



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

April 23, 2024

Mike Ott
Summerhill Engineering
60 Wall Street
Madison, CT 06443

RE: *Wetland and Watercourse Delineation Report*
Williams School Athletic Complex

Mr. Ott,

I am a Registered Soil Scientist with 24 years of experience conducting wetland delineation in Connecticut. I conducted an inspection of the above-referenced Site on November 13 and December 19, 2023, as depicted on the attached *Wetland Delineation Sketch Map*. The purpose of the inspection was to delineate Connecticut jurisdictional wetlands and watercourses. The inspection was conducted in accordance with 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*.

Soils were examined per the aforementioned regulatory requirements. Along each wetland boundary, a hand auger was used to investigate the soil profiles to a minimum depth of 20 inches. This was necessary to determine the U.S. Department of Agriculture drainage class (per State requirements). Soil profiles were reviewed approximately every 15-30 feet along the boundary, typically digging one hole on either side of the defining boundary to confirm the wetland limit.

A single wetland was delineated. It was demarcated in the field with pink plastic flagging tape labeled "Wetland Delineation" and numbered 1-24 and 1X-35X. The wetland is predominately a hillside groundwater slope forested wetland. The upper reaches of the wetland transition to shrub dominated as the tree canopy decreases. At the very upper end near the athletic field, the wetland transitions to small marsh that appears to have been created to manage stormwater, with a riprap outlet feeding the lower wetland.

Digitally available soil survey information was obtained from the Natural Resources Conservation Service to aid in the classification of the soil types present. Wetland soils consist of the Ridgebury, Leicester and Whitman complex. This is an undifferentiated mapping unit consisting of two poorly drained (Ridgebury and Leicester) and one very poorly drained (Whitman) soil developed on glacial till in depressions and drainageways in uplands and valleys. Their use interpretations are very similar, and they typically are so intermingled on the landscape that separation is not practical. The Ridgebury and Leicester series have a seasonal high water table at or near the surface (0-6") from fall through spring. They differ in that the Leicester soil has a more friable compact layer or hardpan, while the Ridgebury soils have a dense to very dense compact layer. The Whitman soil has a high water table for much of the year and may frequently be ponded.

The non-wetland soils were not examined in detail, except as was necessary to determine the wetland boundary. Non-wetland soils consist of the Canton and Charlton complex. The Canton series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy glacial till. They are on nearly level to very steep glaciated plains, hills, and ridges. Permeability is moderately rapid in the solum and rapid in the substratum. The soils developed in a fine sandy loam mantle over acid sandy glacial till of Wisconsin age derived mainly from granite and gneiss and some fine-grained sandstone.

The Charlton series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

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

Respectfully submitted,

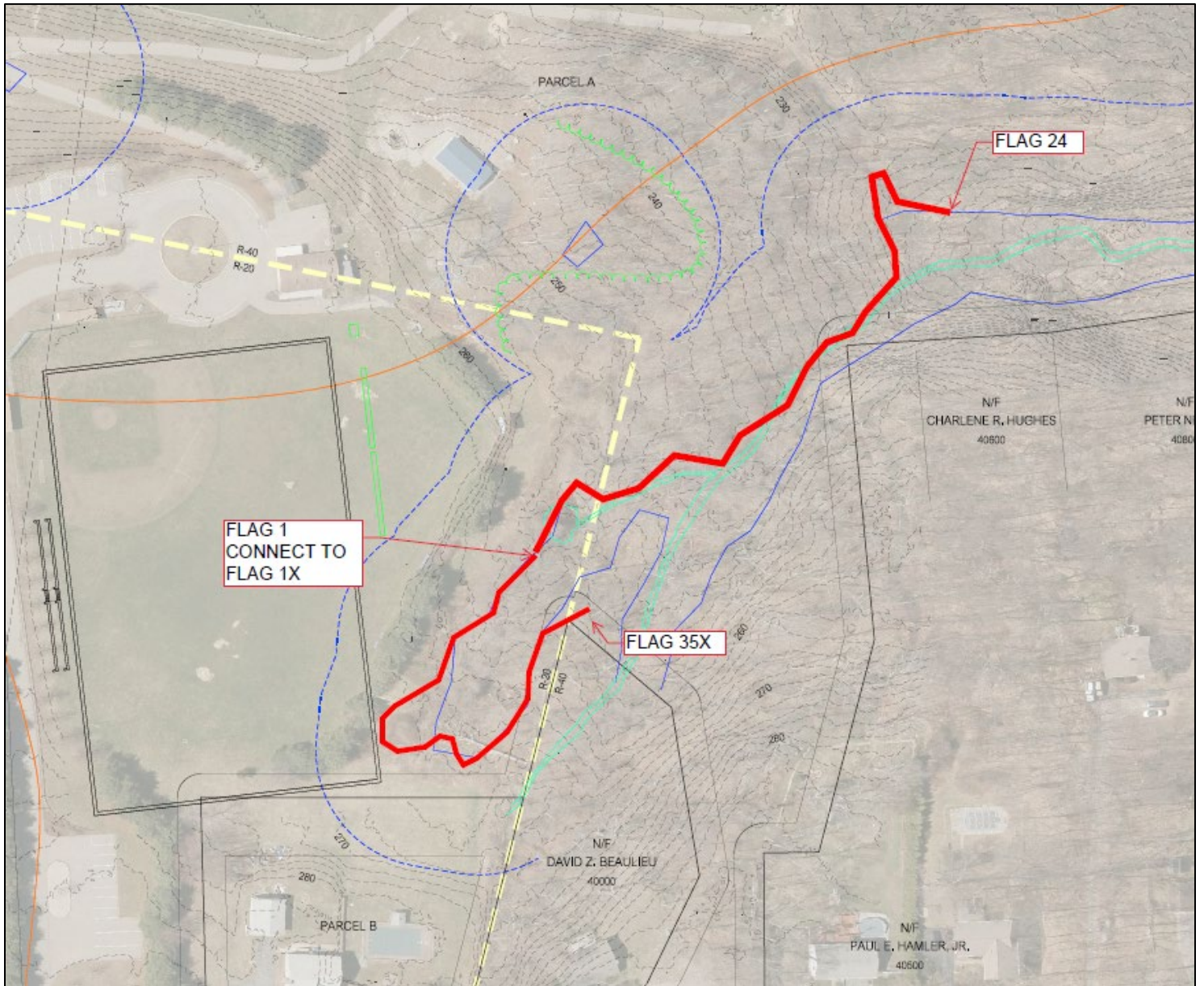


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Attachments: (1) Wetland Delineation Sketch Map
(2) Wetland Photographs

WETLAND DELINEATION SKETCH MAP



SITE PHOTOGRAPHS



Photo 1: View of lower reach of wetland.



Photo 2: View of upper reach of wetland showing areas of concentrated flow.



Photo 3: View of upper reach of wetland as it transitions to shrub dominated.



Photo 4: View of uppermost segment of wetland which includes a stormwater basin.