THE INLAND WETLANDS COMMISSION OF THE TOWN OF AVON HELD A MEETING ON TUESDAY, OCTOBER 3, 2017 AT THE AVON TOWN HALL.

Present were Clifford Thier, Chair, Michael Beauchamp, Vice Chair, Bob Breckinridge, Jed Usich, Dean Applefield, and Michael Feldman. Martha Dean was absent. Also present was John McCahill, Planning and Community Development Specialist/Wetlands Agent.

Mr. Thier called the meeting to order at 7:00 p.m.

NEW APPLICATION:

APPL #752 – Golf Club of Avon, owner/applicant: Requests/activity within the 100' upland review area: 1) Construction of drainage piping from Burnham Road into "Lily Pond"; 2) Improvement to the Green (Hole "red" 7); regrading, filling, and landscaping. Location: 160 Country Club Road, Parcel 1940160.

Doug Ellis, Buck & Buck, Michael Klein, Environmental Planning Services, Jonathan Charpinsky, Golf Club of Avon Superintendent and members of the Golf Club of Avon were present. No other interested parties were present at the meeting.

Mr. Ellis stated Buck & Buck was hired to investigate the possibility of a proposed drainage pipe off of Burnham Road from the existing Town drainage system to help supply water to Lily Pond. The pond is drying up every year since there has not been much rainfall. They spoke with the Town over the summer and they have come up with a plan. They are proposing to install a small block wall to help divert some of the water towards Lily Pond. They are utilizing an existing pipe, which could have been an outfall, on the east side of Burnham Road. They will install a 10" drain pipe with gate valve that can be shut off at any time if an issue were to arise.

The wetland site walk map was explained: Lily Pond is to the right, blue is the wetland which is basically the high watermark, and the red is the area within the 100' setback. After they started working on the drainage project, Buck & Buck learned that the Golf Club of Avon wanted to also make improvements in and around the green so they included those improvements at the advice of John McCahill. In doing so they submitted an application in September trying to get things in as quickly as they could. Pictures of the existing conditions and photos from Mr. Klein's environmental report and renderings from the golf course architect on how it would look in the end were shown. Mr. Ellis stated it made sense to combine these two (2) projects because they were proposing a drainage line in the same area the golf course plans to regrade, between the fairway and the existing green.

Mr. Ellis turned the meeting over to Mr. Klein, to discuss the potential environmental impacts of the project.

Mr. Klein introduced himself as a biologist and soil scientist with his office located in West Hartford. In September, 2017, he identified the wetland boundaries in the field as depicted by the purple line on the map. The wetland boundaries were not staked because this area is actively used by the golf course. Flags were not set in the field but the surveyors were on location to document the wetland limits.

As contained in Mr. Klein's environmental report dated September 28, 2017, photograph #1, looking from the north, shows sandy sediments and there is a high water line break. There is silt upslope to that and there is no wetland vegetation; below the high water line there is some wetland vegetation.

Photograph #2, looking from the south of the pond, you can see the edge of the wetland vegetation and you can see the pond is drawn down substantially. Soils in entire area have been modified and they were classified wetlands soils, as "aquents" - disturbed wetland soils. There is a narrow band of these soils at the high water line of the pond. The lower area is a pond, which is regulated as it meets the definition of a waterbody or watercourse in the regulations.

The non-wetland soils are mapped as Hinckley, which includes sand and gravel that may be the genesis of the pond originally. The area shows evidence of shallow grading and filling which was associated with the initial golf course construction.

Mr. Klein stated the extent of wetland soils is very limited, there is a very narrow band right at the high water line of the pond. During most years the area has functions and values that are associated with an aquatic environment, not necessarily a wetland environment; a stillwater environment, with fish and aquatic habitat support functions. Any sediment suspended in the water that drains into the pond will settle out. In a stillwater environment, nutrient transformation can occur and the pond is also aesthetically pleasing.

These functions and values are associated with the presence of year round standing water. It also has some flood storage function due to the shape, the narrow band of wetland soils and the sparse wetlands vegetation. As Mr. Ellis mentioned, the proposal calls for the installation of a drainage pipe through the regulated area to get to the pond.

Generally, Mr. Klein's experience is that it is appropriate to bring any type of piped discharge to either a very level area or the area immediate adjacent to the water resource, so it can be stabilized and not cause any erosion.

Mr. Klein explained that the plans include a plunge pool at the outlet. Mr. Klein made a couple of recommendations in reviewing the plans. The plans include a standard detail for the plunge pool and it is one Mr. Klein never liked. The shape of the plunge pool slows water down; so in a period of high flow, water actively moving through concentrates in the center. Due to his concerns with this, Mr. Klein recommended a modification to extend the stone to mimic the flared end shape of the outlet pipe.

He also suggested the dewatering pump discharge should go through a sediment filter called a Type II dewatering basin discharge filter. He stated that with the inclusion of those two (2) very minor changes, it is his opinion there would be no adverse impact on Lily Pond associated with the rerouting of the stormwater.

At this point he asked the Commission if they had any questions he could answer. Mr. Breckenridge asked what the primary source of the water filling the pond currently. Mr. Ellis of Buck and Buck, responded that they did not look at that in great detail but his suspicion was that

it was a water table pond; the pond was excavated into the sand and gravel below the water table.

Mr. Breckenridge then asked what type of flow they anticipated from this rerouting. Mr. Ellis replied that they are putting in a 10" pipe and it is difficult to determine the exact flow. They did look at the amount of runoff that might get in the pond, since this was something the golf club was concerned with knowing.

Larry Baril, Town Engineer, also asked them to take a look at the hydrodynamics. However, they have not had the opportunity to discuss this with him. There is a 30" pipe coming down Burnham Road and they are proposing to install a baffle wall 10" above the invert. This may change to 6" above the invert when they do final analysis but they will work it out with Mr. Baril.

Mr. Breckinridge stated that he was not that knowledgeable about golf course maintenance. There is a lot of grass and there are fertilizers and possibly pesticides being used. He asked if the pond were to overflow over a large area, what effect would it have on the water in the pond.

Mr. Ellis replied that the Town drainage system still would have the existing capacity and the water coming down Burnham Road wants to go straight down the road. There is a 30" drainage line to the west, to the east a 24" pipe. They are looking to install the 10" pipe within the small stub. The proposed the baffle wall is on the west side and it will only redirect some of the drainage towards Lily Pond.

John McCahill pointed out that if the pond does get full to a point where there may be a flooding issue; there is a gate valve and they can close off the flow to the pond.

Mr. Breckenridge questioned the gate valve shut off procedure. It was explained by Mr. Ellis, it would take some time for the pond to overflow and there would be ample time to witness what is happening and respond. With the gate valve you have flexibility to respond to what is really happening. It could be throttled back if needed to give some more flexibility. Jon Charpinsky, as their Golf Course of Avon Superintendent monitors ongoing conditions at all times.

Mr. Beauchamp asked if the main reason for this project is because they want to put more water into the pond for aesthetic purposes. He asked if Mr. Ellis was comfortable with the stormwater coming into the pond since there can be oils and such. Mr. Ellis stated yes and added that there is a hood on the basin where they will install the new pipe so the oils would stay in the catch basin.

Mr. Beauchamp asked where is the stormwater is going now. Mr. Ellis stated there is an outlet on Burnham Road southerly of Country Club Road. The water eventually flows into the Farmington River.

Mr. Usich questioned since there is stormwater going into Lily Pond should a vortex type mechanism be considered.

John McCahill responded that typically that would be used when you have a large surface area such as a parking lot. He stated there is a catch basin maintenance plan in place. The catch basins have standard sumps, up and down the road, and the Town vacuums out each catch basin yearly.

Mr. Usich then asked how they determine where to place the outlet. Mr. Ellis replied they are

putting it outside the wetland boundary which is the high water mark. They are modifying the riprap plunge pool so the water cascades instead of a more concentrated flow. They put in plunge pool, to catch sediment that is not caught by the sumps in Town drainage.

Michael Feldman asked if they knew what the overall condition was of the water in pond along with the aquatic life and vegetation. Michael Klein responded that the short answer is no. They have not performed any detailed pond investigations. It is a drawdown environment. They did see some emergent vegetation; for example, waterlilies and a few submergent species. Typically, these environments are still water/pond environments; for example, a trout habitat. It supports sunfish, perch, suckers, frogs and other amphibians bred in the pond. No detailed analysis was performed; usually this environment is nutrient enriched by virtue of two (2) things, it is a low spot in the watershed so it collects sediments and nutrients and the existing use generates nutrients and runoff.

He went on to say that golf course management techniques have evolved dramatically over the last 20-30 years. Golf courses really work hard to only apply the amount of products needed; otherwise it is just wasted money.

Mr. Feldman reiterated that the main purpose of this proposal is to keep the pond full and prevent further evaporation. He stated currently the pond is very low and it has been down significantly for a while. He questioned how long it has been this way.

Mr. Ellis deferred to Golf Club of Avon Superintendent, Jonathan Charpinsky who stated currently the pond is very low. The pond has not been a full ten (10) acre pond for about three (3) years due to drought. He stated the last time the pond was full was in 2014.

Dean Applefield inquired if any consideration was given to potential alternatives to get water into the pond. Doug Ellis, Buck & Buck, responded that this was the most viable solution.

Mr. Applefield again questioned what other alternatives were considered. Doug Ellis stated there were really no other solutions for filling the pond. He knew the Golf Club of Avon was talking with the Avon Water Company about buying water from them to help with irrigation. They do have an irrigation system that draws water from this pond. There is no other alternative other than trucking water in. Rainfall is a renewable resource and nothing else seemed feasible.

Mr. Applefield questioned further if serious considerations were given to other alternatives. Mr. Ellis once again stated rainwater is a renewable resource. Mr. Applefield then followed up on the water quality of the pond asking if there was information on the potential impact that stormwater may have on the pond. Mr. Ellis stated they were doing their best effort to protect water quality. He explained that there is a proposed hood on the outlet side of the catch basin to prevent oils from getting in. They are also introducing a plunge pool to help catch sediments. When the catch basins are full, oils rise to the surface, trapped oils stay in the sump within the Town drainage system. There is also a sediment control at the outlet.

Mr. Applefield asked if there was any analysis of the water quality. Mr. Ellis responded no analysis of the existing water was performed.

Mr. Applefield then asked follow-up questions to Mr. Feldman's question relative to where

water currently goes. He inquired if the drainage is piped directly to the Farmington River. Mr. Ellis responded that it discharges at the end of the Burnham Hollow Road into a watercourse which flows eventually to the Farmington River. Approximately 266 acres flow into that outlet. This drainage system is at the top of the watershed and it is about 18% or approximately forty-eight (48) acres.

Mr. Applefield said he was trying to understand the potential consequence downstream. John McCahill explained that it is a long travel distance, Burnham Road toward Scoville Road then it crosses through Avon Old Farms School but ultimately the water gets to the Farmington River. There is no direct channel into the Farmington River. It is a long meandering travel route.

Mr. Ellis said he would guess less than 5% of the rain water passing Burnham Road will be diverted into Lily Pond. It is tough to put a number on it but an educated guess would be about 5% of the 18%. There is no significant impact on water quality.

Mr. Applefield then asked if there had been any review of the natural diversity database and if they knew if there are any endangered species or plants. Mr. Ellis stated no evaluation has been conducted. He also wanted to note that no water is being diverted out of the watershed it is just being rerouted by the distance from Lily Pond to the southernmost point of the golf course. The water is getting to the same place via a different route. There is an opportunity to improve water quality on a net basis once you get past the current outlet point downstream. It will not have a significant impact on water quality. There is not a major change in rerouting of the water since it is only a small portion of the flow.

