

**MINUTES
CONSERVATION COMMISSION**

**1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE
CONFERENCE ROOM "A"**

3:30 p.m.

October 09, 2019

MEMBERS PRESENT: Chairman Steve Miller; Vice Chairman MaryAnn Blanchard;
Members; Allison Tanner, Barbara McMillan, Samantha Collins

MEMBERS ABSENT: Adrienne Harrison; Alternate, Jessica Blasko

ALSO PRESENT: Peter Britz, Environmental Planner/Sustainability Coordinator



I. APPROVAL OF MINUTES

A. September 11, 2019

Ms. Tanner moved to approve the minutes from the September 11, 2019 Conservation Commission Minutes, seconded by Vice Chairman Blanchard. The motion passed unanimously by a 5-0 vote.

II. CONDITIONAL USE APPLICATIONS

1. 20 Taft Road
Shannon Harrington & James St. Pierre, Owners
Assessor Map 268, Lot 91
(This item was postponed at the September 11, 2019 meeting to the October 09, 2019 meeting.)

Shannon Harrington, Kelly Eliot and Glen Towne spoke to the application. Ms. Harrington is the owner and commented that the goal was to expand an existing deck to go around the left edge of the existing pool. There is crushed rock below where the new deck will go.

Chairman Miller questioned what side the wetland was on. Ms. Harrington responded that the wetland was in the back. The whole property is in the wetland. Mr. Towne added that there would not be any digging or wetland encroachment.

Chairman Miller questioned what would be under the deck. Mr. Towne responded that they would dig for the footings and the posts would sit on cement slabs. The rest of the area would be gravel.

Ms. Collins questioned if they could shift the proposed deck to the side of the pool. Then the deck would not go any closer to the wetland. Ms. Eliot responded that would reduce the amount of open space in their yard.

Chairman Miller questioned if they could put in plantings behind the pool to create a vegetated buffer strip. Ms. Eliot responded that they could add hosta back there.

Ms. McMillan questioned if there would be spacing between each deck board to reduce additional runoff. Mr. Towne responded that they could space them 1/8 inch apart to let water through.

Vice Chairman Blanchard summarized that the Commission would like to have the deck boards spaced and a buffer strip planted in the back area to encourage infiltration.

Vice Chairman Blanchard moved to recommend **approval** of the Wetland Conditional Use Permit to the Planning Board, seconded by Ms. McMillan with the following stipulations:

1. The deck boards on the new deck will be spaced to allow water to pass through the deck.
2. The applicant shall provide plantings in the 4' strip between the proposed deck and rear property line.

The motion passed in a 4-1 vote. Ms. Collins opposed.

2. 350 Little Harbor Road
Robert J. & Susan L. Nalewajk, Owners
Assessor Map 202, Lot 16

Owner Susan Nalewajk spoke to the application. A CUP was granted in 2016 for their house construction. Ms. Nalewajk moved into the house earlier this year and they are finishing the last driveway details. They put in permeable pavers and would like to keep it all permeable pavers instead of cutting out a ribbon. Ms. Nalewajk provided pictures of the existing driveway as it has been installed and showed a plan sheet where the ribbon would have been cut out.

Ms. Tanner questioned what the name of the paver was. Ms. Nalewajk responded that it was called techo block blue. Ms. Tanner noted that this paver was different than what was previously specified and requested more details about it. Ms. Nalewajk handed out a paper with the cross section of the new paver. The paver was switched because the other one was not a drivable paver. The construction crew put in the whole driveway, and then they will cut out the ribbon. The entire driveway has the same sub surface. If the ribbon is cut out, then 2 inches of loam would be laid down and it would be seeded.

Chairman Miller questioned what the differences in maintenance between a driveway with the pavers as is vs. the ribbon were. Ms. Nalewajk responded that it would be reduced maintenance if it were all pavers. They would be able to plow it for the winter. In the summer they would have to make sure the grass in the ribbon stays growing otherwise it could create potential erosion issues.

Ms. McMillan questioned what the spacing between the pavers was. Ms. Nalewajk responded that they were spaced about 1/8 inch apart. Ms. McMillan questioned if there would be small stones in the spaces. Ms. Nalewajk responded that was correct.

Ms. Collins commented that the plan showed additional driveway areas. Ms. Nalewajk responded that they did not install that because the Conservation Commission did not approve it. They did not go to Planning Board with that plan.

Ms. McMillan questioned if the driveway would be used in the winter and if it required a special plow. Ms. Nalewajk responded that it would be used in the winter, and it would be able to use a normal plow. The pavers are close together and should not come up.

