WETLAND DELINEATION REPORT

Project Name: Anthony Properties - West Street & Curtis Street
Site Location: 1303 West Street, Southington, CT

Prepared For: Anthony Properties
Contact: Brian Shiu, 12770 Coit Road, Suite 970, Dallas, TX 75251

F&O Project No: 20210063.A10

Project Description: Multi-Unit Residential Development

Date(s) of Investigation: June 21, 2021
Weather: 70°F, Sunny **Rainfall (last 24 hours):** 00.00 inches

METHOD OF WETLAND/WATERCOURSE DELINEATION

Delineation: ☒ Connecticut Inland Wetlands & Watercourses (CGS 22a-36 to 22a-45)
☒ U.S. Army Corps of Engineers
☐ Tidal Wetlands

Flag Number Sequence: 21172-A100-A262, B200-B240, C300-C329, D400-D416

Field Plotted: ☐ Site sketch ☐ Aerial photograph ☒ GPS (sub-meter) located
☐ Site mapping: Title of Site Map
Sheet No.: Scale: Contours: n/a ft.

METHOD OF UPLAND SOIL DELINEATION

☒ Field Delineated ☐ Field confirmed NRCS soil mapping

FIELD INVESTIGATION METHOD

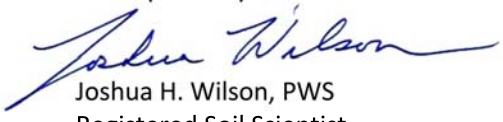
☒ Spade & Auger ☐ Deep test pit (backhoe) ☐ Other:_____

SOIL CONDITIONS

☐ Dry ☒ Moist ☐ Wet ☐ Frozen (_____ in.) ☐ Snow cover (_____ in.)

The wetland and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance. Classification and mapping of soils on site were conducted in a manner consistent with the U.S. Department of Agriculture Soil Survey Manual (Soil Survey Staff, 1992). This delineation does not constitute an official wetland boundary until such time as it is accepted and approved by local, state or federal regulatory agencies.

As Prepared By:



Joshua H. Wilson, PWS
Registered Soil Scientist

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METHODOLOGY

Inland wetlands and watercourses are regulated in the State of Connecticut by Connecticut General Statutes, Inland Wetlands and Watercourses Act, Chapter 440, sections 22a-36 to 22a-45. **Wetlands** are defined as "soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey." **Watercourses** are defined as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private." **Intermittent watercourses** are identified 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."

Federal jurisdictional wetland boundaries are defined by 33 CFR 328-329. **Federal jurisdictional wetlands** are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Federal wetlands were delineated in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0, January 2012). Activities occurring within Inland Waters and Wetlands within the State of Connecticut are subject to approval by the US Army Corps of Engineers, New England District.

RESULTS

SUMMARY OF SOILS

Wetland Soils

Aquents: Poorly to very poorly drained soils formed in human transported material or on excavated (cut) landscapes. No development to incipient B-horizon typical. Evidence of aquic moisture regime found where saturation results in redoximorphic features in upper 20 inches. Unmapped Aquents were observed at the site in areas of previous disturbance, primarily in the south-central portion of the site.

Aquepts: Poorly to very poorly drained soils with an aquic moisture regime and showing some soil development in the B-horizon. Soils mapped and observed as Aquepts at the site belong to the Wilbraham and Saco series.

Aquolls: Poorly to very poorly drained soils with an aquic moisture regime formed in drainageways of subglacial till-covered plains and hills. Soils mapped and observed as Aquolls at the site belong to the Menlo series.

Upland Soils

Udorthents: Well drained to excessively drained soils that have been disturbed by cutting or filling, and areas that are typically covered by buildings and pavement. These soils were observed in the portions of the site that had historically ben develop, such as immediately along West and Curtis Streets and along the former canal.

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Cheshire: Well drained loamy soils formed in supraglacial till on uplands. They are nearly level to very steep soils on till plains and hills. These soils make up the majority of the uplands on site.

Ludlow: Moderately well drained soils formed in loamy lodgment till. They are nearly level to strongly sloping soils on till plains, hills, and drumlins. These soils were observed largely in the transition areas between uplands and wetlands where slopes were generally gradual.

SUMMARY OF WATERCOURSE AND HYDROLOGY

The principal watercourse at the site is the former New Haven and Northampton Canal. The canal is located on the eastern portion of the site and generally flows to the northeast. East of the canal is a perennial stream, which also flows to the northeast, and is a tributary to the Quinnipiac River. Both the canal and the unnamed perennial stream flow from the headwaters of a wetland complex near Curtis Street.

There are three additional watercourse that flow easterly across the site and are tributaries to the canal:

- A small, intermittent stream flows from a wetland area in the southern portion of the site.
- A second, small intermittent stream flows from the wetland area located in the central portion of the site.
- A second, unnamed perennial stream located in the northern portion of the site flows from a wetland area located off site.

The hydrology for the wetlands and watercourses on the site a result of shallow, perched groundwater. The site is largely underlain by dense glacial till. As a result, a combination of local surface water and groundwater is expressed in level areas of the site.