Mr. Applefield clarified that the focus of his question was the potential impacts on the pond not where the water is starting from and ending up. He did not feel it was clear that they looked at the impact associated with rerouting the water into the pond. There was no evaluation of plants or endangered species.

Michael Klein said although they have not looked into it in detail, increasing flow into a pond like this is generally considered to be a positive situation. It improves the condition; reduces the turnover time water stays in the pond making it less stagnant, and in this case, it is not clean water to begin with. Water cycles through the system quickly. If you were to pump water from the ground into the pond you are just robbing Peter to pay Paul. The pond is a groundwater source. It is rarely economically or environmentally desirable to use potable water for irrigation purposes or to fill-up a pond for aesthetic purposes. In terms of trucking in water, a lot of water would be needed to raise the elevation by a couple of feet.

Mr. Beauchamp asked how deep the 10" pipe would be and how much of the wetlands are going to be disturbed when the pipe is installed. Doug Ellis answered that the pipe is approximately 4' deep for the entire length and they are keeping all the work outside of the wetlands, the work is within the setback.

Mr. Beauchamp further questioned if trees would have to be removed. Mr. Ellis explained they would have to remove a few trees and those are outside of the wetlands as well.

Mr. Beauchamp asked what the timeframe for this project is. Mr. Ellis stated they were hoping to complete it this year.

Mr. Beauchamp reiterated that there would not be much of a disturbance associated with installing the pipe. To which Mr. Ellis responded, correct.

Mr. Feldman asked why the golf course wanted to do this. Mr. Ellis replied to keep Lily Pond full for both aesthetics and to do some pumping for irrigation. Mr. Feldman then questioned if they going to increase irrigation because of the water available from the pond. Mr. Ellis responded no.

Mr. Breckinridge then asked if the irrigation was the cause of the water table going down. Mr. Ellis said it was not; it is a recyclable thing as well.

Mr. Breckinridge went on to say the land appears to slope toward Burnham Road, the crown of that area is fairly close to the pond, if they are irrigating the fairways closer to Burnham Road that water is going to end up on Burnham. Mr. Ellis said that land from Burnham downgrades all the way to the pond. Burnham Road is the high point; they are at a low point and that is why there is crossing drainage. There is a small stub and there was previously a possibility of placing drainage there.

Mr. Breckinridge said he was not sure how much of the golf course they are irrigating from Lily Pond. Jon Charpinsky stated that the whole golf course is irrigated from the pond. Mr. Breckinridge wanted to know if their intent was to have more water to irrigate the course, would they just continue to keep the pond water level low. He questioned if the real purpose for doing this was for irrigation or bring up the water level in the pond.

Doug Ellis replied it was both. It is all in the same watershed and it does not leave the watershed when they irrigate. Mr. Breckinridge stated he understood and had no further questions.

Mr. Thier asked if there were any further questions and there were not.

John McCahill stated he submitted comments and the applicant submitted revised plans to address those comments. Larry Baril, Town Engineer had offered an email in response to the application suggesting some things the Town wants to do at the staff level. Staff met with the golf course property manager and CFO, three (3) to four (4) months ago to determine if this project was something the Town could entertain and if there were any obstacles. Mr. Baril addressed staff level concerns from an Engineering and Public Works perspective. He is protecting the Town's interest in the project if they move forward.

Mr. McCahill added an interesting story that when Bill Ferrigno saw this plan he told him that when Mr. Ferrigno built Highgate, which actually contributes a lot of water to this area, some 35-40 years ago, he was actually going to discharge the water into Lily Pond. However, at that point in time the golf course did not think they had much of a need for the water and he was forced to put in a 30" pipe down Burnham Road.

Mr. McCahill also received written responses in addition to the revised plans. Information included in the record were the soil scientist report, the site walk map and responses to staff comments.

Mr. McCahill asked Mr. Ellis to walk the Commission through their responses to his comments dated September 19, 2107. Comment #1, the plan states a 100' upland review area taken from the edge of the surveyed high water line, as shown on the plans. Mr. McCahill received confirmation from Michael Klein's partner that in fact the high water line and the wetlands line were one in the same.

