INLAND WETLANDS
COMMISSION
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TOWN HALL
238 Danbury Road
Wilton, Connecticut 06897

MINUTES

January 22, 2015

PRESENT: John Hall (Chair), Liz Craig, Tom Burgess, Nick Lee, Rick Stow, Dan Falta

ALSO PRESENT: Patricia Sesto, Director, Environmental Affairs; Liz Larkin, Recording Secretary; Casey Healy, Gregory & Adams; Barry Blades, Blades & Goven; Joe Canas, Tighe & Bond; Matt Davison, Tighe & Bond; Tom Nelson, McChord Engineering Associates; Steve Trinkaus, Trinkaus Engineering; Will Patty, Property Owner; Christina Duncan, Property Owner; John McDermott, Property Owner; Tom Costello, Property Owner; Robert Grippando, Property Owner; Rick Crossman, Archadeck of Coastal Connecticut; Antonella Schmidt, Antonella Designs; Joanne Lepore, Property Owner

I. CALL TO ORDER

Mr. Hall called the meeting to order at 7:30 p.m.

II. PUBLIC HEARINGS

A. WET#2295(S) – WILTON YOUTH FOOTBALL – 131 School Road – renovation of existing grass field to an artificial turf field at Middlebrook School

Ms. Sesto read the documents into the record.

Mr. Hall, Ms. Craig, Mr. Burgess, Mr. Lee, Mr. Falta and Mr. Stow indicated they visited the site.

Mr. Healy introduced the proposal to renovate the existing grass field at Middlebrook School. It includes removing the natural grass field and installing an artificial turf field in addition to adding emergency access, which does not exist today. He explained this renovation is crucial to the Wilton Youth Football, Wilton Youth Field Hockey, Wilton Youth Lacrosse and physical education classes for children who attend the school as the current field is in poor shape. He confirmed that Parks & Recreation investigated replacing the grass on the current field. The cost would be $220K and he stated there is no manpower to maintain this field.

Mr. Blades provided a site review and indicated the location of the field is bound by the school building and other existing sport fields. He explained the new turf field will be slightly larger than the current grass field. The additional space is being taken from the existing parking area by excavating into the slope. Retaining walls will be added and there is a space for bleachers,

which may be added later. This extension will include pedestrian access and gates. Mr. Blades confirmed the grey areas on the plan are to be paved walkways and will be ADA compliant. He confirmed the stormwater management system includes a bio-filtration area which receives runoff from the detention system from the south end of the property.

Mr. Nelson explained how he designed the stormwater system to rapidly remove runoff to the underground detention system. This system has 1,440 linear feet which is sized to accommodate the first 1 inch/first flush for water quality improvements. The system includes 2 yard drains and a curtain drain with a bio-filter basin which allows plant growth. Mr. Nelson confirmed there is an underdrain in the biofilter and an overflow pipe, that both discharge to the existing storm drainage network.

Addressing the staff report, Mr. Nelson stated they used an infiltrometer instead of percolation test holes as they are more precise. These consist of an inner and an outer ring to get a more precise infiltration rate. He confirmed the scour hole is designed per DOT standards and will improve the current conditions. He then confirmed sediment trapping takes place before the scour hole, so no sediment retention is planned.

Mr. Nelson confirmed two trees must be removed by the outlet and a vegetative mix is added to the area to avoid erosion. There is access to the scour hole through a walking path as there will be maintenance and annual inspections that need to take place.

Mr. Davison stated he completed a biological evaluation in May of 2014. He confirmed the turf field location would be best within the existing field area. He explained west of the proposed field area is a mixed hardwood forest with a dense understory composed of invasives. Mr. Davison stated the plunge pool is just within the property boundary and connects to a larger off-site wetland. The pool is in disrepair with scour and sediment. He confirmed this proposal will not adversely affect the wetland.

Mr. Canas reviewed the Pollutant Renovation Analysis. He confirmed the total suspended solids account for nitrogen, copper, lead and zinc. Mr. Canas explained there are two treatments for this stormwater management design; 1 for infiltration to the west, and 1 bio-filter to the south and then these systems combine at the outlet and scour hole. Mr. Canas described he looks for efficiency and the impervious percentage of the proposal. His conclusions from this proposal are backed up by the CT Department and Energy and Environmental Protection which state that the system needs to be sized to treat the 1st flush. Mr. Hall mentioned a study that looked at other turfs for chemicals transported by the system and zinc is the primary concern. Mr. Canas responded that the proposal removes 85% of zinc.