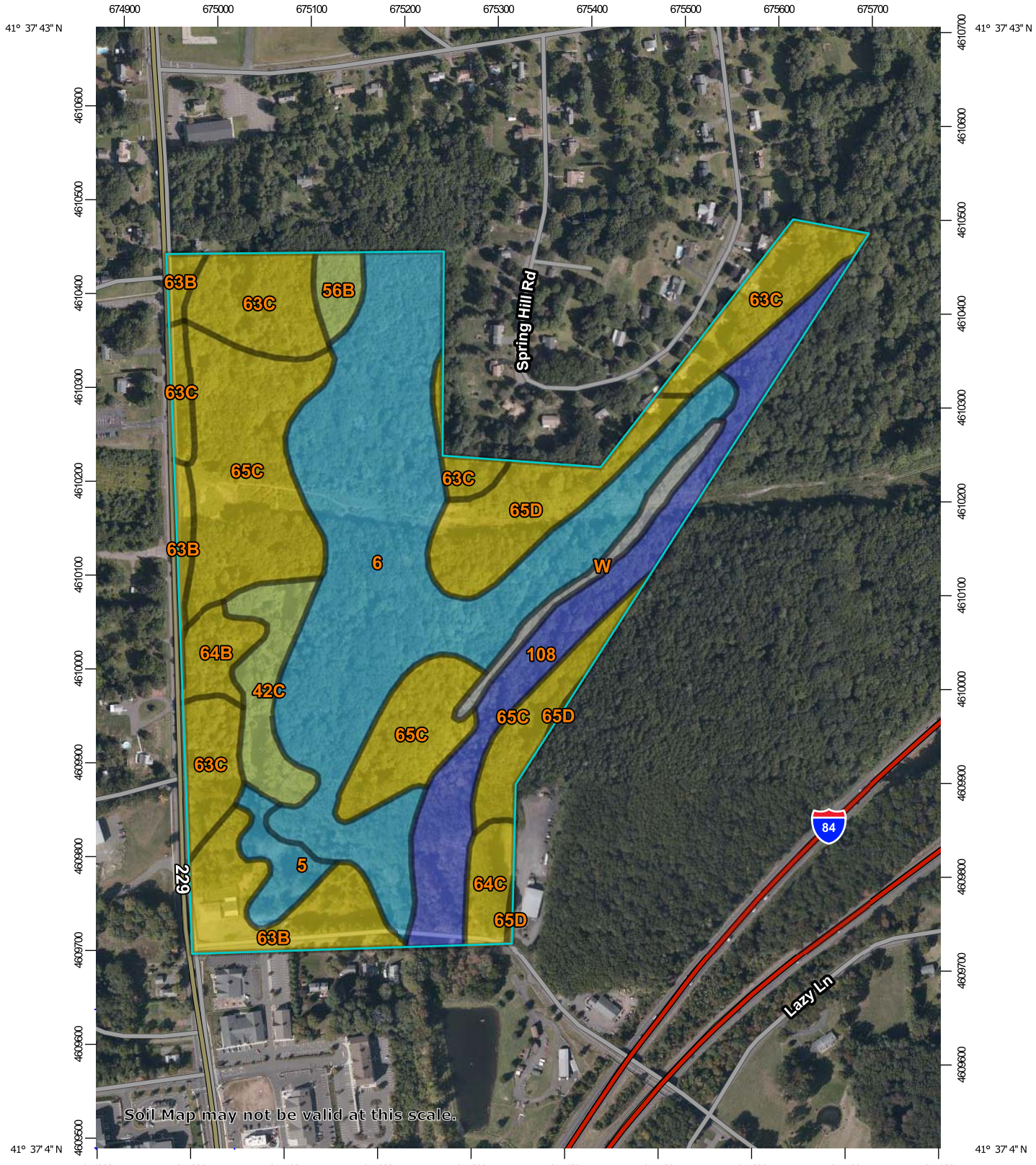
SUMMARY OF WETLAND FUNCTION & VALUES ASSESSMENT

The wetlands on site provide the following principal functions and values: groundwater recharge and discharge, production export, wildlife habitat. The wetlands on site also provide sediment and nutrient retention and renovation as a secondary function.

ATTACHMENTS

- Wetland Delineation Map
- NRCS Soil Drainge Class Mapping

Drainage Class—State of Connecticut
(20210063.A10 - 1303 West Street, Southington, CT)



Map Scale: 1:5,820 if printed on A portrait (8.5" x 11") sheet.

Meters: 0 50 100 200 300

Feet: 0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Lines

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

Soil Rating Points

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Subaqueous
- Not rated or not available

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 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: Aug 30, 2019—Oct 15, 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.

Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
5	Wilbraham silt loam, 0 to 3 percent slopes	Poorly drained	1.7	2.1%
6	Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony	Poorly drained	25.2	32.3%
42C	Ludlow silt loam, 2 to 15 percent slopes, extremely stony	Moderately well drained	3.1	4.0%
56B	Watchaug fine sandy loam, 2 to 8 percent slopes, very stony	Moderately well drained	1.0	1.3%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	Well drained	5.4	7.0%
63C	Cheshire fine sandy loam, 8 to 15 percent slopes	Well drained	10.2	13.1%
64B	Cheshire fine sandy loam, 3 to 8 percent slopes, very stony	Well drained	1.5	2.0%
64C	Cheshire fine sandy loam, 8 to 15 percent slopes, very stony	Well drained	1.5	1.9%
65C	Cheshire fine sandy loam, 3 to 15 percent slopes, extremely stony	Well drained	14.3	18.3%
65D	Cheshire fine sandy loam, 15 to 35 percent slopes, extremely stony	Well drained	4.6	5.8%
108	Saco silt loam	Very poorly drained	8.0	10.3%
W	Water		1.5	1.9%
Totals for Area of Interest			**78.1**	**100.0%**

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher