



## CONSERVATION COMMISSION MEETING MINUTES– March 25, 2019

**Present:** Laurie Freeman- Chair, John Mooney, Bob Mosher and Bob Hidell- Commissioners, Loni Fournier- Conservation Officer, and Sylvia Schuler- Administrative Secretary

**Absent:** Frank Gaul, Paul Hall, and Jacqueline Zane

**The meeting was called to order at 7:00 PM.**

### Approval of Minutes

**Motion:** Commissioner Mosher moved to approve the draft minutes from the March 11, 2019 meeting.

**Second:** Commissioner Mooney

**In Favor:** All

**Opposed:** None

### Certificate of Compliance

#### 8 Smith Road – DEP 034-1285

Applicant: Adam Devine, TACZ Realty Trust

*Excerpts from the staff memo:* An Order of Conditions was issued in January 2017 for alterations and a large addition, a garage, and new decks associated with an existing single family house. The as-built plan adheres to the final approved plan. Staff visited the site last month for an occupancy inspection and required that erosion controls, which had been removed, be reinstalled since the area around the house was not stable. Staff visited the site again on 3/18/19 for the COC inspection and required the erosion controls to be extended to more fully protect the resource areas from an eroding, sloped area adjacent to the garage. Mitigation plantings have not yet been installed and staff reminded the builder that the Order requires a planting plan to be approved by the Commission prior to planting. The Order also requires that the downspouts associated with the addition and garage be connected to a drywell or discharge into a rocky swale. At this time, there is only a downspout on a portion of the original house. Instead, most of the rooftop runoff is being captured by stone trenches, via a drip edge, and a portion of the garage runoff is being directed to the driveway, which consists of pavers (semi-permeable). Staff requested and received a cross-section detail of the stone trench and was satisfied with its construction.

*Meeting Documents & Exhibits:* Staff memo and As-built plan

Jon Palmgren was present and explained that he was the builder, they have a buyer and he is just waiting for the growing season to start in order to get the plantings in and the lawn seeded. Commissioner Hidell asked if the buyer was aware of the Order of Conditions and J. Palmgren said that they were.

The C.O. stated that erosion controls are still in place. Commissioner Freeman asked if there was anything outstanding with the down spouts into drywells. The C.O. stated that she felt the alternative that was installed meets the same purpose; the addition portion of the house does not have downspouts, it has only a drip edge but below this is a gravel trench, 18" wide by 18" deep. She added that everything has been wrapped up with this project except for the plantings and they will be installed as soon as possible.

**Motion:** Commissioner Mooney moved to issue a Partial Certificate of Compliance for 8 Smith Road DEP 034-1285.

**Second:** Commissioner Mosher

**In Favor:** All

**Opposed:** None

**Commissioner Freeman read the Public Hearing Notice of Intent.**

### Request for Extension of Order of Conditions

Applicant: Dominic Meringolo, Solitude Lake on behalf of the Cushing Pond Preservation Group, Inc.

*Excerpts from the staff memo:* The current Order of Conditions for Cushing Pond was issued in April 2016 for control of aquatic vegetation, using herbicides and algaecides in accordance with the approved Aquatic Management Program. The Order is set to expire on April 21, 2019. The applicant, Cushing Pond Preservation Group Inc., is requesting a three-year extension to continue the treatment program. Targeted plants were anticipated to be predominantly curly-leaf pondweed, fanwort, and floating leaf water lily, however the program includes flexibility to use alternative products and strategies depending on the actual conditions each year and annual monitoring.

Staff requested and obtained an update on the annual monitoring, treatments completed and plants targeted, treatment locations, effectiveness of treatments, and current status of the pond (see attached). Staff has also inquired whether the applicant conducts any education for residents/abutters regarding avoiding the spread of invasive plants or minimizing fertilizer use in the area. SOLitude

Lake Management (the contractor) also has several good suggestions in their 2016 report. There is no requirement in the Order to do this, however staff encourages these measures as additional ways to help address the vegetation problems through prevention, and potentially save funds if fewer or smaller treatments were needed.

Meeting Documents & Exhibits: Staff memo and from Solitude Lake, the 2017-2018 Annual Summary Report & 2016 Year-End Report

Drew Kelosis, Solitude Lake, was present and described Solitude Lake's efforts, along with the Cushing Pond Preservation Group (CPPG), to maintain Cushing Pond. He stated that Solitude Lake has been working with the CPPG for over 15 years. He explained that Cushing Pond is basically an impoundment of the Eel River, and they are trying to keep the level of invasive species under control.

D. Kelosis stated that the main species needing attention is curly-leaf pondweed (non-native). He stated that they use the permitted amount of a contact herbicide seasonally which burns back the top of the plant but doesn't kill it completely. It does come back but through the years the density has decreased. Commissioner Freeman asked why they can't eradicate it and D. Kelosis stated that they don't use the word 'eradicate' as it is not so easy. They had success with another plant, fanwort, that had been in Cushing Pond and that seems to be all gone. The herbicide method kills the tops so it reduces seed and turion production but the roots remain and eventually grow again. If they were to use a mechanical method of removal, the pondweed would fragment and eventually spread. Commissioner Mosher asked how these weeds would have gotten into the pond and D. Kelosis explained that it's unknown, could be that birds might have eaten the seeds from another pond and transported them to Cushing Pond.

**Motion:** Commissioner Mosher moved to issue a three-year Extension Permit for the Order of Conditions issued to Cushing Pond (DEP 034-1255).

**Second:** Commissioner Hidell

**In Favor:** All

**Opposed:** None

### **Notices of Intent**

#### **0 and 90 Ward Street** – DEP 034-1337

Applicant: Black Rock Development

Representative: Carmen Hudson, Cavanaro Consulting, Inc.