Ms. Craig expressed concern about thermal pollution and any plans to use irrigation to cool the field. Mr. Canas responded that it would only be cooled from rain.

Ms. Sesto pursued questions pertaining to the amount of zinc given off as the field ages and asked how old the fields were in the DEEP study. Mr. Canas stated that the fields were about 4 years old. Ms. Sesto asked if the field pollutes more as it ages and Mr. Canas could not answer that question.

Ms. Craig asked if the infill material gets replenished due to the material migrating. Mr. Canas responded artificial turf fields last about 10 – 15 years. The concentration of zinc from artificial

turf is 84 micrograms per liter which is not much more than a residential property. The concentration that affects aquatic life is 65 micrograms per liter and the DEEP reports no other issues with water quality standards. Stormwater treatment yields a zinc renovation rate of 70-99%, bringing the 84 ug/l down substantially.

Ms. Craig asked about the maintenance of the bio-filtration basin. Mr. Nelson confirmed that it would require plant replacement if necessary and a regular schedule to remove sediment and debris. Mr. Falta asked who would be responsible for this cleaning. Mr. Nelson stated anyone with a shovel could complete this maintenance. Ms. Sesto asked Mr. Healy if Parks and Recreation, or Department of Public Works would be completing this regular maintenance. Mr. Healy stated he would find out.

Mr. Healy stated the artificial turf is less work to maintain than grass and the plans will be updated with these maintenance details. Mr. Falta asked the commission if they can make sure that someone completes this work. Ms. Sesto explained that any non-compliance issues on the part of the town would have to go through the Board of Selectmen as town departments do not have authority over each other. Mr. Healy noted there are many resolutions for private and commercial use that require a declaration to maintain the systems and he did not understand why a town project would be any different.

Mr. Stow inquired about the net flow increase from the turf field. Mr. Nelson stated they are attempting to reduce the peak flow with the turf field. Ms. Sesto asked if they investigated storm events larger than the 25-year storm to which Mr. Nelson confirmed they did not. Mr. Hall asked if the zinc is absorbed into the ground. Mr. Canas responded zinc carrying runoff it goes into the infiltrator or biofilter where the zinc binds to the soils and in the case of the biofilter, zinc is absorbed by the plants as well. This process does not result in toxic plants.

Ms. Sesto asked about the accumulation of zinc associated with infiltration. If the zinc is continually binding to the underlying soil, does a "zinc sink" develop? Mr. Davison responded the levels of zinc are currently higher than they would be post-development. Mr. Hall asked the maintenance costs be provided. Mr. Healy responded those are being calculated and will be provided at the next meeting.

Mr. Hall asked how the turf decomposes as its aging; are different pollutants emitted over time? Ms. Craig asked if the stormwater system will still function properly when the turf breaks down and asked if solvents are used to clean the turf. Mr. Healy confirmed the fields are cleaned by vacuuming and/or sweeping. Mr. Blades added no solvents are used unless there is a hazardous spill on the turf.

Mr. Stow asked what happens if children walk through the bio-filter area. Mr. Blades stated the soil can become compacted so a fence would be appropriate to keep foot traffic away.

Mr. Healy reviewed some alternatives to the proposal. Alternate Plan #1 includes removing parking spaces that if lost, would create problems for other fields. Alternate Plan #2 is to have the turf field installed at the Comstock Community Center, which includes a steep grade and removal of trees. Alternate Plan #3 shows the turf field being installed in an area of the Middlebrook School grounds that are surrounded by wetlands. Alternate Plan #4 was attempting to fit the field within the existing high school fields, but would not fit without impacting the softball field. Alternate Plan #5 would place the field in a wooded and wetland area that is

owned by the state.

Ms. Duncan, of 121 Middlebrook Farm Road, provided two handouts to the commission. One of the handouts was a study of crumb rubber used for turf field infill. She confirmed this study proves the crumb rubber is unsafe as it contains lead, heavy metals, and other chemicals. The second handout shows the rainfall totals are increasing for our area. She stated this should be taken into account when calculating the stormwater management system. She added her well is close to the school and she is concerned about her drinking water.

Mr. Trinkaus introduced himself, stating he was hired by property neighbor, Will Patty, to review the application and offer professional comments. He confirmed he utilizes the 2004 CT State Manual for Stormwater Management. This manual gives guidelines for underground detention and water quality standards. He stated the DEEP manual states infiltrators should not be placed below surfacing which would hinder access. It is unrealistic to think the turf field would be ripped up to fix the infiltrators if needed.

