





[LEC File #: MCEI\20-002.04]



September 8, 2022

Email (rgendreau@sturbridge.gov)

Sturbridge Conservation Commission 301 Main Street Sturbridge, MA 01566

Re: NOI—DEP File #300-1113

Blueberry Hill Estates - Lot 3 Berry Farms Road 20 Fiske Hill Road / Parcel ID: 280-03534-020-portion 30 Main Street / Parcel ID: 415-03914-030-portion

Sturbridge, Massachusetts

Dear Members of the Commission:

On behalf of the Applicant, Justin Stelmok, LEC Environmental Consultants, Inc., (LEC) is submitting supplemental materials for the Notice of Intent (NOI) Application for Blueberry Hill Estates, a 55+ Housing Community ("Manufactured Housing Community") on the above-referenced site. The following provides responses to recommendations outlined within Oxbow Associates' (OA) August 25, 2022 peer review letter, received after the August 25th Public Hearing. The *Open Space Plan* prepared by McClure Engineering, dated September 7, 2022, has also been updated to exclude the rain gardens as requested by the Commission and provide greater detail on the Open Space proposed on Lot 4.

The questions pertaining to stormwater management will be addressed in conjunction with the Planning Board engineering/stormwater peer review; however, the Applicant is investigating measures to implement a reduced salt application to roadways during winter storm events.

Crossing Structure

OA: With the elimination of the curbing/retaining walls to direct migrating wildlife towards the crossing structure, OA recommends the Commission explore the feasibility of additional crossing structures to bypass beneath the roadway, or the possibility of a grated bridge (see Photos) spanning a larger proportion of the migratory corridor to ensure that wildlife do not bypass the opening of the crossing structure.

Response: As requested by the Commission, the side retaining walls abutting the lots surrounding the habitat corridor, specifically Lots 4, 6, 66, and 69-71, were eliminated in lieu of regraded side slopes to be revegetated and left to naturalize. Retaining walls are still proposed along the west and east sides of the roadway (Proposed Drive A), connecting to the expanded grated crossing structure (5-feet wide x 3-feet tall). The retaining wall is depicted as a solid bold red line on the previously submitted, revised Sheet

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C14. At the highest point, a portion of the westerly retaining wall is 4-foot tall. The retaining walls taper to the north and south (1-foot min.). As proposed, the retaining walls along the roadway will direct small wildlife to the expanded crossing structure, specifically facilitating the movement of vernal pool breeding amphibians.

In subsequent email correspondence on September 7, 2022, OA recommended a small extension of the retaining wall extend east-west off each corner (north and south edges of both sides) to orient wildlife back towards the forest/the crossing structure, or at least stop them from continuing away from the crossing structure if they miss the opening. If amenable to the Commission, the Applicant can propose a 5-10 foot long extension of the retaining walls (1-foot tall min.) at the north and south ends, on both sides of the roadway. The toe of the retaining walls and adjacent 1-2 feet would be kept free of vegetation. This maintenance provision would be incorporated into the community Operations and Maintenance Plan. To reiterate, the community O&M Plan will include maintenance of the crossing structure to ensure proper functionality and that the passage is free of obstruction.

The small wing wall extensions connecting to the retaining walls along the roadway will enhance small wildlife movement through the habitat corridor and expanded crossing structure.

<u>Vernal Pool A – Buffer Zone Impacts</u>

As requested by OA, LEC has updated the table to provide the cumulative total square footage and percentage of proposed impervious structures, driveways, road, rain gardens, and lawn within the 200-foot Vernal Pool Buffer in comparison to that protected in the Open Space.

Vernal Pool	Total Proposed 100-200 foot VP Buffer Disturbance	Total Proposed Impervious Structure, Driveway, Road, Rain Garden, Lawn	Proposed Revegetation	Total VP Buffer Protected
A-series Vernal Pool (south)	19,800	12,200 (9.3%)*	7,600	130,761
A-series Vernal Pool (north)	11,325	5,705 (2.5%)*	5,620	225,968
E-series Vernal Pool	11,700	8,065 (6.5%)*	3,635	123,252
TOTAL	42,825	25,970 (5.4%)*	16,855	479,981 (11.02± acres)

^{*}Proposed Impervious Structure, Driveway, Road, Rain Garden, Lawn /Total VP Buffer Protected

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The project will cumulatively protect 11.02± acres within the 200-foot Vernal Pool Buffer. The project proposes to permanently disturb, including impervious structures, driveways, roadways, rain gardens, and lawn/landscaped area, a total of 5.4% of the 200-foot Vernal Pool Buffer in comparison to that protected in the Open Space. The Proposed Revegetation along the regraded side slopes represents a temporary disturbance that will be revegetated and allowed to naturalize as wildlife habitat.

The proposed 5.4% permanent disturbance will not result in a significant adverse impact to the on-site Vernal Pools and will not substantially reduce or impair the Vernal Pools' or 200-foot Vernal Pool Buffer Zones' capacity to provide important wildlife habitat functions. The Applicant has taken comprehensive measures to minimize disturbance within the 200-foot Vernal Pool Buffer Zone and expand the habitat corridor/connection between the southerly A-series Vernal Pool and E-series Vernal Pool. The project as currently proposed is not anticipated to result in a measurable decrease in extant wildlife populations, including Spotted Salamanders, Fairy Shrimp, or general wildlife species; or negatively impact biological community composition, structure and species richness of the site or in the vicinity; or impair, damage or reduce in wildlife habitat value or functions/values. The 24.2± acre Open Space, including the 11.02± acres within the 200-foot Vernal Pool Buffer, will permanent protect important wildlife habitat in perpetuity. The project therefore complies with the performance standards outlined within the *Town of Sturbridge Wetlands Bylaw* ("Bylaw," Chapter 286) and Wetlands Regulations ("Bylaw Regulations").

Thank you for your consideration of this supplemental information. We look forward to September 15th Public Hearing to discuss the project further. Should any questions in advance, please do not hesitate to contact me at 508-746-9491 or at bmadden@lecenvironmental.com.

Sincerely,

LEC Environmental Consultants. Inc.

Brian T. Madden

Senior Wildlife/Wetland Scientist

cc: Oxbow Associates Justin Stelmok McClure

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