INLAND WETLANDS AND WATER COURSES COMMISSION MEETING MINUTES OF MARCH 3, 2020

CALL TO ORDER:

The Inland Wetlands and Water Courses Meeting was called to order by Chairman William Jackson at 7:00 p.m. on March 3, 2020 in Room 120 of the Town Hall.

ATTENDANCE:

Chairman William Jackson, Commissioners: Peter Nieman, David Rogan, Michael Cassetta, Gary Pavano, Rick White, and John Zarotney.

AUDIENCE OF CITIZENS: None.

MINUTES:

The minutes of the February 4, 2020 meeting were previously distributed for review.

Chairman Jackson would like the minutes (page 1) to reflect more detail/clarification to his request to Mr. Bruton (Application 19-11WF) to define the shaded areas on the print, discuss the sub-surface stormwater management plan, and the northeast infiltration area. Add: *The Commission noted that the proposed location for the gasoline station/convenience store building extended into the Floodway*.

Commissioner Pavano made a motion to accept the minutes of the February 4, 2020 meeting, with the suggested additional sentence, seconded by Commissioner Nieman. The motion was unanimously approved.

Commissioner Cassetta made a motion to open the Public Hearings, seconded by Commissioner White. The motion was unanimously approved.

PUBLIC HEARINGS:

Application 19-11WF - Proposal by BT 2008, LLC to construct residential and retail improvements within both wetland and flood hazard regulated area on Lot #12, 13A and 13C, Block 83 Berlin Turnpike.

Attorney Peter Alter, Alter & Pearson, LLC in Glastonbury, Matt Bruton BL Companies, Raina Volovski – Tighe & Bond, Leonard Jackson-Leonard Jackson Associates, and Developer Peter D'Addio were present for the Applicant.

Attorney Alter again summarized the BT2008 application; the presentation on behalf of the Applicant was organized so that the proposed floodplain activities were separated from proposed wetland activities. Regarding the flood zones, the applicant is requesting a variance, but willing to compensate. The applicant is proposing to place 25,000 cubic yards of fill and to impact 6,925 square-feet of area in the Floodway and 18,292 square feet of area within the Floodplain. Attorney Alter requested the engineer to give an overall description of the proposed development.

Raina Volovski- Wetlands Consultant referenced a 2017 inland wetlands delineation, in the eastern section of the property, a 2018 vernal pool study and more recent wetlands delineations in the westerns section of the property in January 2020 and again summarized her findings. Ms. Volovski indicated two areas of proposed direct impact to existing inland wetlands and stated that the wetland areas were not significant since invasive plant species were present.

Leonard Jackson - Hydraulic Analysis again summarized his findings for the Commissioners. Mr. Leonard Jackson indicated that the floodplain for the 100-year flood (also known as the "1% chance flood" and the "base flood") extended to Elevation 41 in this case. Mr. Leonard Jackson explained the definition of a floodway and reviewed his hydraulic analyses of stream flow during the base flood.

Mr. Matt Bruton, BL Companies, described the newest revisions on prints, a total of 3,739 square-feet of direct impacts to inland wetlands, and 6,851 square-feet of indirect impacts within upland review areas were shown and, after other presentations, additionally summarized the response to the Wetlands Consultant for the Town – WMC Consulting Engineers (as follows – per the BL Companies response):

Site Plans

1. Indicate the wetland flag numbers and locations on the plans along with the date in which there were located by Tighe & Bond.

Response: Wetland flag numbers have been recorded and will be added to the plans for future submissions. Wetlands were located by Tighe & Bond on January 30, 2020, this information will be added to the General Notes sheet.

2. A large amount of fill, complex retaining walls, stormwater management systems and associated infrastructure are required to construct the proposed development. We recommend a detailed phasing and grading plan be provided demonstrating how the site will be constructed and how erosion control measures will be implemented throughout the construction duration. Ensure the location of storm drainage or utilities behind the walls does not have an impact on the geogrid reinforcing.

Response: A phased grading and erosion control plan can be developed moving forward into the planning and zoning approval and building permit phases. All retaining wall systems will be designed by a third-party CT licensed professional engineer to ensure that all geogrid reinforcement can be provided to work in coordination with site utilities and appurtenances.

