

# **Environmental Land Solutions, LLC**

*Landscape Architecture & Environmental Planning*

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February 8, 2021

Inland Wetlands Commission  
Town Hall Annex  
238 Danbury Road  
Wilton, CT 06897

Re: Significant Corrective Action Permit Assessment  
220 Nod Hill Road, Wilton, CT

Dear Commission Members:

Environmental Land Solutions, LLC (ELS) has been retained by Hermann and Candice Behrens, owners of the referenced property, to prepare this project narrative in conjunction with a Corrective Action Permit application, to resolve a Cease and Desist Order, dated June 30, 2020, for the clearing of vegetation within the eastern portion of the Behrens' property and a portion of the neighboring property to the east. ELS staff performed site visits on August 25 & 27, and September 2, 2020.

## **EXISTING CONDITIONS**

The existing 3.2± acre property is a rear lot located on the eastern side of Nod Hill Road. The site is residentially developed with a small maintained lawn and landscape areas, at the front or west of the house. The area cited in the Cease & Desist Order is located to the rear or east of the house. Deciduous wooded areas occur along the north and south perimeters of the property. The Site Soil Investigation report, prepared by Mary Jaehnig and dated 8/28/20, found no wetlands within the Behrens property, and noted wetland soils were likely "located on the edge of Streets Pond off site to the east and were not flagged at this time." The water body, known as Pope's Pond and owned by South Norwalk Electric and Water (SNEW), abuts the Behrens property. The off-site areas were not investigated for wetland soils. The topography on the site ranges from nearly level immediately around the house, to steeper slopes (ranging from 20-40± %) to the east at the rear of the site. The topography transitions to a 10% slope within the SNEW property. Site elevations (an assumed datum) range from 90.0' around the house to 18.0' at the eastern property line. The site is in the Barrett Brook watershed, a sub-watershed of the Comstock Brook and the Norwalk River.

Within the last year, trees were removed from within the Behrens property and a portion of the slope between the house and Pope's Pond was stumped and graded. This activity extended off the site to the east onto the SNEW property. The existing silt fence located on the survey defines the lower limit of grading, and is located 35' to 45' east of the Behrens' property, within the SNEW property. The recent survey reflects the total area of disturbance is  $0.47 \pm$  acre ( $0.12 \pm$  acres on the SNEW property, and  $0.35 \pm$  acres on the Behrens property). The area is now vegetated with Japanese Stiltgrass and Smartweeds. Slopes within the graded portion of the work area range from 26-30%. Steeper site areas are not within the disturbed area.

Deciduous woods to the north and south of the site that are composed of a Sugar and Red Maple, White Oak, Hickory, Black Birch, and Black Locust trees, and are adjoining the cleared area of the Behrens property. The average diameter breast height of the wooded area is of 12-18" diameter breast height. The understory is sparse and includes Euonymus, hardwood saplings, Japanese Stiltgrass, Woodland Aster, Goldenrod, Christmas Fern, Garlic Mustard, and Virginian Knotweed (native) and Virginian Creeper. The wooded sections include downed trees that have fallen under natural circumstances.

In addition, there is open scrub area in the northeastern corner of the Behrens property that has been maintained in dense thicket cover (trees removed) for several years. These areas are not part of the recent clearing, and are clearly reflected in the older aerial maps. Vegetation in this area is predominately invasive species of Asiatic Bittersweet, Euonymus, Multiflora Rose, Grape, Autumn Olive, and Privet.

Areas within and adjacent to the cleared and ungraded portion of the SNEW property include Black Birch, Locust, Hickory and Ash trees, with Goldenrod, New York Ironweed, Multiflora Rose, Privet, Autumn Olive, Mullen, Blackberry, Raspberry and Wineberry in the understory.

As part of ELS' review the recent survey was overlaid onto the 2016 town aerial map to help establish the number of trees that were removed. The 2016 map was used for its clarity, and reflects the site before the Behrens owned the property. From this exhibit it was established that 19 trees were removed from the affected area. Fourteen trees from the Behrens site and 2 to 5 trees within the SNEW property. Several of the removed trees are located along the property line so it is unclear which property they are located on. In addition, there is a discrepancy in the number of trees shown within the SNEW property between the 2016 and 2019 aerial images. Fewer trees are seen in the 2019 aerial within the SNEW property. It is presumed this reduction is due to storm damage and the Ash tree decline from the Emerald Ash Borer.

## **PROPOSED RESTORATION PLAN**

The applicant has applied to resolve the violation for vegetation clearing within the upland review area and proposes new buffer planting shown on the "Wetland Buffer Planting Plan,"

prepared by ELS, last revised 12/29/20. The plan proposes to restore a wooded buffer within 150 feet of the highwater line of Pope's Pond on the SNEW property. The tree planting is proposed at a denser ratio than is growing in the adjacent undisturbed wooded area. The remaining affected area ( $6675 \pm \text{sf}$  or 0.15 acre) that runs from the retaining wall behind the house down to the new buffer planting is proposed to be maintained as meadow. This meadow area will be over-seeded by hand with a native meadow grass seed mix to supplement the native forbs and field grasses that have become established in the open area.