Proposed: Demolition of existing structure and construction of three single family houses

Excerpts from the staff memo: This hearing is continued from 3/11/19 to give the applicant time to respond to comments and questions raised by staff, as well as to allow staff the opportunity to verify the wetland delineation when field conditions were more favorable. Staff visited the site again on 3/18/19. Staff was able to verify the wetland delineation and is in agreement with the delineation of the Bordering Vegetated Wetland, Inland Bank, and Potential Vernal Pool. Staff does not agree with the delineation of Bordering Land Subject to Flooding. Staff does not recommend requiring a flood study or additional information for the purposes of this filing, given that staff believes the actual floodplain likely does not reach the higher elevations on the site, if it is present on the site at all, and all work except for new lawn has been kept out of the mapped FEMA flood zone boundary.

Staff has also received a letter from the representative responding to questions and comments regarding the project and has had a follow-up conversation with the representative. The following items summarize the bulk of those communications.

- **Structures and impervious area in the 50 and 100ft buffer zones.** Staff would prefer to see the house and driveway moved farther away from the wetland resource areas, however staff understands that the applicant is considering multiple factors, including grading, flood zones, fire access, retaining wall height, as well as monetary considerations. The representative has indicated that the driveway could potentially move farther away, however the proposed septic tank and associated sewer line would then move closer. Staff recommends mitigation as noted below in other comments and draft conditions.
- **Impervious area and stormwater management.** Although a 1,200 sq ft area of impervious pavement will be removed from the 100ft buffer zone on Lots 1 and 2, there will be a significant increase of 3,817 sq ft (1,937 pavement + 1,788 dwelling + 92 retaining wall) of impervious area on Lot 3, which is currently wooded. Staff recommends mitigation for stormwater runoff. The representative has submitted a revised plan depicting a crushed stone apron on the eastern side of the driveway. Staff recommends that drywells also be incorporated on Lot 3 in order to infiltrate rooftop runoff.
- **Lawn, tree removals, and landscaping.** The limit of lawn has been revised to stop the 50ft buffer zone and based on staff recommendations, the limit of work and erosion control line has also been moved as close as possible to the 50ft buffer zone on the revised plan. The proposed work on Lot 3 and the Open Space Lot will remove a maximum of 58+/- trees 6" in caliper and larger. Staff recommends as many mitigation plantings (shrubs and trees) as feasible on Lot 3. Staff also recommends a permanent demarcation of the 50ft buffer zone, particularly since the lot is currently undeveloped. The representative has agreed to these recommendations.
- **Septic system.** Staff remains concerned about the proximity of the septic system to the resource areas, however staff understands there are other factors affecting the siting of the leaching field and sewer pipes, including private wells, site topography, soil conditions, and property lines. As proposed, the leaching field is exactly 100ft away from the closest resource area and the pipes are within 10ft. The Regulations only speak to the location of the leaching field and the current proposal meets those performance standards.

- **Public access to open space.** Related to Planning Board requirements, the applicant is proposing a 5ft wide, approximately 100ft long mulch path for the public to access the Open Space Lot, which contains the wetland resource areas. This path will be mostly within the 50ft buffer zone, in close proximity to the intermittent stream.

Meeting Documents & Exhibits: Staff memo and drawing No. FRD revised 3/20/19

George McGoldrick from Black Rock Development was present and explained that the project had gotten approval from the Planning board for the Flexible Residential Development (FRD). He described the proposal and pointed out that one of the three proposed lots was within the Commission's jurisdiction. G. McGoldrick stated that there is an overall reduction of impervious on the 6 acre site, from 15,000 sf to 14,000 sf. The C.O. explained there is a decrease overall, however, on Lot 3 in the Commission's jurisdiction, there is an increase.

In response to a question from Commissioner Hidell, G. McGoldrick confirmed that all the wastewater is proposed to go to the 4 acre lot, and explained that with a Flexible Residential Development (FRD) that they are allowed to consolidate the wastewater treatment to minimize the impacts. G. McGoldrick explained that they'd been before the Board of Health (BOH) and asked for seven variances and have been told they'll give six variances. The one they have not received has to do with the distance from potable wells. There are two house lots #100 and #104 which have potable wells. He added that he's been in discussion with Aquarion about potentially putting those homes on town water. The developer would have to extend the water main down to those houses; Aquarion would donate the pipe. The homeowners are interested in discussing it but there is no deal yet.

G. McGoldrick stated that there's been great abutter and neighborhood support for the project because it's only three houses on 6 acres and dedicating 4 acres as a permanent conservation restricted easement. Commissioner Hidell stated that he didn't see that they had a lot of choice and that he doesn't view that as a giveaway. G. McGoldrick commented that if someone were to apply for a development as a 40B then the developer wouldn't have to abide by the 250 ft restrictions.

The C.O. explained that since the initial proposal, the Conservation staff had worked with the applicant, made some progress in terms of adjustments to construction activity on lot 3 as well as restoration; some areas that were originally proposed as lawn would now be a seed mix or some other more valuable restoration from a conservation perspective. Staff had drafted some not so usual draft conditions to try to protect the resource areas.

