



Commonwealth of Massachusetts

City/Town of

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

A. Facility Information

Owner Name

Street Address

Map/Lot #

City

State

Zip Code

B. Site Information

1. (Check one) [] New Construction [] Upgrade [] Repair

2. Soil Survey Available? [] Yes [] No If yes: Source Soil Map Unit

Soil Name

Soil Limitations

Geologic/Parent Material

Landform

3. Surficial Geological Report Available? [] Yes [] No If yes: Year Published/Source Publication Scale Map Unit

4. Flood Rate Insurance Map

Above the 500-year flood boundary? [] Yes [] No Within the 100-year flood boundary? [] Yes [] No If Yes, continue to #5.

5. Within a velocity zone? [] Yes [] No

6. Within a Mapped Wetland Area? [] Yes [] No

MassGIS Wetland Data Layer: Wetland Type

7. Current Water Resource Conditions (USGS): Range: [] Above Normal [] Normal [] Below Normal Month/Year

8. Other references reviewed:



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

Deep Observation Hole Number: _____ Date _____ Time _____ Weather _____

1. Location

Ground Elevation at Surface of Hole: _____ feet Latitude/Longitude: _____ / _____

Description of Location: _____

2. Land Use

(e.g., woodland, agricultural field, vacant lot, etc.) _____ Surface Stones (e.g., cobbles, stones, boulders, etc.) _____ Slope (%) _____

3. Distances from: Vegetation _____ Landform _____ Position on Landscape (SU, SH, BS, FS, TS) _____
Open Water Body _____ feet _____ Drainage Way _____ feet _____ Wetlands _____ feet
Property Line _____ feet _____ Drinking Water Well _____ feet _____ Other _____ feet

4. Parent Material: _____ Unsuitable Materials Present: [] Yes [] No

If Yes: [] Disturbed Soil [] Fill Material [] Impervious Layer(s) [] Weathered/Fractured Rock [] Bedrock

5. Groundwater Observed: [] Yes [] No If yes: _____ Depth Weeping from Pit _____ Depth Standing Water in Hole _____

Estimated Depth to High Groundwater: _____ inches _____ elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: _____

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			

Additional Notes:



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C. On-Site Review (continued)

Deep Observation Hole Number: _____ Date _____ Time _____ Weather _____

1. Location

Ground Elevation at Surface of Hole: _____ feet Latitude/Longitude: _____ / _____

2. Land Use

(e.g., woodland, agricultural field, vacant lot, etc.) Surface Stones (e.g., cobbles, stones, boulders, etc.) _____ Slope (%) _____

3. Distances from: Vegetation _____ Landform _____ Position on Landscape (SU, SH, BS, FS, Wetlands _____
Open Water Body _____ feet Drainage Way _____ feet
Property Line _____ feet Drinking Water Well _____ feet Other _____ feet

4. Parent Material: _____ Unsuitable Materials Present: Yes No

If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock

5. Groundwater Observed: Yes No If yes: _____
Depth Weeping from Pit _____ Depth Standing Water in Hole _____

Estimated Depth to High Groundwater: _____ inches _____ elevation



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C. On-Site Review (continued)

Deep Observation Hole Number: _____

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			

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D. Determination of High Groundwater Elevation

1. Method Used:
- | | | |
|---|-------------------|-------------------|
| <input type="checkbox"/> Depth observed standing water in observation hole | Obs. Hole # _____ | Obs. Hole # _____ |
| | _____ inches | _____ inches |
| <input type="checkbox"/> Depth weeping from side of observation hole | _____ inches | _____ inches |
| <input type="checkbox"/> Depth to soil redoximorphic features (mottles) | _____ inches | _____ inches |
| <input type="checkbox"/> 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 # _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

Obs. Hole # _____ S_c _____ S_r _____ OW_c _____ OW_{max} _____ OW_r _____ S_h _____

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? Upper boundary: _____ inches Lower boundary: _____ inches
- c. If no, at what depth was impervious material observed? Upper boundary: _____ inches Lower boundary: _____ inches



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F. Board of Health Witness

Name of Board of Health Witness

Board of Health

G. Soil Evaluator 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

Date

Typed or Printed Name of Soil Evaluator / License #

Expiration Date of License

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](#).



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Field Diagrams

Use this sheet for field diagrams: