



Wetland Delineation • Wetland Assessment & Permitting • Wildlife Surveys • Fisheries & Aquatics • GIS Mapping • Forestry

May 11, 2023

JR Russo & Associates, LLC
Attention: Jay Ussery
1 Shoham Road
East Windsor, Connecticut 06088

RE: Wetland Delineation, Cusson Automotive Rear, South Windsor

Mr. Ussery,

At your request, I conducted an inspection on the above-referenced property on April 21, 2023. The purpose of the inspection was to delineate Connecticut jurisdictional wetlands and watercourses. The inspection was conducted by a soil scientist according to the requirements of the Connecticut Inland Wetlands and Watercourses Act (P.A. 155).

Inland wetlands include soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey as may be amended from time to time, of the National Resources Conservation Service (NRCS). Watercourses means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent. Intermittent watercourses shall be delineated by a 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 a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.*

Wetlands were delineated by examining the upper 20" of the soil profile with a spade and auger. Those areas meeting the requirements noted above were marked with pink wire stake flags and numbered with the following sequence: WF 1 – 13; 14 – 42; 43 – 54 CLOSE (refer to *Wetland Delineation Sketch Map*), attached.

WF 1 – 13 and 14 – 42 delineate a forested wetland located in a valley along the rear (west and southwest) property boundary (see Photo 1). An intermittent watercourse flows within the interior but appears to be located off-site. Dominant species include red maple, spicebush, and skunk cabbage. WF 43 – 54 delineate a small, constructed stormwater wetland (see Photo 2). The substrate was found to be comprised of stone (rip rap) and soil. A catch basin drains this feature (see Photo 3), although the destination of outletting flows was not observed.

Digitally available soil survey information was obtained from the Natural Resources Conservation Service (refer to NRCS Soil Map, attached). Note that the NRCS digital soil mapping is not precise to the site scale. Rather, the soil types are representative of the soil catena that would be present in the region in which the site occurs and is therefore a useful reference for onsite wetland soil identification. The following is a description of wetland and upland soil types observed on the site.

Wetland Soil Types

Wetland soils are comprised of Raypol silt loam. The Raypol series consists of very deep, poorly drained soils formed in loamy over sandy and gravelly glacial outwash. They are nearly level to gently sloping soils in shallow drainageways and low-lying positions on terraces and plains. The soils have a water table at or near the surface much of the year.

Upland Soil Types

The non-wetland soils were not examined in detail, except as was necessary to identify the wetland boundary. They generally consist of Windsor loamy sand and Ninigret fine sandy loam. The Windsor series consists of very deep, excessively drained soils formed in sandy glacial outwash. They are nearly level to very steep soils on glaciofluvial landforms.

The Ninigret series consists of very deep, moderately well drained soils formed in loamy over sandy and gravelly glacial outwash. They are nearly level to strongly sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainageways. The soil has a seasonal high water table.

If you have any questions regarding these findings, please feel free to contact me.

Respectfully submitted,



Matthew Davison

Professional Soil Scientist

Professional Wetland Scientist

Certified Professional in Erosion and Sediment Control

CT Certified Forester

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Attachments: (1) Wetland Photographs
(2) NRCS Soil Survey Mapping
(3) Wetland Delineation Sketch Map

