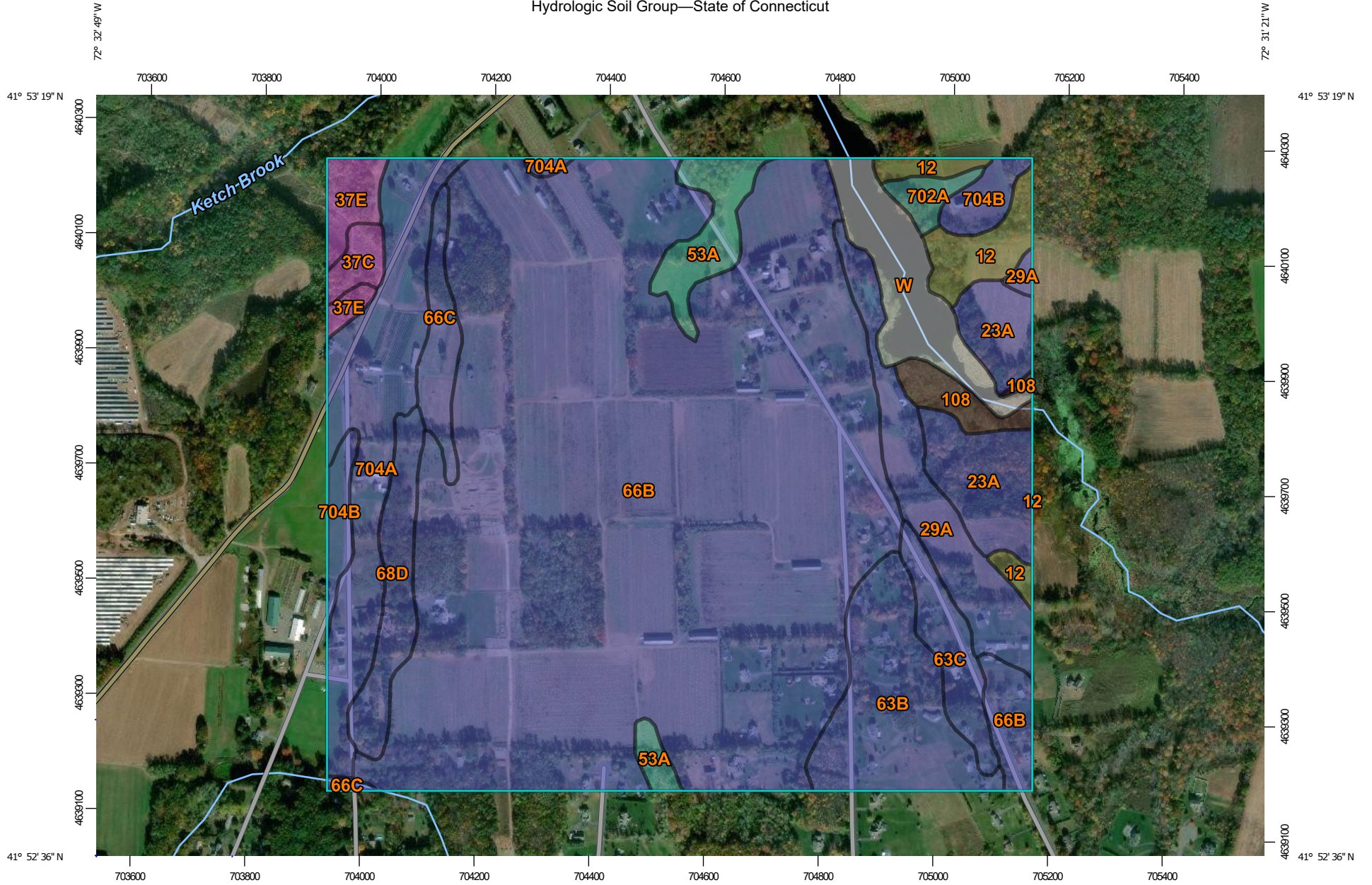


Hydrologic Soil Group—State of Connecticut



Map Scale: 1:9,310 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
 Survey Area Data: Version 19, Sep 13, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 27, 2016—Oct 30, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
12	Raypol silt loam	C/D	7.5	2.2%
23A	Sudbury sandy loam, 0 to 5 percent slopes	B	13.5	4.0%
29A	Agawam fine sandy loam, 0 to 3 percent slopes	B	14.1	4.2%
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	A	2.3	0.7%
37E	Manchester gravelly sandy loam, 15 to 45 percent slopes	A	4.3	1.3%
53A	Wapping very fine sandy loam, 0 to 3 percent slopes	C	7.7	2.3%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	B	18.1	5.4%