Vice Chairman Blanchard commented that in 2016 they were presented with a very challenging project that had a lot of concern from the Commission. They appreciated the effort made to keep green space. This is not the first after the fact application for this project. The Commission wanted a green strip because it was good for the buffer. Vice Chairman Blanchard had reservations because they were altering the barest of concessions made back then. Ms. Nalewajk responded that the driveway would function better when permeating rainfall with a full driveway. This application is part of normal construction. It is unfinished construction because the install procedure entails installing a full driveway then cutting out a ribbon.

Ms. Collins moved to recommend **approval** of the Wetland Conditional Use Permit to the Planning Board as presented, seconded by Ms. Tanner.

Chairman Miller commented that the Commission should think about what is best for the environment. This is porous surface and the Chairman has learned a lot about it by having it for his own driveway. The engineer is correct that the organics in the strip could cause issues. The Chairman has experienced clogging on the side of his own driveway. As long as the water is getting into the ground and the driveway surface is maintained to allow that, then a full driveway should be fine. Chairman Miller did not see an issue with the change. It would not make a big difference environmentally.

Ms. McMillan commented that she was conflicted because the pavers won't infiltrate as much as grass would be infiltrating. Grass has tendency to slow down water as it infiltrates. The pavers are not permeable just the cracks in between. So much depends on maintenance.

Vice Chairman Blanchard commented that she did not have any practical experience with pavers and would rather have grass. However, she would support the application moving forward because she did not see a significant change environmentally.

Ms. Tanner agreed with the rationale Chairman Miller gave.

The motion passed by a 4-1 vote. Ms. McMillan opposed.

3. 0 Banfield Road
Maud Hett Revocable Trust, Owner
Assessor Map 256, Lot 2

Corey Colwell from TF Moran, Jim Gove from Gove Environmental Services, Gary Spaulding with Spaulding Design Consultants, Attorney John Bosen, Jack McTigue, and Jenna and Michael Green were present to speak to the application. The application is for a CUP for wetland and wetland buffer impact of approximately 24,000 square feet. The plan includes existing conditions, test bit logs, and a wetland impact plan. The application is proposing a 22-unit multi-family condo project. A private street with a pavement width of 28 feet will give access to the homes. The cul-de-sac will be 24 feet wide. The team did a site walk with the Commission in the summer. The property is 44.9 acres and is completely wooded except for the power line easement. 57% of the property is upland, with 23.7 acres of developable land. All of the homes, yards and septic systems will be outside of the buffer. The roadway will cross the wetland and wetland buffer off Banfield Road to get to the development. The road will cross at the narrowest point at 90 feet. There is no strip proposed between the sidewalk and road to help reduce buffer impact. There are gravel wetlands proposed in the buffer for storm water treatment. The team has met with AOT and showed them the plan. AOT prefers this type of gravel wetland and agreed this was the preference for this site. The water table is around 2 feet. The gravel creates a wetland to provide the most treatment. All of the storm water would be draining to the low point. If the gravel wetland were moved out of the buffer more of the road would go untreated. There will be a second gravel wetland further up the road.

Mr. Gove commented that Mr. Britz wrote about the culverts with grates. Mr. Gove explained that this is a new technique and has been researched by UMASS Amherst. The culverts with grates allow sunlight to come through, so it is not a dark space that an amphibian or small mammal needs to go through. It is hard to make a large open box culvert on this site because of the grades. That is why they chose the culverts with grates. Animals don't like to go through dark areas because they are afraid. These don't require a lot of cover, so they will work well with the design of the road. Mr. Britz mentioned the types of animals going through the property and vernal pools. Mr. Gove responded that they put together a graphic that outlined the areas of potential vernal pools. They did their investigation after the egg hatching. There were two areas with tadpoles and water elevations were dropping. It was not appropriate to size them, but they are shown as potential vernal pools. A number of different amphibians and reptiles would use the culvert. They would go down by Banfield Road then back north and west. The plan showed the expected travel corridors. That helped locate the culvert. There is no alternate way into the upland, so they need to be able to access the site as shown. They picked the narrowest crossing point to minimize impact. The plan is avoiding adverse impacts to pools and habitat. The site will maintain 100 foot or more from the pools. There are two types of soils on the property. There are areas with a bedrock component and then a moderately well drained hardpan soil. The water table 20-36 inches. That is acceptable for septic design. They have not completed a tree inventory at this time. There are three wetlands. The gravel wetland areas can be planted with native vegetation.

Mr. Spaulding commented that traditional septic systems have to be 48 inches above the seasonal high water table. Other technologies can be 24 inches because of the efficiency of the system.

This plan proposes a geo-mat shallow based leaching system with pressured distribution. This will give better treatment and spread effluent over a larger area.