WETLAND PHOTOGRAPHS



Photo 1: View of forested wetland located along the west property boundary

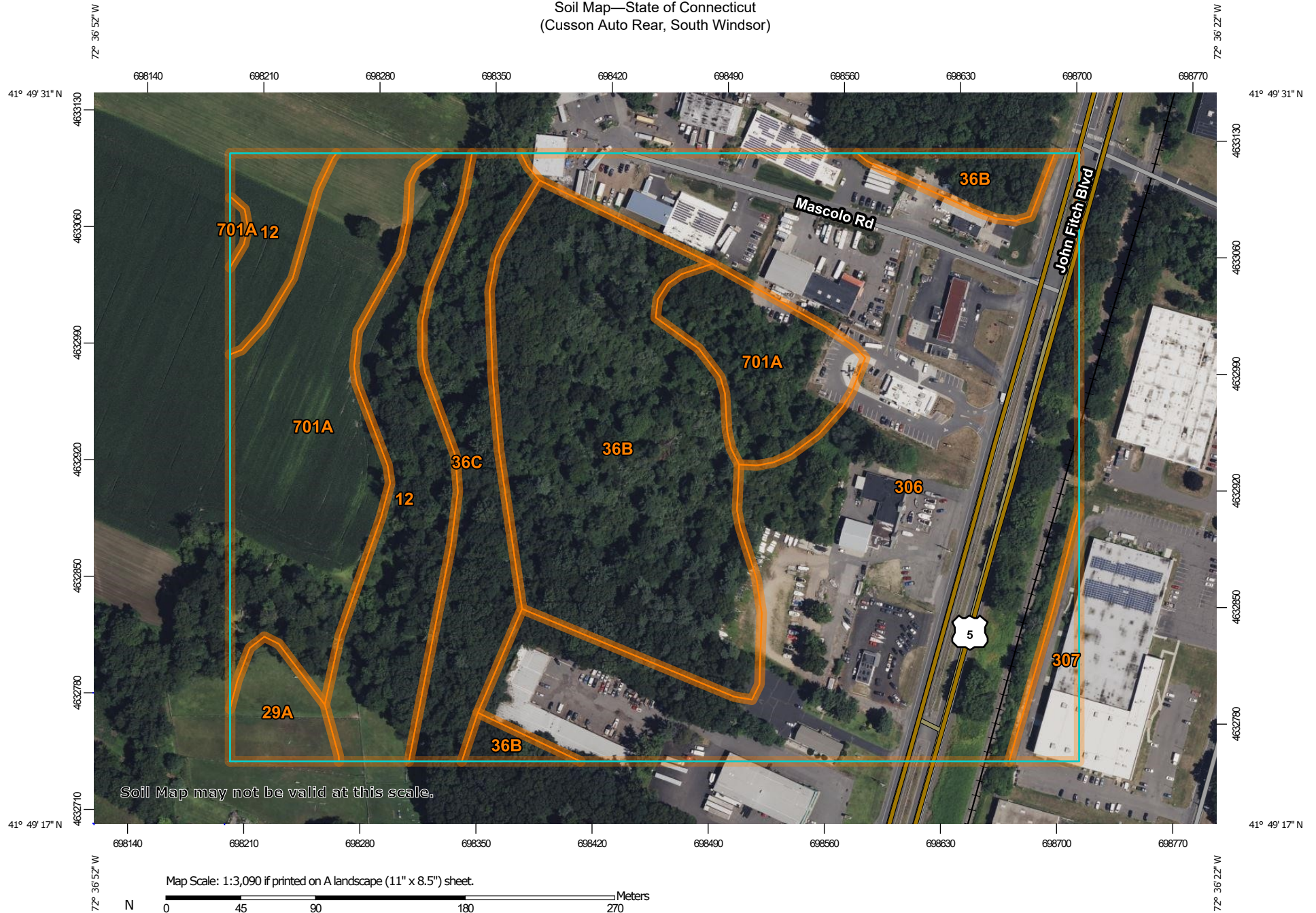


Photo 2: View of constructed stormwater wetland

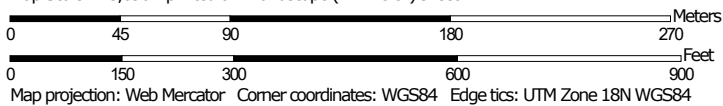


Photo 3: View of catch basin in the bottom of stormwater wetland

Soil Map—State of Connecticut
(Cusson Auto Rear, South Windsor)



Map Scale: 1:3,090 if printed on A landscape (11" x 8.5") sheet.