The C.O. stated that the proposed sewer lines running from the last pump chamber, to the leaching field are probably only 10 ft from the stream. She added that it meets the regulations, which only have a setback to a leaching field, but out of an abundance of caution, and knowing that at any point a component could fail, they added a draft condition requiring the septic pipes to be in a 'sleeve'. She stated that it is not ideal, and had asked why the septic system couldn't go behind the houses on Lots 1 and 2, and learned that, again, it's the 250 ft buffer from a potable well and the owner of the adjoining lot is unwilling to negotiate on any connections or wells. Therefore, they are left with the best option being the combined system where it's currently proposed with the hopes that 100 and 104 Ward Street are able to connect to town water. G. McGoldrick said that in order to get the Board of Health approval, they have to get the water connection done. He added that Lot 1 has an existing well and they propose to leave that well in place. Lot 2 already has service to it and there is water right across from lot 3. They would have to extend the main down to #100 and #104 Ward St if the neighbors approve. G. McGoldrick said they have no problems with a sleeve for the septic pipes. The C.O. stated that in her research and talking to local experts, the sleeves are the best option and standard practice.

Commissioner Hidell asked if they didn't have the wells on site then could each lot have its own septic. G. McGoldrick stated that if the neighboring 'Riverstone' well wasn't there at #70 Ward Street, then they could do that. In response to a question from Commissioner Hidell, the C.O. explained that drainage coming off the roof and the driveway would be addressed with a stone apron on the eastern side of the driveway; grading will be such that sheet flow will be directed to that apron and there's also a condition about incorporating drywells into the site design to capture roof runoff. Initially everything was going to the street and staff wanted to capture as much of that as possible to support the wetlands area. The C.O. clarified that the applicant was not required to meet stormwater standards but staff had asked for these minimal changes in order to slow, treat and infiltrate stormwater. G. McGoldrick stated that there were numerous test pits done where the septic is designed to go. There were no test pits done on Lot 3 however that is adjacent to where the existing septic system is now.

The C.O. stated that the history of the site based on the topography of the 4 acre portion was used for gravelling. G. McGoldrick stated that Dave Margetts had told him that they had pulled a lot of sand and gravel out of there in the forties and fifties. When Autumn Circle was developed, there were some drainage issues and the belief is that it's a manmade swale; there is an ongoing issue with drainage in Autumn Circle. He added that for with this proposal, the future owner of the property has to maintain that swale when it gets backed up with debris; it would be part of the HOA that there be an annual cleanup of it.

Commissioner Freeman asked about the tree removals. The C.O. explained that the entire Lot 3 and the 4 acre lot are currently forested so everywhere on the plan where there is proposed development or lawn would mean taking out trees. The C.O. stated that there is very little work in the 50 ft buffer on Lot 3 and no work happening within the 50 ft buffer on the 4 acre lot. She explained how the engineers calculated the number of trees,  $\pm$  58 trees, and that the number would not be over 58. The C.O. stated that the only place where there might possibly be trees removed in the 50 ft buffer would be where the driveway turnaround and retaining wall are proposed. G. McGoldrick explained that the reason for the retaining wall is to minimize the impact to the 50 ft buffer; they wouldn't have to grade it down. Commissioner Freeman asked about mitigation plantings. The C.O. stated that staff had asked them to focus on the area in between the turnaround on Lot 3 and Ward Street for restoration as due to the grading, it's

unlikely that it would be a usable space for the future homeowner. Formerly it was proposed to be just seed mix, but since then, staff has encouraged them to include trees and shrubs, though this might be limited due to underground utilities. She also included a draft condition requiring submittal of a landscape plan. Commissioner Freeman expressed her concern over the quantity of tree removal and stability. The C.O. offered that the tree removal is all within the 100 ft buffer and in this area they are not providing stability or shading for the wetland; ultimately it would be habitat loss.

Commissioner Hidell commented that as prime land gets consumed, development begins to move into marginal areas and he is not enthusiastic because of the proximity of proposal to the 50 ft buffer. G. McGoldrick agreed that there are a lot of wetlands on the site but added that there are a lot of local restrictions that wouldn't be in place if someone used State regulations. To put only 3 houses on 6 acres is de minimis. He added that there are maybe up to 50 trees being removed but as a part of the FRD there are over 100 trees being planted on Lot 1 and behind Lot 1 so more than duplicating what is being lost.

Commissioner Hidell stated that he's struggling with the concept of the 6 acres, a lot of that would not be developed. Commissioner Freeman noted that several 'de minimus' projects start to add up. G. McGoldrick confirmed with Commissioner Hidell that his hesitation is because of work within the 50 ft buffer.

Commissioner Freeman invited any comments from the public.

Steve Hickey, 5 Autumn Circle, stated that he's a veteran of Riverstone. He believes this is a very conscientious use of the property. He added that whatever the Commission might be concerned about losing, they will lose vastly more if another developer gets ahold of it. The neighborhood is very concerned.

Commissioner Hidell clarified that the Commission has a jurisdiction of the 100 and 50 ft buffers from the wetlands.

Arthur Casey, 17 Autumn Circle, stated that he's lived there since 1962 and described that there had been bad flooding and piping issues and then the ditch was cut in. All of Autumn Circle feels this proposal is a legitimate reasonable use of this parcel. He added that if it's proposed to put in more trees than are being removed then he doesn't understand the problem. He really supports this project. He added that the town doesn't clean the stream and that the neighbors have gotten together to clean it and the fact that this proposal offers to make it part of the HOA to keep in cleared out is a huge plus.

Ed Johnson, 108 Ward Street, spoke in support of the project. He feels that it is shortsighted if this is not approved because it would mean a lot more houses. He realizes what the Commission's charge is, however, if the project defaults to the other developer, then it will be the State regulations and the Commission will have no control. He added that G. McGoldrick has worked with the neighbors, whereas with the other developer, the neighbors had no say.

Elizabeth Johnson, 108 Ward Street, expressed her concern and stated that within the Commission's jurisdiction are the water issues; the areas by Autumn Circle and Riverstone interact with the aquifer between Weymouth and Hingham. They want to protect the water quality and supply, the environment and leave it as natural as possible.

