

**INLAND WETLANDS AND WATERCOURSES COMMISSION MEETING
WEDNESDAY, NOVEMBER 9, 2016
TOWN HALL 7:00 P.M.**

Present: Chairman Bruce Burnett, Susan Ryan, Paul Whiton, Robert Wesneski, Timothy Bobroske, Alternate Member Robert Orciari and Land Use Coordinator Polly Redmond
Absent: Victoria Elliott

1. OPEN MEETING – ESTABLISH QUORUM.

Chairman Burnett called the meeting to order at 7:00 p.m. All regular members present are seated with Alternate R. Orciari seated for V. Elliott.

2. APPROVE MINUTES OF PREVIOUS MEETINGS: 9/6/16 AND 10/3/16

R. Wesneski **motioned** to approve the minutes of 9/6/16, seconded by S. Ryan. Motion passed unanimously with P. Whiton and T. Bobroske refraining from voting due to their absence at the 9/6/16 meeting.

R. Wesneski **motioned** to approve the minutes of 10/3/16 with the correction to add that Alternate Member R. Orciari was seated for absent member S. Ryan. Also, correction to page 5, line 15, the word “sloth” to the word “swath”. P. Whiton seconded the motion and it passed unanimously.

3. DECISION - BRIAN & JESSICA TAYLOR – APPLICATION FOR 20’ X 34’ INGROUND POOL, 52 WOODCHUCK LANE.

Mr. Taylor and John Zaczyk, Carolyn Pools are present. IWZEO David Perkins has submitted a report on his inspection of the property at the request of the Commission. The report states that the location of the pool is further north than what was proposed on the sketch provided to the Commission on 10/3/16 and is located in a flat location. IWZEO Perkins reports that there should be no cut or fill needed in the slope towards the south and there should be no impacts to wetlands as long as proper erosion controls are in place. His report includes photos of the property and a photo of the revised sketch with the correct location of the pool. Mr. Zaczyk states that E&S Controls will be in place and that the correct location of the pool is closer to the house and further away from the wetlands, approximately 80 feet and not 40 feet as first presented. T. Bobroske **motioned** to approve the application as a regulated non-significant activity with the condition that the IWZEO inspects for erosion control measures, seconded by S. Ryan. Motion passed unanimously.

4. DECISION - PICKETT BROOK PROPERTY – APPLICATION FOR ROAD CONSTRUCTION OF BREAK MAIDEN LANE WITHIN EQUESTRIAN ESTATES SUBDIVISION, PLYMOUTH ROAD.

Atty. William J. Tracy, Furey, Donovan, Tracy & Daly, P.C., Bristol, CT is present to represent along with Robert Hiltbrand, R.R. Hiltbrand Engineers and Surveyors, Bristol, CT, Clinton Webb, C. Webb & Associates, Norfolk, CT and Jared Braddock, Project Manager, Supreme Industries/Pickett Brook Property. Atty. Tracy reminds the Commission that the application was accepted at the last IWWC meeting in October with request for revisions to the plans. Revisions have been done and is shown on plans submitted tonight titled Overall Plan Equestrian Estates, Sheet O, dated 10/3/16, revised 11/7/16, Proposed Roadway Plan, Sheet RP, dated 10/3/16, revised 11/7/16, Roadway Profile – Sheet P1, dated 10/3/16, revised 11/7/16, Roadway Profile – Sheet P2, dated 10/3/16, revised 11/7/16, Sediment & Erosion Control Details, Sheet S&E, dated 10/3/16, revised 11/7/16.

