

November 24, 2025

Town of Hingham Conservation Commission
Hingham Town Hall
210 Central Street
Hingham, MA 02043

Re: Notice of Intent – Waiver Request
22 Del Prete Drive

Dear Commissioners:

On behalf of Jennifer McGuire (applicant), South River Environmental (SRE) is providing supplemental information regarding the Notice of Intent (NOI) submitted to the Hingham Conservation Commission (Commission) for proposed activities at 22 Del Prete Drive. Specifically, the applicant is seeking to construct a new addition to the existing single-family residence with an associated deck as well as install a new 18-foot by 38-foot swimming pool and patio within the existing back yard. The majority of the work is located within the 100-foot buffer zone to a bordering vegetated wetland (BVW) which is a resource area subject to protection under the Massachusetts Wetlands Protection Act (Act) and the Town of Hingham Wetlands Protection Bylaw (Chapter 22) (Bylaw). A portion of the BVW also functions to provide vernal pool habitat which has been certified by the Massachusetts Natural Heritage and Endangered Species Program (CVP 130) based on the presence of fairy shrimp (*Branchinecta lynchi*). The Bylaw also identifies vernal pools as a wetland resource area subject to protection. While the BVW may function as isolated land subject to flooding, an area subject to protection under the Act and regulations (310 CMR 10.57), it does not have an associated buffer zone.

The Bylaw includes provisions for no-disturbance setbacks from several wetland resource areas including 50 feet for BVWs and 100 feet for vernal pools (vernal pool protection zone). No work is allowed within these setbacks except as authorized by the Commission. Within the subject property, the majority of the 50-foot no disturbance buffer to the BVW is currently undisturbed and vegetated while the 50 to 100-foot buffer is developed and contains a portion of the existing residence and deck, manicured lawn and hard and soft landscaping. All of the proposed activities subject to review under the NOI are located within the outer 50-foot buffer to the BVW and the vernal pool protection zone. The objective of this report is to demonstrate that the proposed project, including mitigation measures, can be approved by the Commission through the issuance of an Order of Conditions in a manner that not only protects the interests of the Act and Bylaw but results in a net benefit to the vernal pool protection zone.

Project Design

The proposed Project has been specifically designed to minimize activities within the 100-foot buffer zone and the vernal pool protection zone. The addition and swimming pool have both been sited outside of the 50-foot no-disturbance buffer within areas of the property that have been previously disturbed and either developed or maintained as lawn. The existing natural buffer within the 0 to 50-foot buffer will not be adversely affected by the Project. In addition, the applicant has incorporated multiple measures to ensure the protection of the buffer zone and vernal pool protection zone to function to protect the interests of the Bylaw.

Specifically, the Project will:

- The current lawn area within the buffer zone is 2,821 square feet. Through the landscape plan, the total lawn area will be reduced by approximately 1,900 square feet and replaced with approximately 918 square feet of drought-tolerant lawn, which reduces the need for watering and fertilizer applications;
- Hand removal of invasive species including Asiatic bittersweet (*Celastrus orbiculata*), glossy buckthorn (*Rhamnus frangula*), multiflora rose (*Rosa multiflora*) Japanese barberry (*Berberis thunbergii*) and tree of heaven (*Ailanthus altissima*) which are colonizing the undisturbed buffer zone and decreasing wildlife habitat value;
- Extensive planting of native species within the buffer zone / vernal pool protection zone to increase species diversity and improve wildlife habitat value;
- Installation of ground structure (by hand) within the 0 to 50-foot buffer zone to increase the dispersal, escape and overwintering habitat for amphibians that may be using the vernal pool to breed; and
- Installation of a drywell for dewatering activities (drawdown / backwash) associated with the pool. There will be no direct surface discharge of water from the pool into the buffer zone;

By incorporating these measures into the Project design, there will be a net improvement in the function of the buffer zone to protect and promote wildlife habitat and also enhances the upland habitat within the vernal pool protection zone.

Vernal Pool Protection Zone

As previously stated, the BVW provides vernal pool habitat for fairy shrimp, which has been documented through the NHESP vernal pool certification process. Fairy shrimp are invertebrates that complete their entire life cycle within the confined basin depression and do not use the surrounding upland habitat. Therefore, the main function of the upland habitat is to protect the water quality of the pool through interception and infiltration of stormwater. The existing undisturbed, vegetated buffer will not be impacted by the proposed project, and the implementation of the mitigation measures which includes invasive species management and planting of a significant number of native shrubs and trees will improve the ability of the vernal pool protection zone to maintain the water quality within the pool itself.

Although the vernal pool was certified through the documented presence of fairy shrimp, the vernal pool could also provide suitable breeding habitat for obligate species of amphibians such as wood frogs (*Rana sylvatica*) and spotted salamanders (*Ambystoma maculatum*). The delineation of the portion of the BVW within the subject property was conducted in March of 2024 and prior to the migration of these species to their breeding areas. Since the presence or absence of breeding activity within the pool was not confirmed in 2024, SRE assumes presence which represents the most conservative approach to the value of the vernal pool protection zone since the amphibian species rely on the upland habitat within close proximity to the breeding pool for the majority of the year.

As previously stated, the Project-related activities within the buffer zone and vernal pool protection zone will avoid new disturbances within undisturbed areas and will result in a net benefit to the quality of the habitat within. There will be no adverse effect on the ability of the vernal pool protection zone to promote water quality as any dewatering from the pool will be directed into a drywell, and erosion controls will be installed at the limit of work to prevent stormwater-related issues during construction. Although the majority of the available upland habitat surrounding the vernal pool is located outside of the subject property to the north, south and east, the extensive planting plan and inclusion of additional ground cover will improve the ability of the vernal pool protection zone to provide the necessary habitat characteristics required by vernal pool breeding amphibians during the majority of the year.

The Project, as currently designed, fully protects the buffer zone's ability to protect the interests of the Act and the Bylaw and represents a net benefit to the quality of the habitat within the vernal pool protection zone. It is SRE's professional opinion that the Project meets the performance standards for a variance under the Bylaw. To provide the Commission with further reassurance that the applicant is committed to protection of the resource areas and buffer zones, SRE provides the following suggested special conditions that could be incorporated into an Order of Conditions should the Commission ultimately vote to approve the Project:

- Installation of a minimum of three, four-foot-high cedar posts with conservation markers along the approved limit of work within the buffer zone to ensure no future encroachment occurs;
- Two years of monitoring of the plantings within the buffer zone and associated reporting to ensure a minimum survival rate of 75%;
- Oversight of the buffer zone mitigation work by a qualified wetland scientist/wildlife biologist to ensure proper placement of plants and structure within the vernal pool protection zone; and
- Pre and post-construction (2 years) monitoring of the vernal pool to ensure continued function.

On behalf of the applicant, SRE appreciates the opportunity to provide this information in support of the Project. Should you have any questions regarding this letter report, please do not hesitate to contact me at 978-697-0854. Thank you for your continued consideration.

Sincerely,
South River Environmental



John Zimmer
Wetland Scientist / Wildlife Biologist