**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 1
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/11/15 Time: 12:00 Weather: ~~Overcast~~ Sunny 60°s

1. Deep Hole Number 1A Location (Identify on Plan): Lot 1
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Moraine Position on landscape:

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

3. Distances from: Open Water Body _ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: loose sandy & gravelly glaciofluvial Deposits 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0"-1" | | AP | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 1"-24" | | Bw | FSL | 10YR 5/6 | | | | – | 5 | M | VF | |
| 24"-120" | | C | Coarse Sand | 2.5Y 3/2 | | | | 20+ | 20+ | SG | Firm in P Loose in H | Gravelly & Stratified Sand |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling observed to 120". Stratified Sand observed on South Wall of Deep Hole.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 1
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/11/15 Time: 12:15 Weather: Sunny 60°

1. Deep Hole Number 1B Location (Identify on Plan): Lot 1
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120" +

| | |
|---|---|
| Depth | 42" |
| Start Soak | 1:36 |
| End Soak | 1:51 |
| Time at 12 | 1:51 |
| Time at 9 | 1:52 |
| Time at 6 | 1:53 |

P = minimum 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-1" | | Ap | FSL | 10 YR 2/2 | | | | – | – | 6 | VF | |
| 1"-20" | | Bw | FSL | 10 YR 5/6 | | | | – | 5 | M | VF | |
| 20"-120" | | C | Coarse Sand | 2.5 Y 3/2 | | | | 20+ | 20+ | S6 | Firm in P Loose in H | Gravelly, w stratified Sand |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling observed to 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders lot 1
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/11/15 Time: 12:30 Weather: Sunny 60°s

1. Deep Hole Number 1C Location (Identify on Plan): Lot 1
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Woods

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120" +

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | — | — | G | VF | |
| 2-18" | | Bw | FSL | 10YR 5/6 | | | | — | 5 | M | VF | |
| 18"-120" | | C | Coarse Sand | 2.5Y 3/2 | | | | 20+ | 20+ | SG | Firm in P loose in H | Gravelly w stratified sand |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling Observed to 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 1
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/11/15 Time: 12:45 Weather: Sunny 60's

1. Deep Hole Number 1D Location (Identify on Plan): Lot 1
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| | |
|---|---|
| Depth | 48" |
| Start Soak | 1:59 |
| End Soak | 2:09 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons < 15 min

P = minimum 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Color | Percent | Coarse Fragments % by Volume Gravel | Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 2/2 | | | | – | – | G | VF | |
| 2"-24" | | Bw | FSL | 10 YR 5/6 | | | | – | 5 | M | VF | |
| 24"-120" | | C | Coarse Sand | 2.5 Y 3/2 | | | | 20+ | 20+ | SG | Firm in P loose in H | Gravelly w/ Stratified Sand |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling observed to 120"

Builders Lot 2

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/10/15 Time: 9:45 Weather: Overcast 70's

1. Deep Hole Number 2A Location (Identify on Plan): Lot 2
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: F Coarse loamy eolian Deposits over F Sandy Basal Till 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 108"

| | |
|---|---|
| Depth | 54" |
| Start Soak | 1:10 |
| End Soak | 1:22 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons < 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Color | Percent | Coarse Fragments % by Volume Gravel | Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 3/3 | | | | - | - | 6 | VF | |
| 2-26" | | Bw | FSL | 10 YR 4/6 | | | | - | 10 | M | VF | Many Roots |
| 26"-108" | | C1 | LS | 2.5 Y 4/2 | | | | 20 | 20 | 56 | Firm in P loose in H | Boulders + cobbles |
| | | | | | | | | | | | | Stratified coarse sand layers through C horizon |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Refusal @ 108". No Mottles Observed. ESHW @ Bottom of Excavation @ 108".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 2
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/10/15 Time: 10:00 Weather: overcast 70's

1. Deep Hole Number 2B Location (Identify on Plan): Lot 2
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 110"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 3/3 | | | | – | - | G | VF | |
| 2"-24" | | Bw | FSL | 10 YR 4/6 | | | | – | 10 | M | VF | Many Roots |
| 24"-110" | | C1 | LS | 2.5 Y 4/2 | | | | 20 | 20 | SG | Firm in P loose in H | Boulders & Cobbles |
| | | | | | | | | | | | | Coarse Sand layers Through ~~C Horizon~~ |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Refusal @ 110". No Mottles Observed. ESHW Estimated @ Bottom of Excavation @ 110".

Grafton

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 2
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 5/10/15 Time: 10:40 Weather: Overcast 70's

1. Deep Hole Number 2C Location (Identify on Plan): Lot 2
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2"-18" | | Bw1 | FSL | 10YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 18"-36" | | Bw2 | FSL | 2.5Y 5/6 | | | | – | – | M | VF | |
| 36"-120" | | C. | LS | 2.5Y 4/2 | | | | 20 | 20 | SG | Firm in P Loose in H | Cobbles & Boulders |
| | | | | | | | | | | | | Coarse Sand mixed throughout |

Additional Notes No SW, No Weeping, No Mottles observed. ESHW @ Bottom of Excavation @ 120"

Builders Lot 2

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/10/15 Time: 10:50 Weather: Overcast 70's

1. Deep Hole Number 2D Location (Identify on Plan): Lot 2
2. Land Use: Woods Surface Stones: _____ Slope (%): __ Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120"

| | |
|---|---|
| Depth | 50" |
| Start Soak | 1:10 |
| End Soak | 1.20 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons
2 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 2"-18" | | Bw. | FSL | 10 YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 18"-30" | | Bw2 | FSL | 2.5 Y 5/6 | | | | – | – | M | VF | |
| 30"-120 | | C1 | LS | 2.5 Y 4/2 | | | | 20 | 20 | SG | Firm in P Loose in H | Cobbles & Boulders |
| | | | | | | | | | | | | Coarse Sand mixed Throughout |

Additional Notes No SW, No Weeping, No Mottles Observed. ESHW below Roots/Above bottom of Excavation @ 120".

