

LYME CODE

Soil determination is made from Soil Potential Ratings Septic Tank Absorption Fields for Single Family Residences New London County, Connecticut.

LOT #1

Shape Factor/Net Buildable Lot Area

Note: Due to large lot size and past experience in computing shape factor/net buildable lot area, scaling of soil areas is acceptable in determining shape factor otherwise actual surveyed measurements shall be used.

1. Soils	Resource Characteristic (per section 20)	Area
CdC	100%	196,500 sq. ft.
CrC	75%	130,000 sq. ft.
CrD	50%	
WzC	50%	
Rn & wetland setback	0%	<u>260,000 sq. ft.</u>
Net Buildable Area Provided		586,500 sq. ft.

2. Weighted Resource Characteristic

$$\frac{196,500 \times 1.0}{586,500} + \frac{130,000 \times 0.75}{586,000} + 0 =$$

$$(0.34) + (0.17) = 0.51$$

3. Net Buildable Area = 28,000 divided by 0.51 = 54,902 sq. ft.
(exceeds minimum required)

4. Shape Factor = $\frac{0.67 \times 28,000}{0.51} = 36,785 \text{ sq. ft.}$
(192' x 192')
(136' x 278')

ZONING REGULATIONS

LOT 2

Shape Factor/Net Buildable Lot Area

Note: Due to large lot size and past experience in computing shape factor/net buildable lot area, scaling of soil areas is acceptable in determining shape factor.

1.. Soils	Resource Characteristic	Area	
CdC	100%	385,000 sq. ft.	
CrC	75%	176,000 sq. ft.	(SEE MAP 2)
CrD	50%	48,000 sq. ft.	
WzC	50%		
Rn &w/in 100'	0%	<u>255,000 sq. ft.</u>	
Net Buildable Area Provided		864,000 sq. ft.	

2. Weighted Resource Characteristic

$$\frac{385,000}{864,000} \times 1.0 + \frac{176,000}{864,000} \times 0.75 + \frac{48,000}{864,000} \times 0.5 + 0 =$$

$$(0.45) + (0.15) + (0.03) = 0.63$$

3. Net Buildable Area = 28,000 divided by 0.63 = 44,444 sq. ft.
(exceeds minimum required)

4. Shape Factor = $\frac{0.67 \times 28,000}{0.63} = 29,777$ sq. ft.
(172.5' x 172.5')
(122' x 244')

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LOT 3

Shape Factor/Net Buildable Lot Area

Note: Due to large lot size and past experience in computing shape factor/net buildable lot area, scaling of soil areas is acceptable in determining shape factor.

1.. Soils	Resource Characteristic	Area	
CdC	100%	325,250 sq. ft.	
CrC	75%	210,000 sq. ft.	(SEE MAP 3)
CrD	50%	37,000 sq. ft.	
WzC	50%		
Rn &w/in 100'	0%	400,000 sq. ft.	
Net Buildable Area Provided		972,250 sq. ft.	

2. Weighted Resource Characteristic

$$\frac{325,250 \times 1.0}{972,259} + \frac{210,000 \times 0.75}{972,259} + \frac{37,000 \times 0.5}{972,259} + 0 =$$

