



REMA

REPORT DATE: December 10, 2022

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REMA ECOLOGICAL SERVICES, LLC

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ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT

PROJECT NAME & SITE LOCATION:

(+/- 1.097 acres) ("study area")
54 West Mountain Road (Parcel B)
West Simsbury, CT

REMA Job No.: 22-2556-SIM44

Field Investigation Date(s): December 10, 2022

Field Investigation Method(s):

- Spade and Auger
- Backhoe Test Pits
- Other: _____

REPORT PREPARED FOR:

Red Door Construction
18 Shingle Mill Road
West Simsbury, CT 06092

Field Conditions:

Weather: Sunny, 30s
Soil Moisture: Moderate
Snow/Frost Depth: n/a

Purpose of Investigation:

- Wetland Delineation/Flagging in Field
- Wetland Mapping on Sketch Plan or Topographic Plan
- High Intensity Soil Mapping by Soil Scientist
- Medium Intensity Soil Mapping from *The Soil Survey of Connecticut* Maps (USDA-NRCS)
- Other: _____

Base Map Source: CT Soil Survey web; USDA-NRCS (attached); Figure A (attached)

Wetland Boundary Marker Series: RES-A-1 to RES-A-10, and RES-1A-1 to RES-1A-9 (open lines)

General Site Description/Comments: The "study area", or "site", consists of an undeveloped parcel of land encompassing roughly 1.097 acres, with frontage on West Mountain Road, to the west, in West Simsbury, CT. In its present state the site is wooded, containing mostly mixed deciduous-evergreen uplands, with very little wetlands. Most of the site has gentle to moderate topography, except the far northeastern section, which has moderately-steep slopes, associated with a north-south trending sandy knoll. The on-site soils are derived from glaciofluvial deposits (i.e., stratified sand and gravel). However, the off-site wetlands to the east are also derived from organic deposits (i.e., peat and muck). The undisturbed upland-type soils were identified as the excessively drained Manchester (37) gravelly sandy loam, and the moderately well drained Ninigret (701) fine sandy loam soil series. The undisturbed wetland-type soils are the Raypol (12) silt loam (very fine sandy loam dominant) soil series, and the Catden and Freetown (18) soil series complex. The regulated wetland areas are classified as seasonally flooded, seasonally saturated, and saturated deciduous wooded swamps. Dominant or common woody species associated with the delineated wetlands includes red maple, American elm, green ash, red oak, eastern hemlock, white pine, spicebush, Japanese barberry, winterberry, highbush blueberry, and mountain laurel. Herbaceous species were limited to those observable in the off-season and included asters, goldenrods, sedges, stout wood reedgrass, skunk cabbage, cinnamon fern, swamp dewberry, and evergreen woodfern.

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: (+/- 1.097 acres) ("study area")
54 West Mountain Road (Parcel B), West Simsbury, CT

SOIL MAP UNITS**Upland Soils**

Manchester gravelly sandy loam (37). This series consists of very deep, excessively drained soils formed in a shallow, loamy sand mantle underlain by gravelly sand, water deposited glacial outwash materials. They are level to very steep soils on outwash plains, terraces, deltas, kames and eskers. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived mainly from Triassic sandstone, shale, conglomerate and basalt. Typically, these soils have a reddish brown gravelly sandy loam surface layer 6 inches thick. The subsoil layer from 6 to 16 inches is yellowish red gravelly sandy loam. The substratum from 16 to 60 inches is yellowish brown stratified sand and gravel.

Ninigret fine sandy loam (701). This series consists of very deep moderately well drained soils formed in a coarse-loamy mantle underlain by sandy water deposited glacial outwash materials. They are nearly level to gently sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainage ways. The soils formed in loamy over stratified sandy and gravelly outwash derived from a variety of acid rocks. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam with mottles below 16 inches. The substratum from 26 to 60 inches is mottled, pale brown, loose, stratified loamy sand.

Wetland Soils

Raypol silt loam (12). This series consists of deep, poorly drained soils formed in a coarse-loamy mantle underlain by sandy water deposited glacial outwash materials. They are nearly level and gently sloping soils on outwash plains and high stream terraces. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived mainly from acid rocks. Typically, these soils have very dark brown, silt loam Ap horizons, grayish brown and dark yellowish brown, mottled, silt loam and very fine sandy loam B2 horizons over light olive brown, mottled gravelly sand 11C horizons at a depth of 29 inches.

Catden & Freetown mucks (18). This soil series complex, formerly known as Carlisle, consists of very poorly drained soils formed in organic materials more than 51 inches thick. Carlisle soils are found within lake till plains, lake plains, outwash plains and glacial moraines. The size of these areas ranges from small, isolated depressions (e.g., kettle-holes) to wetlands several hundred acres in size. Slope gradients are less than 2 percent. One of the regions unique wetland communities, bogs, has formed on these materials. Typically, this soil has a black muck layer to a depth of 51 inches or more. The Freetown series is very similar to the Catden series, but these soils have a somewhat higher saturated hydraulic conductivity, and have a dysic reaction class, that is, they are more acidic. By definition to meet the dysic reaction class criterion, the pH must be less than 4.5 (in 0.01M CaCl₂) in all parts of the control section of the Histosol.

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: (+/- 1.097 acres) ("study area")
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SOIL MAP UNITS

See previous page

Any accompanying soil logs and soil maps, and the on-site soil investigation narrative are in accordance with the taxonomic classification of the National Cooperative Soil Survey of the USDA Natural Resource Conservation Service, and with the Connecticut Soil Legend (DEP Bulletin No.5, 1983), as amended by USDA-NRCS. Jurisdictional wetland boundaries were delineated pursuant to the Connecticut General Statutes (CGS Sections 22a-36 to 22a-45), as amended. The site investigation was conducted and/or reviewed by the undersigned Registered Soil Scientist(s) [registered with the Society of Soil Scientists of Southern New England (SSSSNE) in accordance with the standards of the Federal Office of Personnel Management].