A seconded deficiency noted was the lack of pretreatment of stormwater prior to discharge to the infiltrators or biofilters. The number and location of test pits was also questioned. Test pits should be dug every 50 ft. on either side of the proposed infiltrator, especially given the variability in the percolation rates and the unknown presence or absence of ledge. He noted that if there is a large storm, the system as proposed would not be able to drain down within the 48 hours projected.

Mr. Trinkaus confirmed the filtrometer with the double ring that the applicant has utilized is the best way to get a reading. He then stated the applicant shows a curve value for the turf field at 82, which is incorrect. The correct value is 98, as stated with the stormwater manual. This discrepancy could result in greater discharge and erosion within the wetland.

Mr. Trinkaus concluded that the systems as proposed will fail. He stated that most Public Works and Parks and Recreation staff do not know how to properly clean the proposed basins. Further, the raised outlet is designed to pond 2 feet of water and the weight of the water will compact the underlying soil, causing a reduction in filtration.

Mr. Hall asked Mr. Trinkaus if he was okay with the zinc levels. Mr. Trinkaus confirmed he would be okay with it if there is a properly designed system. Mr. Falta asked Mr. Trinkaus if he felt the turf field could be installed in this location. Mr. Trinkaus responded that it could be installed, with the right design, not with the current proposal.

Mr. John McDermott, of Hunting Ridge Lane, stated he moved here 6 years ago to be within the Wilton School System. He confirmed the current field has rocks which are dangerous to children using the field. He stated the Girls Field Hockey Team cannot use the field at all in its current state and many people will benefit from the proposed turf field.

Mr. Tom Costello, of 27 Woodhill Road, stated the applicant addressed his concerns and he thinks this is a great project for the town.

With no further questions or concerns, the public hearing was continued to the next regularly scheduled meeting on February 12, 2015.

III. APPLICATIONS READY TO BE REVIEWED

A. **WET#2296(I) – GRIPPANDO – 35 Cavalry Hill Road** – relocate existing septic tank in order to accommodate deck expansion

Mr. Grippando stated he wants to build a new deck, which requires his septic tank be relocated. Palladino Septic conducted the testing and found a new site for the tank behind the shed.

Mr. Lee recused himself for this application.

Ms. Sesto confirmed the backyard was filled previously and the wetlands are on the east side of the property. Mr. Grippando confirmed there will be no tree removal and there are no alternate sites for the tank as these soils behind the shed are the best.

Mr. Falta MOVED to APPROVE WET#2296, with normal and General conditions, SECONDED by Ms. Craig and CARRIED 5-0-0.

B. WET#2298(I) – LEPORE – 44 Saddle Ridge Road – proposed addition and B100a within a regulated area

Mr. Lee was reseated.

Ms. Schmidt, architect for the applicant, explained the proposal is for a third bay garage and kitchen expansion for the growing family of 6, plus a nanny. All additions are on piers with a crawl space or slab within existing developed areas of the property. The B100a septic system, which is required per the Health Code, is located within 100 feet of a wetland across the street.

Mr. Burgess MOVED to APPROVE WET#2298, with normal and General conditions, SECONDED by Mr. Craig and CARRIED 6-0-0.

IV. APPLICATIONS TO BE ACCEPTED

A. WET#2300(I) – COLBERT – 106 Linden Tree Road – "emergency" septic replacement adjacent to a wetland

B. WET#2303(S) – PRIEGER – 35 Hickory Hill Road – construction of a new residence, septic system, and associated grading within an upland review area

Mr. Lee made a MOTION to accept all new applications and schedule them for the next appropriate meeting of the commission, SECONDED by Mr. Hall, and CARRIED, 6-0-0.

V. APPROVED MINOR ACTIVITIES - None

VI. CORRESPONDENCE - None

VII. OTHER APPROPRIATE BUSINESS

A. VIOLATIONS

1. **DeVito – 40 Honey Hill**

Ms. Sesto confirmed the attorneys are speaking to come to a resolution on this matter.

2. **English – 189 Westport Road**

Ms. Sesto confirmed this property owner came into the office and is making forward progress.

3. **Leska – 50 Sunset Pass**

Ms. Sesto confirmed she spoke with the agent who is assisting Mr. Leska and a survey is being completed.

B. APPROVAL OF MINUTES – January 8, 2015

Mr. Lee made a MOTION to approve the minutes as drafted, SECONDED by Ms. Craig, and CARRIED, 6-0-0.

VIII. ADJOURN

Mr. Lee MOVED to ADJOURN at 9:50 pm, SECONDED by Ms. Craig and CARRIED 6-0-0.

Respectfully Submitted,
Liz Larkin
Recording Secretary, Environmental Affairs