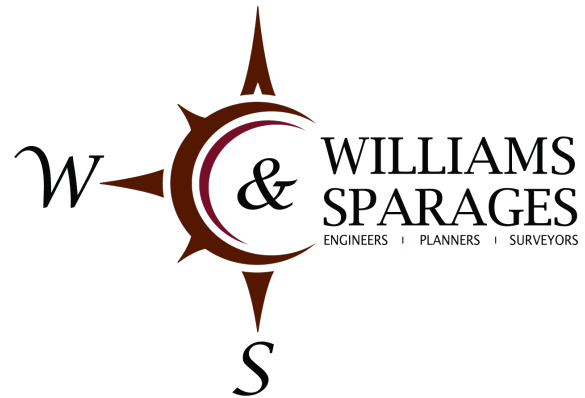


Project No. **LYNF-0141**

February 9, 2022



Lynnfield Conservation Commission
Attn: Emilie Cademartori
Director of Conservation & Planning
55 Summer Street
Lynnfield, MA 01940
ecademartori@town.lynnfield.ma.us

Re: 36 Elmwood Road, Notice of Intent
Assessors Map 42, Parcels 195, 278 & 911

Dear Emilie,

Our office was hired to assist the applicant, Bryan Last, with the after-the-fact permitting for activities that are subject to the Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40, and its regulations in 310 CMR 10.00, more specifically the construction of a stone retaining wall, installation of a paver patio, and landscaping improvements within the 100 foot buffer zone to inland Bank (Bank), and within Bordering Land Subject to Flooding (BLSF), at the above referenced properties.

It is our understanding that Michael Novak, P.E., from Patriot Engineering LLC, filed a Notice of Intent application (NOI), on behalf of the applicant, in October of 2021 for the above-mentioned activities. Unfortunately, as of today, a file number has yet to be issued from the Massachusetts Department of Environmental Protection (MassDEP). Both Patriot Engineering and our office have reached out to MassDEP and hope to have a file number prior to the continued public hearing.

Two of the parcels, 36 Elmwood Road & 0 Elmwood Road, (Assessors Map 42, Parcels 195 & 278) back up to Pillings Pond, and the third parcel, 35 Elmwood Road, (Assessors Map 42, Parcel 911), is located to the south west of 0 Elmwood Road. All of the parcels are owned by the applicant.

All three parcels are located within 100 feet of the Bank associated with Pillings Pond, and all three parcels contain BLSF, associated with a Zone AE, (Elevation 98.0 NAVD 88), 100 Year FEMA Floodplain, as shown on FEMA Flood Insurance Rate Map Number 25009C0394F, with an effective date of July 3, 2012.

The parcels are not within a mapped Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species, as determined by the Division of Fisheries and Wildlife, Natural Heritage & Endangered Species (NHESP), nor are the parcels within a mapped Area of Critical Environmental Concern (ACEC), or an Outstanding Resource Water.



It is our understanding that the parcels in question were shown on a subdivision plan, prepared by Shay & Shay, Civil Engineers, for Samuel B. Donovan, dated April 1928, recorded in the Southern Essex Registry of Deeds in Plan Book 54, Plan 7. Because the parcels were created prior to the enactment of the Lynnfield Wetlands Protection Bylaw, which was April 25, 2005, it is our understanding the determined Bylaw does not apply.

Inland Bank:

All of 36 Elmwood Road is bound by Bank associated with Pilling's Pond. Prior to the retaining wall being constructed by the applicant it appears that the Bank was comprised of boulders and stones that sloped up to an existing maintained lawn area. This assumption was made after discussing the property with the applicant and after reviewing historic photographs. The Bank shown on the attached plan was located by surveyors from Meridian Associates, Inc. and for the most part it is coincident with the face of the stone retaining wall that was constructed.

Performance Standards:

According to 310 CMR 10.54(4)(a.), any proposed work on a Bank shall not impair the following:

1. the physical stability of the Bank;
2. the water carrying capacity of the existing channel within the Bank;
3. ground water and surface water quality;
4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;
5. the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

According to the applicant, he pulled most of the stones and boulders back towards the lawn, while keeping the base intact, and utilized the existing stones and boulders in the construction of the new stone retaining wall. When the existing stones and boulders were used up, a small number of additional stones were imported to construct the remainder of the wall that exists today. It is important to note that according to the applicant he did not push the wall or lawn further into the resource area. If anything, it appears that the Bank was actually pulled back slightly toward the existing lawn.