Mr. Hiltbrand addresses the Commission and referring to Sheet RP (Proposed Roadway Plan) addresses revisions to the plans discussed at the last IWWC meeting. He notes that the access road leading to the parking area has been moved away from wetlands and relocated to the area where you will enter off the repositioned roadway. He states that the old location of the road came in to the gravel road that ran between the two wetlands so that has now been pulled away. The second thing the revised plans address was how the area between the two wetland areas are to be treated and the removal of the crushed stone roadway and the culvert associated with it that connected the two wetland areas together. That culvert, due

to its elevation allowed the vernal pool area to not store water to a certain elevation, rather it took away water from that. By removing the culvert and creating a level area between the two wetlands with a weir in it they were able to build up the water in vernal pool 5N allowing it to have a larger surface area, a deeper pool, then would be allowed by the culvert. The culvert has been removed and it is noted the area will be backfilled with native select fill that will be screened to be compacted to 95% compaction so no water will bleed through and it will act more like a dam structure than a pervious structure. There is a placement of stone/boulders at the edge on either side of the roadway so it is proposed that those stone/boulders be pulled down to a certain elevation, elevation 775, and then create a flat shelf area outside of the wetland area that could be planted. In the middle of the flat area on either side is a concrete weir, at elevation 715.50, so the vernal pool could build up water to elevation 715.50 which it is noted that the vernal pool is surrounded by 775.50. The vernal pool is surrounded by 776 so it could pull water to about 4 or 5 feet outside of the wetland area itself would be the maximum water level. That is about 1.25 feet higher than the flow line of the culvert currently in there picking the water surface up 1.25 feet. The flat areas on either side could be planted using a bioretention mix of sand, top soil and organic mulch which is good for treatment as far as stormwater goes and makes a good planting bed for plants. Crushed stone in this area will be removed. Mr. Hiltbrand notes that there was mention of the proposed under drain that will go on the high side of the roadway, from the high point heading down into the vernal pool. The purpose of the under drain is to pick up ground water on the high side of the road taking it and bringing it to the vernal pool as an additional source of cool clean water to help maintain the water level in the vernal pool.

At this time the Roadway Profile Sheets are reviewed. Mr. Hiltbrand states that he took the storm drainage pipe that was down gradient from the wetlands and changed to specify pipe to be gasketed joint pipe backfilled with native screen fill so there wouldn't be any crushed stone that might tend to want to take water away from the lower, or most southerly wetland. Also, he was asked to put the elevation of pipes in the largest culvert that outlets to the second wetland towards the pond, he were asked to put a pipe in there and did so with a 24" pipe. He showed the underdrain coming in to the vernal pool, shown in the profile, which shows the vernal pool elevation at 775.50. This elevation also relates to the vernal pool which is 50 feet from the road. Those were the major items that were discussed at the last meeting.

T. Bobroske asks the question of when Mr. Hiltbrand speaks of 95% compaction on the new structure, will Mr. Hiltbrand be testing to say it is at 95% compaction and how will the checks and balances be done to know it will be 95%? Mr. Hiltbrand replies that to be certain it could be tested but this is normal construction of compaction and is very reasonable.

T. Bobroske states that in his profession he did a job with 98% compaction and he had to get it tested. He wants to be assured that there will be no leakage and that no geofabric will be used, just regular compaction and asks again, how can we be insured it will happen? Mr. Hiltbrand states that if one were building a dam for a pond, he could see the justification for compaction testing, but what is being proposed is a very small area and very low surface elevation of water, a foot and half of water. T. Bobroske states that you're trying to get 95% compaction he wants to be assured that it won't be filled with undesirable fill. He questions Mr. Hiltbrand if he would be the one inspecting the compaction with Mr. Hiltbrand replying, if that is what the Commission wants and asks for. R. Wesneski expresses his concern that if it is not compacted tight, it can act as a conduit to act faster draining down to the stone with T. Bobroske agreeing that this is the concern.

R. Wesneski questions whether there is ledge rock in the area of the drain with Mr. Hiltbrand replying, no. R. Wesneski questions so where the road is going how deep the drain will be? Mr. Hiltbrand states it should be down about 4 feet to the top. R. Wesneski asks whether the stratus will be looked to see where the water bearing material is? Mr. Hiltbrand states that what you're looking at is where the site drains naturally. Generally ground water follows the same plain as the ground. When you dig, you're finding in this location groundwater in places at 24 to 36 inches at seasonal ground water. You're not going to get water year round but with spring time you want water. With spring time it will catch groundwater for the vernal pool where the vernal pool will be recharged. In the summer months you won't be grabbing anything from the underdrain with R. Wesneski stating, unless it was deeper. R. Hiltbrand states, unless

there was seepage or unless we have a very wet season. Clinton states that last summer was fairly dry and the vernal pool ran all summer. Clinton Webb states that to keep its vernal pool character, you don't want water after August with T. Bobroske stating that in spring you want to keep it as a functional vernal pool.

R. Wesneski states this is the important thing, in keeping the vernal pool alive. To miss it by a foot bothers him. Mr. Hiltbrand states, it gets significantly deeper because they're going under the storm drainage pipe. Mr. Webb states that in order to keep its vernal characteristics you don't want to add water after August 1st. T. Bobroske states he understands but with this but we want to make sure that in the spring time it is going to be a functional vernal pool because based on what's been submitted, the vernal pool #3 is not that functional compared to the other two. Mr. Webb states that is correct but we're adding a foot and a quarter of water of additional depth then what it has now and this will help tremendously. It is a little extra so since there is water there why not just guide it in there because it's going to be bedrock derived groundwater so it will clean and cool. Mr. Webb states it's really eliminating a culvert that's a 90% improvement on keeping water in the pond during the breeding season. Mr. Hiltbrand states they showed that they didn't just put the underdrain in with 6 inches of stone on it, they showed the stone up to finish grade so it acts as a french drain as well as an underdrain so it's grabbing everything within that four foot profile plus the surface water that rolls in to the top of it that will filter out through the stone.

T. Bobroske states that out of the three vernal pools this application is dealing with in this area, the Commission just wants the best way to improve it. R. Wesneski questions whether the applicant would object to a stipulation, if this application is approved, for C. Webb or R. Hiltbrand to be present on the site looking at the soil to see if it's the best water bearing soil with Mr. Webb stating there isn't much soil, that the work is in rock. R. Wesneski questions then why can't it be put it on top of the rock, as far as can be dug down, where the water is going, where it's going to slide on the rock, under the drain and come out the bottom. C. Webb states that it can be done and adds that most soil on rock is man placed but they will remove it and put the drain in. R. Orciari asks that the level spreader location be pointed out on the site plan and questions whether this was added or was it on the original plan because he did speak of it at the last Wetlands Commission meeting suggesting putting a level spreader from the outlet of the culvert going into the pond and placing rip rap at the western culvert although he is not sure if that would moderate the flow before it goes into the culvert. Mr. Hiltbrand states that it can be placed there, that it won't hurt anything.

Clinton Webb addresses the Commission and distributes *Recommendations for Enhancing the Buffer Around Wetland 5's Vernal Pool* that he authored. This document remains on file in the Land Use office. He states that they want to create a buffer that is missing from the south side of the vernal pool. He reports that tree seedlings and shrubs have been planted on the west side of the proposed barn and they will now be ready to plant on the south side. Final depth of soil after stone removal will be determined. He's looking at a four foot depth of soil but he says that Mr. Hiltbrand believes it to be two feet. Mr. Webb states that there is a new planting plan for the edge of the new road and vernal pool area around Wetland 5 (or 5S) but no wetland plants will be used. T. Bobroske questions what types of plants will be planted with Mr. Webb stating that seedlings will be planted and that those seedlings will be no more than four (4) feet tall at maturity. R. Wesneski states that when the planting plan was discussed at the time of the barn application submitted by Pickett Brook Property, he believes the Commission wanted taller trees with 40% of the trees proposed to be five to ten feet tall upon planting to provide immediate shade. Mr. Webb states that the Commission will have to make that a condition for this application. R. Orciari states that White Ash should be replaced with something else because of the Emerald Ash Borer that feeds on ash species. Mr. Webb states that he will scratch the planting of White Ash listed on the *Recommendations for Enhancing the Buffer Around Wetland 5's Vernal Pool* list with R. Orciari suggesting the planting of oaks because you want leaf litter instead of pines or hemlocks. The leaf litter from oaks will fall down into the vernal pool and form a seal. Mr. Webb states that he will place the pines farthest away from the vernal pool and the insidious trees in between the pool because that will give the greatest shade area. At this time, Mr. Webb distributes a copy of *Environmental Site Inspection Schedule for Break Maiden Lane Project* that he

