ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT

PROJECT NAME & SITE LOCATION:
(+/- 7.03 acres)
80 Denison Road
Somers, CT

REMA No.: 20-2351-SOM10
Field Investigation Date(s): 12/31/2020
Field Investigation Method(s):
☒ Spade and Auger
☐ Backhoe Test Pits
☐ Other:

Field Conditions:
Weather: Cloudy, 40s
Soil Moisture: moderate-high
Snow Depth: N/A
Frost Depth: N/A

REPORT PREPARED FOR:
Mr. James Patsun
Patsun Construction
109 Franklin Woods Drive
Somers, CT 06071

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 Web Soil Survey; USDA-NRCS) (attached); Figure A (attached)


General Site Description/Comments: The "study area" is a roughly +/-7.03-acre residentially-zoned property on the southwest side of Denison Road, at its terminus, in Somers, CT. The site is undeveloped and characterized by second-growth deciduous forest, oak dominated, with some younger woods within its eastern section adjacent to the roadway. The study area’s soils are predominately undisturbed, with exception of those found in the vicinity of the roadway, and there is some evidence of deposition of large boulders dating back a few decades, mostly at the edge of the wetland. The study area’s soils are derived predominately from glacial till deposits (i.e., unstratified sand, silt, and rock). The upland soil types are the moderately well drained Sutton (51) fine sandy loam soil series. The wetland-type soils are the poorly and very poorly drained Ridgebury, Leicester, and Whitman (3) soil series complex. The regulated areas associated with the study area are characterized as seasonally saturated to seasonally flooded deciduous wooded swamp. At the far southern portion of the study area an intermittent watercourse was observed flowing westerly from an adjoining property to the east. In the northern portion of the site and old “watering” hole for livestock is observed at a seasonal seep up against steep slopes. Dominant and common overstory trees in these regulated areas include red maple, green ash, yellow birch, red oak, witch-hazel, hemlock, ironwood, and American elm. The shrub stratum includes multiflora rose, arrowwood, Japanese barberry, winterberry, highbush blueberry, and spicebush. Herbs include cinnamon, Christmas and evergreen ferns, sedges, asters, goldenrods, violets, white avens, garlic mustard, skunk cabbage, and others.
**SOIL MAP UNITS**

**Upland Soils**

**Sutton stony fine sandy loam (51).** This series consists of deep, moderately well-drained loamy soils formed in friable, glacial till on uplands. They are nearly level to steeply sloping soils on till plains, low ridges and hills, being typically located on lower slopes and in slight depressions. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 28 inches is yellowish brown, mottled fine sandy loam and sandy loam. The substratum from 28 to 60 inches or more is light olive brown fine sandy loam.

**Wetland Soils**

**Ridgebury fine sandy loam (3).** This soil series consists of deep, poorly and somewhat poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level to moderately steep soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black sandy loam surface layer 6 inches thick. The mottled subsoil from 6 to 16 inches is olive gray sandy loam. The mottled substratum from 16 to 60 inches is a light olive brown and olive, very firm and brittle gravelly sandy loam.

**Leicester fine sandy loam (3).** This series, which is in some Connecticut counties is found only in complex with the Ridgebury and Whitman series, consists of deep, poorly drained loamy soils formed in friable glacial till on uplands. They are nearly level to gently sloping soils in drainage ways and low lying positions on till covered uplands. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of black fine sandy loam 6 inches thick. The subsoil from 6 to 23 inches is grayish brown, mottled fine sandy loam. The substratum from 26 to 60 inches or more is dark yellowish brown, mottled, friable, gravelly fine sandy loam.

**Whitman fine sandy loam (3).** This series, which is in some Connecticut counties is only mapped in complex with the Ridgebury and Leicester series, consists of deep, very poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level and gently sloping soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black fine sandy loam surface layer 8 inches thick. The mottled subsoil from 8 to 15 inches is gray sandy loam. The mottled substratum from 15 to 60 inches is firm, olive gray to gray dense glacial till.
PROJECT NAME & SITE LOCATION: (+/- 7.03 acres)  
80 Denison Road, Somers, CT

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
Field Investigator/Senior Reviewer
FIGURE A:
WETLAND DELINEATIONS SKETCH MAP
80 Denison Road, Somers, CT
(as seen on a April 2016 aerial photo)

Legend
- 80 Denison Rd
- Approximate Study Area
- Wetland Delineation

Note: Study Area does not coincide with property boundaries
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 20, Jun 9, 2020

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

Date(s) aerial images were photographed: Sep 3, 2019—Oct 22, 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

<table>
<thead>
<tr>
<th>Map Unit Symbol</th>
<th>Map Unit Name</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony</td>
<td>6.8</td>
<td>9.5%</td>
</tr>
<tr>
<td>50B</td>
<td>Sutton fine sandy loam, 3 to 8 percent slopes</td>
<td>5.5</td>
<td>7.8%</td>
</tr>
<tr>
<td>51B</td>
<td>Sutton fine sandy loam, 0 to 8 percent slopes, very stony</td>
<td>14.2</td>
<td>19.9%</td>
</tr>
<tr>
<td>60B</td>
<td>Canton and Charlton fine sandy loams, 3 to 8 percent slopes</td>
<td>4.7</td>
<td>6.5%</td>
</tr>
<tr>
<td>61B</td>
<td>Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony</td>
<td>15.6</td>
<td>21.9%</td>
</tr>
<tr>
<td>62C</td>
<td>Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony</td>
<td>17.7</td>
<td>24.9%</td>
</tr>
<tr>
<td>73C</td>
<td>Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky</td>
<td>6.8</td>
<td>9.5%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td><strong>71.3</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>