Vice Chairman Blanchard questioned if the area was qualified for a community leach field. Mr. Spaulding responded that would not work because there are too many homes in the community. They would plan to do 16-18 fields. Community fields become a maintenance issue. These fields will provide a higher level of treatment in a micro area. The shallow base system will have 8-12 inches of cover over it. This gives an overall longer lasting field and a higher level of treatment.

Chairman Miller questioned how that would work with areas where the test pit distances are not deep enough. Mr. Spaulding responded that some areas could require 6-18 inches of fill. There were no concerns based on test pits for leach field. Chairman Miller requested confirmation that these mats would work with these water tables and this location. Mr. Spaulding confirmed that was correct.

Mr. Britz questioned how thick the septic system bed was. Mr. Spaulding responded that it was 8-12 inches.

Vice Chairman Blanchard questioned if there would be any rock blasting or removal for this. Mr. Spaulding responded there would not. They can't blast out ledge and put a leach field in. That would not meet NH requirements. Vice Chairman Blanchard questioned if they had calculated the fill needed for the sites. Mr. Spaulding responded that they have not measured how many cubic yards would be needed. That will be included in the AOT application. Vice Chairman Blanchard noted that there probably would be a significant amount of tree cutting. Mr. Spaulding confirmed that there would be tree cutting.

Mr. Colwell commented that they would need one approval for each field from the state. The gravel wetlands were moved out of the 0-25 buffer so no trees will be cut for that. There will be four trees cut in the 0-25 foot buffer for the roadway.

Vice Chairman Blanchard questioned what the length of the road was. Mr. Colwell responded that it was 850 feet to the 600-foot cul-de-sac. Overall there will be approximately 1,400 feet of pavement.

Chairman Miller commented that the map made it seem like there was a narrower point for the road below the first house. They could eliminate a lot of buffer impact if the road is moved to the right. Mr. Colwell responded that they were attempting to cross the wetland at the narrowest point, then get to the upland as quickly as possible without a curve in the road. Chairman Miller commented that they should come in at the peak. Mr. Colwell noted that would have slightly more wetland impact. The state would ask the opposite because it would minimize the most wetland impact. Chairman Miller requested to see a comparison of the buffer and wetland impacts if the road was moved to the right.

Chairman Miller questioned what a subsurface gravel wetland was. Mr. McTigue responded that it would be a pond above with a subsurface layer of gravel. Chairman Miller questioned what

purified the water. Mr. McTigue responded that the plants would create anaerobic action. Chairman Miller questioned if it could go under the road. Mr. McTigue responded that it could not because it needed the pond above it. Chairman Miller requested to see the numbers on how much water would reach the gravel wetland where it is located in the plan vs. how much would reach if it were outside the buffer. Mr. McTigue responded that if they were moved out of the buffer then they would not pick up 600 feet of roadway. The gravel has 90% nitrogen removal.

Ms. Tanner commented that she was concerned that there was no tree inventory. They have no idea the total trees that would be removed for the roadway. It is not good to cut the largest wetland in half. There is way too much going on, for this site. The plan is too impactful and there are too many houses. They need to look at a scaled down project. The applicants should ask the Girl Scout property if they could build a road from their property or they could build a bridge from that site. Mr. McTigue responded that a bridge was not feasible because they are required by DPW to come off the road at -2%. Animals would not be able to walk under it. The super structure for a bridge would touch the wetland. Mr. Colwell confirmed they could ask the Girl Scout property for access. Ms. Tanner commented that there were too many homes. The amount of roadway and the subsurface and septic systems would be challenging for the wetland. More rain and sea level rise will increase the water tables. Everything they are doing in the buffer should be outside the buffer.

Vice Chairman Blanchard recommended that they ask for an independent review of the application for environmental impacts to the site. The project does not quantify the significant amount of terrain alteration needed for construction. The density of septic systems is concerning and the lower 7 houses are so close to the buffer and wetland. It would be helpful if the Commission had independent information. It would be good to have a tree inventory.

Chairman Miller requested more information about the placement of the three eco-passages. Mr. Gove responded that the concept of the eco-passage is that it is the same elevation of wetland and the walls help direct animals toward passage. The goal is to move the animals into one of the three passages.

Ms. Collins commented that she read the 2 studies they referred to and the studies talk about a lot of requirements for the passages. There should be a plan to include the requirements to demonstrate that they will work. The studies also talk about how they haven't been extensively tested and have to be specific about what species they are trying to target. It is an interesting idea and would be good to be implemented for testing. However, it should not be the only thing implemented in this design.

Ms. McMillan questioned what the bottoms of the eco-passages would be like. Mr. Colwell responded that they would have a natural bottom. Ms. McMillan was concerned that the road was only 2 feet above it. It could flood out if there was a strong storm event. Ms. McMillan also agreed with Ms. Collins' concerns. It would be good to demonstrate why it would not be feasible to do a bridge. It would also be good to show why moving the gravel wetlands would not provide enough treatment. It would be good to show a comparison of a natural buffer vs. the gravel wetland. Ms. Tanner noted that they could remove some houses from the plan and put the gravel wetland there. Chairman Miller added that they should include a profile in the packet.

Mr. Gove commented that they had a limitation when they were looking at the wildlife habitat and vernal pools because they looked in the summer. The best time to look is in the winter. Mr. Gove looked at areas with water that would have met the hydro period and they could see how high it had ponded. Ms. McMillan agreed with Ms. Tanner's comments on the intensity of the development and the septic system impacts from climate change. Trees help a lot with storm water treatment. The City letter recommended an independent delineation of the wetlands. Mr. Britz confirmed that it recommended a verification of the wetland and their functions and values and a wildlife assessment. Ms. McMillan agreed with those recommendations.

Vice Chairman Blanchard questioned how they should proceed if they wanted to move forward with the independent reviews. Mr. Britz responded that they could postpone, so the reviews can happen.

Vice Chairman Blanchard moved to recommend **postponement** of the Wetland Conditional Use Permit to the Planning Board, seconded by Ms. Tanner.

Vice Chairman Blanchard commented that they needed more information before making a decision.

Ms. Collins requested that they include a detailed cross section and of the wetland crossing and the roadway across the wetland and wetland buffer. Chairman Miller added that it should show how it all relates to one another. Mr. Britz added that there should be a detail of the gravel wetland and septic design.

The motion passed unanimously by a 5-0 vote.

III. STATE WETLANDS BUREAU PERMIT APPLICATIONS

- A. Standard, Dredge, and Fill Application
1 Jackson Hill Street
Jackson Hill Condominium Association, Owner
Assessor Map 141, Lot 30

Steve Riker with Ambit Engineering spoke to the application. The application had been submitted to DES and was currently under review. The proposal is for a tidal docking structure with a 4 by 8 foot access way, 4 by 20 foot pier, 3 by 22 foot gangway, and a 10 by 20 foot float. It will be secured with mooring anchors and chains. The overall structure is 62 feet and it will have one slip.

Vice Chairman Blanchard commented that there was not a lot of water on the site. Mr. Riker agreed it was shallow. The float would be supported by float stops at low tide. The mean high water is approximately 8 feet of depth. Low tide would be 3.5 – 4 feet of water. This would be for a small motorboat and kayaking access. The application has written concurrence from the abutter on map 122 lot 9. Both property owners would share inter-tidal rights in the area.

Vice Chairman Blanchard questioned if this would be for all of the people in the association. Mr. Riker confirmed that was correct there are 2 units in the condo association. The application includes a letter of authorization signed by both condo owners.

Ms. Collins commented that looking at the property tax map it looked like map 123 lot 9 may have inter-tidal rights as well. Mr. Riker confirmed they would look into that.

Chairman Miller commented that there was a public boat launch just down the road. Mr. Riker commented that he thought that was private property. Chairman Miller responded that it was City property. Chairman Miller was concerned about the proposed pier location. It would be put in at such a tight narrow cove.

Chairman Miller questioned if there was a proposal to repair the rock wall. Mr. Riker responded that they would leave the wall as is. The access stairs will go over it. Vice Chairman Blanchard questioned if it would be seasonal. Mr. Riker confirmed that was correct. The gangway and float would be removed for the off-season. Chairman Miller commented that this proposal should not say there is no impact on adjacent tidal wetland. It should say minor or almost no impact to the functions and values.

Ms. McMillan commented that if they want to be good stewards, then they should consider doing plantings along the wall.

Ms. Collins shared the Chairman's concerns about the narrow inlet and a dock going out in the middle. Mr. Riker responded that it was 120 feet from HOTL to HOTL.

Vice Chairman Blanchard commented that the proximity to a public access was bothersome.

Ms. McMillan moved to recommend **approval** of the application to the State Wetlands Bureau as presented, seconded by Ms. Tanner. The motion passed by a 3-2 vote. Chairman Miller and Ms. Collins opposed.

IV. OTHER BUSINESS

Ms. Tanner brought in a survey from the University of New Hampshire, Cooperative Extension that was sent to the Conservation Commission. The Commission reviewed the survey and answered accordingly.

Vice Chairman Blanchard excused herself from the meeting.

Ms. Tanner commented that the Commission should take the time to look at the map for properties that have not been developed that the City doesn't own. Chairman Miller agreed and hoped the open space plan would help prioritize acquisition.

V. ADJOURNMENT

Ms. McMillan moved to adjourn the meeting at 6:16 p.m., seconded by Ms. Tanner. The motion passed unanimously by a 4-0 vote.

Respectfully Submitted,

Becky Frey
Acting Secretary for the Conservation Commission