JMM WETLAND CONSULTING SERVICES, LLC

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April 9, 2021

Mr. Frank Cirillo 363 South Main Street, Apt 2s Torrington, CT 06790

RE: Site Investigation

195 Bethany Road, Beacon Falls, Connecticut

JMM Job # 21-2803-BEC-1

Dear Mr. Cirillo:

Per your request, Mr. James McManus of JMM Wetland Consulting Services, LLC (JMM) conducted a site visit at the above-referenced site on April 6th, 2021. The purpose of the investigation was to verify the absence or the presence of regulated wetland areas in accordance with the State of Connecticut Statutes. The subject site is located north of Bethany Road (Rt. 42) and west of Bonna Street, in Beacon Falls, CT. Specifically, JMM reviewed only a portion of the +/- 34-acre site (i.e., JMM Study Area). The study area is comprised of an existing barn, maintained lawn, gravel/dirt driveway, scattered trees and shrubs, storage of construction equipment, bedrock outcrops, and forested upland areas (see Figure 1, attached).

The soil types were found to be a mainly undisturbed; however, disturbed soils were noted. The undisturbed soils are derived from glacial till (i.e., unstratified sand, silt, and rock) deposits and glacial outwash (i.e., stratified sand and gravel) deposits. The undisturbed upland soils are comprised of the excessively to somewhat excessively drained Hollis-Chatfield (75) soil series complex, the well to somewhat excessively drained Charlton-Chatfield (73) soil series complex and the moderately well drained Sutton (50) soil series and Ninigret (701) soil series.

Hollis fine sandy loam (75). This series consists of shallow, well drained and somewhat excessively drained; loamy soils formed in a thin mantle of friable glacial till over ledge. Depth to bedrock ranges from 10 to 20 inches. They occur on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of dark grayish brown fine sandy loam 3 inches thick. The subsoil from 3 to 14 inches is yellowish brown fine sandy loam. Hard and unweathered bedrock lies under the subsoil.

Charlton very stony fine sandy loam (73). This series consists of very deep, well drained coarse-loamy soils formed in friable, glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. In tilled areas, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam and sandy loam. The substratum from 26 to 60 inches or more is grayish brown gravelly fine sandy loam.

Chatfield fine sandy loam (75/73). This series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. Permeability is moderate or moderately rapid.

Sutton stony fine sandy loam (50). 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.

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.

The disturbed upland soils were mapped as the Udorthents (308) mapping unit.

Udorthents (308). This soil mapping unit consists of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. The areas either have had two feet or

more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. *Udorthents* or Made Land soils can be found on any soil parent material but are typically fluvial on glacial till plains and outwash plains and stream terraces.

JMM carefully reviewed the study area with the use of a hand-held soil auger and spade, to a minimum depth of 24-inches and it was determined that no poorly or very poorly drained soils were identified. However, if it worth noting that within the far northern extent of the study area a narrow swale with flow was observed. After a careful review it was determined that this narrow swale is non-regulated as there is no wetland soils, nor hydrophytic vegetation observed within or adjacent to the swale. It is clear from the review that this area developed most likely during the multiple decades of agricultural use and carries periodic flow from the surrounding sloping landscape to the west.

Please call us if you have any questions on the above or need further assistance.

Respectfully submitted,

Janes M. Mil

JMM WETLAND CONSULTING SERVICES, LLC

James M. McManus, MS, CPSS

Certified Professional Soil Scientist (No. 15226)

Attachments: Figure 1, NRCS Web Soil Survey

Town of Beacon Falls

Geographic Information System (GIS)





MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Beacon Falls and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 400 feet







MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads Stony Spot Spoil Area **US Routes** Wet Spot Other Rails Water Features **Iransportation** Background Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Miscellaneous Water Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Special Point Features Gravelly Spot Borrow Pit Area of Interest (AOI) Lava Flow Clay Spot **Gravel Pit** Blowout Landfill 0

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.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of 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 distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts 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: Oct 22, 2018-Nov 1,

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.

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

Rock Outcrop Saline Spot Sandy Spot

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|-----------------------------|--|--------------|----------------|
| 38C | Hinckley loamy sand, 3 to 15 percent slopes | 2.0 | 1.5% |
| 38E | Hinckley loamy sand, 15 to 45 percent slopes | 2.2 | 1.7% |
| 73C | Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky | 21.6 | 16.7% |
| 73E | Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky | 25.4 | 19.7% |
| 75E | Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes | 16.4 | 12.7% |
| 86C | Paxton and Montauk fine sandy loams, 3 to 15 percent slopes, extremely stony | 0.0 | 0.0% |
| 86D | Paxton and Montauk fine sandy loams, 15 to 35 percent slopes, extremely stony | 5.7 | 4.4% |
| 103 | Rippowam fine sandy loam | 5.2 | 4.0% |
| 238C | Hinckley-Urban land complex, 3 to 15 percent slopes | 28.1 | 21.8% |
| 308 | Udorthents, smoothed | 17.0 | 13.2% |
| 701A | Ninigret fine sandy loam, 0 to 3 percent slopes | 4.6 | 3.5% |
| W | Water | 0.9 | 0.7% |
| Totals for Area of Interest | | 129.0 | 100.0% |