Builders Lot 3

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 12:45 pm Weather: Sunny 80's

1. Deep Hole Number 3A Location (Identify on Plan): Lot 3
2. Land Use: Wooded Surface Stones: Yes Slope (%): 15 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: F. Coarse loamy eolian Deposits over F. Sandy Basal till 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 84"

| Depth | |
|---|---|
| Start Soak | ~~[illegible]~~ 3:10 |
| End Soak | 3:25 |
| Time at 12 | 3:25 |
| Time at 9 | 3:46 |
| Time at 6 | 4:12 |

P = 8.67 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0"-4" | | Ap | FSL | 10YR 2/2 | | | | — | — | G | VF | |
| 4"-20" | | Bw | FSL | 10YR 4/6 | | | | — | 10 | M | VF | Roots |
| 20"-60" | | C1 | Gravelly LS | 2.5Y 4/2 | | | | 20 | 10 | SG | Firm in P loose in lt | Boulders & Cobbles |
| 60"-96" | | C2 | LS | 5Y 3/1 | 84" | C. 7.5YR 4/4 | 5% | — | — | SG | " | |
| | | | | | | | | | | | | |

Additional Notes No Sat, No Weeping, Mottles @ 84". Refusal @ 96"

Builders Lot 3

Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 1:00 PM Weather: Sunny 80's

1. Deep Hole Number 3B Location (Identify on Plan): Lot 3
2. Land Use: Woods Surface Stones: Yes Slope (%): 15 Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: > 78"

| | |
|---|---|
| Depth | 42" |
| Start Soak | 3:10 |
| End Soak | 3:25 |
| Time at 12 | 3:25 |
| Time at 9 | 3:40 |
| Time at 6 | 4:02 |

P = 7.33 m/i

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4" | | Ap | FSL | 10 YR 2/2 | | | | - | - | G | VF | |
| 4"-24" | | Bw | FSL | 10 YR 4/6 | | | | - | 10 | M | VF | Roots |
| 24"-86" | | C1 | Gravelly LS | 2.5 Y 4/2 | 84" | c. 7.5 YR 4/4 | 5 | 20 | 10 | SG | Firm in P loose in H | Boulders + Cobbles |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, [redacted]. Refusal @ 78" with Machine. Hand Dug to 86" Areas of

Builders Lot 3

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 1:30 Weather: Sunny 80's

1. Deep Hole Number 3C Location (Identify on Plan): Lot 3
2. Land Use: Woods Surface Stones: Yes Slope (%): __ Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 84"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 4-24" | | Bw | FSL | 10YR 4/6 | | | | – | 10 | M | VF | Roots |
| 24"-68" | | C1 | Gravelly LS | 2.5Y 4/2 | | | | 20 | 10 | SG | Firm in P loose in H | Boulders & Cobbles |
| 68"-96" | | C2 | LS | 5Y 3/1 | 84" | C. 7.5YR 4/4 | 5 | – | – | SG | " | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Mottles @ 84". Refusal at 96".

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Builders Lot 3
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 2:00 Weather: Sunny 80's

1. Deep Hole Number 3D Location (Identify on Plan): Lot 3
2. Land Use: Woods Surface Stones: Yes Slope (%): 15 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 80"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-4" | | Ap | FSL | 10 YR 2/2 | | | | – | – | G | VF | |
| 4-20" | | Bw | FSL | 10 YR 4/6 | | | | – | 10 | M | VF | Roots |
| 20"-92" | | C1 | Gravelly LS | 2.5 Y 4/2 | 80" | c. 7.5 YR 4/4 | 5 | 20 | 10 | SG | Firm in Place Loose in Hand | Boulders + Cobbles |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping. Refusal @ 82". Hand dug to 92".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 4
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 10:15 Weather: Sunny 80's

1. Deep Hole Number 4A Location (Identify on Plan): Lot 4
2. Land Use: Woods Surface Stones: Yes Slope (%): 15% Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: F. Coarse loamy eolian Deposits over F Sandy Basal Till 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 36"

| | |
|---|---|
| Depth | 64" |
| Start Soak | 2:40 |
| End Soak | 2:55 |
| Time at 12 | 2:55 |
| Time at 9 | 3:00 |
| Time at 6 | 3:09 |

P= 3 min

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | $A_p$ | FSL | 10YR 2/2 | | | | - | - | G | VF | |
| 2"-34" | | $Bw_1$ | FSL | 2.5Y 5/4 | | | | - | 10% | M | VF | Many Roots |
| 34"-50 | | $Bw_2$ | FLS | 10YR 5/4 | 36" | a. 5YR 4/6 b. 2.5Y 5/3 | 20% | - | 5% | M | VF | |
| 50"-108" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping. Mottling @ 36". Large Boulders Mixed through B + C Horizon.
$Bw_2$ Horizon is a stratified FLS. Water Possibly Perching in layer above C.

Builders Lot 4

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 10:30 Weather: Sunny 80's

1. Deep Hole Number 4B Location (Identify on Plan): Lot 4
2. Land Use: Woods Surface Stones: Yes Slope (%): 15 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.
   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 38"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | | | 6 | VF | |
| 2"-36" | | Bw1 | FSL | 2.5Y 5/4 | | | | | 10% | M | VF | Many Roots |
| 36"-50" | | Bw2 | FLS | 10YR 5/4 | 38" | C. 5YR 4/6 D. 2.5Y 5/3 | 20% | | 5% | M | VF | |
| 50"-104" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping. Mottling @ 38". Large Boulders in B+C Horizon.

Builders Lot 4

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 11:15 Weather: Sunny 80's

1. Deep Hole Number 4C Location (Identify on Plan): Lot 4
2. Land Use: Woods Surface Stones: Yes Slope (%): 15 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same Unsuitable Materials Present: Yes ☐ No ☑

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

| | |
|---|---|
| Depth | 60" |
| Start Soak | 2:35 |
| End Soak | 2:50 |
| Time at 12 | 2:50 |
| Time at 9 | 2:55 |
| Time at 6 | 3:02 |

P= 2.33 min

5. Groundwater Observed: Yes ☐ No ☑

If Yes: Depth Weeping from Pit __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 46" Perched 84" GW

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 3"-34" | | Bw. | FSL | 2.5Y 5/4 | | Perched | | – | 10% | M | VF | Many Roots |
| 34"-54" | | Bw2 | FLS | 10YR 5/4 | 46" | C. 5YR 4/6 D. 2.5Y 5/3 | 20% | – | 5% | M | VF | |
| 54"-106" | | C | Gravelly LS | 2.5Y 4/2 | 84" | | | 20% | 10% | SG | Firm in P Loose in H | Cobbles & Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Mottling @ 46" & 84" Large Boulders in BoC Horizon.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders lot 4
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/2/15 Time: 12:00 Weather: Sunny 80's

1. Deep Hole Number 4D Location (Identify on Plan): Lot 4
2. Land Use: Woods Surface Stones: Yes Slope (%): 15 Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 42"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-28" | | Bw1 | FSL | 2.5Y 5/4 | | | | – | 10% | M | VF | Roots |
| 28"-60" | | Bw2 | FLS | 10YR 5/4 | 42" | C. 5YR 4/6 D. 2.5Y 5/3 | 20% | – | 5% | M | VF | |
| 60"-100" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20 | 10% | SG | Firm in P. Loose in H. | Cobbles + Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Mottling @ 42". Large Boulders in B+C Horizon.