authored to cover inspections of only the vernal pool with the town's enforcement officer. This document remains on file and highlights five (5) project steps that includes (1) Pre-construction review of the erosion controls surrounding the vernal pool area. (2) Inspection of the proposed excavation of the existing stone road (to a depth that will allow approximately 4 feet of topsoil to be placed in the buffer planting area) and the construction of the overflow swale. (3) Inspection of the planting program relating to species and number of plants. (4) Inspection of the condition of the plantings at least two time periods during the growing season, such as, early summer and late summer to check on the plant mortality. If more than 20% of the plants die, then they must be replaced in kind. (5) Final signoff inspection after all erosion controls have been removed and the site is stabilized. R. Orciari questions what type of 50 shrub seedlings will be planted (noted on page 2 of *Recommendations for Enhancing the Buffer Around Wetland 5's Vernal Pool*) with Mr. Webb replying spice bush, native shrubs and blueberries. R. Orciari suggests planting of winterberry with Mr. Webb agreeing to that.

R. Wesneski states that with the proposed 56 trees to be planted, there should be 56 trees growing with zero mortality rate. Mr. Webb agrees stating that the time frame should be within one (1) year to date of planting for the growing season. R. Wesneski expresses his concern with four (4) feet of topsoil in that with any possible erosion it ending up going into the main pond with Mr. Webb stating it would be 'up to' four feet and it should say "compacted" but he may have left that word off. So again, Mr. Webb states, we're talking 95% compaction with two to four feet of topsoil and then in that very compacted soil they will dig out the bowls and holes for the root balls. R. Wesneski states that this is in the area of the two ponds (vernal pools) and these are overflow plunge pools and water does build up. He questions, will it go over the top? Mr. Webb states, no, there is an engineered spillway and it will go over the concrete weir. Mr. Hiltbrand adds that there will be a very level planting area where shrub plantings will take place with no slopes and no erosion and each end will be protected by the stone walls. R. Wesneski asks Mr. Webb if he can quantify the coverage with the shrubs with Mr. Webb stating they could put the shrubs two to three on center from the first 10 feet from the edge of the pool and back; right on the perimeter of the pool and between the two ponds. He figures that if you took 20 shrubs at 2 feet apart, that's 80 feet so that is going to allow for three off set/staggered rows. R. Wesneski states that this should be added to the conditions.

R. Wesneski questions what will keep the horses out of the vernal pool area with Mr. Webb stating that there was fencing shown on the plans presented for the construction of the barn that will be installed. R. Wesneski questions why it wasn't kept to be shown on these plans with Atty. Tracy stating that this application and site plan is for the road construction. R. Wesneski states that it should be shown on this plan as well with Mr. Hiltbrand stating that it can be added to the plans.

Land Use Coordinator Redmond questions when this portion of road will be built. Would it be done at the time the barn is being constructed and brought in from Plymouth Road to meet the westerly portion of Break Maiden Lane? Atty. Tracy replies that he does not know the phasing schedule of this portion of Break Maiden Lane.

R. Wesneski states that bonding of this project through the Planning Commission and Subdivision application should include plantings and that this should be stated on the bond. Atty. Tracy states that the bond for road construction usually includes public improvements.

T. Bobroske questions the fee for the Wetland Enforcement Officer and that it should be the same requirement as it was for the barn application submitted by Pickett Brook Property with the applicant covering the fee for those inspections. Atty. Tracy states that there is not a set fee yet for the inspections for this application but that there shouldn't be a lot of inspections required by the IWZEO. Mr. Webb states that he figures on three to four enforcement hours for site inspections and report writing for a total of 15 to 20 hours. If Mr. Webb is to accompany the IWZEO on these inspections, Mr. Webb states that the Commission should make this a condition.