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/11/2023
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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 22, Sep 12, 2022

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
12	Raypol silt loam	5.0	10.7%
29A	Agawam fine sandy loam, 0 to 3 percent slopes	0.9	1.9%
36B	Windsor loamy sand, 3 to 8 percent slopes	9.6	20.8%
36C	Windsor loamy sand, 8 to 15 percent slopes	3.4	7.3%
306	Udorthents-Urban land complex	19.1	41.2%
307	Urban land	0.8	1.7%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	7.6	16.5%
Totals for Area of Interest		46.4	100.0%

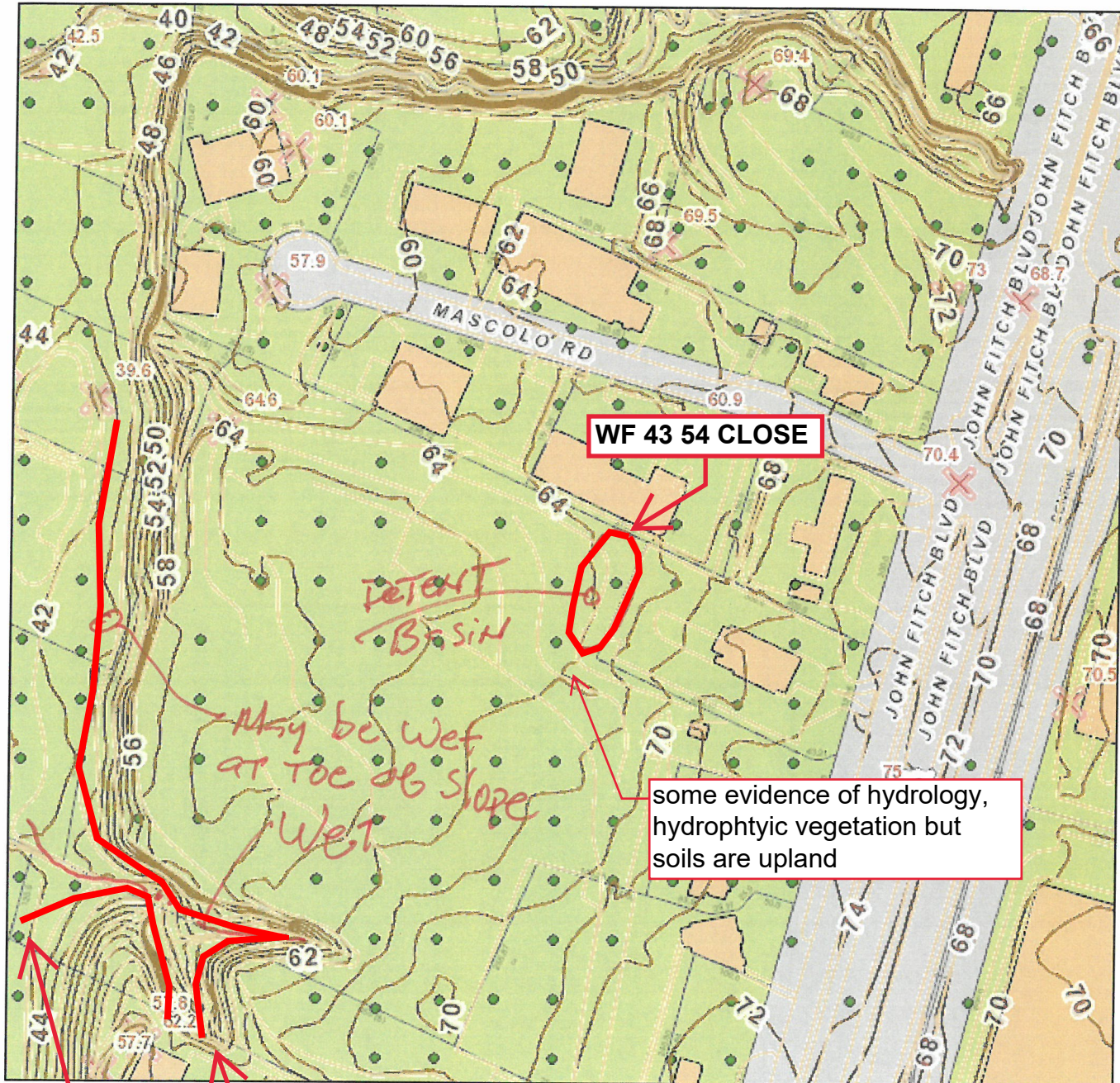
WETLAND DELINEATION SKETCH MAP

Town of South Windsor

Geographic Information System (GIS)



Date Printed: 4/11/2023



WF 1 - 13

WF 14 - 42

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 South Windsor and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 200 feet

0 200 Feet

