



Ian Cole, LLC

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September 12, 2024

Mr. John Faulise, Jr., L.S.
Boundaries LLC
PO Box 184
179 Patchaug River Road
Griswold, CT 06351

**RE: WETLAND AND WATERCOURSE DELINEATION REPORT
47 SHARP HILL ROAD
MAP 23, LOT 63
19.13 +/- ACRES
MONTVILLE, CONNECTICUT**

Dear Mr. Faulise:

At Boundaries LLC's request, I completed a field delineation of the Connecticut jurisdictional freshwater inland wetland and watercourses located on the 19.13-acre residential property located on Sharp Hill Road with additional access from cul-de-sac on Carol Drive in Montville, Connecticut.

DELINEATION METHODOLOGY

The wetland delineation was completed in accordance with the standards of the Natural Resources Conservation Services (NRCS) National Cooperative Soil Survey and the definitions of inland wetlands and watercourses as found in the Connecticut General Statutes, Chapter 440, Sections 22a-36 through 22a-45 as amended. Wetlands, as defined by the Statute, are those soil types designated as poorly drained, very poorly drained, floodplain or alluvial in accordance with the NRCS National Cooperative Soil Survey. Such areas may also include disturbed areas that have been filled, graded, or excavated and which possess an aquic (saturated) soil moisture regime.

Watercourses means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal, or intermittent, public, or private, which are contained within, flow through or border upon the Town of Montville or any portion thereof not regulated pursuant to sections 22a-28 through 22a-35,

inclusive, of the Connecticut General Statutes. Intermittent watercourses are defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.

WETLAND SURVEY RESULTS

The wetland survey was completed on September 10, 2024. The on-site wetland delineation examined the upper 20" of the site's soil profile for the presence of hydric soil conditions and delineated any wetland and/or watercourse boundaries located on the parcel. Two areas meeting the criteria above were marked in the field with sequentially numbered wetland flagging labeled 1-1 through 1-2 and 2-1 to 2-4. The attached wetland sketch illustrates the approximate wetland locations and corresponding flag series. Please note this sketch is for high level planning and navigation purposes only and the wetland boundaries depicted are subject to refinement once traditionally located and mapped.

The subject property is currently vacant, undeveloped and vegetated with a mixed hardwood forest. The front half of the property was used extensively as pasture and the forest community is dominated by an early successional forest with a high concentration of evergreens and cedar trees. The forest community in the rear northern half of the site is mature woods with a relatively open forest understory in comparison to the front half of the site. At the peripheral of the property at the northern edge and near southeast corner are two small, flagged wetland areas. Both flagged wetlands are associated with a hillside seepage point that spawns the source / headwaters for each respective intermittent watercourse. Wetland #1 designated by wetland flags 1-1 to 1-9 was flowing at the time of my field visit and has a more persistent flow and is a larger wetland system in comparison to the relatively small, more ephemeral nature of Wetland #2 which is marked in the field by flags 2-1 to 2-4. Both of these wetlands/watercourse features drain to the east away from the subject property.

The overall wetland vegetation community of the flagged wetlands includes the following vegetative species but is not limited to:

Trees: Red Maple, yellow birch, American beech.

Shrubs: Japanese barberry, spicebush, multiflora rose, winterberry, high bush blueberry

Herbaceous: skunk cabbage, jewelweed, false hellebore, sensitive fern, marsh fern, cinnamon fern.

The above is not an exhaustive list, but a sample of commonly encountered vegetation that characterizes the on-site wetland community. Representative photos are attached. Below.

SOIL SURVEY

The soils identified on-site are a refinement of the Natural Resources Conservation Service (NRCS) Websoil Soil Survey. The property generally drains from west to east with moderate slopes ranging from 3% to 15%.

Wetland Soils

The wetlands soils are classified as (3) Ridgebury, Leicester, and Whitman fine sandy loams. The poorly drained soils along the wetland boundary belong to the Ridgebury and Leicester soil series. Ridgebury and Leicester soils are found within drainageways and depressions on glacial till landscapes. Ridgebury and Leicester soils have a seasonal high-water table at a depth of about 6 inches. Very poorly drained Whitman soils are found in the lowest lying areas within the interior of the wetlands where the water table is at the surface thought most of the growing season.