$$(0.33) + (0.16) + (0.02) = 0.51$$

3. Net Buildable Area = 28,000 divided by 0.51 = 54,902 sq. ft.
(exceeds minimum requirement)

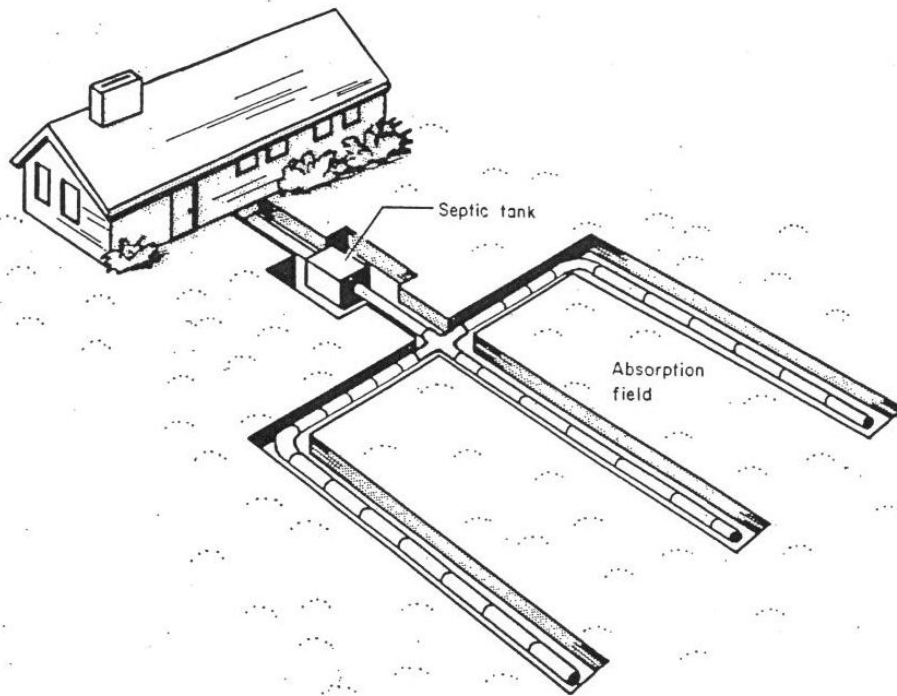
4. Shape Factor = $\frac{0.67 \times 28,000}{0.51} = 36,784$ sq. ft.

(191.5' x 191.5')
(135.5' x 271')