63C	Cheshire fine sandy loam, 8 to 15 percent slopes	B	6.4	1.9%
66B	Narragansett silt loam, 2 to 8 percent slopes	B	200.4	59.8%
66C	Narragansett silt loam, 8 to 15 percent slopes	B	5.7	1.7%
68D	Narragansett silt loam, 15 to 25 percent slopes, extremely stony	B	8.3	2.5%
108	Saco silt loam	B/D	3.6	1.1%
702A	Tisbury silt loam, 0 to 3 percent slopes	C	2.2	0.6%
704A	Enfield silt loam, 0 to 3 percent slopes	B	24.1	7.2%
704B	Enfield silt loam, 3 to 8 percent slopes	B	5.8	1.7%
W	Water		11.4	3.4%
Totals for Area of Interest			335.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

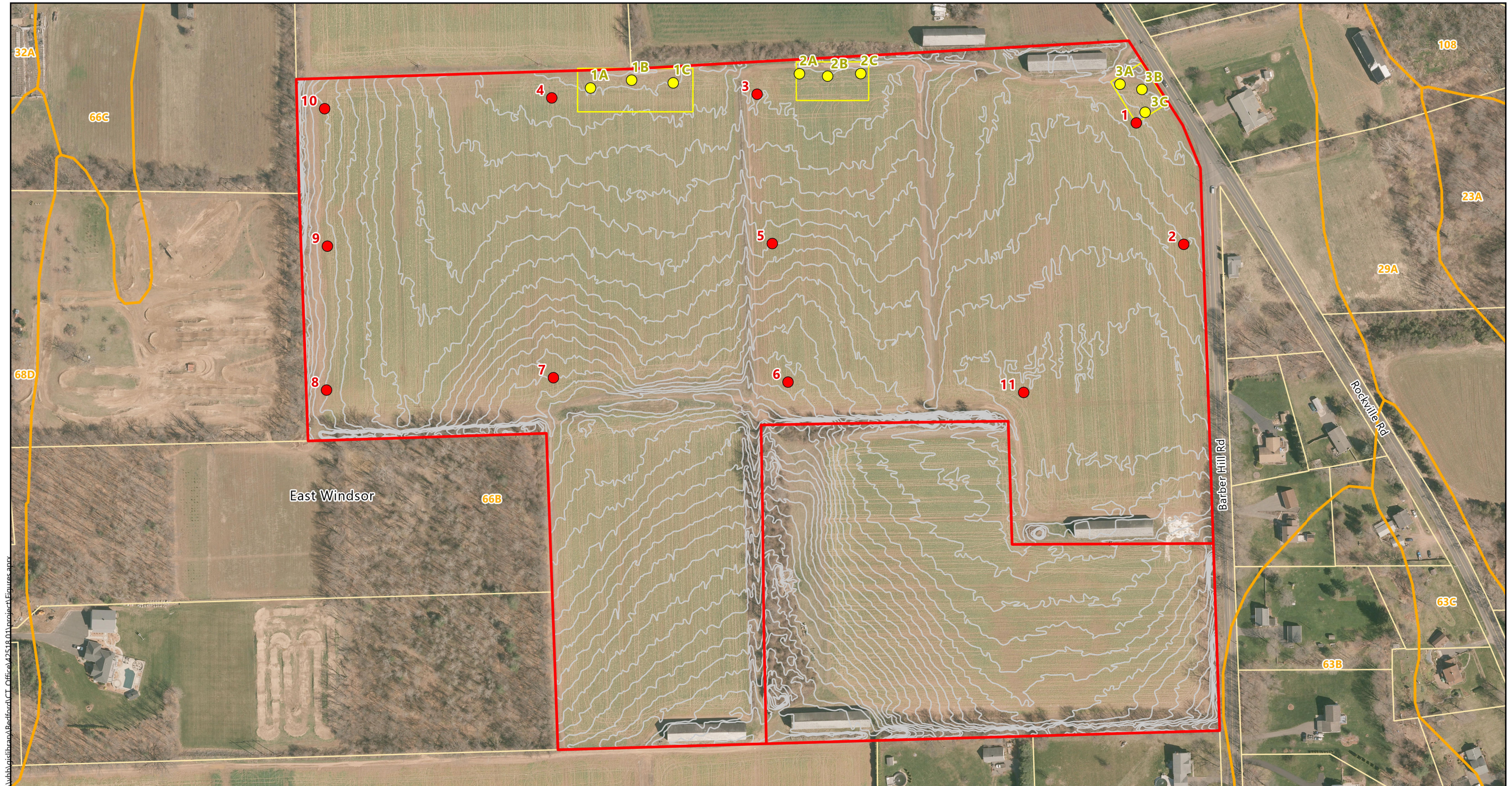
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