Respectfully submitted,

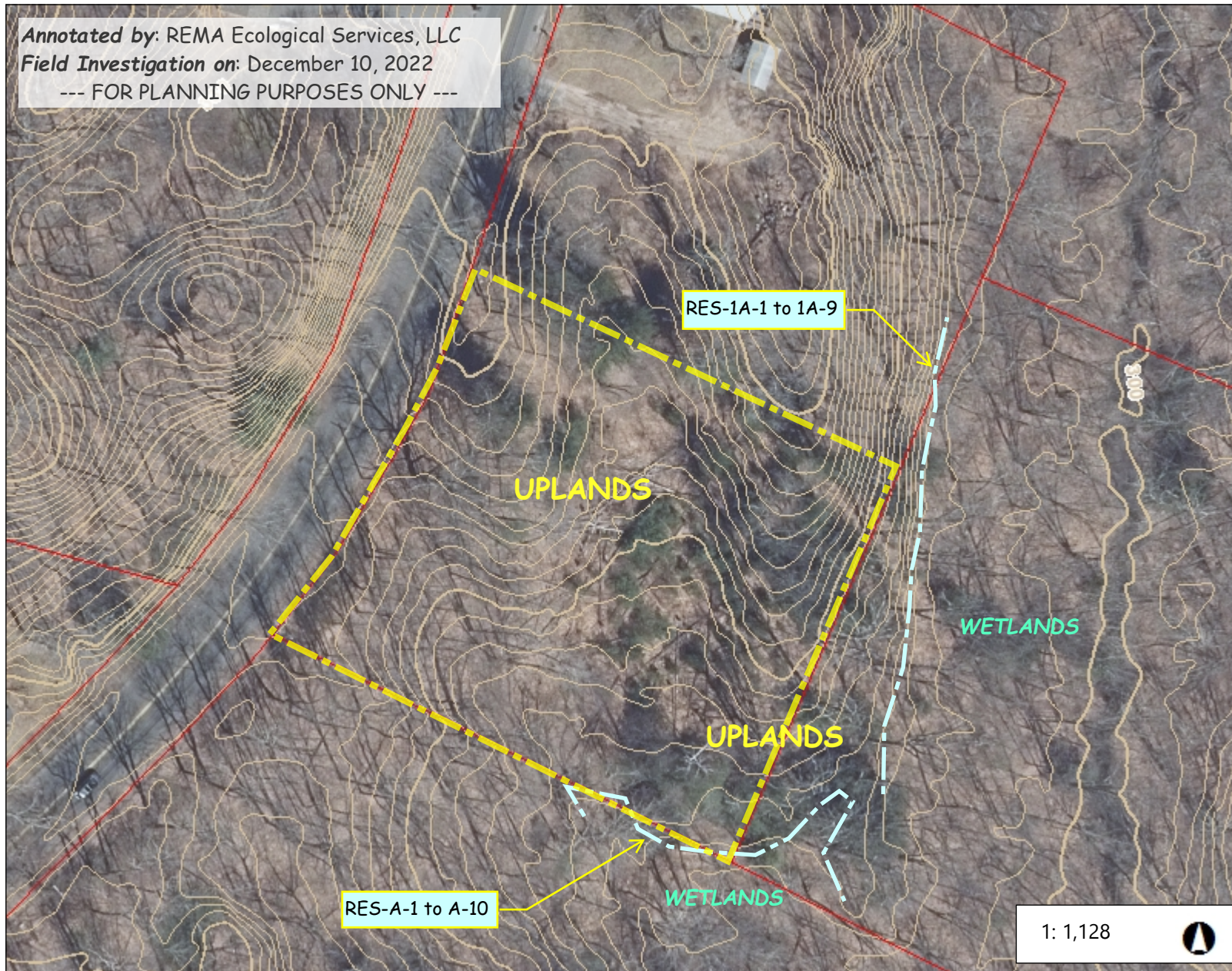
REMA ECOLOGICAL SERVICES, LLC



George T. Logan, MS, PWS, CSE
Registered Soil Scientist (SSSSNE)
Field Investigator/Senior Reviewer



Annotated by: REMA Ecological Services, LLC
Field Investigation on: December 10, 2022
--- FOR PLANNING PURPOSES ONLY ---



Legend

- Parcels for Protected Open Sp
- Light Gray Canvas Base

Notes

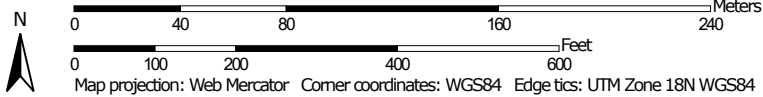
0.0 0 0.02 0.0 Miles

This map is intended for general planning, management, education, and research purposes only. Data shown on this map may not be complete or current. The data shown may have been compiled at different times and at different map scales, which may not match the scale at which the data is shown on this map.

Soil Map—State of Connecticut
(West Mountain Road, West Simsbury, CT)



Map Scale: 1:2,850 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

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.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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 21, Sep 7, 2021

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

Date(s) aerial images were photographed: Aug 24, 2019—Oct 24, 2019

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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
12	Raypol silt loam	3.5	8.4%
18	Catden and Freetown soils, 0 to 2 percent slopes	10.5	25.4%
29C	Agawam fine sandy loam, 8 to 15 percent slopes	1.8	4.4%
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	14.1	34.2%
38A	Hinckley loamy sand, 0 to 3 percent slopes	3.7	8.9%
38C	Hinckley loamy sand, 3 to 15 percent slopes	2.3	5.7%
103	Rippowam fine sandy loam	4.8	11.5%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	0.6	1.5%
W	Water	0.0	0.0%
Totals for Area of Interest		41.4	100.0%