Builders lot 5

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 8/27/15 Time: 10:20 Weather: Sunny 70°s

1. Deep Hole Number 5A Location (Identify on Plan): Lot 5
2. Land Use: Wooded Surface Stones: * Yes Slope (%): 10% Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 70"

| Depth | 40" |
|---|---|
| Start Soak | 2:17 |
| End Soak | 2:32 |
| Time at 12 | 2:32 |
| Time at 9 | 2:46 |
| Time at 6 | 3:07 |

P = 7 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-22" | | Bw | FSL | 2.5Y 6/4 | | | | 0 | < 10% | M | VF | Many Roots |
| 22-70" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weepings, No Mottlings. Refusal @ 70".
* Large Boulder Exposed 50' NW of Deep Hole.

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Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 5
Site Address or Map/Lot Number

## C. On-Site Review

*(minimum of two holes required at every proposed disposal area)*

**Deep Observation Hole:** Date: 8/27/15 Time: 10:45 Weather: Sunny 70°s

1. Deep Hole Number 5B Location (Identify on Plan): Lot 5
2. Land Use: Wooded Surface Stones: 0 Slope (%): 10% Vegetation: Wooded

   Landform: _____ Position on landscape:

3. Distances from: Open Water Body ___ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line ___ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: Same 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 ___ Standing Water in Hole _____ Estimated Depth to High Groundwater: >104"

| | |
|---|---|
| Depth | 46" |
| Start Soak | 2:21 |
| End Soak | 2:36 |
| Time at 12 | 2:36 |
| Time at 9 | 2:39 |
| Time at 6 | 2:44 |

P < 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-36" | | Bw | FSL | 2.5Y 6/4 | | | | 0 | 10% | M | VF | Many Roots |
| 36"-104" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles & Boulders. |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling. Refusal @ 104".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 5
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/27/15 Time: 11:15 Weather: Sunny 70°s

1. Deep Hole Number 5D Location (Identify on Plan): Lot 5
2. Land Use: Wooded Surface Stones: 0 Slope (%): 10 Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: F. Coarse loamy eolian Deposits over F. Sandy Basal Till 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 96"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2-27" | | Bw | FSL | 2.5Y 6/4 | | | | – | 10% | M | VF | Many Roots |
| 27"-96" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling. Refusal @ 96"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 5
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/27/15 Time: 11:00 Weather: Sunny 70°s

1. Deep Hole Number 5C Location (Identify on Plan): Lot 5
2. Land Use: Wooded Surface Stones: * Yes Slope (%): 10% Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 76"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | — | — | G | VF | |
| 2-28" | | Bw | FSL | 2.5Y 4/4 | | | | — | 10% | M | VF | Many Roots |
| 28-76" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling. Refusal @ 76"
* large Boulder Exposed at Surface 30' NW of Hole.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 6
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/26/15 Time: 9:00AM Weather: Overcast 70°

1. Deep Hole Number 6A Location (Identify on Plan): Lot 6
2. Land Use: Wooded Surface Stones: None Slope (%): 0 Vegetation: Wooded

   Landform: _____ Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: F. Coarse-loamy eolian Deposits over F. Sandy Basal Till 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 118"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3" | | Ap | Fine SL | 10YR 2/2 | | | | – | – | Granular | VF | |
| 3-24" | | Bw1 | Fine SL | 10YR 5/6 | | | | – | – | Massive | VF | Many Roots |
| 24-36 | | Bw2 | Fine SL | 2.5Y 6/4 | | | | – | – | Massive | VF | |
| 36"-66" | | C1 | Gravelly ~~LS~~ | 2.5Y 5/2 | | | | 20% | < 10% | ~~Massive~~ SG | Firm in Place ~~Friable~~ | Till, many cobbles & Boulders |
| 66"-118" | | C2 | Gravelly ~~LS~~ | 2.5Y 4/2 | | | | 20% | < 10% | ~~Massive~~ SG | Firm, In Place ~~Friable~~ | Till, Many cobbles and Boulders |
| | | | | | | | | | | | | |

Additional Notes No Weeping or Mottling Observed. Refusal @ 118" – Compact Till or Bedrock.

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

Builders Lot 6
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/26/15 Time: 10:30 Weather: Sunny 75°

1. Deep Hole Number 6 B3 Location (Identify on Plan): Lot 6
2. Land Use: Wooded Surface Stones: None Slope (%): 0 Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 120"

| | |
|---|---|
| Depth | 42" |
| Start Soak | 2:18 PM |
| End Soak | 2:33 PM |
| Time at 12 | 2:33 PM |
| Time at 9 | 2:41 PM |
| Time at 6 | 2:50 PM |

P = 3 min

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3" | | Ap | FSL | 10 YR 2/2 | | | | - | - | G | VF | |
| 3"-20" | | Bw1 | FSL | 10 YR 5/6 | | | | - | - | M | VF | Many Roots |
| 20"-36" | | Bw2 | FSL | 25 Y 6/4 | | | | - | < 10% | M | VF | Cobbles & Boulders |
| 36"-120" | | C | Gravelly LS | 25 Y 4/2 | | | | 20% | < 10% | SG | Firm in Place Loose in Hand | Till, Many Cobbles & Boulders |
| | | | | | | | | | | | | |

Additional Notes No Weeping, No SW, No Mottling Observed. Very Dense, Hard Packed till in C Horizon.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 6
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/26/15 Time: 11:15 Weather: Sunny 75

1. Deep Hole Number 6C Location (Identify on Plan): Lot 6
2. Land Use: Wooded Surface Stones: — Slope (%): 0 Vegetation: Wooded