- Stormwater Test Pits
- Site-Specific HSG Soil Survey
- NRSC Soil Boundary
- Stormwater Test Pit Areas
- Property Boundary
- 1-ft Contour Intervals
- Parcel Boundary
- Town Boundary

Mulnite Farms

East Windsor, Connecticut

Test Pit Locations

Source: VHB, CTDEEP, USGS, ArcGIS Online

East Windsor Soil Test Pit Descriptions

Described 02/13/2020

By Patricia Brousseau, RIDEM Class IV License No. D4095

Test Pit 1

Ap	0-15 inches	Brown (7.5YR 4/4) sandy loam, weak medium granular structure, friable, many roots, abrupt smooth boundary
Bw	15-22 inches	Yellowish brown (5YR 4/6) sandy loam, weak medium subangular blocky structure, friable, few roots, clear smooth boundary
BC	22-32 inches	Reddish brown (5YR 4/4) loamy sand, weak medium to coarse subangular blocky structure, friable, common roots, clear smooth boundary
2C	32-48 inches	Reddish brown (2.5YR 4/4) extremely cobbly loamy sand, single grain, loose

Test Pit 2

Ap	0-13 inches	Brown (7.5YR 4/4) sandy loam, weak medium granular structure, friable, many medium roots, abrupt smooth boundary
BC	13-26 inches	Reddish brown (5YR 4/4) loamy sand, weak medium subangular blocky structure to massive, friable, few fine roots, clear smooth boundary
2C1	26-41 inches	Reddish brown (2.5YR 4/4) very gravelly loamy sand, massive, friable, abrupt smooth boundary
3C2	41-48 inches	Dark reddish brown (2.5YR 3/4) extremely cobbly loamy sand, single grain, loose

Test Pit 3

Ap	0-14 inches	Brown (7.5YR 4/4) sandy loam, weak medium granular structure, friable, many medium roots, abrupt smooth boundary
Bw	14-16 inches	Strong brown (7.5YR 4/6) sandy loam, weak medium subangular blocky structure, friable, common medium roots, abrupt wavy boundary
2C1	16-30 inches	Reddish brown (2.5YR 4/4) gravelly loamy sand, massive, friable, common roots, abrupt wavy boundary
2C2	30-48 inches	Reddish brown (2.5YR 4/4) very cobbly sand, single grain, loose