Commissioner Freeman stated that protecting the water is one of the goals of the Commission which is why there is concern about the septic pipes running so close to the wetland.

Rebecca Shumbata, 104 Ward Street, pointed out that with this proposal the beautiful forest across from her house would remain which would make her happy, protect her property value and she's petrified that it would be developed and she would have houses on her back yard. If this proposal protects so much of the land and the woods, for all of these neighbors, then it should be seriously considered. She added that she is willing to work with G. McGoldrick on her well.

Jean Silverio, 6 Autumn Circle, Autumn Circle stated that she wholeheartedly supports this proposal

Commissioner Hidell stated that he understands the neighborhood's passion and added that he also understood the comments about aquifer recharge and that's part of his concern. Commissioner Mosher stated that he has concern regarding the work within the 50 ft buffer, but from a practical viewpoint it makes sense to protect as much as he can, by getting the best deal now, as opposed to someone else coming in who he can't get a deal with. The C.O. clarified that if this were to come back as a 40B project, it would not come before the Conservation Commission; just as the Riverstone project did not. She added that while she usually dissuades the Commission from trying to get the best deal they can get, should they deny the project, the applicant could always appeal to DEP or if the deal with the property owner unravels, it could always come back as a 40B project for which the Commission would lose all say.

Further discussion followed regarding the potential of a 40B proposal. G. McGoldrick stated that the town's level of affordable housing changes every census year. There is a new census coming up this year. G. McGoldrick stated that he doesn't own the property yet, he has an option to buy, and has been granted extensions from the owner as he goes through the permitting process. They do have another offer on the table. G. McGoldrick described his development at Black Rock and how it cleaned up and restored the land. He added that he had been advised that 5 lots could be fit in this area but had rejected that idea because three lots pays the price. Based on the overall plan he's proposing for this property, he believes it is a de minimis amount to keep this property as natural as possible.

Commissioner Freeman asked for clarification of why the septic line had to go so close to the wetland. The property lines were pointed out on the plan.

The C.O. confirmed with G. McGoldrick that he had reviewed the draft conditions in the staff memo and that he had no comments or concerns about them. The C.O. described conditions #20 & #21 regarding installation of a permanent demarcation of the 50 ft buffer zone, not to be encroached on in the future, and noted that the representative had another great solution in mind, rather than a post & beam fence, that would accomplish the same purpose. She added that to address the Commission's concerns about the 50 ft buffer, she explained that the applicant's had responded to staff's concerns by pulling the limit of the work back, including a sleeve for the pipe and Condition #5 calls for a double row of erosion controls for along the sewer line located on Lot 3 and the Open Space Lot, where work will be taking place within the 50ft buffer zone.

Regina Casey, 17 Autumn Circle, spoke of the many meetings for Riverstone that they sat through and that there are 132 units going in there. She spoke further and enthusiastically in support of this proposal.

With no further comments from the public, Commissioner Freeman closed the hearing to public comment.

**Motion:** Commissioner Mooney moved to issue an Order of Conditions for the proposed work at 0 and 90 Ward Street (DEP 034-1337), as shown on the submitted plans, and adopt the findings of fact a through c, and special conditions 1 through 26 of the staff report.

Findings:

- a. The project meets the submittal requirements for issuance of an Order of Conditions under the Wetlands Protection Act (M.G.L. c. 131, § 40) and the Town of Hingham Wetland Regulations.
- b. The work described is within an area subject to protection under the Wetlands Protection Act (M.G.L. c. 131, § 40) and the Town of Hingham Wetland Regulations, and will not alter or adversely affect the area subject to protection under the Act or the Regulations.
- c. For the purpose of this filing, the Commission makes no finding as to the exact boundaries of the Bordering Land Subject to Flooding on the site.

Conditions:

1. The applicant shall notify the Hingham Conservation Commission in writing of the name, address, and telephone number(s) of the project supervisor or contractor who shall be responsible for ensuring compliance with this Order and shall notify the Commission, by telephone or writing, at least 48 hours prior to commencement of work on the site.
2. This document shall be included in all construction contracts and subcontracts dealing with the work and shall supersede all other contract requirements.
3. The project supervisor or contractor in charge of the work shall have a copy of this Order available on the site at all times.
4. Prior to the start of any excavation or construction, there shall be a pre-construction conference on the site between the project supervisor or contractor responsible for the work and an agent of the Commission to ensure that the requirements of this Order are understood.
5. Prior to the start of any excavation or construction, erosion and sediment controls shall be installed in the locations shown on the final approved plan and inspected by an agent of the Commission. A double row of erosion and sediment controls shall be installed along the sewer line located on Lot 3 and the Open Space Lot, where work will be taking place within the 50ft buffer zone. Straw wattles and/or hay bales will not be used as a form of erosion or sediment control.
6. Erosion and sediment controls shall remain in place until all disturbed or exposed areas have been stabilized with a final vegetative cover or the Commission has authorized their removal.
7. Prior to the start of any excavation or construction, a planting plan shall be submitted to the Commission for review and approval. The planting plan shall include a mix of native trees, shrubs, and perennials, and shall include as many mitigation plantings as feasible within the 100 ft buffer zone on Lot 3, between the driveway and the septic system components.
8. Prior to the start of any excavation or construction, a Long-term Operation and Maintenance Plan shall be submitted to the Commission for review and approval. The plan shall include information and details on the manmade structures or improvements located on Lot 3, as well as any plans for the maintenance of or drainage improvements to the intermittent stream or other resource areas located on the Open Space Lot.
9. During all phases of construction, all disturbed or exposed areas shall be brought to a finished grade and either a) loamed and seeded for permanent stabilization, or b) stabilized in another way approved by the Commission.
10. Any debris, which falls into any resource area, shall be removed immediately by hand.
11. Any on site dumpsters shall not be located within 50 feet of any resource area.
12. There shall be no stockpiling of soil or other materials within 50 feet of any resource area.
13. Issuance of these conditions does not in any way imply or certify that the site or downstream areas will not be subject to flooding, storm damage, or any other form of damage due to wetness.
14. Any dewatering activities on the project in which water will be released into any resource area or storm drain shall make use of a stilling pond or similar device to remove sediment before the water is released.