   Landform: Moraine Position on landscape:

| | |
|---|---|
| Depth | 42" |
| Start Soak | 2:21 |
| End Soak | 2:36 |
| Time at 12 | 2:36 |
| Time at 9 | 2:45 |
| Time at 6 | 2:57 |

P = 4 m/i

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: F. Coarse loamy eolian Deposits over F. Sandy Basal Till 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 114"

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | — | — | G | VF | |
| 2-20" | | $Bw_1$ | FSL | 10YR 5/6 | | | | — | — | M | VF | Many Roots |
| 20-36" | | $Bw_2$ | FSL | 2.5Y 6/4 | | | | — | < 10% | M | VF | Cobbles & Boulders |
| 36-114" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | < 10% | SG | Firm in Place Loose in Hand | Till, Many Cobbles & Boulders |
| | | | | | | | | | | | | |

Additional Notes No Weeping, No SW, No Mottling Observed. Dense Hard Packed Till in C Horizon.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 6
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/26/15 Time: 12:15 Weather: Sunny 75°

1. Deep Hole Number 6D Location (Identify on Plan): Lot 6
2. Land Use: Wooded Surface Stones: – Slope (%): 0 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 108"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2-36" | | Bw | FSL | 2.5Y 6/4 | | | | – | < 10% | M | VF | |
| 36-108" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | < 10% | SG | Firm in Place Loose in Hand | Till with layers of Sand Refusal |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Weeping, No SW, No Mottling Observed. Lower layer in C above Refusal is Sand with No Cobbles. Refusal @ 108"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 7
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/26/15 Time: 1:17 Weather: Sunny 80°

1. Deep Hole Number 7A Location (Identify on Plan): Lot 7
2. Land Use: Wooded Surface Stones: – Slope (%): 5% Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Friable Coarse loamy eolian Deposit over F Sandy Basal Till 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 __ Standing Water in Hole 100"+ Estimated Depth to High Groundwater:

| Depth | |
|---|---|
| Start Soak | 2:25 |
| End Soak | 2:40 |
| Time at 12 | 2:40 |
| Time at 9 | 2:50 |
| Time at 6 | 3:03 |

= 4.33 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2-32" | | Bw | FSL | 2.5Y 6/4 | | | | – | < 10% | M | VF | |
| 32"-100" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | < 10% | SG | Firm in place Loose in Hand | Till, Refusal |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes Refusal @ 100", No Weeping, No SW, No Mottling Observed

Shelly
(774) 262 0054

**Massachusetts Department of Environmental Protection**
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# Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

Builders Lot 7
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/26/15 Time: 1:45 Weather: Sunny 80°

1. Deep Hole Number 7B Location (Identify on Plan): Lot 7
2. Land Use: Wooded Surface Stones: – Slope (%): 5% Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 796"

| | |
|---|---|
| Depth | 42" |
| Start Soak | 1:44 |
| End Soak | 1:59 |
| Time at 12 | 1:59 |
| Time at 9 | 2:10 |
| Time at 6 | 2:20 |

P = 3.33 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-48" | | Bw | FSL | 2.5Y 6/4 | | | | – | <10% | M | VF | |
| 48"-96" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | <10% | SG | Firm in Place loose in Hand | Till Refusal |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes Refusal @ 96", No Weeping, No SW, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 7
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/26/15 Time: 2:00 Weather: Sunny 80°

1. Deep Hole Number 7C Location (Identify on Plan): Lot 7
2. Land Use: Wooded Surface Stones: – Slope (%): 5% Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 7/100"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | 6 | VF | |
| 2"-44" | | Bw | FSL | 2.5Y 6/4 | | | | – | <10% | M | VF | |
| 44"-100" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | <10% | SG | Firm in Place Loose in Hand | Till Refusal |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes Refusal @ 100". No Weeping, No SW, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 7
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/26/15 Time: 2:15 Weather: Sunny 80°

1. Deep Hole Number 7D Location (Identify on Plan): Lot 7
2. Land Use: Wooded Surface Stones: – Slope (%): 5% Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: >104"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 2/2 | | | – | – | – | G | VF | |
| 2"-28" | | Bw | FSL | 2.5 Y 6/4 | | | – | – | < 10% | M | VF | |
| 28"-104" | | C | Cgravelly LS | 2.5 Y 4/2 | | | | 20% | < 10% | SG | Firm in Place Loose in Hand | Till Refusal |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Weeping, No SW, No Mottling observed. Refusal @ 104".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 8
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/27/15 Time: 9:00 AM Weather: Sunny 70°

1. Deep Hole Number 8A Location (Identify on Plan): Lot 8
2. Land Use: Wooded Surface Stones: — Slope (%): 3% Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: F. Coarse Loamy Eolian Deposits over F. Sandy Basal Till 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 __ Standing Water in Hole ____" Estimated Depth to High Groundwater: >120"

| | |
|---|---|
| Depth | 42" |
| Start Soak | 1:40 |
| End Soak | 1:55 |
| Time at 12 | 1:55 |
| Time at 9 | 2:07 |
| Time at 6 | 2:20 |

P = 4.33 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-36" | | Bw | FSL | 2.5Y 6/4 | | | | – | <10% | M | VF | Roots |
| 36-120" | | C | Gravelly LS | 2.5Y 4/2 | 108 | 7.5YR 4/4 | 3% | 20% | <10% | SG | Firm in Place Loose in Hand | Till, Many Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, . Refusal @ 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 8
Site Address or Map/Lot Number

## C. On-Site Review

*(minimum of two holes required at every proposed disposal area)*

**Deep Observation Hole:** Date: 8/27/15 Time: 9:45 Weather: Sunny 70°

1. Deep Hole Number 8B Location (Identify on Plan): Lot 8
2. Land Use: Wooded Surface Stones: – Slope (%): 3% Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: >104"

| Depth | |
|---|---|
| Start Soak | 40" |
| End Soak | 1:40 |
| Time at 12 | 1:55 |
| Time at 9 | 1:55 |
| Time at 6 | 2:01 |
| | 2:09 |

P = 2.67 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-1" | | $A_p$ | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 1"-34" | | Bw | FSL | 2.5Y 6/4 | | | | – | 10% | M | VF | Roots |
| 34"-104" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm In Place loose in hand | Many Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling. Refusal @ 104".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 8
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/27/15 Time: 9:30 Weather: Sunny 20°