Test Pit 4

Ap	0-18 inches	Dark brown (7.5YR 3/4) sandy loam, weak medium granular structure, friable, common roots, abrupt wavy boundary
Bw1	18-22 inches	Reddish brown (7.5YR 4/4) loamy sand, massive, friable, few roots, clear smooth boundary
Bw2	22-28 inches	Dark yellowish brown (10YR 4/4) loamy sand, massive, friable, few roots, abrupt smooth boundary
2C1	28-37 inches	Reddish brown (5YR 5/4) sand, single grain, loose, clear smooth boundary

2C2 37-58 inches Reddish brown (5YR 5/4) sand, single grain, loose, common fine to medium, distinct yellowish red (5YR 5/6) concentrations
 Estimated ASHWT at 37 inches

Test Pit 5

Ap 0-10 inches Brown (7.5YR 4/3) sandy loam, weak medium granular structure, friable, many medium fine roots, abrupt smooth boundary
 Bw 10-18 inches Dark yellowish brown (10YR 4/6) loamy sand, medium subangular blocky structure, friable, abrupt wavy boundary
 2C1 18-27 inches Reddish brown (5YR 4/4) cobbly sand, single grain, loose, clear smooth boundary
 2C2 27-40 inches Reddish brown (5YR 4/4) very cobbly sand, single grain, loose, clear smooth boundary
 2C3 40-53 inches Reddish brown (2.5YR 5/4) extremely gravelly fine sand, single grain, loose

Test Pit 6

Ap 0-10 inches Brown (7.5YR 4/4) sandy loam, weak medium granular structure, friable, many roots, abrupt smooth boundary
 Bw 10-15 inches Brown (7.5YR 5/4) sandy loam, weak medium subangular blocky structure, friable, abrupt smooth boundary
 2C1 15-31 inches Reddish brown (5YR 4/4) loamy sand, weak medium subangular blocky structure, friable, clear smooth boundary
 3C2 31-41 inches Dark reddish brown (2.5YR 3/3) extremely gravelly coarse sand, single grain, loose, clear smooth boundary
 4C3 41-55 inches Dusky red (10R 3/3) extremely gravelly sand, single grain, loose

Test Pit 7

Ap 0-4 inches Brown (7.5YR 4/3) sandy loam, weak medium granular structure, friable, many roots, abrupt smooth boundary
 Bw 4-11 inches Yellowish brown (10YR 5/4) loamy sand, massive, friable, few roots, abrupt smooth boundary
 2C1 11-20 inches Reddish brown (5YR 4/4) loamy sand, massive, friable, clear smooth boundary
 2C2 20-42 inches Reddish brown (2.5YR 4/4) extremely gravelly sand, single grain, loose, clear smooth boundary
 2C3 42-50 inches Dark reddish brown (2.5YR 3/4) extremely gravelly sand, single grain, loose

Test Pit 8

Ap	0-13 inches	Brown (7.5YR 4/3) sandy loam, weak medium granular structure, friable, common roots, abrupt smooth boundary
Bw	13-17 inches	Brown (7.5YR 5/4) loamy sand, massive, friable, abrupt wavy boundary
2C1	17-28 inches	Reddish brown (5YR 4/4) gravelly loamy sand, massive, friable, clear smooth boundary
2C2	28-50 inches	Dark reddish brown (2.5YR 3/3) stony gravelly sand, single grain, loose

Test Pit 9

Ap	0-12 inches	Brown (7.5YR 4/3) sandy loam, weak medium granular structure, friable, common roots, abrupt smooth boundary
Bw	12-21 inches	Dark yellowish brown (10YR 4/4) sandy loam, weak medium subangular blocky structure, friable, abrupt wavy boundary
2C1	21-34 inches	Reddish brown (5YR 4/4) stony sand, single grain, loose, clear smooth boundary
2C2	34-47 inches	Reddish brown (2.5YR 4/4) very gravelly sand, single grain, loose, clear smooth boundary
2Cr	47-52 inches	Dusky red (10R 3/3) extremely gravelly and stony sand, single grain, loose