3. Temporary Sediment Traps (TST) will be required to control runoff and the transportation of sediments due to the overall land area disturbed. A Temporary Sediment Trap detail is shown on Sheet DN-1; however, the locations of these sediment traps should be depicted on the plans and appropriately designed. Consideration may need to be given to locating these TSTs outside footprint of the development area, in the upland review areas, with diversions swales directing flow accordingly. The locations of the TST can then be restored to grade, planted and reseeded upon completion.

Response: A phased grading and erosion control plan can be developed moving forward into the planning and zoning approval and building permit phases. These updated plans will be able to adequately depict locations in which the contractor shall install TSTs during each phase of construction. Ideally the TSTs will be located in areas within the existing limit of disturbance to reduce further impact to wetland upland review areas.

4. Provide the contact number and person responsible for erosion control measures on the plans.

Response: The contractor will be responsible for implementation of the erosion control measures. The contractor's contact information will be shared upon bid selection.

5. We recommend an isolator rows be specified at the inlet location of the underground detention system and all inlet/outlet pipes be increased to 24 inches as indicated on the detail on Sheet DN-4.

Response: Stormwater flowing to the underground detention system is being treated for total suspended solids (TSS) by the upstream hydrodynamic separation unit (HDS-40). Since the TSS is removed before entering the system, an isolator row is not warranted. The 24" inlet/outlet pipes as shown on the detail apply only to instances where an isolator row is used. In the current configuration, inlet pipe size will be determined by pipe hydraulic calculations and the outlet pipe size is as determined necessary for the hydrologic peak flow mitigation calculations.

6. The roof leaders should be clearly depicted on the plans to ensure stormwater is directed to the appropriate underground detention system. It is suggested that they be directed to a suitable infiltration area or the nearest inlet structure to reduce icing concerns.

Response: Roof leader systems for each building will be added to the grading and drainage plans as the project moves forward to planning and zoning and building permit approvals.

7. The applicant is advised to initiate discussions with CTDOT regarding Encroachment Permitting for both the curb cuts and drainage connections. Should any plan changes be made as a result of Hydraulics and Drainage review, the Commission/Town should be apprised to determine if further review is warranted.

Response: Acknowledged. The developer has hired F.A. Hesketh & Associates to do a traffic impact study and permit the project through the Connecticut Department of Transportation.

8. The 30" inlet and outlet pipe in the vicinity of HDS-10 only has a few inches of cover. Provide a detail of this hydrodynamic separator. It does not appear this unit can be constructed or function as designed with the given inverts and relative top of frame elevation. Please confirm and clarify.

Response: The design of HDS-10 will be looked at with more detail once the hydraulic pipe sizing analysis of the site has been performed. The unit can be substituted with an off-line unit configuration if topography and pipe size make the in-line configuration infeasible.

9. Specify catch basin types on the Grading and Drainage Plans.

Response: Catch basin types will be labeled on the grading and drainage plan sheets in future submissions.

10. Specify required storm drainage manhole diameters on the Grading and Drainage Plans.

Response: Storm drainage manhole diameters will be labeled on the grading and drainage plan sheets in future submissions.

11. Ensure OCS-40 will function as designed with the resultant tailwater elevation created by USDS-1 during the design storm event.

Response: OCS-40 has been designed to impound water in USDS-1 to mitigate peak flows that eventually discharge into the CTDOT system. This will be re verified once the pipe sizing calculations are completed prior construction.

12. The riprap apron designs associated with FES-20 and FES-31 do not apply at locations of steep slopes. Provide adequate erosion control protection via riprap swale and locate any such aprons on level terrain at the bottom of the water quality basin.

Response: Acknowledged, adequate riprap slope protection will be provided at FES-20 and FES-31 in addition to the riprap aprons relocated to level ground. These changes will be reflected on the revised grading and drainage plan.

13. Consideration should be given to installing a trash rack at the inlet end of the 24" discharge pipe within the water quality basin.

Response: A trach rack at the 24" outlet from the stormwater basin will be added to the revised grading and drainage plan for future submissions.

14. Specify an erosion control blanket (or equal) to be installed on the steep slopes.

Response: The erosion control blanket specified is North American Green SC150 as seen in the "Blanket on Fill Slope" detail on Site Details sheet DN-1.

15. We recommend an impervious core material be used for the large embankment proposed to surround the stormwater quality basin.

Response: Provisions for an impervious core within the embankment of the stormwater basin will be added to the revised grading and drainage plan for future submissions.