15. No vehicle or other machinery, refueling, lubrication or maintenance, including concrete washout, shall take place within 50 feet of any resource area.
16. Before executing any change from the plan of record, the applicant must have the Commission's written approval. Any errors found in the plans or information submitted by the applicant shall be considered as changes. Approval from other Town Agents or Inspectors does not relieve the applicant from obtaining approval from the Commission.
17. The entire length of the sewer pipes (2, 2" pipes) from the pump chamber on Lot 3 to the leaching field on the Open Space Lot shall be sleeved to provide additional protection for the resource areas.
18. Rooftop runoff for new dwelling on Lot 3 shall be infiltrated on site, using either drywells, infiltration chambers, or drip edge stone trenches.
19. The new driveway on Lot 3 shall be pitched so that runoff from driveway will be directed to a stone infiltration trench(es) or a trench drain, not to the street. Permeable pavement or pavers will also be allowed for the driveway with prior approval from the Commission.
20. To prevent encroachment, a post and rail fence (or other approved demarcation) shall be erected at the 50ft buffer zone boundary to protect the resource areas. Said fence shall have posts secured in concrete and no gates (to exclude wheelbarrows and lawn mowers). No occupancy permit signoff shall occur prior to the fence (or other approved demarcation) installation. This demarcation shall be maintained in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
21. The area beyond the fence (or other approved demarcation) is to remain naturally vegetated. This condition shall apply in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
22. It is the sole responsibility of the owner of record to maintain drainage structures at all times. The property owner shall comply with the approved Long-term Operation and Maintenance Plan. The property owner is also responsible for retaining records of the maintenance and cleaning for review by the Commission. This condition shall apply in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
23. The applicant shall apply for a Certificate of Compliance as soon as work has been completed and prior to the expiration of this Order. If work cannot be completed prior to the expiration of this Order, the applicant shall contact the Commission in writing to apply for an extension at least thirty days prior to the expiration date.
24. The applicant shall submit an "as built" plan to the Commission upon completion of this project. The plan shall be signed by the professional engineer of record, who shall certify that the work has been done in accordance with the approved plans and this Order. This plan must be submitted prior to the issuance of a Certificate of Compliance by the Commission.
25. Prior to the issuance of a Certificate of Compliance, the mitigation plantings shall survive at least two full growing seasons with a minimum of 75% survival rate
26. Prior to the issuance of a Certificate of Compliance, a qualified wetlands consultant shall monitor the potential vernal pool located on the Open Space Lot during the vernal pool amphibian breeding season and submit all data collected to the Massachusetts Natural Heritage & Endangered Species Program so that it may be certified. A copy of the submitted materials shall be provided to the Commission.

**Second:** Commissioner Mosher

**In Favor:** All

**Opposed:** None

**382 (aka 384) Cushing Street** – DEP 034-1338

Applicant: Neil and Susan Connolly

Representative: Tom Liddy, Lucas Environmental

Proposed: Addition and deck

*Excerpts from the staff memo: The applicant is proposing to construct a two-story garage addition, with living space on the second floor and a footprint of approximately 315 sq ft, a set of stairs and a walkway around the garage to the front door of the existing house, a replacement porch at the front of the existing house, and a deck and stairs of approximately 400 sq ft off the rear of the existing house. Mitigation plantings are also proposed. The entire lot is located within the Riverfront Area associated with an unnamed stream that drains into the Plymouth River. Two areas of Bordering Vegetated Wetlands associated with the stream are located on or immediately adjacent to the lot. The existing house and almost all of the proposed work, with the exception of a very small section of the proposed walk, are located within both the 100 ft inner riparian zone and the 100 ft buffer zone. In addition, a portion of the proposed rear deck, approximately 133 sq ft, will be located within the 50 ft buffer zone. Almost the entire lot and all of the proposed work is located within Bordering Land Subject to Flooding (Zone A).*

*Staff visited the site on 3/18/19. Staff agrees with the delineation of wetland resource areas on site, including Bordering Vegetated Wetland, Inland Bank, and Riverfront Area. Bordering Land Subject to Flooding is discussed below. The existing house is accessed by way of two separate driveways, though the upper driveway is mostly on an adjacent lot. The garage will be constructed on a sloping hill that runs between the upper and lower driveways and will be set into the hillside, which would potentially also add compensatory*

flood storage in BLSF. The proposed stairs and walkway will allow access up the hill to the front door without additional filling. The area currently consists of mostly lawn and a set of stone stairs with a small amount of boulders set into the hill. The deck will be constructed on a flat area behind the house currently consisting of lawn and a small number of ornamental shrubs set against the house. Finally, staff noted that there was a significant amount of yard waste and possibly a compost pile in a couple of locations in or near the BVW on the lot.

#### Riverfront Area

The proposed work would be considered new development under the performance standards. As required per 310 CMR 10.58 (4)(c), the applicant has submitted an alternatives analysis that considered several alternatives to meet the requirement that “there must be no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on the interests identified in M.G.L. c. 131, § 40.” The proposed project is preferred due to the orientation of the house, property line setbacks, location of a septic field, and proximity to resource areas, since the existing house is entirely within the inner riparian zone.