Land Use Coordinator is asked to recite back the proposed conditions of approval that have been mentioned. R. Orciari would like to add that a small level spreader or rip rap be placed at the outlet of the western culvert at Station 12+70 before it goes into the pond. T. Bobroske states that he would like to add that five (5) inspections be conducted by the Inland Wetland Enforcement Officer with Clinton Webb accompanying him.

S. Ryan **motioned** to approve the application with the following Conditions of Approval:

*That Hiltbrand Engineers inspects compaction and test for 95% compaction of backfill proposed in site development and that they supervise the removal of the existing road, construction of the vernal pool overflow, and the installation of the cold ground water underdrain along the proposed road to insure the maximum amount of water will flow into vernal pool #5 and that the engineer issue a written report when done.

*That 40% of the trees proposed to be planted in Clinton Webb's "*Recommendations for Enhancing the Buffer around Wetland 5's Vernal Pool*" shall be followed with the exception that 40% of each categorized tree be five to ten feet tall upon planting.

*That there shall be zero mortality of trees planted within one year to date of planting.

*That White Ash shall be replaced by oaks due to the Emerald Ash Borer that feeds on ash species.

*That the planting plan presented by Clinton Webb titled "*Recommendations for Enhancing the Buffer around Wetland 5's Vernal Pool*" that states shrub seedlings shall be planted within a 10 to 15 foot swath along the southern boundary of the wetland be modified to reflect the shrub coverage and distances away from the vernal pool and that winterberry bushes would be added to the mix.

*That fencing to keep horses out of the wetland proposed and shown on the site plan approved by this Commission on 6/6/16 for the construction of a 20-stall horse barn (Plans by R.R. Hiltbrand, revised to 7/11/16, titled Proposed Site Plan -- Lot 21 Equestrian Estates, Sheet O) be shown on the as built plans at the time they are presented at Town Meeting for road acceptance.

*That a small level spreader or rip rap be placed at the outlet of the western culvert at Station 12+70 before it goes into the pond.

*That the bond to be posted for the road construction includes and covers plantings and work around the vernal pool. This should be noted at the time of the Planning Commission's decision on the application for resubdivision/road construction of Break Maiden Lane.

*That a minimum of five (5) site inspections (15-20 hours total) be conducted by the Inland Wetlands/Zoning Enforcement Officer with Clinton Webb accompanying him. The IWZEO fee for these inspections shall be paid by the applicant and that the Commission will receive five (or more, if needed) reports on those inspections.

*That it be known that Clinton Webb is attesting to these items and that the engineer record is on file and when the critical areas of the drain and the interconnection between the two wetlands occur, a written report stating what has occurred is received.

P. Whiton seconded the motion and it passed unanimously.

R. Wesneski states for the record that this was a great improvement over the plans this Commission has seen in the past and realizes a lot of effort was put into this to ensure that these vernal pools survive.

5. ANY OTHER BUSINESS.

LUC Redmond informs the Commission of Agent approval on a Wetlands application for a 2-lot resubdivision, 135 County Line Road, submitted by Joshua E. Dumas, Trustee of the Dumas Children Trust. No wetland activity.

The 2017 Budget Request for IWWC is reviewed. No changes are made to the \$1500.00 current budget.

6. COMPLAINTS/ENFORCEMENT ACTIONS.

None.

7. CORRESPONDENCE.

Copies of Habitat are received.

8. INVOICES.

None.

9. ADJOURN.

P. Whiton **motioned** to adjourn the meeting at 8:10 p.m., seconded by S. Ryan. Motion passed unanimously.

Respectfully submitted,

Polly Redmond
Land Use Coordinator

RECEIVED FOR RECORD AT HARWINTON CT
ON 11/16/16 AT 2:11 PM
ATTEST NANCY E. ELDRIDGE TOWN CLERK