

**Lincoln Conservation Commission**  
Meeting Minutes – February 27, 2019

Start – 7:00 pm  
End – 9:45 pm

**Commissioners Present:** Peter von Mertens, Christine Dugan, Larry Buell, Richard Selden, Jim Henderson, Ari Kurtz

**Staff present:** Tom Gumbart, Jennifer Curtin

**Attendees:** Susan Mygatt

**WETLANDS**

**7:30 p.m. - Notice of Intent: Orgel. 237 Old Concord Rd (139-1-0).** The project is for the restoration of the buffer zone resource areas at the property.

**Attendees:** Elizabeth Orgel, Robert Orgel

Peter von Mertens opened the hearing. Six Commissioners attended the site visit this morning. Mr. von Mertens asked if they could please flag the 50 and 100 ft. buffer zone lines in the field. The Orgels said that their wetland consultant, Dave Burke, said he did it but it did not appear to be done when the Commissioners attended the visit. Mr. von Mertens spoke to Mr. Burke who said that he was never asked to mark those lines in the field. Elizabeth Orgel said that they definitely asked him to do that and that they have emails as proof that they will send along. Jim Henderson made a composite of the aerials of the property with the buffer zones overlaid to get a visual. Mr. von Mertens noted that the area was heavily treed and now it is not. Ms. Orgel said they consulted with two landscapers who both agreed that planting 12-15 shrubs and a 2-3 trees within the 50-100 ft. buffer zones would be sufficient. Mr. von Mertens asked if that would be sufficient to hold the slope as he believes that 10-12 plants on that large of an area may not control erosion as there is currently a thick layer of wood chips holding the slope. Robert Orgel said that he did not know the method of planting but the professionals believed that would be sufficient. Jim Henderson said that they estimated 90-100 trees that used to be in this area based on aerials. Richard Selden said that with that estimation the planned number of trees is far too few. Mr. von Mertens agreed that they need to be replanted. Mr. Henderson estimated 45 major trees with 60-70 smaller trees and shrubs. Mr. von Mertens said that the Commission would ask for 90 trees to be planted with a number of shrubs. Mr. Orgel said that decades ago there were no trees. Mr. Henderson noted that may have been before conservation regulations. Mr. Orgel said that there were few trees on the slope. He said that the view from the canopy does not show conditions on the ground and that he does not think there were close to 90 trees there. He said that they are open to discussion but not aim to replicate what was there before. Mr. Henderson said that the Commission wouldn't ask them to plant mature trees; it would be a replication in stem count to repopulate. He said that the 90 tree number is a start of a conversation. Mr. Henderson then showed pictures he took of the neighboring property a number of years ago which show the Orgels property to be mainly wooded from that perspective.

Mr. Orgel asked the difference between 50 and 100 ft. buffer zones from the Commission's perspective to which Mr. von Mertens replied that the 50 ft. buffer zone is really a no-touch zone so this area will need the most restoration to the previous conditions. Mr. Henderson said that in addition to the restoration of the 0-50 and 50-100 foot buffer zone resource areas the Orgels should plan to plant up the top of slope to control erosion and runoff into the wetland at the foot of the slope. Mrs. Orgel said that was always part of their plan and Mr. Henderson said that they will need a lot of planting to hold the hill. Tom Gumbart said that here may be an opportunity to do some terracing on the slope to minimize the number of plants necessary. Mr. Henderson agreed and said that once you start planting it will be hard to manage the slope.

Mr. von Mertens said that the view is beautiful and understands that it is important to the Orgels; however it is essential to plant a sufficient number of trees to restore that area. That is why there should be an emphasis on

stabilizing the hillside with small trees and bushes to absorb rain and protect the ground. Mr. von Mertens added that area should return to wooded canopy. Ari Kurtz asked what native trees would be good to not block view shed. Mr. Gumbart said that they will need a mix of native deciduous and coniferous trees, not just the planned Birches which are extremely susceptible to storm damage. Mrs. Orgel presented the proposed plan which included trees with good root system. Mr. Henderson asked if they would like a list of trees to which Mrs. Orgel responded that they have a list of suggested species. Larry Buell said some conifers would be helpful since there are none currently in the plan. Mr. Orgel said that they would rather set up a long term plan and open to increasing this number of trees and they attempted to make a good faith effort. Mrs. Orgel said they contacted a local ornithologist to inquire about creating good bird habitat on their property. She added that this plan was intentionally vague as to serve as a jumping off point.