1. Deep Hole Number 8C Location (Identify on Plan): Lot 8
2. Land Use: Wooded Surface Stones: – Slope (%): 3% Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line _ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 _ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 110"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 2"-34" | | Bw | FSL | 2.5Y 6/4 | | | | – | < 10% | M | VF | Many Roots |
| 34"-120" | | C | Gravelly LS | 2.5Y 4/2 | 110 | 2.5YR 4/4 | 3% | 20% | < 10% | SG | Firm in Place loose in Hand | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Refusal @ 120".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 8
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/27/15 Time: 10:00 Weather: Sunny 70°

1. Deep Hole Number 8D Location (Identify on Plan): Lot 8
2. Land Use: Wooded Surface Stones: – Slope (%): 3% Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: >108"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-1" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 1"-36" | | Bw | FSL | 2.5Y 4/4 | | | | – | <10% | M | VF | Roots |
| 36"-108" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | <10% | SG | Firm in Place loose to Hard | Cobbles Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling. Refusal @ 108".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 9
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/27/15 Time: 11:50 Weather: Sunny 75°

1. Deep Hole Number 9A Location (Identify on Plan): Lot 9
2. Land Use: Wooded Surface Stones: 0 Slope (%): 15 Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.

4. Parent Material: F. Coarse loamy Eolian Deposits over F Sandy Basal Till 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 __ Standing Water in Hole ____" Estimated Depth to High Groundwater: 96"

| | |
|---|---|
| Depth | 42" |
| Start Soak | 2:55 |
| End Soak | 3:10 |
| Time at 12 | 3:10 |
| Time at 9 | 3:28 |
| Time at 6 | 3:51 |

P = 7.67 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 2/2 | | | | 0 | 0 | G | VF | |
| 2"-22" | | Bw | FSL | 10 YR 4/6 | | | | <10% | < 10% | M | VF | Many Roots |
| 22"-98 | | C | Gravelly LS | 2.5 Y 4/2 | 96" | 7.5 YR 5/2 | 3% | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, . Refusal @ 98".

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 9
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/27/15 Time: 12:00 Weather: Sunny 75°

1. Deep Hole Number 9B Location (Identify on Plan): Lot 9
2. Land Use: Wooded Surface Stones: ~ Slope (%): 15 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line _ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 _ Standing Water in Hole ____ Estimated Depth to High Groundwater: > 114"

| Depth | 36" |
|---|---|
| Start Soak | 2:54 |
| End Soak | 3:09 |
| Time at 12 | 3:09 |
| Time at 9 | 3:24 |
| Time at 6 | 3:42 |

P = 6 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 2/2 | | | | 0 | 0 | G | VF | |
| 2"-20" | | Bw | FSL | 10YR 4/6 | | | | <10% | <10% | M | VF | Many Roots |
| 20"-114" | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling. Refusal @ 114"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 9
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/27/15 Time: 12:15 Weather: Sunny 75°

1. Deep Hole Number 9C Location (Identify on Plan): Lot 9
2. Land Use: Wooded Surface Stones: – Slope (%): 15 Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: >108"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-1" | | Ap | FSL | 10YR 2/2 | | | | – | – | G | VF | |
| 1-24" | | Bw | FSL | 10YR 4/6 | | | | 10% | 10% | M | VF | Many Roots |
| 24"-108 | | C | Gravelly LS | 2.5Y 4/2 | | | | 20% | 10% | SG | Firm in Place Loose in Hand | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes N.S.W., No Weeping, No Mottling. Refusal @ 108"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 9
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/27/15 Time: 12:40 Weather: Sunny 75°

1. Deep Hole Number 9D Location (Identify on Plan): Lot 9
2. Land Use: Wooded Surface Stones: – Slope (%): 15 Vegetation: Wooded

   Landform: Moraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 100"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 2/2 | | | | – | – | 0 | VF | |
| 2"-29" | | Bw | FSL | 10 YR 4/6 | | | | 10% | 10% | M | VF | Many Roots |
| 29"-106" | | C | Gravelly LS | 2.5 Y 4/2 | 100" | 7.5 YR 5/2 | 3% | 20% | 10% | S 0 | Firm in Place loose in Hand | Cobbles & Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping. Refusal @ 106"

Builders lot 10

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/11/15 Time: 10:00 Weather: Overcast, Drizzle, 60's

1. Deep Hole Number 10 A Location (Identify on Plan): Lot 10
2. Land Use: Woods Surface Stones: N/A Slope (%): 15% Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: >120"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-6" | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 6"-40" | | Bu | FSL | 10 YR 5/6 | | | | – | 10 | M | VF | large Boulders |
| 40"-60" | | C1 | Loamy Fine Sand | 2.5Y 5/3 | | | | – | 10 | M | VF | " |
| 60"-120" | | C2 | S | 2.5Y 4/2 | | | | 20 | 10 | SG | Firm in P loose in H | Cobbles & Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling observed to 120".

Builders lot 10

Site Address or Map/Lot Number

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

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

**Deep Observation Hole:** Date: 9/11/15 Time: 10:30 Weather: Overcast Drizzle 60's

1. Deep Hole Number 10 B Location (Identify on Plan): lot 10
2. Land Use: Woods Surface Stones: NA Slope (%): __ Vegetation: Woods

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: >120"

| Depth | 60" |
|---|---|
| Start Soak | 2:34 |
| End Soak | 2:49 |
| Time at 12 | 2:49 |
| Time at 9 | 2:58 |
| Time at 6 | 3:08 |

P = 3.5 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-6 | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 6"-36" | | Bw | FSL | 10 YR 5/6 | | | | – | 10 | M | VF | large Boulders |
| 36"-60" | | $C_1$ | LFS | 2.5 Y 5/3 | | | | – | 10 | M | VF | " |
| 60"-120" | | $C_2$ | S | 2.5 Y 4/2 | | | | 20 | 10 | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No mottling Observed.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 10
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/11/15 Time: 11:00 Weather: Overcast 60's

1. Deep Hole Number 10 C Location (Identify on Plan): Lot 10
2. Land Use: Woods Surface Stones: NA Slope (%): 15 Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line _ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 _ Standing Water in Hole ____ Estimated Depth to High Groundwater: >120"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

PE

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-6" | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 6"-32" | | Bw | FSL | 10 YR 5/6 | | | | – | 10 | M | VF | Boulders |
| 32"-60" | | C1 | Coarse Sand | 2.5 Y 4/2 | | | | 20 | 10 | SG | Firm in P Loose in H | Cobbles & Boulders |
| 60"-120" | | C2 | Fine Sand | 2.5 Y 5/3 | | | | – | 10 | M | VF | Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No mottling observed to 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 10
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/11/15 Time: 11:30 Weather: overcast 60's