ZONING REGULATIONS

SOIL POTENTIAL RATINGS
SEPTIC TANK ABSORPTION FIELDS
FOR
SINGLE FAMILY RESIDENCES

NEW LONDON COUNTY, CONNECTICUT

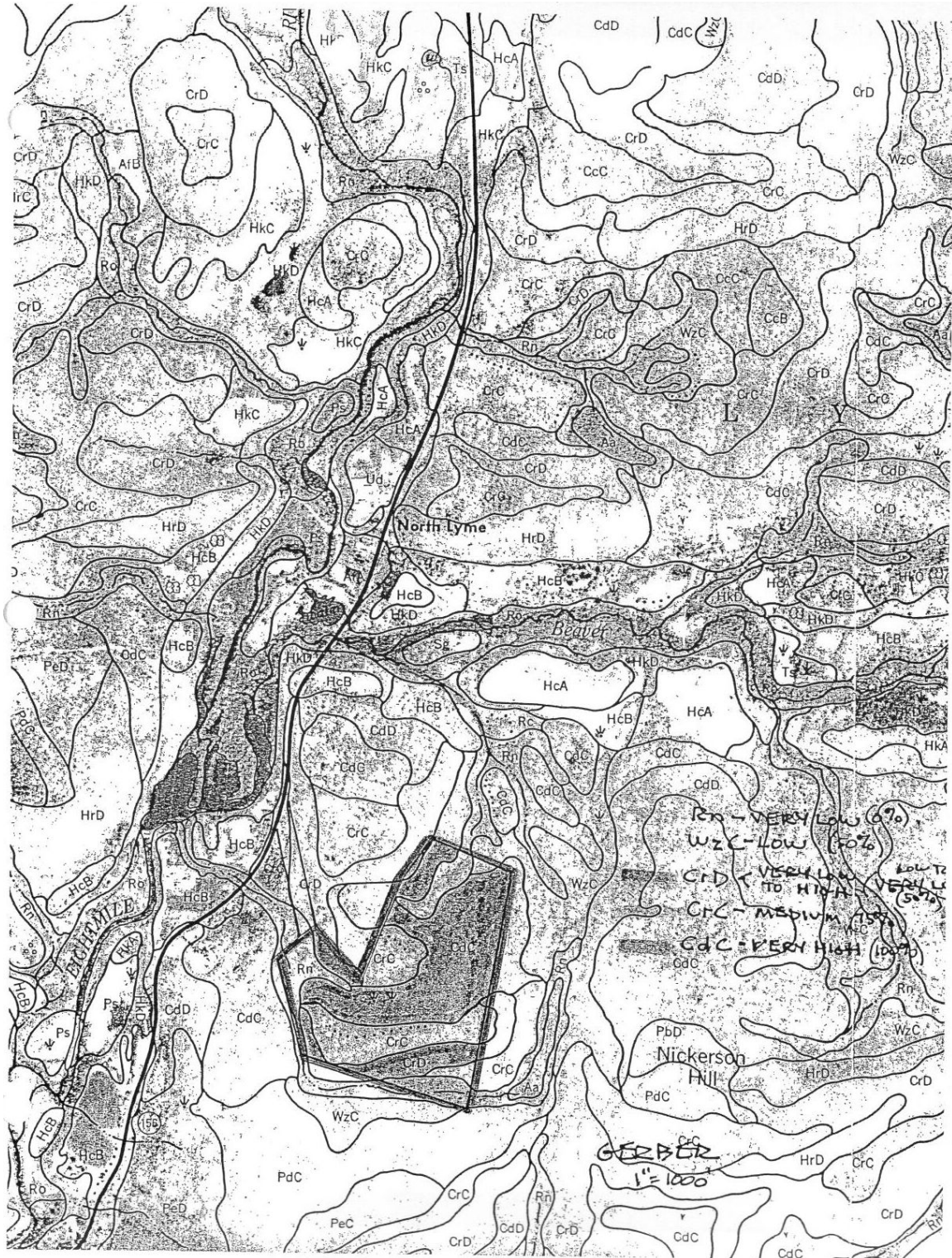


New London County Soil and Water Conservation District

1986

NEW LONDON

LYME CODE



ZONING REGULATIONS

TABLE 1
(continued)

SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
Ts	Tisbury silt loam	LOW	fast perc rate, depth to water table.	Fill. Double separating distance between wells and leach fields.		1
Ub	Udorthents-Pits complex, gravelly	NOT RATED				
Ud	Udorthents-Urban land complex	NOT RATED				
Ur	Urban land	NOT RATED				
W	Water	NOT RATED				
Wd	Wapole sandy loam	VERY LOW**	fast perc rate, depth to water table.	Curtain drain and fill. Double separating distance between wells and absorption field.	Access to drainage outlet.	2,3,4
We	Westbrook mucky peat	EXTREMELY LOW	Organic soils, depth to water table, flooding (tidal).		Tidal flooding. No drainage outlet.	2,3,4
WV	Windsor loamy sand, 0-3% slopes	HIGH	fast perc rate.	Double separating distance between wells and absorption field.		1
WVB	Windsor loamy sand, 3-8% slopes	HIGH	fast perc rate.	Double separating distance between wells and absorption field.		1
WVA	Woodbridge fine sandy loam, 0-3% slopes		Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVB	Woodbridge fine sandy loam, 3-8% slopes		Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVC	Woodbridge fine sandy loam, 8-15% slopes		Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVB	Woodbridge very stony fine sandy loam, 0-8% slopes	LOW	Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVC	Woodbridge very stony fine sandy loam, 8-15% slopes	LOW	Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVA	Woodbridge and Rainbow extremely stony soils	LOW	Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
WVC	Woodbridge and Rainbow extremely stony soils, 3-15% slopes	LOW	Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.

**The rating assumes that the water table is the naturally occurring soil can be drained to a depth of 18 inches or more.

- 1 Identified as an area of special concern by state regulations - engineer's design required.
- 2 Identified as unsuitable in its natural condition by state regulations - an engineer's evaluation is needed to determine whether an absorption field can be built.
- 3 Identified as inland wetlands or tidal wetlands by state regulations. Local, state, and/or federal wetland permits may be required.
- 4 A permit to install an absorption field cannot be issued if the site cannot be drained. A permit cannot be issued if the groundwater level is less than 18 inches below the soil surface for one month or longer.

TABLE 1
(continued)

SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
RaA	Rainbow silt loam, 0-3% slopes	LOW	Slow perc rate, depth to water table.	Fill, curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
RaB	Rainbow silt loam, 3-8% slopes					
RbB	Rainbow very stony silt loam, 0-8% slopes					
Rc	Raypoil silt loam	VERY LOW**	Fast perc rate, depth to water table.	Curtain drain and fill. Double separating distance between wells and absorption field.	Access to drainage outlet.	2,3,4
Rd	Ridgebury fine sandy loam	VERY LOW**	Depth to water table.	Curtain drain and fill.	Access to drainage outlet.	2,3,4
Rn	Ridgebury, Leicester, and extremely stony fine sandy loams					
Ro	Rippowan fine sandy loam	EXTREMELY LOW	Fast perc rate, depth to water table, flooding.	Drainage needed. Access to drainage outlet unlikely.		2,1,4
Rp	Rock outcrop-Hollis complex	EXTREMELY LOW	Depth to bedrock, slope.			5
Sf	Scarboro mucky fine sandy loam	EXTREMELY LOW	Fast perc rate, depth to water table.	Drainage needed. Access to drainage outlet unlikely.		2,3,4
Sg	Sudbury sandy loam	LOW	Fast perc rate, depth to water table.	Fill. Double separating distance between wells and leach fields.	Access to drainage outlet.	1
SvA	Sutton fine sandy loam, 0-3% slopes	LOW	Depth to water table.	Fill, curtain drain and drainage swale.	Access to drainage outlet.	1
SvB	Sutton fine sandy loam, 3-8% slopes					
SwB	Sutton very stony fine loam, 0-8% slopes					
SxB	Sutton extremely stony fine sandy loam, 0-8% slopes					