Mr. von Mertens said that the next step would be to redesign this with 90 trees and 40-45 shrubs that are mixed native. Mr. Orgel said that 90 trees seem like too many. They planted the front with 15 trees and multiple shrubs and ferns. He says he understands the goal but 90 trees are going to block the view. Dr. Selden said that replication is impossible but the Orgels have to get close to what was there. He continued saying that if a smaller number of trees works to cover the area then that would be sufficient however it will take a very long time for the habitat to come back. Mr. Orgel said that what was there in terms of vegetation wasn't very supportive of wildlife and would like to get guidance as to what is the most beneficial. Mr. von Mertens said that that makes sense and that the Commission would like to see the habitat improve as well. He added that the Orgels can go out themselves and mark the buffer zone and place markers where they believe trees should be planted to get a feel for the scope. He reiterated that there would need to be a substantial number of trees that would grow tall. The shrubs on the slope are good but there should be some trees on the slope as well. Mr. Gumbart says that the most important area for the wetland is the 0-50 ft. buffer zone so this should be the most populated with new plantings and maybe scale down the number as they move out from this area. He added that they Orgels should also be aware of invasive species control as they will move in to the newly disturbed area, especially bittersweet, buckthorn, and knotweed. Mr. von Mertens agreed and said that this should be written in the agreement with a 5 year management plan to ensure the area would not become overgrown with invasives and the planted species will take. Mr. Kurtz said that in some of the other properties where these plans have been implemented, the 5 year timeline is important because not every tree or shrub will succeed and requires monitoring to ensure a good percentage is taking.

Mr. Henderson said that the plan moving forward should look at the type of tree and what kind of area it thrives in to protect subject trees. Mr. Kurtz suggested that an inexpensive drip irrigation system would be helpful especially during drought times Mr. Henderson agreed that the slope will get very hot and will require diligent watering for the plants to take. Mr. von Mertens said that this should be included in the write-up as well. He continued to say that one more issue is a permanent demarcation of the 100 ft. buffer line that would be natural like stones or boulders or some sort of fencing. Mr. Orgel said that they plan to put stones along the zone to distinguish the line. Mr. Henderson said that they should bring in a sketch plan with plantings clearly marked as to where they will go. The Orgels agreed and will come back in April to present the detailed plan.

**The Commission voted 6-0 to continue the hearing to April 10 at 7:30p.m.**

### **CONSERVATION DIRECTOR'S REPORT**

Peter von Mertens is planning to leave Commission but would like to see through the permitting of the schools project. Jim Henderson plans on being reappointed to the Commission.

Tim Beliveau has resigned his position as Land Manager and moving out of the state. Stacy Carter, the current Land Steward, will be promoted to Land Manager.

Annual letter to Board of Selectmen about amphibian migration will go out soon. There is very high groundwater and full vernal pools this year.

Municipal Vulnerability Preparedness workshop took place this February 25<sup>th</sup> regarding climate resilience and emergency preparedness. Being designated as an “MVP Town” allows for access to grants. Most people at the workshop agreed on more aggressive tree management and pruning around power lines. There will a public listening session at a Selectman’s Meeting in early April.

Umbrello field work is continuing. Pasture behind the Public Safety building was worked on to open up vista and push back the field edges to allow for further grazing. The team will work more to open up trails.

A license agreement is being drafted by Town Counsel to MBTA/Keolis to ensure continued work and maintenance on the Food Project land roadway. This draft has been sent to Mary Day for insurance approval.

## **DISCUSSION ITEMS**

**8:30 p.m.** - Discussion with Samiotes Consultants, Inc. regarding a possible request Amended Order of Conditions for the Minuteman Technical School Building Project. Mill St (115-10-0). DEP File#203-0907

**Attendees:** Eric Roise, Sy Nguyen, Ed Bouquillon, Michelle Kayserman

Eric Roise presented the proposed changes which included tennis courts, bleachers, concessions, and bathrooms. Changes also include synthetic turf fields instead of the grass which was originally planned. There are the same limits of disturbance. Mr. Henderson asked if drainage characteristics between natural and synthetic turf change. Michelle Kayserman said that they do, and this proposal will add additional stone to bottom for collection and infiltration. Additions to the track area are fences around the track. Mr. Kurtz asked if the restrooms will have septic. Mr. Roise responded that they link up to Lexington sewer with the utility section in Lincoln. Dr. Selden asked the net difference in disturbance. Mr. Roise showed that these changes add 3,363 sf disturbances with additional 3,798 sf impervious. This includes tennis courts and walkways. The current site where the tennis courts would be built is open playing field, not native vegetation, Ms. Kayserman said. Larry Buell asked if this was additional tennis courts to what was planned. Mr. Roise said that they were originally going to take out old tennis courts and not replace them but this new plan replaces them. Mr. Roise said that there is a tennis team and the parents want them to keep the courts there.

