

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

February 6, 2023

Scott Brown Verdanterra, LLC 307 South Paterson Street Madison, Wisconsin 53703

RE: Wetland and Watercourse Delineation Report
Medtronic Property
Middletown Avenue, North Haven

Mr. Brown,

At your request, I conducted an inspection on the above-referenced property on January 7, 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 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 an auger. There was no snow of frost cover present that impeded investigation of the soil profile. Those areas meeting the regulatory requirements were marked with pink flagging tape labeled "Wetland Delineation"

and numbered 1 through 39. Refer to *Wetland Delineation Sketch Map*, attached (note that the sketch map is for illustrative purposes only).

The delineated resource consists of the ordinary high water mark of the Little River. No bordering wetlands were present in the delineation area. The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation and the presence of litter and debris.

The banks of the river are well-defined and steeply sloping, with the low flow channel of the river lying approximately 5-10 below the high water limit. Several stormwater outlets from bordering development were noted along the river, both on and offsite. At the easterly limits of the delineation area, east of wetland flag #39, the security fence lies atop the steep and narrow slope of the riverbank. The flagging was not continued past that limit but was sketched on the *Wetland Delineation Sketch Map*. Along that entire eastern segment, the river is bordered by parking lot.

Due the abrupt slope break defining the riverbank, little hydrophytic vegetation was present. The riverbank was vegetated with hardwood trees and an understory dominated by invasive shrubs and vines. Dominant tree species include black locust (*Robinia pseudoacacia*), cottonwood (*Populus deltoides*), tulip poplar (*Liriodendron tulipifera*), tree-of-heaven (*Ailanthus altissima*) and oaks (*Quercus sp.*). The shrub layer is dominated primarily by the invasive non-native multiflora rose (*Rosa multiflora*), Japanese knotweed (*Fallopia japonica*) and autumn olive (*Elaeagnus umbellata*), along with native species including staghorn sumac (*Rhus typhina*). Dense vines are present, primarily the invasive non-native Japanese honeysuckle (*Lonicera japonica*) and Asiatic bittersweet (*Celastrus orbiculatus*) along with the native greenbriar (*Smilax rotundifolia*).

No wetland soils were observed within the delineation area. The non-wetland soils consist of Udorthents (smoothed, type 308). Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

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

Respectfully submitted,

Eric Davison

Cyr Davisa

Wetland Scientist Registered Soil Scientist eric@davisonenvironmental.com www.davisonenvironmental.com

Attachments: (1) Wetland Photographs

(2) Wetland Delineation Sketch Map



Photo 1: View of Little River at the western site boundary.



Photo 1: View of stormwater discharge pipe outlet into river near wetland flag #10.



Photo 3: View of Little River looking northeast at McDermott Road.



Photo 4: View of Little River looking northwest towards McDermott Road.



Photo 5: View of rear of building looking west; the fence lies approximately 25 feet from the river.



Photo 6: View from fence at steep slope above river, looking north.



Wetland Sketch Map Medtronic Middletown Ave North Haven

## Legend



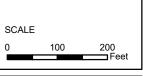
Little River Ordinary High Water Mark (field delineated)



Little River Ordinary High Water Mark (field sketched)

Map Description: 2019 aerial photograph (source CT ECO) showing approximate site boundary. This map is intended for general planning purposes only.







Davison Environmental, LLC 10 Maple Street Chester, CT www.davisonenvironmental.com