

**Findings**  
**26 Highland Road**  
**#IWW, WPL 10960-20**  
**Hearing Date: April 15, 2020**

**1. Receipt Date: April 15, 2020**

**2. Application Classification: Plenary**

**3. Application Request:**

Applicant is requesting to construct a new single-family residence, driveway, deck, and associated site appurtenances\* Portions of the work are within the upland review area and the WPLO area of Muddy Brook and Sasco Brook. IWW and WPLO Regulated Areas

\*The pool, submitted as a part of this application, has been denied based on a lack of information to allow for a decision. The Conservation Commission allows for the applicant to return to Conservation Staff with an application with missing information (pool depth and dewatering procedures) and allows Staff to assess and issue permit administratively if they see fit. Alternatively, the applicant may return to the Commission to review a pool application separately.

**4. IWW and WPLO Regulated areas**

IWW setbacks determined for this property include a 50' review area for the residence, 35' review area for the pool, 30' review area for the deck, a 20' non-disturbance buffer for the proposed grading, drainage, and/or other alteration from wetland boundaries. The Waterway Protection Line Ordinance dictates that the WPLO boundary be located 15' from the 25 year floodplain, 15' from the wetland boundary, or 15' from the top of bank, whichever is more conservative. For this project, the location of the WPLO will be 15' from the wetland line.

**5. Plans Reviewed:**

- a) "Site Improvements for a Proposed Single Family Residence Site Plan Prepared for Perkins Real Estate LLC, 26 Highland Road, Westport, Connecticut", Sheet C-1 and C-2, Scale: 1"= 20', dated January 23, 2020 and last revised to February 26, 2020, prepared by Landtech
- b) "Stormwater Management Report for 26 Highland Road, Westport, Connecticut", dated January 9, 2020 and last revised to February 26, 2020, prepared by Landtech
- c) Architectural Plans entitled: "Perkins Family Addition 26 Highland Drive, Westport, CT", (sheets H1, H2), dated January 10, 2020 and last revised to February 3, 2020, prepared by John Jones Architect

**6. Previous permits on file:**

- **#AA-4085-90:** Installation of swale and filling for maintenance of lawn
- **#IWW/M-10100-15:** Amendment of wetland boundary: Map G15
- **#IWW, WPL-10086:** New house, septic, and plantings. This work never started and there is a new owner.

**7. Background Information:**

The Flood & Erosion Control board issued the approval with conditions on March 4, 2020. The WWHD issued approval for the new house, deck, and pool on February 12, 2020.

**8. Facts Relative to this application:**

A portion of the proposed residence is located within the 50' IWW upland review area setback.

A portion of the grading and the drainage appurtenances are within the WPLO area and within the 20' IWW upland review area setback.

Town wetland boundaries are shown on the plan.

The property is not located within the Aquifer/wellfield Protection Overlay zone or groundwater recharge area.

The property is not located within a Coastal Area Management Zone.

The proposed total coverage is 19.4%

Tax Assessors card indicates the original residence was constructed in 1958, prior to Inland Wetland Regulations and Waterway Protection Line Ordinance.

The Health Department has approved the septic system application for a four-bedroom residence. The existing septic system will be removed.

Christopher Allan, Professional Registered Soil Scientist of Landtech conducted an on-site investigation of the property on August 26, 2014 and flagged the wetland boundary.

- The wetland soils on the property are described as follows:  
**Leicester, Ridgebury and Whitman (3):** These soils are mapped together because they react similarly to most uses and management. These poorly and very poorly drained soils are formed in drainageways.
- The non-wetland soil are described as the following:  
**Paxton and Montauk fine sandy loam:** These soils consist of well drained loamy soils formed in lodgement till. The soils are very deep to bedrock and moderately deep to a densic contact. They are on upland till plains, hills, moraines and drumlins.

The following includes **regulated activities** pursuant to the Inland Wetlands and Watercourses Regulations proposed in this application:

- The new residence is proposed (at the closest point) approximately 31'± from the delineated wetland boundary, most of the rear of the house is within the 50' IWW review area from wetlands. The existing foundation will be reused, in place, and the new house will utilize the exiting basement slab. Additionally, there are areas of new foundation that will be located outside the 50' review area.
- A pool is proposed (at the closest point) approximately 23'± from the delineated wetland boundary and within the 35' IWW review area. It is located where the existing septic system is, which will be abandoned.
- Two decks are proposed within the 30' IWW review area. The lower deck is proposed within the WPLO boundary. A portion of the lower deck is also in the 20 ft. setback.
- The footing drain discharge is within the 20' IWW review area and the WPLO boundary (approximately 9'± from wetland line).
- Grade changes are proposed within the 20' IWW review area and the WPLO boundary (approximately 6'± from wetland line).
- Mitigation plantings are proposed. These occur within flagged wetland limits, the 20' non-disturbance area, and the WPLO boundary. Plant size are not included on the submitted materials. The Commission finds that 3' to 4' shrubs and 2" caliper trees are required as part of the mitigation.
- The silt fence and the limit of disturbance are proposed within the WPLO boundary and the 20' non-disturbance area.

## **Conformance to Section 6 of the Inland Wetlands and Watercourses Regulations**

### **9. 6.1 GENERAL STANDARDS**

- a) disturbance and pollution are minimized;
- b) minimize height, width, length of structures are limited to the minimum; dimension to accomplish the intended function;
- c) loss of fish, other beneficial organisms, wildlife and vegetation are prevented;
- d) potable fresh water supplies are protected from dangers of drought, overdraft, pollution, misuse and mismanagement;
- e) maintain conservation, economic, recreational and aesthetic qualities;
- f) consider historical sites

### **Discussion:**

The Commission finds that the existing septic system installed immediately adjacent to the wetlands is to be removed and relocated greater than 60' from the flagged wetland boundary. A new code compliant system (60' of Eljen Mantis, 5 bedroom) is proposed to be installed. The footprint of the proposed residence will encroach no closer than that of the existing residence. Approximately thirty-five feet of the existing wetland vegetation behind the residence was previously removed and is currently being maintained as lawn. The Commission finds that this area will be revegetated with native plant species suitable for a wetland environment. Forty-two (42) plants are proposed along with a New England Wetmix seed mix. The small wetland pocket on the southern property boundary is also proposed to be revegetated. Japanese stilt grass has been identified onsite as an invasive species and is proposed to be mechanically removed.

#### **10. 6.2 WATER QUALITY**

- a) flushing rates, freshwater sources, existing basin characteristics and channel contours will not be adversely altered;
- b) water stagnation will neither be contributed nor caused;
- c) water pollution will not affect fauna, flora, physical or chemical nature of a regulated area, or the propagation and habitats of fish and wildlife, will not result;
- d) pollution of groundwater or a significant aquifer will not result (*groundwater recharge area or Aquifer Protection Overlay Zone*);
- e) all applicable state and local health codes shall be met;
- f) water quality will be maintained or improved in accordance with the standards set by federal, state, and local authority including section 25-54(e) of the Connecticut General Statutes
- g) prevents pollution of surface water

#### **Discussion:**

The Commission finds that the proposed landscaping removes manicured lawn within the wetland boundary and proposes to be revegetated with native wetland species to help restore and protect water quality. A permit issued in 1990 allowed the property owner to fill and reseed a portion of the backyard due to repaving of Highland Road and erosion activity that was occurring as a result. From review of the attached sketch plan, the fill activity was to take place to approximately 37' from the rear of the residence. The distance from the rear of the residence to the existing tree line is now currently approximately 50'. Due to this previous over clearing, the planting restoration proposal is similar to the proposal for the house construction permit approved by the Conservation Commission in 2015. This removes approximately 25 feet of lawn, which is in the biological wetlands.

Erosion control fencing is proposed to be installed adjacent to the flagged wetland line. Minimal grade changes are proposed up to the silt fence and will need adjustment to blend in the final grade. The Commission finds that the erosion control fence set at the perimeter of the site disturbances and as shown on the plans should be adequate to retain sediment and soils from entering the wetlands as long as it is properly maintained. The Commission finds that the monthly sediment and erosion reports and site monitoring are required to ensure the controls are effective.

An existing asphalt driveway at approximately 20' from the wetland edge at its closest point is to be removed and the area restored to lawn. Furthermore, as a result of the increase in impervious surfaces proposed with this development, the applicant is proposing a surface rain garden as the stormwater retention system. This has been sized to handle the first inch of runoff for water quality. The Commission finds that the "...attenuation and treatment of stormwater improves the groundwater entering the wetland..." The Commission finds that this will be an improvement over the existing site condition without drainage, and, allows for water quality treatment through biofiltration. The Commission finds that the site engineer shall oversee the drainage installation and certify that it is installed correctly prior to the issuance of a CCC. In addition, the plantings

for the rain garden include only a seed mix. The Commission finds that the list shall be amended to include plantings as well, especially around the boarder, to prevent the likelihood it would be mowed over by future owners. Seed mix alone, while it contains wildflowers, takes 2-3 years to mature.

A new code compliant septic system is to be installed on the western property line further from the wetlands as an existing system immediately adjacent to the wetlands is being removed.

#### **11. 6.3 EROSION AND SEDIMENT**

- a) temporary erosion control measures shall be utilized during construction and for the stabilization period following construction;
- b) permanent erosion control measures shall be utilized using nonstructural alternatives whenever possible and structural alternatives when avoidable;
- c) existing circulation patterns, water velocity, or exposure to storm and flood conditions shall not be adversely altered;
- d) formation of deposits harmful to aquatic life and or wetlands habitat will not occur;
- e) applicable state, federal and local guidelines shall be met.

##### **Discussion:**

The Commission finds that the proposed pool design does not provide enough information for the management of dewatering ground water during construction based on the fact that a pool depth has not been decided upon by the applicant. The Commission finds that the pool is **denied** and will not be approved as part of this project.

The Commission finds that the remaining proposed activities will not cause erosion and sedimentation to the wetlands provided the silt fence, backed by hay bales, be installed appropriately and maintained throughout the construction process. The Commission finds that monthly sediment and erosion reports and site monitoring are required to ensure the controls are effective. The Commission further finds that the wetland boundary as previously flagged by Soil Scientist, Christopher Allan, have been removed and need to be reinstalled prior to work commencement.