Comment #2, selective tree removal would be well outside the regulated upland review area and silt fence would be installed. Comments #3/4, while they were pulling everything together they submitted Plan A from the golf course architect. Comment #5, a site walk map was prepared for the Commission showing the before and after. Comment #6 referring to the work they would be doing around the green, one of the main things is that they are taking out the bunker and also filling in an area between the green and fairway. Comment #7, all the work will be done when the pond is low as noted in the revised plans. Comment #8, Buck and Buck will work with Mr. Baril, Town Engineer and Public Works. They will address any issues and the golf club will do what is requested of them.

Dean Applefield asked why the pond seemed to be declining in volume. Doug Ellis surmised it was the low rainfall over the last few years. There has been a dry spell and the pond has not been full in three-four years. They need a more reliable source of water which is not dependent on rainfall.

Mr. Thier asked if there were any further questions. There were no further questions.

Mike Beauchamp made a motion to approve **APPL #752** with the standard approval conditions, as well as the recommendations outlined by Mr. McCahill in his memorandum dated September 19, 2017. Mr. McCahill also added the two recommendations from the report submitted by Michael Klein dated September 28, 2017 regarding the modification to the plunge pool and including the standard dewatering discharge detail. Also, the applicant must address any comments and concerns of the Town.

Mr. Usich seconded the motion to approve.

Mr. Applefield voted no. He was not against the proposal or project but did not feel the applicant provided adequate information concerning the endangered species and water quality. He felt the application was not complete. He stated the storm water which is going into the pond has potential concerns and they did not know the possible impact on animals and plants.

Mr. Feldman said he did share some of Mr. Applefield's comments but he favored the proposal and added that the polluted water has to go somewhere, maybe better it be going into Lily Pond than other brooks and watercourses. Lily Pond is a detention pond.

Mr. Applefield further added he was not opposed to stormwater going into Lily Pond that it is the unknown that concerns him. He needed additional information to make an informed decision.

Mr. Feldman stated that Lily Pond is a major source of irrigation. He added if that could be something that could be turned off if they needed to reconsider.

Mr. Thier added they could not turn off the irrigation. There is no protocol for that.

Mr. McCahill said the golf course will balance the water demand. They do not want a dry pond for the sake of aesthetics. The golf club would buy water if they had to.

Mr. Breckinridge noted you could take a look at any watercourse and say it is polluted; stormwater from the street is going into wetlands areas everywhere all the time.

Mr. Applefield once gain stressed he was not suggesting it does not happen everywhere. He just did not believe all the application requirements had been met.

Motion to vote. Those in favor were Mr. Breckinridge, Mr. Thier, Mr. Feldman, Mr. Usich and Mr. Beauchamp. Mr. Applefield opposed the application. The motion passed.

COMMUNICATIONS FROM THE PUBLIC:

There were no communications.

OTHER BUSINESS:

John McCahill told the Commission the trial date set for the Flors case, 232 Mountain Road, is scheduled for November 30, 2017. November 7, 2017 there will be a trial management conference with Kari Olson.

STAFF COMMENTS:

There were no authorized agent approvals.

Mr. McCahill requested the Commission vote on the 2018 IWC schedule. Mr. Thier made the motion to approve. The schedule was approved unanimously.

<u>APPROVAL OF MINUTES</u>: April 4, 2017

Mr. Thier noted a correction to the April 4, 2017 minutes page 4694. The word noted should be changed from grief to brief. Mr. Applefield motioned to approve the minutes of the April 4, 2017 meeting, as amended. The motion, seconded by Mr. Breckinridge received unanimous approval. Mr. Feldman abstained.

NEXT MEETING:

The next regularly scheduled meeting is October 3, 2017.

There being no further business, the meeting adjourned at 8p.m.

Respectfully submitted,

Christine Campasano, Clerk Inland Wetlands Commission