The limit of meadow will be delineated by newly dense new plantings along the eastern edge and proposed stone markers on the north and south edge of the proposed meadow area. The proposed planting plan includes the following;

1. Planting a 150-foot buffer adjacent to Pope's Pond, including 14 shade trees, 8 understory trees, and 20 shrubs.
2. Completion of the partially constructed retaining stone wall 60' from the house, and 250 feet from Pope's Pond, and terraced soil leveling between the existing wall and the new wall (estimated to be 5 yards of soil).
3. Maintenance of the stone steps that were constructed below the new retaining wall.
4. Re-seeding the  $6675 \pm \text{sf}$  meadow area below the new stone wall. No earth disturbance beyond hand raking is proposed.

## **POTENTIAL IMPACTS TO WETLAND / WATERCOURSE**

The clearing and grading of the affected site area ( $0.48 \pm$  acre) have included the removal of existing trees, the removal of the tree roots, and the establishment of a herbaceous cover on the slope. There was no earthwork performed within the inland wetland areas, as documented by Mary Jaehnig's soil report. However, the site work has had the potential of indirect impacts to the off site regulated areas during the construction, and the post construction period due to the removal of woody plants on a steep hillside.

Potential Short-term Impacts expected from clearing and disturbance on a slope area adjacent to a water body include the following:

1. Loss of a riparian habitat.
2. Increased stormwater runoff.
3. Reduced capacity to remove nutrients and other impurities from runoff.
4. Soil erosion/sedimentation.
5. Release of nutrients bound in the soil.
6. Loss of habitat diversity from the removal of wind-thrown trees and branches.

Potential Long-term Impacts expected from clearing and disturbance on a slope area adjacent to a water body include the following:

1. Increased surface water temperature.
2. Reduction of food source for aquatic organisms.
3. Reduction of a riparian habitat/diminished in stream habitat value.
4. Increased stormwater runoff.
5. Reduced capacity to remove nutrients and other impurities from runoff.
6. Increases soil erosion/sedimentation.
7. Release of nutrients bound in the soil.
8. Loss of habitat diversity from wind-thrown trees and branches.

## **PROPOSED MITIGATION**

The proposed plan and will help mitigate these potential impacts. The following Best Management Practices (BMP's) are proposed.

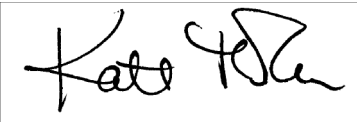
1. *New Planted Buffer:* The new 150 foot-planted buffer proposes 14 native shade trees, 8 native understory trees, and 20 native shrubs. This planting will aid soil stabilization, habitat restoration, and wildlife habitats, and help to protect water quality by removing nutrient within stormwater runoff that are taken up by the new plantings. The proposed trees and shrubs provide capacity for nutrient uptake, infiltration, stabilize soil, absorb rain fall, and wildlife habitats. The plan includes a planting detail with trunk protection from deer rubbing on the newly planted trees.
2. *Meadow Area:* The new meadow areas will be over seeded with native perennial grasses and forbs. The meadow will allow for evapotranspiration, soil stabilization, and infiltration of runoff, and habitat for pollinators.
3. *Meadow Demarcation:* Demarcation, consisting of stones will provide long term visual and documented physical delineation between maintained landscaped and natural areas.
4. *Erosion and Sedimentation Controls:* The site plans indicate that erosion and sedimentation will be controlled by maintaining the existing silt fencing to trap sediments. The disturbed areas are currently covered within mix of forbs and grasses that have prevented erosion from occurring during this past several months. No further soil disturbance is proposed except for planting. Silt fencing will remain in place until the new plants and the meadow are well established.
5. *Control of Invasive Nonnative Plant Species:* The plan includes a commitment to manage nonnative invasive plants to ensure the new plants will become established and thrive without being encumbered by vines and other invasive plants that are established in the

adjoining area.

## **SUMMARY**

When installed the new woody buffer and meadow area will promote soil stabilization and maintain storm water runoff quality. The proposed total buffer from lawn areas to open water is 250-foot in width. The restoration of the 150-foot wooded buffer will result in an upland buffer that protects the off site regulated areas.

Sincerely,

A handwritten signature in black ink, appearing to read "Kate Throckmorton", enclosed within a thin black rectangular border.

Kate Throckmorton, ASLA  
Landscape Architect

Attachments:

Aerial map  
Wetland Buffer Planting Plan

Nod Hill Road-220-Wilton rpt2.wpd