Lower boundary: inches

inches

Lower boundary:

inches

inches

c. If no, at what depth was impervious material observed?



City/Town of South Borlos (1)

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.

Signature of Soil Evaluator

Signature of Son Evaluator

Typed or Printed Name of Soil Evaluator / License #

SOUTISFORD POARD OF DEALTS

7/24/24 Date (13,275

Expiration Date of License

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.

Field Diagrams: Use this area for field diagrams:



Form 11 – Soil Suitability Assessment for On-Site Sewage Disposal • Page 5 of 5

BA



Commonwealth of Massachusetts City/Town of South Bought **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.

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



Α.	Site Information					
	TOILH OF SOUTHE	SOROUGN				
	Street Address or Lot #					
	Say 71-Ballou (91-) City/Town		State	 Zip Code		
	Contact Person (if different from Owner)		Telephone Numbe	r	_	
Β.	Test Results53	PORICERM	ILLE KOM	2		
		7/24/24 Date	Time	<u> 7/74/74</u> Date Time		
	Observation Hole #	724-3-	FERC-A	724-2- PERC-	B	
	Depth of Perc	45"		39"		
	Start Pre-Soak	8:2B		9:12		
	End Pre-Soak					
	Time at 12"	6:43		9:23		
	Time at 9"	9:25		10:18		
	Time at 6"	10:30		11:45	_	
	Time (9"-6")	65111	J	87 1110		
	Rate (Min./Inch)	22 FAIL	Incit	29 MIN/11/04		
		Test Passed: Test Failed:		Test Passed: Test Failed:		
	INP GUDGELE- TA	16001				

Test Performed By:

SOUTHBOROUGH BOGRO OF HEALTH Board of Health Witness

Comments:

Perc Test • Page 1 of 1



USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey

	MAP LEGEND											
✓ US Routes ✓ Major Roads					Area of Interest (AOI) ~~							
rou	Ba				ed ble ed ed	OI) posed railable posed railable railable als	nterest (AOI) ons dy loam ely decompos terial I or not availa dy loam ely decompos terial I or not availa dy loam ely decompos terial I or not availa and Canals e Highways	Area of Inter g Polygons Fine sandy le Moderately of plant materia Peat Not rated or g Lines Fine sandy le Moderately of plant materia Peat Not rated or g Points Fine sandy le Moderately of plant materia Peat Not rated or g Points Fine sandy le Moderately of plant materia Peat Not rated or g Points Fine sandy le Moderately of plant materia Peat Not rated or res Streams and ion Rails Interstate Hig	A ting F P N ting F N P N ting F N P N S atio R Ir	Soils Soil Rai		

Surface Texture

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI								
70A	Ridgebury fine sandy loam, 0 to 3 percent slopes	Moderately decomposed plant material	3.1	9.0%								
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	Peat	3.0	8.7%								
254B	Merrimac fine sandy loam, 3 to 8 percent slopes	Fine sandy loam	2.7	7.9%								
420B	Canton fine sandy loam, 3 to 8 percent slopes	Fine sandy loam	4.7	13.6%								
420C	Canton fine sandy loam, 8 to 15 percent slopes	Fine sandy loam	1.7	5.0%								
651	Udorthents, smoothed		19.4	55.8%								
Totals for Area of Intere	st	34.8	100.0%									

Description

This displays the representative texture class and modifier of the surface horizon.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

Rating Options

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

For an attribute of a soil horizon, a depth qualification must be specified. In most cases it is probably most appropriate to specify a fixed depth range, either in centimeters or inches. The Bottom Depth must be greater than the Top Depth, and the Top Depth can be greater than zero. The choice of "inches" or "centimeters" only applies to the depth of soil to be evaluated. It has no influence on the units of measure the data are presented in.

When "Surface Layer" is specified as the depth qualifier, only the surface layer or horizon is considered when deriving a value for a component, but keep in mind that the thickness of the surface layer varies from component to component.

When "All Layers" is specified as the depth qualifier, all layers recorded for a component are considered when deriving the value for that component.

Whenever more than one layer or horizon is considered when deriving a value for a component, and the attribute being aggregated is a numeric attribute, a weighted average value is returned, where the weighting factor is the layer or horizon thickness.



Test Hole-1



Test hole-2



Test hole-3



Waterline Diagram