



500A Washington Street, Quincy, MA 02169

March 5, 2024

CHESS Engineering, LLC
Attn: Paul Campbell
PO Box 9480
Lowell, MA 01853

Re: Wetland Summary Letter
Shaker Hills Country Club
Harvard, Massachusetts

Dear Mr. Campbell,

A professional wetland scientist from Lucas Environmental, LLC (LE) conducted a site investigation on February 20, 2024 to determine if wetland resources were present at or near the site of a newly constructed structure (the "Study Area") on the Shaker Hills Country Club property located at 146 Shaker Road in Harvard, Massachusetts. The Study Area is located to the south of the 12th hole green, at the top of a hill, within an actively maintained portion of the golf course. Please note that this effort is specific to wetland resources; it does not evaluate constraints related to local planning or zoning requirements, historical or cultural significance, nor does it evaluate the potential for soil, air, or water contamination.

The wetland investigation was performed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 *et seq.*); Section 404 of the Clean Water Act (33 U.S.C. 1344); Massachusetts Department of Environmental Protection (MassDEP) publication "Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands (2022); and the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987), the Northcentral and Northeast Regional Supplement (2012); and the Town of Harvard Wetlands Protection Bylaw, Chapter 119 and Wetlands Protection Bylaw Rules, Chapter 147.

The site investigation was limited to wetland areas within 100 feet and perennial streams within 200 feet of the Area of Interest. The Study Area does not include the entire parcel or off-property areas. Note that the site was reviewed under appropriate field conditions, i.e., minimal snow cover or frozen ground.

The following data sources were examined prior to the site investigation:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps;
- United States Geological Survey Topographic Quadrangle;
- MassGIS MassDEP Wetland and Hydrography Datalayers;
- MassGIS Natural Heritage Atlas Datalayers; and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey.

There were no wetlands, watercourses, or buffer zones regulated under the Massachusetts Wetlands Protection Act, Town of Harvard Wetlands Bylaw, or Section 404 of the Clean Water Act identified.



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A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage and Endangered Species Program (NHESP) indicates that the Study Area is not located within Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife. No Certified Vernal Pools under the jurisdiction of the Wetlands Protection Act Regulations (310 CMR 10.00 et seq.) or the Massachusetts Endangered Species Act (321 CMR 10.00 et seq.) occur within the Study Area.

According to the June 4, 2010, FEMA Flood Insurance Rate Map for Worcester County, Map Number 25017C0216E, the Study Area is located in Zone X, which is classified as areas outside the 0.2% annual chance flood (500-year floodplain). Therefore, Bordering Land Subject to Flooding does not occur within the Study Area.

The Study Area is not located within a MassDEP Wellhead Protection Area, Area of Critical Environmental Concern (ACEC), Outstanding Resource Water (ORW), or Watershed Protection Area.

If you have any questions, please do not hesitate to contact me at 617.529.8262 or mdv@lucasenviro.com or Christopher Lucas at 617.405.4140 or cml@lucasenviro.com. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC

A handwritten signature in black ink that reads 'Matthew Varrell'.

Matthew Varrell
Environmental Consultant/Wetland Scientist & Soil Scientist