A typical soil profile along the wetland boundary consists of approximately 3"-0" of intermediately decomposed organic material (Oi), followed by 0"-6" of a thick dark topsoil horizon (A), underlain by 6-18" of a wet weakly developed grayish subsoil horizon (Bg) with common redoximorphic features (Common medium distinct strong brown mottles, masses) ranging from fine sandy loam to very fine sandy loam. This subsoil is underlain by a saturated sandy loam to fine sandy loam gray substratum (2Cg).

Upland Soils

The upland soils were not examined in great detail except as necessary to delineate the wetland boundary. The upland soils on the bulk of the property are mapped as Woodbridge soils. These moderately well-drained fine sandy loam soils are typically compact in place from dense glacial till deposits and as a result are often associated with a perched seasonal high watertable and slow permeability rates.

If you have any questions or comments, please do not hesitate to contact me at itcole@gmail.com or (860) 514-5642.

Sincerely,



Ian T. Cole
Professional Registered Soil Scientist
Professional Wetland Scientist #2006

Attachments:

GIS LOCUS MAP
WETLAND SKETCH
NRCS SOIL SURVEY
SITE PHOTOS



CT-163

Maple Ave

Sharp Hill Rd

Carol Dr

Elton Ct

30

4

5

10

23

11

19

3

3-1

12

14

63-5

63-6

63-7

63-8

63-4

63-3

63-2

63-1

51

63

53

50-B

54

50-A

55

50

56

19

49

48

57

47

58

46

59

45

60

29

42

43

44

38-C1

38-1

38-2

37

38-3

38-10

26

27

28

30-1

39

38-C

38-4

38-5

38-9

30-3

30

39-A

38-6

31

30-2

38-7

27

36-A

36

35

33

34

65

66

67

68

69

1-A

1-B

2

2-A

1

12

14

11

10

9

8

7

6

5

4

3

2

1

WETLAND SKETCH

47 SHARP HILL ROAD

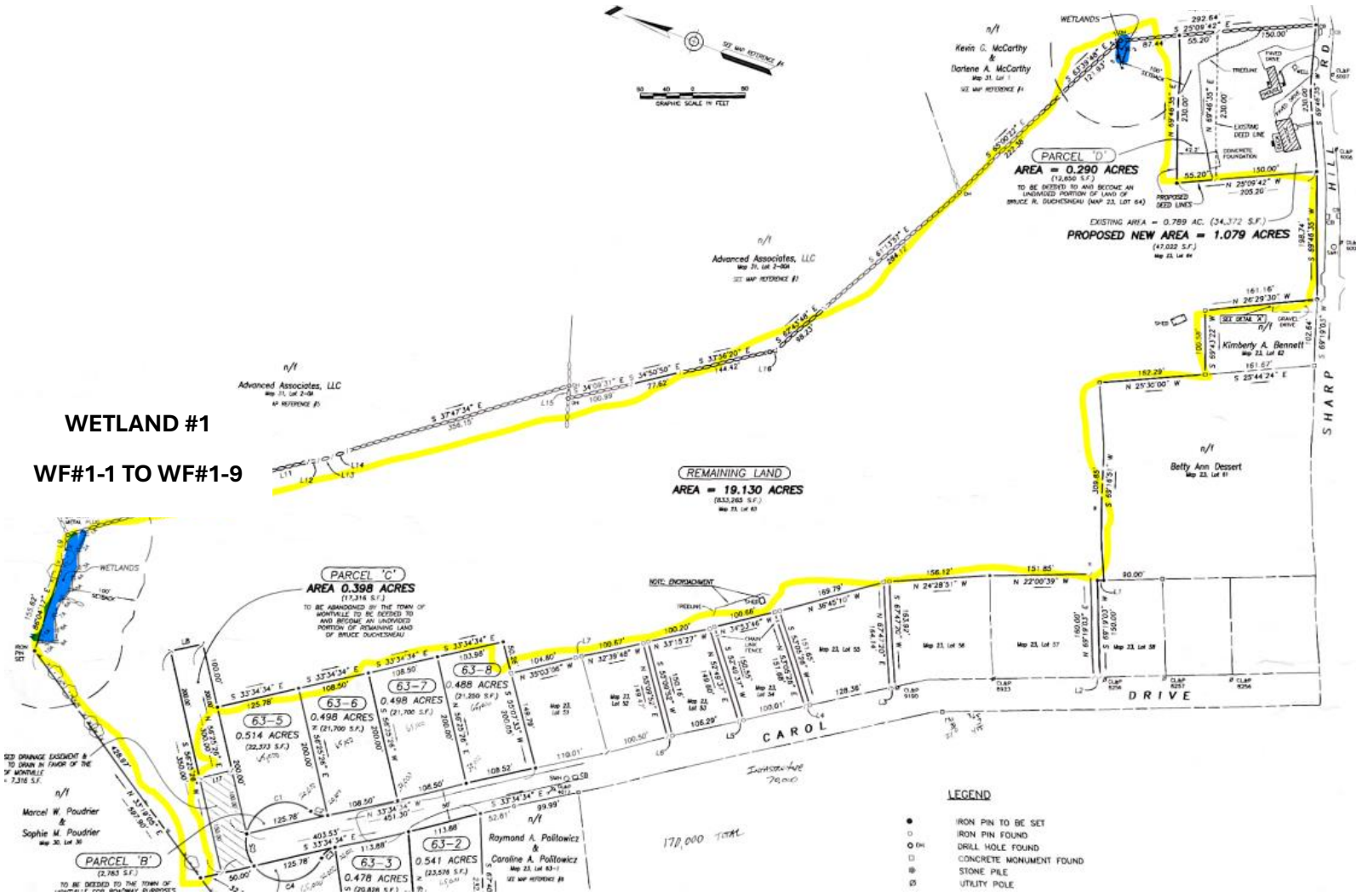
MONTVILLE

WETLAND #2

WF#2-1 TO WF#2-4

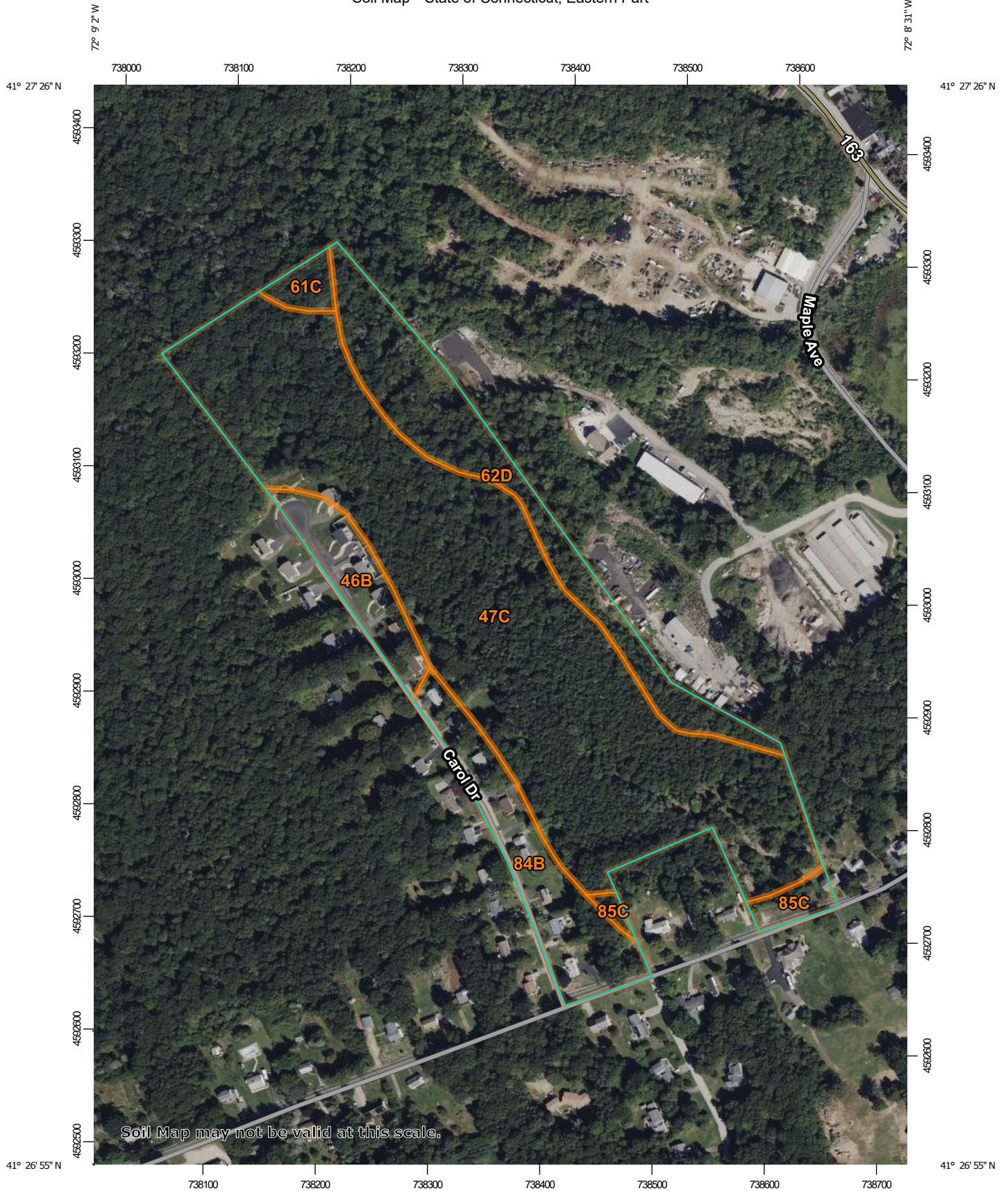
WETLAND #1

WF#1-1 TO WF#1-9

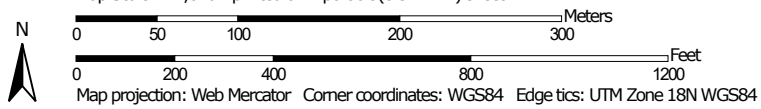


Disclaimer: This map is for planning purposes only. Verification of its accuracy, currency and completeness is the responsibility of the reader's own independent research. All inland wetland and watercourse boundaries are subject to refinement once traditionally field located by a Licensed Land Surveyor and formally adopted by the Town. Ian Cole LLC shall not be held liable for any loss, damages or claims made in relation to anyone referring to this map.

Soil Map—State of Connecticut, Eastern Part




Map Scale: 1:4,670 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, Eastern Part
 Survey Area Data: Version 1, Sep 15, 2023

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

Date(s) aerial images were photographed: Jun 14, 2022—Oct 6, 2022

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
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	2.0	5.8%
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	22.4	64.7%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	0.6	1.6%
62D	Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	5.2	15.1%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	3.7	10.7%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	0.7	2.1%
Totals for Area of Interest		34.7	100.0%

WETLAND SURVEY PHOTOS

SEPTEMBER 10, 2024

**SHARP HILL ROAD
&
CAROL DRIVE**

MONTVILLE

CONNECTICUT



Photo 1: Example of Wetland #1 – Hillside Spring



Photo 2: Example of conditions at Wetland #2, Spring that discharges from base of rock pile forming source of intermittent watercourse that flows east offsite.



Photo 3: Example of typical conditions of the upland forest in the south half of the property, note dense young growth of trees.



Photo 4: Example of the mature park like forest that covers the northern half of the site.



Photo 5: General conditions at end of Carol Drive and example of the man-made stormwater drainage features that have been somewhat recently installed.