It would be difficult to conduct a wildlife habitat evaluation at this point since the wall is already constructed, however; one could assume, based on observing abutting Bank's, that there were no unique wildlife habitat components altered as a result of the project. The adjacent Bank's appear to be a 1:1 stone slope into the pond.

The project should help the physical stability of the Bank and the water carrying capacity of the existing pond should not be impacted. In addition, the project should have no impact on the ground water or surface water quality.

Bordering Land Subject to Flooding (BLSF):

As mentioned above, according to Community Panel Number 25009C0394F, with an effective date of July 3, 2012, there is a Zone AE, (elevation 98), 100 Year FEMA Floodplain associated with this portion of Pilling's Pond. The 98 contour extends out towards the home on both 35 Elmwood Road and 36 Elmwood Road. For the most part, the BLSF in the area of the activities, is a maintained lawn area.

According to the applicant, a small amount of loam was imported to fill in some uneven areas within the existing lawn to make the grade more uniform. The loam that was imported to the properties resulted in the filling of approximately 58 cubic feet within a 590 s.f. area. The attached Site Plan to Accompany an NOI, prepared by Patriot Engineering, Inc., dated October 1, 2021, revised to, February 8, 2022, shows the areas where BLSF was filled.

According to 310 CMR 10.57(4)(a), the performance standards for work within BLSF are as follows:

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows.

Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

3. Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively)



alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

In accordance with the requirements set forth in 310 CMR 10.57(4)(a)1., compensatory flood storage is being proposed that will amount to 60 cubic feet in a 601 s.f. area, at each incremental volume that was displaced with an unrestricted hydraulic connection to Pillings Pond. The areas selected for compensatory flood storage are on 0 Elmwood Road and 35 Elmwood Road, in existing maintained lawn and landscaped areas.

Prior to the excavation effort, erosion controls, in the form of a trenched silt fence, are proposed to be installed between the proposed compensatory flood storage areas and the Bank. A temporary stockpile area is proposed, upgradient of the erosion controls, in case there is a need to temporarily stockpile materials. Following the excavation effort, the area will be loamed and seeded. The erosion controls are proposed to remain in place until all areas are stabilized and permission is granted for their removal from the Lynnfield Conservation Commission and/or its Director.

Land Under Water (LUW):

The applicant installed granite steps from the lawn, through the wall, and into the pond. The installation of the steps resulted in the alteration of 14 square feet of Land Under Water. The plan has been revised to propose the removal of the steps and to restore the wall in the location of the steps so that there is no alteration to LUW.

Summary:

In addition to the work detailed above the applicant also constructed a small paver patio, fire pit, stone sitting wall and placed paver stones within an area that was maintained as lawn. These activities are within the buffer zone to Bank and within BLSF. It is our understanding that no BLSF was filled as a result of these activities.

The applicant had no intention of attempting to avoid the regulations he simply was not aware of what was required to do the work that he completed. The applicant is aware of the process now and will consult with the Commission prior to any activity within the Commissions jurisdiction.

As mitigation for the activities, the applicant is proposing to enhance the buffer zone with native plantings in two areas. The area along a large portion of the Bank, to the east of the wood dock, and in the south east corner of 0 Elmwood Road. These planting areas is in addition to buffer zone enhancement plantings that the applicant installed under MassDEP File Number 209-426, which are located along the Bank, to the east of the paver patio. The new buffer zone enhancement areas are proposed to be planted with Sweet Flag, *Acorus americana*, Blue Flag Iris, *Iris versicolor*, Northern Arrowwood, *Viburnum dentatum*, Red-Osier Dogwood, *Cornus sericea*, American Cranberrybush, *Viburnum trilobum*, Soft Rush, *Juncus effusus*, and Spotted Joe-Pye Weed, *Eutrochium maculatum*.



The buffer zone enhancement areas should help increase the biodiversity on the properties and help provide more of a vegetated buffer between the pond and the maintained landscaped and lawn areas.

We look forward to discussing with you and your Commission at the continued public hearing on February 15, 2022. In the meantime, if you should have any questions regarding this information, please do not hesitate to contact our office.

Sincerely,

WILLIAMS & SPARAGES LLC



Greg J. Hochmuth, RS, PWS, CWS
Senior Ecological Scientist

cc: Bryan Last
Glenn A. Wood, Esq., Rubin and Rudman LLP
MassDEP NERO