1. Deep Hole Number 10 D Location (Identify on Plan): lot 10
2. Land Use: Woods Surface Stones: NA Slope (%): 15 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line _ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 _ Standing Water in Hole ____ Estimated Depth to High Groundwater:

| | |
|---|---|
| Depth | 48" |
| Start Soak | 2:22 |
| End Soak | 2:37 |
| Time at 12 | 2:37 |
| Time at 9 | 2:40 |
| Time at 6 | 2:45 |

minimum
P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Color | Percent | Coarse Fragments % by Volume Gravel | Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-6" | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 6"-36" | | $B_w$ | FSL | 10YR 5/6 | | | | – | 10 | M | VF | Boulders |
| 36"-64 | | $C_1$ | Coarse Sand | 2.5Y 4/2 | | | | 20 | 10 | SG | Firm in P loose in H | Cobbles & Boulders |
| 64"-120" | | $C_2$ | Fine Sand | 2.5Y 5/3 | | | | – | 10 | M | VF | Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling observed to 120."

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 11
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/10/15 Time: 12:45 Weather: Overcast 70°

1. Deep Hole Number 11 A Location (Identify on Plan): Lot 11
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.
   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2-16 | | Bw1 | FSL | 10YR 4/4 | | | | – | – | M | VF | Many Roots |
| 16-26 | | Bw2 | FSL | 2.5Y 5/6 | | | | – | – | M | VF | |
| 26-84 | | C1 | S | 2.5Y 4/2 | | | | 10 | 20 | SG | Firm in P Loose in H | Cobbles & Boulders |
| 84-120 | | C2 | S | 2.5Y 3/1 | | | | 10 | 10 | SG | Firm in P Loose in H | Cobbles & Boulders |

Additional Notes No Sw, No Weeping, No Mottles observed.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 11
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/10/15 Time: 1:00 Weather: Overcast 70's

1. Deep Hole Number 11 B Location (Identify on Plan): Lot 11
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:

3. Distances from: Open Water Body _ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line _ft. Drinking Water Well ____ft. Other ____ ft.

4. Parent Material: Same 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 _ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120+ "

| Depth | 55" |
|---|---|
| Start Soak | 2:25 |
| End Soak | 2:40 |
| Time at 12 | 2:40 |
| Time at 9 | 2:43 |
| Time at 6 | 2:46 |

P = min 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 2-18 | | $Bw_1$ | FSL | 10 YR 4/4 | | | | – | – | M | VF | Many Roots |
| 18-30 | | $Bw_2$ | FSL | 2.5 Y 5/6 | | | | – | – | M | VF | |
| 30-84 | | $C_1$ | S | 2.5 Y 4/2 | | | | 10 | 20 | SG | Firm in P loose in H | Cobbles & Boulders |
| 84-120 | | $C_2$ | S | 2.5 Y 3/1 | | | | 10 | 10 | SG | Firm in P loose in H | " |

Additional Notes No SW, No Weeping, No Mottles Observed. Estimated HGW above Refusal @ 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/10/15 Time: 12:10 Weather: Overcast 70°s

1. Deep Hole Number 11C Location (Identify on Plan): Lot 11
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120" +

| Depth |
|---|
| Start Soak |
| End Soak |
| Time at 12 |
| Time at 9 |
| Time at 6 |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Color | Percent | Coarse Fragments % by Volume Gravel | Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0"-2" | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 2"-20" | | Bw1 | FSL | 10 YR 4/4 | | | | – | – | M | VF | Many Roots |
| 20"-32" | | Bw2 | FSL | 2.5 Y 5/6 | | | | – | – | M | VF | |
| 32"-60" | | C1 | S | 2.5 Y 4/2 | | | | 10 | 20 | SG | Firm in P loose in H | Cobbles & Boulders |
| 60"-120" | | C2 | S | 2.5 Y 3/1 | | | | 10 | 10 | SG | Firm in P loose in H | Cobbles & Boulders |

Additional Notes No Sw, No Weeping, No Mottles Observed.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders lot 11
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 8/10/15 Time: 11:50 Weather: Overcast 70's

1. Deep Hole Number 11 D Location (Identify on Plan): Lot 11
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body _ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: F Coarse loamy eolian Deposit over F Sandy Basal Till 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| | |
|---|---|
| Depth | 50" |
| Start Soak | 1:52 |
| End Soak | 2:07 |
| Time at 12 | 2:07 |
| Time at 9 | 2:09 |
| Time at 6 | 2:11 |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 2"-15" | | Bw1 | FSL | 10 YR 4/4 | | | | – | – | M | VF | Many Roots |
| 15"-30" | | Bw2 | FSL | 2.5 Y 5/6 | | | | – | – | M | VF | |
| 30"-60" | | C1 | S | 2.5 Y 4/2 | | | | 10 | 20 | SG | Firm in P Loose in H | Cobbles + Boulders |
| 60"-120 | | C2 | S | 2.5 Y 3/1 | | | | 10 | 10 | SG | Firm in P Loose in H | Cobbles + Boulders |

Additional Notes No SW, No Weeping, No Mottles Observed. Estimated HGW above Refusal @ 120"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 12
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/16/15 Time: 12:05 Weather: Sunny 70's

1. Deep Hole Number 12A Location (Identify on Plan): lot 12
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120"+

| | |
|---|---|
| Depth | 52 |
| Start Soak | 2:10 |
| End Soak | 2:08 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons < 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2-20 | | Bw | FSL | 10YR 4/4 | | | | – | – | M | VF | Many Roots |
| 20-30 | | C1 | S | 25Y 4/2 | | | | – | – | M | VF | Fine Sand No Roots or Gravel |
| 30-120 | | C2 | S | 25Y 3/2 | | | | 20+ | 20+ | SG | Firm in P Loose in H | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders lot 12
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/16/15 Time: 12:15 Weather: Sunny 70's