Mr. Gumbart said that another thing to consider is the proposed lighting which will require site plan review it seems at first look there has been a lot of impact already but to introduce a significant amount of concrete is harder to permit if it could be located elsewhere on the site. Mr. Gumbart asked if they had a cricket team at the school and asked if that was what Lexington wanted. Mr. Bouquillon said that they sat down with a number of stakeholders around the area and a many, not necessarily the school, requested cricket fields on the campus. Dr. Selden said that it comes down to a choice; either 6 tennis courts or cricket or 3 tennis courts and cricket. Mr. Bouquillon said that you need 5 courts for a tennis team. Mr. von Mertens asked what the drainage characteristics are with turf versus grass fields. Ms. Kayserman said that rocks below the artificial turf would go to a dry well and sheet overland. The clean runoff would go toward the vernal pool.

Christine Dugan said that Wayland has artificial turf and there are safety issues with off gassing and has impacted breathing for some. Mr. Roise said there have been a lot of studies on crumb rubber and there has been no connection. Ms. Dugan said that there have been connections made between phthalates and intersex fish. Mr. Kurtz asked about the quality of water that flows through the crumb rubber since it does go into vernal pool. Mr. Roise said that fine particulates are the issue and they have a management plan, Dr. Selden asks what the rationale is, Mr. Roise said that you get more use 250 uses per year vs 24/7 use for synthetic. Dr. Selden said that your point for the chemicals, carbon black is in crumb rubber which is a carcinogen and he asks if they could keep the one by the vernal pool natural. Mr. Roise said that baseball starts in the spring which is a wet time of year which would destroy a natural grass field. Mr. Gumbart noted that there are also issues with fertilizing grass fields with that close proximity to a vernal pool. Mr. Roise said it is more cost effective since you can play many more games a year on the field. Mr. Henderson asked about the hydrological impact and asked if they are

overcharging the system. Ms. Kayserman said there are some civil plans showing discharge and does not expect overcharging since stormwater standards limits runoff from the site. Mr. Henderson asked if they know where the water goes when it infiltrates. Dr. Selden said that is something they need to figure out. Dr. Selden asked if there is any way to get the 5 like rotating two. Mr. von Mertens said that maybe they could shift the entire field south and move the tennis courts to the north of the field. Mr. Gumbart said that permitting will be very difficult that close to a vernal pool. Susan Mygatt said that if moving the pieces doesn't work the choice is between tennis which is a school goal, vernal pools, and cricket as a community resource. She said that there may only be space for two. Dr. Selden said that they could possibly have everything if they rearrange but they should look further into carbon black/synthetic material on field.

Mr. von Mertens summarized the main concerns of the Commission with these new plans; runoff from adjacent field and new concrete into vernal pools, rearranging the courts may provide relief and allow for all these pieces outside of the vernal pool buffer zone, and the safety of the material used for the synthetic turf. Mr. Gumbart reiterated that there is permitting happening in Lexington so there may be less room for changing. Mr. von Mertens asked them to go back and work to get the tennis courts out of 100 ft. buffer, since the runoff to vernal pool is a big issue. If they get it out of the 100 ft. and do infiltration, Mr. Gumbart says they may not need to come back before the Commission.

## **SUB-COMMITTEE & LIAISON REPORTS**

### **Leaf Blower Study Group**

Public Forum will take place 7:00 p.m. on February 28 in Town Hall. At the Board of Selectman meeting the Selects pushed the group to do more public outreach. There are sandwich board postings around town. There have been slight modifications of the bylaw to extend fall cleanup to December 15. A number of people raised concerns about the exceptions at the meeting. One person brought up that they use snow blowers to blow snow off solar panels. Mr. Buell said that the Selects did their job to press the committee to do outreach efforts and were content to see it go forward to town meeting. He also believes that the outreach may be targeting supporters more than objectors. He believes it is a compromise measure. Mr. von Mertens added that this isn't a start to banning leaf blowers and that this bylaw will be the end of this committee.

### **School Building Committee**

Mr. von Mertens gave an update on the School Building Committee and a variety of road juxtapositions in relation to the wetland. He advocated against going into/closer to the wetland. Another consideration is the isolated wetland which could be cleaned up by volunteer. Mr. Gumbart said that could be used for stormwater runoff/rain garden treatments.

### **DeCordova**

Forum will be held on March 13th

## **ACTION ITEMS**

- The Commission voted 6-0 to continue the Orgel hearing to April 10 at 7:30p.m.
- Meeting minutes from February 6<sup>th</sup> approved
- Bills paid & payroll signed

Respectfully Submitted,

Jennifer Curtin  
Conservation Assistant