



Ian Cole, LLC

Professional Registered Soil Scientist / Professional Wetland Scientist

PO BOX 619

Middletown, CT 06457

Itcole@gmail.com

860-514-5642

September 30, 2023

Mr. Straat Tenney
Altatwo Realty Company, LLC
P.O. Box 419
Ridgefield, CT 06877

RE: WETLAND AND WATERCOURSE DELINEATION REPORT
250 Rye Street, MBL: 122/18/1, South Windsor, Connecticut.

Dear Mr. Tenney:

I completed a field delineation of the jurisdictional inland wetlands and watercourses on the above referenced 16-acre commercial / industrial parcel with frontage on Rye Street.

WETLAND AND WATERCOURSE DELINEATION METHODOLOGY

A Connecticut soil-based 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 South Windsor 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.

SURVEY RESULTS

The wetland field survey was completed over several on-site inspections through the month of April 2022. The field survey examined the upper 20" of the soil profile for the presence of hydric soil conditions and where present to identify and delineate all wetland and/or watercourse boundaries located on the property. Those areas meeting the wetland criteria noted above were marked in the field with sequentially numbered pink and blue flagging 1 through 29 and 1A through 49A. I have reviewed the current 2023 Design Professionals Inc., General Location Survey / Wetland Re-Development Map and I certify the wetland boundary as depicted accurately represents the wetland limits marked in the field.

The parcel is undeveloped and wooded. Two jurisdictional wetland areas were located on the property. Along the midpoint of the southern property boundary is a low-lying area of poorly drained soils. This isolated forested wetland is seasonally flooded and consists of a series of interconnected shallow pools. The second flagged resource is a well-defined drainageway that flows north along the western property boundary.

The wetland and watercourses boundaries on the parcel were previously flagged by Highland Soil, LLC in 2012 and are shown on the 2014 Design Professionals, Inc. site plans. I relocated some of the remnant wetland flagging from the 2012 wetland delineation. However, based on my reading of the landscape, drainage, vegetative community, and underlying soil morphology I believe the very flat and seasonally flooded areas along the ponded margins adjacent to the 2012 flagged wetland boundary should be included as part of the regulated wetland boundary. It is my professional opinion that the wetland boundary is more extensive than what was flagged in 2012 by Highland Soil, LLC.

While on-site I witnessed several wetland-eco indicators beyond the limits previously flagged by Highland Soil, LLC. Level glaciolacustrine landscapes, particularly those with very fine textured surface layers such as those soil conditions present at 250 Rye Street, can be challenging soils to delineate and at certain times of the year due to ponded surface water extending beyond the delineated wetland limits early in the growing season. This is particularly so in the early spring and later season when temporary standing water and ponding on moderately to some-what poorly drained soils is not too uncommon. Also, these glacial lakebed soils often have very dark surface layers which mask visual soil indicators used to identify poorly drained soil conditions in the field.

The forest history and surrounding developments adjacent to the site also provides anecdotal evidence with respect to the marginal areas that have standing surface water. This site has been forested for a very long time and is shown as a closed canopy forested on the CTDEEP 1934 Air Photos, meaning these flat vacant woodlands have existed in a natural state for a minimum of 100 + years. When looking at the landscape from a forest forensic standpoint, the observer can key into the sizeable mature trees that dominate the closed canopy climax forest. And where there are massive trees, there are also impressive tree blowdowns and tip-overs. These blowdowns can create a significant divot in the ground, sometimes several feet deep. These cavity's often fill with water in

the early growing season. Sometimes if the tree falls are deep enough, they can change the hydrology and soil conditions on a micro scale creating pocket wetlands, particularly in very flat landscapes like this site. The attached photos demonstrate the pillow-and-mount micro-topography that defines much of the micro moon-like forest floor landscape surrounding the wetlands. These cumulative cradles of relic tree-throws filled with water are partly why in my opinion the wetland boundary is more extensive than what was flagged in 2012.

Overall, the site drains to a ditch along the railroad tracks where flow concentrates into a deeply incised channel and intermittent watercourse that flows north under Rye Street. This unnamed watercourse boundary is very well-defined and closely follows the bottom of the steep embankment. In general, I am in agreement with the previous wetland delineation along the watercourse and the western side of the property.

Because of the discrepancy between 2012 Highlands delineation and the 2022 delineation, the wetland limits and soil conditions were verified and reviewed in the field by Soil Scientist, Mr. James McManus of JMM Wetland Consulting Services, LLC on June 8, 2022. In consultation with JMM, a consensus was established of where the jurisdictional wetland boundary is delineated in the field. Following this field verification of the wetland boundary I also completed a field inspection of the site with Jeff Folger from the Town of South Windsor to discuss the final wetland delineation results as shown on the subject DPI site plans and discuss the difference between the 2022 and 2012 wetland surveys.

SOIL SURVEY

The soils identified on-site are a refinement of the Natural Resources Conservation Service (NRCS) Websoil Soil Survey.

Wetland Soils

The wetlands soils are classified as Walpole fine sandy loams. These nearly level very poorly drained soils occur in depressions and the low-lying positions on flat nearly level glacial outwash landscapes. Walpole soils can have water at or near the ground surface throughout most of the year.

Upland Soils

The lower-positioned land along relic stream terrace and at the margins of the wetland boundary are mapped and classified as excessively well-drained Windsor loamy sands and gravels.

The upland soils over the bulk of the property are mapped and classified as Ninigret very fine sandy loams. These nearly level (0-3% slopes) soils are typically associated with a high seasonal water table. Minor inclusions of man-made Udorthent soils can be found along the peripheral of the property where disturbances from adjacent developments have encroached.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Ian Cole", with a stylized flourish at the end.

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

WETLAND DELINEATION

SITE PHOTOS

250 RYE STREET

SOUTH WINDSOR

ALTA REALTY COMPANY, LLC

APRIL 2022



Photo 1: Forested Wetland (Area Not identified in 2012)



Photo 2: Example of Recent Large Tree Throw Exposing High Seasonal Water Table Just Below the Ground Surface



Photo 3: Example of the Many Relic Tree-Throw That Define the Forest Floor and Cumulatively Contribute to Wetland Development.



Photo 4: Example of Intermittent Watercourse along Western Property Boundary



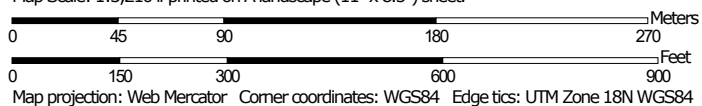
Photo 5: Example of Past Flagging Evidence: Nubs Both Above and Below the Center
New Pink and Blue Wetland Delineation Flagging Placed in the Field in 2022

Soil Map—State of Connecticut
(250 Rye Street)



Soil Map may not be valid at this scale.

Map Scale: 1:3,210 if printed on A landscape (11" x 8.5") sheet.



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

4/20/2022
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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 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
13	Walpole sandy loam, 0 to 3 percent slopes	0.5	1.9%
36A	Windsor loamy sand, 0 to 3 percent slopes	4.4	15.8%
304	Udorthents, loamy, very steep	1.5	5.3%
307	Urban land	4.3	15.5%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	17.0	61.5%
Totals for Area of Interest		27.7	100.0%