

**APPROVED MINUTES
BROOKFIELD INLAND WETLANDS COMMISSION
SPECIAL MEETING**

**Wednesday, December 3, 2014 2:00 PM
TOWN HALL MEETING ROOM #133**

1. Convene Meeting: Chair Sharon Fox called the meeting to order at 2:02 PM, and established a quorum of members.

Present: Chairperson Sharon Fox; Vice Chair Mark Forlenza; Secretary Mark Mulvaney; Commissioner Bob Huttemann; Commissioner Michelle Kukk

Absent: Alternate Member Jeffrey Bronn

Also Present: Wetlands Enforcement Officer/Community Development Director Katherine Daniel; Parks & Recreation Director Dennis DiPinto

Emily Cole Prescott prepared motions and draft minutes from a recording of the meeting.

2. Old Business:

a. Still River Greenway #201400000: Phase Two – Approval Stipulation #6 – Chair Fox stated that the purpose of this meeting is to discuss the application, specifically in reference to stipulation #6 of the approval. Chair Fox mentioned that this application had been approved in January 2014. Chair Fox stated that the suggestion to have this special meeting was discussed at the regular meeting a week ago. Chair Fox stated that she has done some research regarding vernal pools.

Joseph Lenahan, Civil Engineer & Project Manager with Fuss & O'Neill in Trumbull, CT was present. Josh Wilson, Soil Scientist & Ecologist at Fuss & O'Neill, and Chris Faulkner, representative of VHB, were present. Dennis DiPinto stated that this is the last approval to be completed. Mr. DiPinto stated that there had been some discussion about alternatives such as pipes and crossing underneath the trail. There was concern about the amphibians crossing the trail, and alternatives had been considered to the originally proposed rest area and trail realignment. In the past, Mr. Wilson had presented information about the migration of amphibians. A condition of approval was either to provide a subterranean crossing in this location or a timber boardwalk. Mr. Lenahan stated that overall, there is a cost balance between the pipes and the timber bridges. The timber boardwalks are approximately \$35 per square foot. Due to the length of the 140' trail, this would add another \$50,000 to the proposed budget. A pipe crossing was designed, and in October Chris Faulkner of VHB presented the three-pipe crossings to this Commission. What had been done at that point in time was to create a crossing using a twelve-inch pipe that was partially filled in the bottom in order to create a flat walking path as well as provide a natural footing for the crossing. The primary purpose why the pipe was depressed was to reduce the amount of impact within that vernal pool upland area. If the pipe was brought up, additional fill would have to be added to that area, which would affect the vernal pool. Due to the location of the vernal pools, groundwater can be quite high. There was some concern about the success rates of the amphibians using the proposed tunnels.

Mr. Wilson stated that these types of crossings are generally seen in areas of a defined upland vernal pool where a road is installed with consistent traffic. In the late spring, after the amphibians breed, they are in the upland, and not in the vernal pools. The migration area can be as far as thirteen-hundred feet from the vernal pool, and this range of travel is quite varied. Mr. Wilson stated that the critical upland buffer area is generally considered 750 feet around the vernal pool.

The Army Corps of Engineers and DEEP have both agreed to the current plan. If something was changed to the plan at the local level, the applicant would then need to return to the Army Corps of Engineers for approval of a revised plan. There was an existing trail already in the area of the pool, so the Army Corps of Engineers did not require a change to this trail. The migration of the amphibians generally occurs at night, and the trail will be used primarily during the day. Mr. Wilson stated that the biggest risk of mortality will be the trail itself. However, even during the day, the frequency of traffic is low. Chair Fox stated that everyone wants to be sure that the project uses all of the best practices.

The rest area was discussed, and Mr. Lenahan clarified that the rest area near this vernal pool has since been removed from the plan. Secretary Mulvaney asked if the possibility of raised boardwalks has been considered. Mr. Lenahan stated that the boardwalk was considered, but the area would need to be raised 22” for the boardwalk. The maintenance vehicles (trucks and small machines) will be used only for cleaning the trails. It was noted that the trail is following the existing walking path. Mr. Lenahan mentioned the location of the gazebo and rock outcroppings. Secretary Mulvaney asked about a maintenance plan for the pipes, and Mr. DiPinto replied that there would be maintenance procedure for the pipes. Mr. Mulvaney stated that he would like to review a maintenance plan for the proposed pipes.

Mr. Lenahan reviewed some of the other alternatives with the Commission. Mr. Lenahan stated that the timber crossing had been reviewed. Mr. Lenahan reviewed the location of the timber crossing, where there would be a raised elevation. This crossing is \$50,000 and additional fill would be needed due to the ramping.

The next alternative was to review the number of crossings, and the concern of the pipes and the corralling of the amphibians to direct them to the openings. Shortly after the October meeting, the impact of raising the trail to create an impoundment with additional pipe crossing to offer more options to cross the trail was considered. The pipe would be three inches lower than existing grade and additional fill would be required, which would result in additional 1,800 square feet of wetlands impact. Chair Fox stated that there is nothing on the plan that would truly impound the amphibians.

There was another product researched which had been used for a wetlands crossing in Windsor, which is \$600 for each 40” for the product itself. Eight inches of concrete is required to encase the product. This would be a polymer product, which would better maintain the temperature. When that was reviewed, the price was \$26,000.

Mr. Lenahan stated that the best method to keep the grade is to potentially use a trench drain. This would be a standard trench drain ten inches wide. Chair Fox clarified that the trail would still need to be raised. Mr. Wilson replied that if the trench drain were to be used, the grade would need to be brought up nine inches. The pipe would be perforated with crushed stone underneath. Mr. Mulvaney asked for clarification about how natural material would be spread in the pipe, and Mr. Lenahan explained the process. Chair Fox asked how this pipe will then be maintained. Mr. Lenahan stated that the way the grades are, there are limited amount of watershed areas that would be draining into the pipe. One foot of cover is needed for the pavement to the top of the pipe. The ten-foot section is \$250, which cost is much cheaper than the other alternatives discussed. An impoundment may be created on each side. Mr. DiPinto stated that there will be one vehicle every couple of weeks at the most traveling through the area.

Chair Fox stated that she questions the idea of the tunnel and how the amphibians would enter the tunnel in a reasonable way. Chair Fox stated that she had not read anything noting the benefit or the practicality of these tunnels. Without any calculation to indicate the success rate of such a tunnel, she does not see the value of the tunnels for this crossing. WEO Daniel stated that the Commission’s purview has to do with impact to wetlands. She stated that the reason why this matter is discussed has to do with amphibians, but the basis on which the Commission reviews applications has to do with the impact of the project to the wetlands. Chair Fox stated that she sees three alternatives: raise grade, variations to grade, or do nothing.

Secretary Mulvaney stated that he would like to see the plans that were reviewed by the DEEP and Army Corps of Engineers. Chair Fox stated that she does not see enough evidence to prove that the pipes would be practical. Mr. Wilson stated that there are no endangered or threatened species in this vernal pool. Mr. Wilson stated that he is confident that the benefit will not be there for this crossing. Mr. Wilson stated that he does not see the ecological value of the pipes.

Secretary Mulvaney stated given the fact that proposed tunnels will not help the amphibian crossing, he would like the plan to be done without the pipes. Commissioner Kukk and Commissioner Huttemann agreed with Secretary Mulvaney.

WEO Daniel stated that the current stipulations include #6, which states “subpavement/subterranean pipe crossings or raised/elevated timber boardwalks will be added to the plan in the area of vernal pools one, two, three and four to facilitate the amphibian migration from the vernal pools. Revise plans showing this change may submitted to the Inland Wetlands Commission within six months.” The discussion would be to possibly remove stipulation six. The discussion will be brought to the regular meeting on Monday, the 8th. WEO Daniel stated that a copy of the approval stipulations will be included in the Wetlands Commission packets for the regular meeting on the 8th.

Chair Fox stated that she has found the CT Association of Wetlands Scientists, and she stated that this is a group of individuals, and one of their offers is to gather data about vernal pools, and the impact of development. They have an offer to gather information about vernal pools. Mr. Wilson shared some information about this program, which idea is to over the long term, review the data as a group. This is a volunteer project where twice a year information is gathered about the vernal pool. Chair Fox offered to work on this project and to submit an application form for adoption of this vernal pool by this association.

- 3. Adjourn: Secretary Mulvaney made a motion to adjourn at 3:27 PM. Vice Chair Forlenza seconded the motion, and it carried unanimously.**

*****Next regular meeting scheduled for December 8, 2014.*****