As required per 310 CMR 10.58 (4)(d), the work “must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131, § 40.” The Commission “may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater, on a lot recorded on or before October 6, 1997, provided that: a. At a minimum, a 100 foot wide area of undisturbed vegetation is provided. This area shall extend from mean annual high-water along the river unless another location would better protect the interests identified in M.G.L. c. 131 § 40. If there is not a 100 foot wide area of undisturbed vegetation within the riverfront area, existing vegetative cover shall be preserved or extended to the maximum extent feasible to approximate a 100 foot wide corridor of natural vegetation. b. Stormwater is managed according to standards established by the Department in its Stormwater Policy.” The proposed project will alter 1,031 sq ft of Riverfront Area and the lot contains 41,218 sq ft of Riverfront Area total, so the amount of alteration meets the standard, provided the other requirements are met. The applicant has proposed a restoration area to mitigate for both alteration in the Riverfront Area, as well as new structure in the 50 ft buffer zone (see below). This will be an improvement, however staff feels additional mitigation is appropriate and has asked for mitigation specifically for the work in Riverfront Area, since the applicant is proposing a conversion of vegetated areas (lawn) to permanent structures, and there is currently significantly less than a 100 ft wide corridor of natural vegetation on the lot. East of the wooden bridge there is a narrow strip of naturally vegetated area several feet in width and west of the wooden bridge there is BVW with almost no naturally vegetated buffer. Rooftop runoff from the garage is proposed to be collected by gutters and downspouts and discharged to splash blocks with crushed stone.

#### Structures in the 50 ft Buffer Zone

The proposed deck will be installed on helical screws, which will minimize ground disturbance during construction. Crushed stone will be installed under the deck to allow for infiltration of runoff and to avoid erosion. The deck will be 35.4 ft from the BVW at its closest point. The existing house is at least 40.7 ft from the BVW. Since 133 sq ft of the deck will encroach into the 50 ft buffer zone, the applicant has proposed 400 sq ft of restoration plantings near the bank, for a ratio of 3:1 restored area to area of encroachment. Plantings will be an appropriate mix of native shrubs.

#### Land Subject to Flooding

The Bordering Land Subject to Flooding is not accurate as depicted on the plans, as it is not based on site topography and the FEMA flood zone boundary actually crosses existing contours at a 90 degree angle on the lot. It is a Zone A, which does not have a base flood elevation, thus determining BLSF is more challenging. The representative has noted that the watershed size is relatively small (0.55 square miles) and they feel the house is likely out of the floodplain. In addition, the current owners have lived at the residence since 1991 and never observed the stream top its bank. Staff notes that FEMA is considering an adjustment to this particular Zone A polygon, per a current Workmap, as part of their restudy of the Charles Watershed. The draft polygon is smaller than what is currently depicted as the flood zone boundary.

The project proposes to construct the garage by excavating an area from the existing hill and setting the structure partially within the hill. The applicant states that the removal of material from the slope will create 838 cubic feet of flood storage. Flood vents are being proposed and staff has asked for clarification on the exact locations of flood vents. Per 310 CMR 10.57 (4)(a)(2) “work required to provide...compensatory flood storage shall not restrict flows so as to cause an increase in flood stage or velocity.” The Commission will need to determine if this standard has been met. The deck will also be in mapped floodplain, however staff suggests that the Commission consider this a de minimus decrease in flood storage given that the deck will be on footings and not a foundation, and water will still be able to flow freely in the area.

#### Meeting Documents & Exhibits: Staff memo and Proposed Conditions Plan revised 3/22/19

Representative Tom Liddy, Wetland Scientist from Lucas Environmental, architect Roger Hoit and applicants Neil and Susan Connolly were present. T. Liddy described the existing conditions of the 1 acre, primarily developed property; there is a perennial stream and two areas of Bordering Vegetated Wetlands. He stated that almost the entire property is in the 100 ft inner riparian zone. Part of the property is also in flood zone A. He described FEMA’s floodplain designation and contour lines, and despite the

inaccuracy of the floodplain, they drew up their proposal to meet the performance standards for Bordering Land Subject to Flooding, as if the entire property were in the flood plain.

T. Liddy described the two main components of the proposed work. One, a deck that will be located off the back of the house, entirely in lawn, using helical screws (which will permit less land disturbance than if excavating for a sonotube) and under the deck will be crushed stone to infiltrate any runoff coming off the deck.

The second component is a two story addition with a footprint of 315 sq ft. It will include a garage on the lower level and a second story bedroom that would be flush with the second driveway. There would be a reconfiguration of the walkway and landscaping to provide access to the front door. Runoff from the addition would be directed into downspouts and a splash block which would consist of stone. They are proposing two flood vents for the addition. The whole area is mapped as floodplain, however it's highly unlikely that the floodplain extends past the house. They did some research and the watershed for the stream is quite small at half a square mile and so usually with a stream of that nature, one wouldn't see a large floodplain, let alone one that would go 6-8 ft above existing grade. He added that the Connolly's have lived there since 1991 and N. Connolly described that the only time there was flooding in the house was the first night they moved in, the day of the 1991 'perfect storm' and there was minimal flooding around the bank. They haven't seen that extent of flooding in the 28 years since.

T. Liddy described that the garage would be built into the side of the hill and in doing so they are removing a lot of material out of the hillside, leaving an 848 cubic foot void, so should a flood come all the way up the hill, the water would enter the garage.