Test Pit 10

Ap	0-13 inches	Brown (7.5YR 4/4) sandy loam, weak medium subangular blocky structure, friable, common roots, abrupt smooth boundary
Bw	13-21 inches	Strong brown (7.5YR 4/6) loamy sand, weak medium subangular blocky structure, friable, few roots, clear wavy boundary
2C1	21-36 inches	Reddish brown (2.5YR 4/4) very gravelly sand, single grain, loose, clear smooth boundary
2C2	36-48 inches	Reddish brown (2.5YR 4/4) extremely cobbly sand, few fine distinct red (2.5YR 4/6) concentrations, single grain, loose, clear smooth boundary,
2Cr	48-56 inches	Reddish brown (2.5YR 4/4) extremely stony and cobbly sand, single grain, loose

Estimated SHWT at 36 inches

Test Pit 11

Ap	0-12 inches	Brown (10YR 4/3) sandy loam, weak medium granular structure, friable, many roots, abrupt smooth boundary
2C1	12-26 inches	Strong brown (7.5YR 4/6) sand, single grain, loose, few roots, clear smooth boundary
2C2	26-49 inches	Reddish brown (5YR 5/4) sand, single grain, loose, few, coarse, distinct strong brown (7.5YR 5/6) concentrations, abrupt smooth boundary
2Cd3	49-53 inches	Weak red (10R 4/3) loamy sand, weak medium to fine platy structure to massive, firm

Estimated SHWT at 26 inches

Few, fine, and distinct strong brown (7.5YR 5/8) concentrations and the interface of the Ap and C1

Form #2

Technical Standards for Subsurface Sewage Disposal Systems

SITE INVESTIGATION FOR A SUBSURFACE SEWAGE DISPOSAL SYSTEM

Application/Permit #: _____

Property Owner _____ Location Mulnite Farm, East Windsor, CT

DEEP TEST PIT DATA/SOIL DESCRIPTIONS

DATE: 2/12/2020

(Record all Test Pits)

TEST PIT: 1A	TEST PIT: 1B	TEST PIT: 1C	TEST PIT:
0-16" dark brown organic silt loam	0-8" dark brown organic silt loam	0-18" dark brown organic silt loam	
16-87" red fine sand	8-22" tan silt loam	18-23" tan silt loam	
	22-69" brown fine sand	23-40" brown fine sand	
	69-89" red fine sand	40-88" red fine sand with cobbles	
Mottles:	Mottles:	Mottles:	Mottles:
GW:	GW:	GW:	GW:
Ledge:	Ledge:	Ledge:	Ledge:
Roots:	Roots:	Roots:	Roots:
Restrictive:	Restrictive:	Restrictive:	Restrictive:

COMMENTS: _____

GROUNDWATER TABLE (Near max., below max., etc.) _____

SOIL MOISTURE (High, medium, low, etc): _____

PERCOLATION TEST DATA

DATE: 2/12/2020

(Record all Perc Tests)

PERC: 1A		PERC: 1B		PERC: 1C		PERC:	
DEPTH: 23" @ 36" bench		DEPTH: 25" @ 36" bench		DEPTH: 24" @ 36" bench		DEPTH:	
PRESOAK:		PRESOAK:		PRESOAK:		PRESOAK:	
TIME	READING	TIME	READING	TIME	READING	TIME	READING
9:52	3.9"	9:55	12.7"	9:59	4.4"		
10:07	7.5"	10:10	23" empty	10:14	15.5"		
10:22	9"			10:29	19"		
10:37	10.8"			10:44	21.6" empty		
10:52	11.9"						
PERC RATE: 4.4 in./hr		PERC RATE: > 40 in./hr		PERC RATE: 10.4 in./hr		PERC RATE:	

COMMENTS: _____

Form #2

Technical Standards for Subsurface Sewage Disposal Systems

SITE INVESTIGATION FOR A SUBSURFACE SEWAGE DISPOSAL SYSTEM

Application/Permit #: _____
 Property Owner _____ Location Mulnite Farm, East Windsor, CT

DEEP TEST PIT DATA/SOIL DESCRIPTIONS

DATE: 2/12/2020

(Record all Test Pits)