16. We recommend a Bond in the amount of twenty percent (20%) of the cost of the proposed erosion control measures be held for a period of 2 years upon completion of the project. If part of the Bond is used by the Town, the bond amount used shall be replaced by the owner within thirty days. The bond should be in place prior to commencement of construction.

Response: Acknowledged, a note to this effect will be added to the revised general notes sheet.

17. We recommend a Bond in the amount of twenty percent (20%) of the cost of the proposed landscaping and planting associated with Stormwater Quality facilities be held for a period of 2 years upon completion of the project. If part of the Bond is used by the Town, the bond amount used shall be replaced by the owner within thirty days. The bond should be in place prior to commencement of construction.

Response: Acknowledged, a note to this effect will be added to the revised general notes sheet.

18. We recommend the engineer provide as-builts of the stormwater management facilities constructed and certify they were built per the approved plans.

Response: Acknowledged, as-builts can be provided upon completion of construction.

19. The plans and Stormwater System Operation and Maintenance Plan indicate inspections will be performed by a qualified professional. We recommend bi-weekly and measurable event reports be sent to the Town during construction.

Response: Weekly erosion control inspections of the site will be performed as part of CTDEEP permitting and the Stormwater Pollution Prevention Plan. The weekly CTDEEP inspection forms can be shared with Town staff by the inspector.

Stormwater Management Report

1. Demonstrate the drainage system within the State right-of-way is adequately sized and in functional condition to accept the stormwater discharge being proposed. We suggest this system be cleaned and/or video inspected to the outfall.

Response: Pre and post development hydraulic analysis of the state-owned drainage system will be performed to ensure it is adequately sized. Video inspection will be performed if required by the CTDOT.

2. A detailed analysis of the closed subsurface drainage systems demonstrating adequate pipe sizing, inlet sizing and hydraulic grade lines should be provided.

Response: A full pipe sizing hydraulic analysis of the site will be performed moving forward into the building permit application submission.

3. We recommend updating the Stormwater System Operation and Maintenance Plan to specify mowing frequency of swales and basins. In addition, it is recommended that vegetation growth within riprap outfalls be removed as part of the bi-annual inspections.

Response: Acknowledged, guidelines for mowing and vegetation removal within swales and riprap aprons will be added to the O&M plan.

Discussion continued with Attorney Alter.

Chairman Jackson asked if the applicant had considered "feasible and prudent alternatives" to the proposed development, per Section 10.2 b. of the May 24, 2012, Inland Wetlands and Water Courses Regulations for the Town of Berlin, that would lessen the proposed impacts to inland wetlands and watercourses. Attorney Alter gave his opinion that it was a Town IWWC's role to request such alternatives, or a reduction in an activity, or to stipulate conditions associated with a proposed development.

Chairman Jackson noted that Sheet No. CFP-1 of the February 18, 2020 Land Development Plans by BL Companies showed two separate wetland boundaries located north and west of the proposed development. The wetland boundary lines differed significantly. Chairman Jackson requested the applicant to reconcile the differences in the wetland boundaries shown on the plan.

Chairman Jackson opened the floor to the Audience for questions/comments.

Mr. Joe Bajorski, Berlin Housing Authority, spoke in favor of the Applicant. He expressed his opinion that the proposed affordable housing is needed in Berlin.

Additionally, The Commissioners had previously received a favorable letter from Economic Development Director- Chris Edge encouraging additional development on the Berlin Turnpike.

Commissioner Nieman made a motion to continue the Public Hearing for Application 19-11WF with a Special Meeting on Wednesday, March 11, 2020 at 7:00 p.m., in Room 120 (due to hearing time constraints), seconded by Commissioner Pavano. The motion was unanimously approved.

Chairman Jackson read the Public Hearing Notice for Application 20-03WF.

Application 20-03WF - Proposal by Charles and Maryann Lexius to dredge an existing channel within a regulated area on Lots #53, 54K and 54L Block 120, #47 Worthington Point Road.

Mr. & Mrs. Lexius and Mark Amler, Pristine Waters, were present to explain their application from the previous meeting (below).