1. Deep Hole Number 12B Location (Identify on Plan): lot 12
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.
   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120" +

| | |
|---|---|
| Depth | |
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2-18 | | Bw | FSL | 10YR 4/4 | | | | – | – | M | VF | Many Roots |
| 18-36 | | C1 | S | 2.5Y 4/2 | | | | – | – | M | VF | Fine Sand No Roots or Gravel |
| 36-120 | | C2 | S | 2.5Y 3/2 | | | | 20+ | 20+ | SG | Firm in P Loose in H | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 12
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 8/16/15 Time: 12:30 Weather: Sunny 70°

1. Deep Hole Number 12C Location (Identify on Plan): Lot 12
2. Land Use: Woods Surface Stones: NA Slope (%): __ Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120" +

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2-24 | | Bw | FSL | 10YR 4/4 | | | | – | – | M | VF | Roots, Few Cobbles |
| 24-120 | | C1 | S | 2.5Y 3/2 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles & Boulders with stratified layer of Coarse Sand above 40" & below 104" |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 12
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/16/15 Time: 12:45 Weather: Sunny 20's

1. Deep Hole Number 12D Location (Identify on Plan): Lot 12
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120" +

| | |
|---|---|
| Depth | 56 |
| Start Soak | 2:01 |
| End Soak | 2:10 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons < 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2"-30" | | Bw | FSL | 10YR 4/4 | | | | – | – | M | VF | Roots. |
| 30"-120 | | C1 | S | 2.5Y 3/2 | | | | 20+ | 20+ | SG | Firm in P Loose in H | layers of Coarse Sand above 40" + Below 90" |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders lot 13
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/23/15 Time: 10:30 Weather: Sunny 60's

1. Deep Hole Number 13 B Location (Identify on Plan): Lot 13
2. Land Use: Woods Surface Stones: NA Slope (%): __ Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120+"

| | |
|---|---|
| Depth | |
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 3-20 | | Bw | FSL | 10YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 20-120 | | C1 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling Observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 13
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 10:45 Weather: Sunny 60°s

1. Deep Hole Number 13C Location (Identify on Plan): Lot 13
2. Land Use: Woods Surface Stones: NA Slope (%): 20 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120+"

| | |
|---|---|
| Depth | 46" |
| Start Soak | 2:06 |
| End Soak | 2:15 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons < 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 3-20 | | Bw | FSL | 10 YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 20-42 | | C1 | FS | 2.5Y 6/2 | | | | – | – | M | VF | Fine Sand |
| 42-120 | | C2 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P Loose in H | Cobbles & Boulders |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling Observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 13
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/23/15 Time: 11:00 Weather: Sunny 60's

1. Deep Hole Number 13D Location (Identify on Plan): Lot 13
2. Land Use: Woods Surface Stones: NA Slope (%): 20 Vegetation: Woods
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.
   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | - | - | G | VF | |
| 3-18 | | Bw | FSL | 10YR 4/4 | | | | - | 5 | M | VF | Many Roots |
| 18-40 | | C1 | FS | 2.5Y 6/2 | | | | - | - | M | VF | Fine Sand |
| 40-120 | | C2 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling Observed.

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 13
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 10:15 Weather: Sunny 60°F

1. Deep Hole Number 13 A Location (Identify on Plan): Lot 13
2. Land Use: Woods Surface Stones: NA Slope (%): 20 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth |
|---|
| |
| |
| |
| |
| |
| |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Color | Percent | Coarse Fragments % by Volume Gravel | Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 3-24 | | Bw | FSL | 10YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 24-120 | | C1 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 14
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 8:45 Weather: Sunny 50's

1. Deep Hole Number 14 A Location (Identify on Plan): Lot 14
2. Land Use: Woods Surface Stones: N/A Slope (%): 10-15 Vegetation: Wooded

   Landform: Morraine Position on landscape:

| | |
|---|---|
| Depth | 52" |
| Start Soak | 1:05 |
| End Soak | 1:20 |
| Time at 12 | 1:20 |
| Time at 9 | 1:22 |
| Time at 6 | 1:24 |

P = 2 min/in

3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10 YR 3/3 | | | | – | – | G | VF | |
| 2-18 | | Bw | FSL | 10 YR 4/4 | | | | – | 5 | M | Vf | Many Roots |
| 18-120" | | C1 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P Loose in H | Cobbles + Boulders. |
| | | | | | | | | | | | | 5" layer of Fine Sand e |
| | | | | | | | | | | | | 82". |

Additional Notes No SW, No Weeping, No Mottling Observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 14
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 9:00 Weather: Sunny 50's

1. Deep Hole Number 14 B Location (Identify on Plan): Lot 14
2. Land Use: Woods Surface Stones: NA Slope (%): 10-15 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120+"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10 YR 3/3 | | | | - | - | G | VF | |
| 2-20 | | Bw | FSL | 10 YR 4/4 | | | | - | 5 | M | VF | Many Roots |
| 20-120 | | C1 | S | 2.5 Y 4/3 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | 5" layer of Fine Sand |
| | | | | | | | | | | | | @ 80" |

Additional Notes No Sw, No Weeping, No Mottling observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 14
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/23/15 Time: 9:15 Weather: Sunny 50's

1. Deep Hole Number 14C Location (Identify on Plan): Lot 14
2. Land Use: Woods Surface Stones: NA Slope (%): 10-15 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120+ "

| | |
|---|---|
| Depth | 46" |
| Start Soak | 1:05 |
| End Soak | 1:15 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallons
<13 min
30 sec

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | — | — | G | VF | |
| 3-40 | | Bw | FSL | 10YR 4/4 | | | | — | 5 | M | VF | Many Roots |
| 40-120 | | C | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P Loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling Observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 14
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 9:30 Weather: Sunny 50's

1. Deep Hole Number 14 D Location (Identify on Plan): Lot 14
2. Land Use: Woods Surface Stones: NA Slope (%): 10-15 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120+"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 3-36 | | Bw | FSL | 10YR 4/4 | | | | – | 5 | M | VF | Many Roots |
| 36-120 | | C1 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P Loose in H | Cobbles + Boulders |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Su, No Weeping, No Mottling Observed

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 15
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/16/15 Time: 10:45 Weather: Sunny 70's

1. Deep Hole Number 15A Location (Identify on Plan): Lot 15
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded

   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120" +

| Depth |
|---|
| Start Soak |
| End Soak |
| Time at 12 |
| Time at 9 |
| Time at 6 |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 2-22" | | Bw | FSL | 10YR 4/4 | | | | – | >10% | M | VF | Cobbles + Boulders |
| 22-120" | | C1 | S | 2.5Y 4/2 | | | | >20 | >20 | SG | Firm in place Loose in Hand | Coarse to fine mix of fine + Coarse below 110" |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