TEST PIT: 2A	TEST PIT: 2B	TEST PIT: 2C	TEST PIT:
0-25" dark brown organic silt loam	0-23" dark brown organic silt loam	0-34" dark brown organic silt loam	
25-31" tan silt loam	23-52" tan silty loam	34-54" tan silt loam	
31-94" red sandy loam	52-96" red fine sand with cobbles	54-97" red fine sand with cobbles	
Mottles:	Mottles:	Mottles:	Mottles:
GW:	GW:	GW:	GW:
Ledge:	Ledge:	Ledge:	Ledge:
Roots:	Roots:	Roots:	Roots:
Restrictive:	Restrictive:	Restrictive:	Restrictive:

COMMENTS: _____

GROUNDWATER TABLE (Near max., below max., etc.) _____

SOIL MOISTURE (High, medium, low, etc): _____

PERCOLATION TEST DATA

DATE: 2/12/2020

(Record all Perc Tests)

PERC: 2A		PERC: 2B		PERC: 2C		PERC:	
DEPTH: 20" @ 36" bench		DEPTH: 21" @ 36" bench		DEPTH: 22" @ 36" bench		DEPTH:	
PRESOAK:		PRESOAK:		PRESOAK:		PRESOAK:	
TIME	READING	TIME	READING	TIME	READING	TIME	READING
11:30	3"	11:33	4.5"	11:36	3"		
11:45	9.2"	11:48	16.7"	11:51	10.8"		
12:00	13.4"	12:03	19.5" empty	12:06	14.8"		
12:15	15.2"			12:21	17.3"		
12:30	16.8"			12:36	18.3"		
PERC RATE: 6.4 in./hr		PERC RATE: > 10 in./hr		PERC RATE: 4.0 in./hr		PERC RATE:	

COMMENTS: _____

Form #2

Technical Standards for Subsurface Sewage Disposal Systems

SITE INVESTIGATION FOR A SUBSURFACE SEWAGE DISPOSAL SYSTEM

Application/Permit #: _____

Property Owner _____ Location Mulnite Farm, East Windsor, CT

DEEP TEST PIT DATA/SOIL DESCRIPTIONS

DATE: 2/12/2020

(Record all Test Pits)

TEST PIT: 3A	TEST PIT: 3B	TEST PIT: 3C	TEST PIT:
0-13" dark brown organic silt loam with cobbles	0-15" dark brown organic silty loam	0-14" dark brown organic silty loam	
13-27" light brown silty loam with cobbles	15-32" brown silty loam	14-32" light brown silty loam	
27-83" red sandy loam with large boulders	32-102" red sandy loam with cobbles	32-98" red sandy loam	
Mottles:	Mottles:	Mottles:	Mottles:
GW:	GW:	GW:	GW:
Ledge:	Ledge:	Ledge:	Ledge:
Roots:	Roots:	Roots:	Roots:
Restrictive:	Restrictive:	Restrictive:	Restrictive:

COMMENTS: _____

GROUNDWATER TABLE (Near max., below max., etc.) _____

SOIL MOISTURE (High, medium, low, etc): _____

PERCOLATION TEST DATA

DATE: 2/12/2020

(Record all Perc Tests)

PERC: 3A		PERC: 3B		PERC: 3C		PERC:	
DEPTH: 40" from grade		DEPTH: 39" from grade		DEPTH: 38" from grade		DEPTH:	
PRESOAK:		PRESOAK:		PRESOAK:		PRESOAK:	
TIME	READING	TIME	READING	TIME	READING	TIME	READING
1:23	15"	1:25	12.5"	1:28	10.5"		
1:38	22.4"	1:40	22.5"	1:43	17.6"		
1:53	25.2"	1:55	25.6"	1:58	20.8"		
2:08	28.1"	2:10	28.3"	2:13	23.1"		
2:23	29.7"	2:25	29.9"	2:28	25.2"		
PERC RATE: 6.4 in./hr		PERC RATE: 6.4 in./hr		PERC RATE: 8.4 in./hr		PERC RATE:	

COMMENTS: _____