Please note: 47 Worthington Point Road abuts Silver Lake on our southern boundary line. The State of Connecticut conducted an extensive dredging project of Silver Lake over many years, in 4 phases. The cove where our property abuts Silver Lake was included to be dredged in Phase III, Subsection 1 of the State's Dredging Project. A large platform Harvesting dredger was used for the work. It was the intention of the State of Connecticut to access our dock and assist in regaining our access to the Lake, by weed and sediment removal. However, the Harvester was unable to complete the

intended work due to bedrock that was said to have been encountered. Chuck Lee, of DEEP, was our contact person at that time, the spring and summer of 2014. Mr. Lee stated that although the State dredging project would no longer include our dock and regaining our access to the Lake, we could contact the State's contractor while they were on the lake and hire them privately. We were told we would be fully responsible for all costs of labor, equipment usage and disposal of harvested material. At that time, it was not financially feasible for us to undertake this project.

Since 2014, eutrophication of the cove on Silver Lake has continued to close our access to Silver Lake from our dock due to increased sediment depths and invasive aquatic vegetation. We are currently in the process of seeking a permit from DEEP to allow us to contract with Pristine Waters of Ridgefield, CT (a Dredging company that does suction dredging) to open a canal from our dock on Silver Lake, southward into Silver Lake (15 feet wide and 150 feet long). We hope to regain our access to Silver Lake (but on a much smaller scale), and complete what the State of Connecticut could not complete.

A brief overview of this project: we hope to hire Pristine Waters dredging company. They will use a suction dredging pump, and diver to work in the lake to open a 15-footwide by 150-foot-long canal. Mr. Amler explained this process to the Commissioners.

REGULATED ACTIVITIES:

Prior to dredging, and upland of the designated wetlands on our property, our rear yard will be prepared with plastic sheeting on the ground surface, and sedimentation controls for dewatering of the dredged material. Siltation curtains will be placed in the lake to further prevent sedimentation and turbidity concerns while the work is being done. The dredged material will be discharged into a large 'GEOTube' (or mesh bag, that is approximately 45 feet wide by 50-60 feet long) that will be located upland of the designated wetlands on our rear property. The estimated volume of material to be dredged is 210 cubic yards. The dredged material will consist of sediment and root materials from the lake bottom. When completed, an average depth of 2.5 feet of sediment will be removed from the proposed canal.

The material will de-water for approximately 8 weeks in the 'GEOTube' in our rear yard. When dry, we are requesting to deposit the dried material in our rear yard with a mechanical grader. Please see included a 24" x 36" blueprint of our property plot plan and the marked area proposed to deposit the dredged material on Attachment D. All water will be drained back to the Lake through sedimentation-controlled areas. Please note, we intend to create a swale along the filled area on our western property line to mitigate any surface water concerns.

The proposed activity will provide both a work area for the proposed dredging project to accommodate the dredged materials during the dredging process and provides a location for the disposal of the dredged material. The requested method of sediment placement is much more financially beneficial for us than a more cost prohibitive removal of the material off site to an approved location to receive this type waste.

Of additional environmental benefit: The eastern property boundary of 47 Worthington Point Road is Lot 54J that was deeded to the Berlin Land Trust. See Attachment A:

Subdivision map. A year-round stream flows from North to South, passing under Worthington Point Road, through Lot 54J and into Silver Lake. This stream is utilized by the State DOT and Town of Berlin to receive storm water drainage at various points. Historically, there has been no routine maintenance of this stream to remove road sands that have accumulated in this stream. By opening a canal from our dock and into the Lake, we feel this will environmentally benefit the natural flow of the stream especially during high storm water discharge periods and minimize area flooding that can occur.

Chairman Jackson requested that the areas of disturbance (e.g. the spoils areas) be stabilized after construction, and as usual, the Standard Conditions of approval for Applications will ascertain that all methods of sediment and erosion control measures are being followed (i.e. silt fencing along the wetlands lines within the property), with the Wetlands Agent over-seeing the progress of the project.

Commissioner Rogan made a motion to close the Public Hearing for Application 20-03WF, seconded by Commissioner Cassetta. The motion was unanimously approved.

Commissioner Rogan made a motion to approve Application 20-03WF, with conditions, seconded by Commissioner Nieman. The motion was unanimously approved.

ADJOURNMENT:

Commissioner Cassetta made a motion to adjourn the meeting at 9:25 p.m. The motion was seconded by Commissioner Zarotney. The motion was unanimously approved.

Lecia Paonessa Recording Secretary