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

Builders Lot 15
Site Address or Map/Lot Number

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

**Deep Observation Hole:** Date: 9/16/15 Time: 11:00 Weather: Sunny 70's

1. Deep Hole Number 15 B Location (Identify on Plan): Lot 15
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.
   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120"+

| | |
|---|---|
| Depth | 48" |
| Start Soak | 1:40 |
| End Soak | 1:50 |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

25 gallon
< 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | 6 | VF | |
| 2-20 | | Bw | FSL | 10YR 4/4 | | | | – | 10% | M | VF | Roots, Cobbles + Boulders |
| 20-120 | | C1 | S | 2.5Y 4/2 | | | | 20+% | 20+% | SG | Firm in Place loose in Hand | Coarse to 100" Fine + Coarse below 100" |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders Lot 15
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/16/15 Time: 11:15 Weather: Sunny 70°s

1. Deep Hole Number 15 C Location (Identify on Plan): Lot 15
2. Land Use: Woods Surface Stones: NA Slope (%): 13 Vegetation: Wooded

   Landform: Moraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area ____ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 120" +

| Depth | |
|---|---|
| Start Soak | 46" |
| End Soak | 1:52 |
| Time at 12 | 2:01 |
| Time at 9 | |
| Time at 6 | |

25 gallons
2 15 min

P = 2 min/in

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2" | | Ap | FSL | 10YR 3/3 | | | | - | - | G | VF | |
| 2-30 | | Bw | FSL | 10YR 4/4 | | | | | 10 | M | VF | Roots, Cobbles & Boulders Below 18" |
| 30-120 | | C1 | S | 2.5Y 4/2 | | | | 20+ | 20+ | SG | Firm in Place Loose in Hand | Coarse Sand Below 90" w/ Few Cobbles |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Builders lot 15
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/16/15 Time: 11:30 Weather: Sunny 70°s

1. Deep Hole Number 15D Location (Identify on Plan): Lot 15
2. Land Use: Woods Surface Stones: NA Slope (%): 1-3 Vegetation: Wooded
   Landform: Morraine Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area _____ft.
   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
4. Parent Material: Same 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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 120" +

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-2 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | Many Roots Boulders & Cobbles Below 18". |
| 2-28 | | Bw | FSL | 10YR 4/4 | | | | – | 10 | M | VF | Coarse Sand below 90" with few |
| 28-120 | | C1 | S | 2.5Y 4/2 | | | | 20+ | 20+ | SG | Firm in P loose in H | Cobbles |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Proposed SW Basin
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 2:05 Weather: Sunny 70's

1. Deep Hole Number SW-3 Location (Identify on Plan): _____
2. Land Use: Woods Surface Stones: NA Slope (%): 5 Vegetation: Wooded

   Landform: _____ Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area 75-80 ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 36"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10 YR 3/3 | | | | – | - | G | VF | |
| 3-20 | | Bw | FSL | 10 YR 4/6 | | | | – | - | ~ | VF | |
| 20-46 | | C1 | FS | 2.5 Y 5/4 | 36" | C. 5 YR 4/6 D. 2.5 Y 5/2 | | – | – | ~ | VF | Fine Sand |
| 46-84 | | C2 | S | 2.5 Y 4/2 | | | | 10 | 20 | SG | Firm in P loose in H | Moist |
| | | | | | | | | | | | | |

Additional Notes No SW, No Weeping, Mottling @ 36"

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Proposed SW Basin
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 2:00 Weather: Sunny 70's

1. Deep Hole Number SW-1 Location (Identify on Plan): _____
2. Land Use: Woods Surface Stones: N/A Slope (%): 10 Vegetation: Wooded

   Landform: _____ Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way _____ft. Possible Wet Area 75-80 ft.

   Property Line __ft. Drinking Water Well _____ft. Other _____ ft.
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 __ Standing Water in Hole _____ Estimated Depth to High Groundwater: 96+"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3 | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 3-24 | | Bw | FSL | 10YR 4/4 | | | | – | 5 | M | VF | |
| 24-96 | | C1 | S | 2.5Y 4/3 | | | | 20+ | 20+ | SG | Firm in P loose in H | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Additional Notes No Sw, No Weeping, No Mottling

**Massachusetts Department of Environmental Protection**
Bureau of Resource Protection – Wastewater Permitting Program

Proposed SW Basin location
Site Address or Map/Lot Number

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

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

**Deep Observation Hole:** Date: 9/23/15 Time: 1:45 Weather: Sunny 70's

1. Deep Hole Number SW-2 Location (Identify on Plan): Storm Water Basin
2. Land Use: Woods Surface Stones: NA Slope (%): 5 Vegetation: Wooded

   Landform: _____ Position on landscape:
3. Distances from: Open Water Body __ft. Drainage Way ____ft. Possible Wet Area 75-80 ft.

   Property Line __ft. Drinking Water Well ____ft. Other ____ ft.
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 __ Standing Water in Hole ____ Estimated Depth to High Groundwater: 36"

| Depth | |
|---|---|
| Start Soak | |
| End Soak | |
| Time at 12 | |
| Time at 9 | |
| Time at 6 | |

| Depth (In.) A | Depth (In.) B | Soil Horizon/ Layer | Soil Texture (USDA) | Soil Matrix: Color-Moist (Munsell) | Redoximorphic Features (mottles) Depth | Redoximorphic Features (mottles) Color | Redoximorphic Features (mottles) Percent | Coarse Fragments % by Volume Gravel | Coarse Fragments % by Volume Cobbles & Stones | Soil Structure | Soil Consistence (Moist) | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-3" | | Ap | FSL | 10YR 3/3 | | | | – | – | G | VF | |
| 3-22" | | Bw | FSL | 10YR 4/6 | | | | – | – | M | VF | |
| 22-58 | | C1 | FS | 2.5Y 5/4 | 36" | C. 5YR 4/6 D. 2.5Y 5/2 | | – | – | M | VF | Fine Sand |
| 58-96 | | C2 | S | 2.5Y 4/2 | | | | 10 | 20 | SG | Firm in P loose in H | Heavy Redox throughout |
| | | | | | | | | | | | | |

Additional Notes SW @ 89", Weeping @ 86", Mottling @ 36"