



December 23, 2022

Sturbridge Conservation Commission
c/o Ms. Rebecca Gendreau
Conservation Agent
Town of Sturbridge
301 Main Street
Sturbridge, MA 01566

**RE: Peer Review of Notice of Intent Filing
Blueberry Hill Estates – Lot 3 Berry Farms Road
20 Fiske Hill Road & 30 Main Street
Sturbridge, MA**

Dear Ms. Gendreau and Members of the Commission:

Oxbow Associates, Inc. (OA) has reviewed the original filing for this matter (DEP File No. 300-1132), submitted in April of 2022, the supplemental materials submitted during the review process, and the latest Notice of Intent materials prepared and submitted by LEC Environmental Consultants to the Sturbridge Conservation Commission (SCC) on November 10, 2022.

At this time, we believe that the Applicant and the SCC have commented on or addressed previous recommendations to the wildlife crossing structure size, quantity, alternatives, as well as potential impacts to the vernal pools via stormwater runoff, which can be reviewed in the previous comments from OA (reports dated June 17, July 14, and August 25, 2022).

The updated limits of proposed Open Space associated with the project and on the adjacent lot (Lot 4) appear to preserve the immediate habitat surrounding the vernal pools, their associated Bordering Vegetated Wetlands (BVW), and intermittent stream channels that connect them.

Recommendations

OA is providing the following recommendations to monitor effects of the housing community on the existing vernal pool amphibian populations and to ensure the long-term viability of the vernal pool functionality on and adjacent to the proposed project.

NHESP Certification

According to data collected prior to the Notice of Intent submittal, the three vernal pools located on or adjacent to the site (northerly and southerly A-series, and E-series vernal pool) all meet the required criteria to be certifiable vernal pools due to the presence of requisite obligate species. OA recommends that the SCC require as part of an Order of Conditions that the vernal pools located on or adjacent to the property be certified with the Natural Heritage and Endangered Species Program (NHESP) at Massachusetts Department of Fish and Wildlife. Certification will provide additional protections under state and federal laws, in addition to the Wetland Protection

Act (the "Act", MGL Ch. 131, §40) and its implementing Regulations (310 CMR 10.00), and the Sturbridge Wetlands Protection Bylaw (Chapter 286) and its Regulations.

Vernal Pool Monitoring

OA recommends that the SCC encourage or require a multi-year monitoring plan to document any changes to the amphibian or invertebrate populations present in the existing vernal pools and to note any abiotic changes resulting from the construction of the proposed housing project. OA believes this can be accomplished with a vernal pool survey completed during the spring amphibian breeding season to observe and document the biological community associated with each pool. Collected data should mirror the information gathered for certification purposes, and a report should be provided to the Conservation staff for review following each survey. Data on abiotic characteristics should be included in the report to highlight any abnormal results. The results may provide insight as to the effectiveness or adequacy of the protective measures implemented under the Bylaw.

Documented conditions over a period can provide information regarding any necessary adjustments to project methodologies or operations practices.

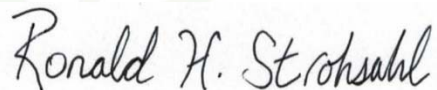
Summary

The Commission should consider maximizing the available protection of the adjacent upland resource areas to ensure the biological functionality of the three vernal pools is not reduced, ensure landscape connectivity and continuity between the wetland systems is kept intact to the most reasonable degree, and limit indirect effects to important abiotic vernal pool characteristics (potential chemical changes affecting pH, salinity, light, temperature, etc.). Certifying the aforementioned vernal pools will provide additional protections to maintain the biological communities within them, and a multi-year monitoring plan can be used to identify aberrations in water quality, chemistry, or hydrology, prior to any irreparable damage.

Thank you for the opportunity to provide these comments. The Commission should feel free to contact me at 978-929-9058 ext. 107, with any questions regarding this review.

Sincerely,

Oxbow Associates, Inc.



Ron Strohsahl, PWS
Senior Wetland Scientist