Julie Vondrak Wetland Permitting Consultant 56 Corinthian Drive Salem, NH 03079

July 5, 2022

Lynnfield Conservation Commission 55 Summer Street Lynnfield, MA 01940

Subject: Order of Conditions, 21 Lakeview Avenue, Lynnfield, MA, DEP #209-0601

Dear Commissioners,

I, Julie Vondrak, Wetland Consultant, on behalf of Aguiar DeFreitas, am responding to a letter dated May 10, 2022 submitted by the Lynnfield Planning & Conservation Department regarding an open Order of Conditions ("OCC") for the above referenced Project site. The letter requested the Applicant submit a Request for a Certificate of Compliance accompanied by an As-Built plan for activities including a stone retaining wall, a patio and buffer zone restoration activities. The issued OOC expired on June 8, 2020.

Permitted Project Summary

The Lynnfield Conservation Commission ("LCC") issued an Order of Conditions on June 8, 2017 for after-the-fact unpermitted activities associated with construction of stone retaining wall along the banks of Pillings Pond, a paver stone patio constructed behind the house and re-surfacing of an existing driveway with pavers. As part of mitigation for the un-permitted activities, the Applicant was required to remove 2-feet of pavers from the pond side and replant the 2-foot strip, remove a section of stone wall 1.5 feet in order to preserve two trees along the bank and plant a 600 s.f. area of lawn with native vegetation. The original permitting was conducted by Williams and Sparages.

Upon receipt of the May 10, 2022 letter, Mr. DeFreitas contacted me to assist him with complying with the conditions outlined in the OOC. Unfortunately, the OOC has expired and the mitigation measures have not been completed to date. Mitigation measures were scheduled to be conducted in the Spring of 2020, however, the pandemic interfered with the scheduled work.

Proposal

On June 17, 2022 I met with Mr. DeFreitas to review his property and to discuss the work required under the OOC. Prior to my meeting, I did reach out to the Lynnfield Conservation Department to let them know Mr. DeFreitas contacted me and that I would be working with him to immediately address the outstanding mitigation measures. As the OOC has expired, on behalf of Mr. DeFreitas, I would request that the LCC consider issuing an Enforcement Order to the Applicant requiring immediate compliance with the mitigation measures outlined in his OOC and displayed on his record plan. I suggest a 30-day completion period would be suitable to complete the outstanding activities.

Upon review of his site, I do recommend some changes be made to the approved planting plan and proposed mitigation measures. Changes and recommendations for consideration are outline below.

Paver Patio Mitigation Measures

In accordance with the OOC and approved plan, the existing paver patio was required to be reduced by 2-feet on the pond side and 2 additional feet was allowed to be expanded on the upland side. Mr. DeFreitas has expressed that he will not expand the patio by 2-feet on the upland side, but will instead just remove the 2-foot section on the pond site (see attached photos). Upon my review of the approved plan, it was not clear which species were proposed to be planted within the 2-foot restoration area. Given the area is very narrow, the larger shrubs including the dogwood, blueberries and American cranberry may not survive within such a narrow strip and may grow too large which would then lead to death and/or future removal. Therefore, I recommend the following herbaceous species be installed within the 2-foot planting strip to ensure better long-term survival. Plants are native to New England and provide benefits to birds, bees, butterflies and hummingbirds:

Species	Number of Plants	Planting Specifications
Rudbeckia hirta: Black eyed susan	6	Alternate plantings with coneflower; add suitable soil around plant base;
Echinacea purpurea: Purple coneflower	6	Alternate plantings with black-eyed susan; add suitable soil around plant base;

Table 1: Patio Plantings (2-foot strip)

Retaining Wall Removal

According to the approved plan and OOC, a section of retaining wall was required to be removed 1.5feet from the edge of two existing trees located along the easterly property boundary. I am assuming the wall was required to be removed to prevent death of the trees as the wall was constructed around the base of the trees. Upon my June inspection, unfortunately the wall was not removed and one of the red maple trees had died and one appeared close to death (see attached photos). Not sure if wall removal will save the struggling tree. I would recommend the wall to remain in place, as the bank slope is fairly steep and bank stabilization will be very difficult. At this time, I request an additional mitigation area be planted upgradient the two trees. An approximate 50 s.f. (10-foot by 5- foot) area be additionally planted upgradient the retaining wall within the maintained lawn area (see attached photos). I recommend the following additional plants be added in this area currently in a maintained lawn area.

Table 2: New 50 s.f. Mitigation Area upgradient retaining wall

Species	Number of Plants	Planting Specifications
Red Maple (Acer rubrum)	1	1 to 2-inch caliber planted upgradient retaining wall;
Highbush Blueberry (Vaccinium corymbosum)	4	Plant approximately 3-feet apart

Approved Buffer Zone Mitigation Area (600 s.f.)

An approximate 600 s.f. Buffer Zone mitigation area was proposed in the northeastern section of the property within maintained lawn area. I recommend these plantings be installed immediately in accordance with the approved plan under the supervision of a wetland scientist. Additionally, wetland marker posts are required to be installed along the boundary of the newly planted area. Previously proposed and approved plantings include the following:

Table 3: 600 s.f. Buffer Zone Mitigation Area

Species	Number of Plants	Planting Specifications
Silky dogwood (Cornus amomum)	(2)	2-3' minimum in size
Highbush Blueberry (Vaccinium corymbosum)	(3)	2-3' minimum in size
Inkberry (Ilex glabra)	(3)	2-3' minimum in size
American cranberry (Viburnum trilobum)	(3)	2-3' minimum in size

Upon review of the Buffer Zone restoration area, it was observed that the area to be planted is upland and may not support some of the wetter species specified above. I would recommend the silky dogwood be replaced with gray dogwood (*Cornus racemosa*) to possibly ensure a better survivability rate. I recommend three (3) replacement dogwoods be planted.

Invasive species Removal

During my inspection with Mr. DeFreitas, I pointed out the significant abundance of oriental bittersweet that is taking over the eastern section of his property along the pond bank. It is choking out the native vegetation and may eventually kill several of the larger trees along the pond banks. As part of additional mitigation, I recommend the bittersweet be removed by hand, with an effort to remove its root base. The area should be re-evaluated next season to determine if carefully applied herbicide is necessary to completely eradicate the invasive species. I will available on-site to advise what areas of bittersweet need to be removed.

As stated above, Mr. DeFreitas is ready to immediately move forward with the mitigation measures. On behalf of the Applicant, I ask the Commission for guidance on how to move forward with the completing the outstanding work that was required under the Order of Conditions. As stated above, the Applicant can complete the work within a 30-day time period.

If you have any questions pertaining to this report, please do not hesitate to contact me at (603) 475-5826 or via email at <u>jvondrak@yahoo.com</u>.

Sincerely,

Julie Vondrak

Julie Vondrak/Wetland Scientist

CC: Aguiar DeFreitas