**The rating assumes that the water table in the naturally occurring soil can be drained to a depth of 18 inches or more.

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- 5 A permit to install an absorption field cannot be issued if the depth to bedrock, of the naturally occurring soil, is less than 24 inches.

ZONING REGULATIONS

TABLE 1
(continued)

SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
Rn	- Ninigret fine sandy loam	LOW	Fast perc rate, depth to water table.	Fill. Double separating distance between wells and absorption field.		1
Pa	- Pawcatuck mucky peat	EXTREMELY LOW	Organic soils, depth water table, flooding (tidal).		Tidal flooding. No drainage outlet.	2,3,4
PbB	- Paxton and Montauk fine sandy loams, 3-8% slopes	MEDIUM	Slow perc rate, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	J; possibly 2 depending on perc rate measured on site.
PbC	- Paxton and Montauk fine sandy loams, 8-15% slopes	MEDIUM	Slow perc rate, slope, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area. Installation to accommodate for slope.	Access to drainage outlet.	I; possibly 2 depending on perc rate measured on-site.
PbD	- Paxton and Montauk very stony fine sandy loams, 15-25% slopes	MEDIUM	Slow perc rate, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	I; possibly 2 depending on perc rate measured on-site.
PbE	- Paxton and Montauk very stony fine sandy loams, 8-15% slopes	MEDIUM	Slow perc rate, slope, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	I; possibly 2 depending on perc rate measured on-site.
PbF	- Paxton and Montauk extremely stony fine sandy loams, 3-15% slopes	MEDIUM#	Slow perc rate, slope, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area. Installation to accommodate for slope.	Access to drainage outlet.	I; possibly 2 depending on perc rate measured on-site.
PbG	- Paxton and Montauk extremely stony fine loams, 15-35% slopes	MEDIUM#	Slow perc rate, slope, depth to water table. +	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area. Installation to accommodate for slope.	Access to drainage outlet.	I; possibly 2 depending on perc rate measured on-site.
Ps	- Pootatuck Variant fine sandy loam	VERY LOW	Fast perc rate, depth to water table, flooding.	Fill. Solution to flooding problem is site specific.		1,3

This rating applies to slopes up to 25%. On slopes greater than 25%, the potential rating may be significantly lower.
+ The water table in these soils is present only for a very brief period of time.

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- 4 A permit to install an absorption field cannot be issued if the depth to bedrock, of the naturally occurring soil, is less than 24 inches.

TABLE 1
(continued)

SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
HrJ	Hollis-Charlton-Rock outcrop complex, 15-45% slopes	VERY LOW			Feasibility study. Increase area of investigation to utilize the deepest soils and flattest slopes. Verify depth to bedrock.	5
	Hollis and Rock outcrop parts	extremely low	Depth to bedrock, slope.			
	Charlton parts	high#	Slope.	Design and installation to accommodate for slope.		1 for slopes > 25%
Ip	Ipswich mucky peat	EXTREMELY LOW	Organic soils, depth to water table, flooding (tidal).		Tidal flooding. No drainage outlet.	2,3,4
Ln	Limerick Variant silt loam	EXTREMELY LOW	Depth to water table, flooding, fast perc rate.		Drainage needed. Access to drainage outlet unlikely.	2,3,4
MyA	Merrimac sandy loam, 0-5% slopes					
MyB	Merrimac sandy loam, 3-8% slopes	HIGH		Double separating distance between wells and absorption field.		1
MyC	Merrimac sandy loam, 8-15% slopes					
NaB	Narragansett silt loam, 3-8% slopes		None.			
NgB	Narragansett very stony silt loam, 3-15% slopes	VERY HIGH				
NhC	Narragansett extremely stony silt loam, 3-15% slopes					
NHD	Narragansett extremely stony silt loam, 15-25% slopes	HIGH	Slope.	Design and installation to accommodate for slope.		
MTC	Narragansett-Hollis complex, very rocky, 3-15% slopes	MEDIUM			Feasibility study. Increase area of investigation to utilize the deepest soils. Verify depth to bedrock.	
	Narragansett part	very high	None.			
	Hollis part	extremely low	Depth to bedrock.			5