#### **12. 6.4 NATURAL HABITAT STANDARDS**

- a) critical habitats areas,
- b) the existing biological productivity of any Wetland and Watercourse shall be maintained or improved;
- c) breeding, nesting and or feeding habitats of wildlife will not be significantly altered;
- d) movements and lifestyles of fish and wildlife (plant and aquatic life) will not be significantly affected;
- e) periods of seasonal fish runs and bird migrations shall not be impeded;
- f) conservation or open space easements will be deeded whenever appropriate to protect these natural habitats.

##### **Discussion:**

The Commission finds that the existing conditions on the parcel limit habitat potential within the wetland immediately adjacent to the residence due to the presence of a manicured lawn. Plantings within the wetlands will help to reestablish a portion of the wetland boundary and offer an opportunity to increase biodiversity. The proposed site development proposal will result in supplementing vegetation within the biological wetland.

The Commission finds that the additional plantings and removal of manicured lawn in an effort to supplement the vegetation in the wetlands is proposed as a means to improve habitat potential. Native plant installation will also improve natural habitat in this area by providing more plant diversity and native habitat within wetland limits.

### **13. 6.5 DISCHARGE AND RUNOFF**

- a) the potential for flood damage on adjacent or adjoining properties will not be increased;
- b) the velocity or volume of flood waters both into and out of Wetlands and Watercourses will not be adversely altered;
- c) the capacity of any wetland or watercourse to transmit or absorb flood waters will not be significantly reduced;
- d) flooding upstream or downstream of the location site will not be significantly increased;
- e) the activity is acceptable to the Flood & Erosion Control Board and or the Town Engineer of the municipality of Westport

#### **Discussion:**

A surface rain garden retention system is proposed to handle the collection of roof runoff and driveway runoff for a 25 year storm. The rain garden is currently proposed as the main treatment for stormwater for the property therefore we find it important that it functions appropriately. The Commission finds that the site engineer oversee the drainage installation and certify that it is installed correctly prior to the issuance of a CCC. Additional plantings within the raingarden other than the seed mix are recommended per the reasons previously stated.

There is no site grading proposed in proximity to neighboring properties and therefore it is not anticipated to have the potential for additional runoff to be directed to the adjacent or adjoining properties. The Commission finds that the site monitor shall oversee any excavation to ensure sediment and stormwater runoff do not affect the wetlands.

The Commission finds that the pool is proposed in an area where groundwater will likely be encountered. The test pit data shows groundwater anywhere from 3 to 4 feet below grade. These pits were taken in the front of the residence. The Commission finds that groundwater will be encountered due to ground water levels closer to wetlands.

**Leicester, Ridgebury and Whitman (3)** soils typically have seasonal high groundwater levels of 0-10" below grade. The Commission finds that the dewatering summary in the "General Erosion & Sediment Control Notes" of the site plan is not adequate. The Commission finds that the pool, submitted as a part of this application, has been denied based on a lack of information to allow for a decision. The Commission finds that the missing information (pool depth and dewatering procedures) limits their ability to make a decision for the pool.

The FECB approved the application at its March 4, 2020 meeting. It was determined that the proposal met the Town of Westport drainage requirements.

### **14. 6.6 RECREATIONAL AND PUBLIC USES**

- a) access to and use of public recreational and open space facilities, both existing and planned, will not be prevented;
- b) navigable channels and or small craft navigation will not be obstructed;
- c) open space, recreational or other easements will be deeded whenever appropriate to protect these existing or potential recreational or public uses;
- d) wetlands and watercourses held in public trust will not be adversely affected.

#### **Discussion:**

The proposed activities will not significantly impact recreational and public uses.

### **15. *Waterway Protection Line Ordinance***

Section 148-9 of the Waterway Protection Line Ordinance states that the applicant shall submit information to the Conservation Commission showing that such activity will not cause water pollution, erosion and/or environmentally related hazards to life and property and will not have an

adverse impact on the preservation of the natural resources and ecosystem of the waterway, including but not limited to impact on ground and surface water, aquifers, plant and aquatic life, nutrient exchange and supply, thermal energy flow, natural pollution filtration and decomposition, habitat diversity, viability and productivity and the natural rates and processes of erosion and sedimentation.

The Waterway Protection Line boundary exists 15' from the wetland line. The Flood & Erosion Control Board has approved this application on March 4, 2020 with standard conditions.

The Commission finds that the implementation of additional native plantings within the wetlands will reduce the amount of manicured landscaping and utilized to maximize biofiltration to minimize the impacts from the increase in runoff. Habitat diversity will be improved with the additional wetland plantings. The natural rates and processes of erosion and sedimentation will be improved with the additional plantings.

Provided erosion controls are properly placed and installed, excavated materials are hauled off the site, tree protection fencing is installed and planting is implemented as proposed, the proposed activity will not significantly impact resources as they are protected under the Waterway Protection Line Ordinance.