He described the proposed mitigation; a vegetated buffer strip consisting of 12 shrubs; arrowwood, sweet pepperbush and blueberry. This reflects a 3:1 ratio. There is 133 sq ft of deck proposed within the 50 ft buffer and the buffer strip would be 400 sq ft.

Commissioner Hidell commented that if water goes into the garage, then wouldn't it also enter the house. T. Liddy agreed but added that would be a catastrophic flood. The C.O. explained that FEMA is in the process of remapping the Charles Watershed (not Charles River Watershed) which encompasses 90% of the town, and she has been able to look at the state's preliminary maps. She has the draft maps and this floodplain is significantly reduced. Whether or not it excludes the house is hard to tell but it's clear that they've done some revisiting of the site based on better contours. They didn't do an H & H (Hydrology and Hydraulics) study for the stream; they didn't do that anywhere in Hingham, but they are attempting to adjust the floodplain based on better data, topography and other flood indicators. So the preliminary maps have this floodplain reduced to the point that she doesn't feel it would be applicable to this project. She added that doesn't override the floodplain that FEMA is enforcing on the site right now, but given the homeowner's history of the site, the fact that the watershed is small, the topography that makes no sense, and the fact that the draft maps don't show the floodplain extending this far, all could give some confidence that it doesn't apply to this site.

Responding to a question from Commissioner Hidell, T. Liddy stated that they had not done any soil testing for groundwater but estimated that it was the elevation of the stream. Brief discussion followed about location of the septic, wet soils encountered by Commissioner Hidell on his site visit, and where the flooding entered the house on that night of the perfect storm (only in one corner of the unfinished basement). Commissioner Hidell stated that he suspected that groundwater was 1-2 ft maximum below the house.

R. Hoit described their efforts to reduce the impact of the deck; they'll use 13 helical screw piles, 3 of which will be within the 50 ft buffer holding up the lower end of the deck. The existing house is 40.7 ft from the wetland and the deck would be 35.4 at its closest point. R. Hoit provided further description of the design of the garage.

Commissioner Freeman noted that the state regulations regarding riverfront give the Commission discretion to allow new alteration in the inner riparian, within the square footage allowable. In this case, the garage is almost entirely in the inner riparian. There were two other requirements of that regulation that were less clear to her. One was 'stormwater managed according to standards' and the other was the '100 ft wide area of undisturbed vegetation'. She confirmed with the C.O. that there is not currently a 100 ft wide area of undisturbed vegetation and read the remainder of the requirement 'if it's not, then existing vegetative cover shall be preserved or extended to the maximum extent feasible to approximate a 100 ft wide corridor of natural vegetation'.

Discussion followed about what the 'maximum extent feasible' could entail, along with what is reasonable, and analysis of the language in the regulation. Commissioner Freeman commented that if the goal is to protect the resource area and someone insists on building right next to the stream then it seems as if the language does provide for the Commissioner to require restoration of the 100 ft buffer. The C.O. stated that she felt the 'ideal' is a 100 ft wide area of undisturbed vegetation, but on this site, it has been lost already and is lawn. The Commission can allow alteration, which this project is below the threshold in the regulations, and the Commission can ask for restoration of some or all of that 100 ft inner riparian in return. The C.O. added that while cost is not called out in the regulations, it has to be a consideration. It's a lot like mitigation for encroachment in the 50, where the Commission looks for something in return; in this case they're getting 3:1 mitigation for encroachment into the 50 ft buffer. The Commission will have to determine if that 3:1 proposed mitigation is sufficient for encroachment in the 50 ft buffer and construction in the inner riparian or if it wants to ask the applicant for more.

Discussion followed regarding the regulation and vegetation. Commissioner Hidell commenting that the 'lawn' is full of moss which absorbs moisture. The C.O. explained that R. Hoit had come in before the application was submitted, and asked where the mitigation would mean the most and she suggested that, if it's lawn right up the resource area, then the best would be to pull back the lawn and put in some plantings there instead; the more of a buffer from lawn maintenance activities, the better. The C.O.

stated that the placement of the mitigation area is great, it's just a matter of whether the Commission feels the size of it is enough given what is proposed.

Commissioner Hidell asked the Connollys further questions about the height that the water came up when it flooded. N. Connolly described the puddling that occurs and where. Commissioner Hidell stated that he doesn't know that added mitigation would help here. The C.O. stated that there is nothing typical for 'maximum extent feasible' and deferred to the Commission.

Commissioner Hidell confirmed that under the deck would be crushed stone/gravel and asked where they expect it to drain. R. Hoit pointed out the various elevations on the plan to the Commission. Further discussion followed regarding mitigation, the inner riparian and the regulation.

Commissioner Freeman invited any comments from the public. With no comments from the public, Commissioner Freeman closed the hearing to public comment.

**Motion:** Commissioner Mooney moved to issue an Order of Conditions for the proposed work at 382 (aka 384) Cushing Street (DEP 034-1338), as shown on the submitted plans, and adopt the findings of fact a through c, and special conditions 1 through 23 of the staff report.

Findings:

- a. The project meets the submittal requirements for issuance of an Order of Conditions under the Wetlands Protection Act (M.G.L. c. 131, § 40) and the Town of Hingham Wetland Regulations.
- b. The work described is within an area subject to protection under the Wetlands Protection Act (M.G.L. c. 131, § 40) and the Town of Hingham Wetland Regulations, and will not alter or adversely affect the area subject to protection under the Act or the Regulations.
- c. For the purpose of this filing, the Commission makes no finding as to the exact boundaries of the Bordering Land Subject to Flooding on site.