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TABLE 1
(continued)
SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
LC	Charlton-Hollis fine sandy loams, very rocky, 3-15% slopes	MEDIUM	None.		Feasibility study. Increase area of investigation to utilize the deepest soils. Verify depth to bedrock.	5
	Charlton part	very high	None.			
	Hollis	extremely low	Depth to bedrock.			5
CLD	Charlton-Hollis fine sandy loams, very rocky, 15-45% slopes	VERY LOW			Feasibility study. Increase area of investigation to utilize the deepest soils and flattest slopes. Verify depth to bedrock.	1 for slopes >25%
	Charlton part	high#	Slope.	Design and installation to accommodate for slope.		
	Hollis part	extremely low	Slope, depth to bedrock.			5
DJ	Dumps	NOT RATED				
HCA	Haven silt loam, 0-3% slopes		fast perc rate.	Double separating distance between wells and absorption field.		1
HCB	Haven silt loam, 3-8% slopes					
HKA	Hinckley gravelly sandy loam, 0-3% slopes	HIGH				
HKC	Hinckley gravelly sandy loam, 3-15% slopes					
HKD	Hinckley gravelly sandy loam, 15-35% slopes		Fast perc rate, slope.	Double separating distance between wells and absorption field. Design and installation to accommodate for slope.	Increase area of investigation to utilize the flattest slopes.	1
HRC	Hollis-Charlton-Rock outcrop complex, 3-15% slopes	MEDIUM#				
	Hollis and Rock outcrop parts	LOH	Depth to bedrock.		Feasibility study. Increase area of investigation to utilize the deepest soils. Verify depth to bedrock.	5
	Charlton part	extremely low				
	Charlton	very high	None.			

This rating applies to slopes of up to 25%. On slopes greater than 25%, the potential rating may be significantly lower.
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TABLE 1

SOIL POTENTIAL RATINGS FOR SEPTIC TANK ABSORPTION FIELDS BY MAP UNIT
NEW LONDON COUNTY, CONNECTICUT

MAP SYMBOL	MAP UNIT NAME	POTENTIAL RATING	CONCERNS	CORRECTIVE MEASURES	ADDITIONAL CONSIDERATIONS	STATE REGULATIONS
Aa	Adrian muck	EXTREMELY LOW	Organic soils, depth to water table.		Drainage needed. Access to drainage outlet unlikely.	2,3,4
Afa	Agawan fine sandy loam, 0-3% slopes	HIGH	Fast perc rate.	Double separating distance between wells and absorption field.		1
Afb	Agawan fine sandy loam, 3-8% slopes	NOT RATED				
Ba	Beaches	NOT RATED				
BrB	Broadbrook silt loam, 3-8% slopes	MEDIUM	Slow perc rate, depth to water table. †	Fill and/or curtain drain and drainage swale. Design absorption field to distribute effluent over a larger area.	Access to drainage outlet.	1; possibly 2 depending on perc rate measured on-site.
Cbb	Canton and Charlton fine sandy loams, 3-8% slopes	VERY HIGH	None.			
Cbc	Canton and Charlton fine sandy loams, 8-15% slopes	VERY HIGH	None.			
Cbd	Canton and Charlton fine sandy loams, 15-25% slopes	VERY HIGH	None.			
Ccb	Canton and Charlton very stony fine sandy loams, 3-8% slopes	VERY HIGH	None.			
Ccc	Canton and Charlton very stony fine sandy loams, 8-15% slopes	VERY HIGH	None.			
Cdc	Canton and Charlton extremely stony fine sandy loams, 3-15% slopes	VERY HIGH	None.			
Cdd	Canton and Charlton extremely stony fine sandy loams, 15-35% slopes	HIGH	Slope.	Design and installation to accommodate for slope.	Increase area of investigation to utilize the flattest slopes. Drainage needed. Access to drainage outlet unlikely.	1 for slopes > 25%
Ce	Carlisle muck	EXTREMELY LOW	Organic soils, depth to water table.		Drainage needed. Access to drainage outlet unlikely.	2,3,4

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