Conditions:

1. The applicant shall notify the Hingham Conservation Commission in writing of the name, address, and telephone number(s) of the project supervisor or contractor who shall be responsible for ensuring compliance with this Order and shall notify the Commission, by telephone or writing, at least 48 hours prior to commencement of work on the site.
2. This document shall be included in all construction contracts and subcontracts dealing with the work and shall supersede all other contract requirements.
3. The project supervisor or contractor in charge of the work shall have a copy of this Order available on the site at all times.
4. Prior to the start of any excavation or construction, there shall be a pre-construction conference on the site between the project supervisor or contractor responsible for the work and an agent of the Commission to ensure that the requirements of this Order are understood.
5. Prior to the start of any excavation or construction, erosion and sediment controls shall be installed, as shown on the final approved plan, and inspected by an agent of the Commission; straw wattles and/or hay bales will not be used as a form of erosion or sediment control.
6. Erosion and sediment controls shall remain in place until all disturbed or exposed areas have been stabilized with a final vegetative cover or the Commission has authorized their removal.
7. During all phases of construction, all disturbed or exposed areas shall be brought to a finished grade and either a) loamed and seeded for permanent stabilization, or b) stabilized in another way approved by the Commission.
8. Any debris, which falls into any resource area, shall be removed immediately by hand.
9. Any on site dumpsters shall not be located within 50 feet of any resource area.
10. There shall be no stockpiling of soil or other materials within 50 feet of any resource area.
11. Issuance of these conditions does not in any way imply or certify that the site or downstream areas will not be subject to flooding, storm damage, or any other form of damage due to wetness.
12. Any dewatering activities on the project in which water will be released into any resource area or storm drain shall make use of a stilling pond or similar device to remove sediment before the water is released.
13. No vehicle or other machinery, refueling, lubrication or maintenance, including concrete washout, shall take place within 50 feet of any resource area.
14. Before executing any change from the plan of record, the applicant must have the Commission's written approval. Any errors found in the plans or information submitted by the applicant shall be considered as changes. Approval from other Town Agents or Inspectors does not relieve the applicant from obtaining approval from the Commission.
15. Flood vents shall be installed on the garage addition as shown on the approved plan.
16. Rooftop runoff from the garage addition shall not be directed to the driveway and shall instead be directed into lawn areas via splash blocks with crushed stone under the downspouts.

17. Accumulated yard waste and compost shall be removed, by hand, from the riverfront area and bordering vegetated wetland, in the vicinity of WF A-5 and WF A-6/BF 1-1, and on the opposite side of the stream in the vicinity of the wooden footbridge and flags BF 1-5 and BF 1-6.
18. There shall be no future dumping of lawn waste, brush, leaves or other materials in the wetland resource areas or buffer zone, per Section 23.6 of the Hingham Wetlands Regulations. This condition shall apply in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
19. The use of de-icing chemicals, except for calcium magnesium acetate, a.k.a. CMA, or other alternative approved by the Commission, shall be prohibited on this property because of its proximity to an unnamed tributary to Plymouth River, which is a state-designated Coldwater Fish Resource (tributary), and the importance of the surrounding resource areas to the groundwater supply and water quality. This condition shall apply in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
20. The use of pesticides, herbicides, and fertilizers shall be prohibited on this property because of its proximity to an unnamed tributary to Plymouth River, which is a state-designated Coldwater Fish Resource (tributary), and the importance of the surrounding resource areas to the groundwater supply and water quality. This condition shall apply in **perpetuity** and shall not expire with the issuance of a Certificate of Compliance.
21. The applicant shall apply for a Certificate of Compliance as soon as work has been completed and prior to the expiration of this Order. If work cannot be completed prior to the expiration of this Order, the applicant shall contact the Commission in writing to apply for an extension at least thirty days prior to the expiration date.
22. The applicant shall submit an "as built" plan to the Commission upon completion of this project. The plan shall be signed by the professional engineer of record, who shall certify that the work has been done in accordance with the approved plans and this Order. This plan must be submitted prior to the issuance of a Certificate of Compliance by the Commission.
23. Prior to the issuance of a Certificate of Compliance, the mitigation area plantings shall survive at least two full growing seasons with a minimum of 75% survival rate.

**Second:** Commissioner Mosher

**In Favor:** All

**Opposed:** None

**111 Weir Street (formerly #105)** – DEP 034-1326, **continued to 5/6/19**

Applicant: John Woodin

Representative: Gary James, James Engineering, Inc.

Proposed: Construction of new single family home and driveway

Other Business

**a. Discussion of changes to Wetland Regulations: Part 1, Section 4.0 Exceptions; Part 2, Section 23.0 Tree Replacement/Site Restoration; Part 2, Section 23.1 Septic Systems**

The C.O. brought up these three sections for the Commission to review and talk about at the next meeting.

**Exceptions:** The C.O. explained that the Conservation office receives notification from the Building department if there is anything within the Conservation jurisdiction. These are sometimes for activities that have no impact but the regulations don't allow for wiggle room, for example, an 8 by 8 shed in existing lawn or replacing a single footing. The C.O. asked the Commission to think about language on possible minimum thresholds for filing. The state regulations have a list of minor activities that are exempt.

**Tree Replacement and Site Restoration:** The C.O. explained and gave examples of other towns regulations (Cohasset and Braintree) that have outlined expectations for tree replacement and site restoration.

**Septic Systems:** The C.O. explained that currently the Conservation regulations only call out the leaching field as a concern, whereas the Board of Health calls out all components.

Commissioner Freeman adjourned the meeting at 8:50 pm.

Submitted, \_\_\_\_\_

Sylvia Schuler, Administrative Secretary

Approved on April 22, 2019

*Meetings are recorded. To obtain a copy of the recording, please contact the Conservation Office.*