

Eastham Public Library

190 Samoset Road

Eastham, MA

Continuance for March 28, 2017

March 14, 2017

Refer to the Landscape Plan of January 11, 2017, Revised March 7, 2017

"Plant Management and Native Plantings"

#### NARRATIVE FOR PROPOSED LANDSCAPE PLAN

**Existing Landscape Conditions:** The proposed project is within the 100' buffer zone from the edge of Depot Pond. The site has a slope going down to the pond which is predominately wooded with native vegetation including Pitch Pine, Oak, Black Cherry, Chokeberry, Summer-sweet, Viburnum shrubs, Poison Ivy, Bull Brier, and other herbaceous plants. There are some non-native and invasive plant species on the site including Norway Maple, Black Locust, Japanese Knotweed, English Ivy, minimal Bittersweet, and a few Barberry. There is gall insect infestation to some of the Oak trees causing weak growth. Overall the slope is stabilized and well vegetated. The soil at the site looks like a sandy loam.

**Work Area:** The majority of the proposed project is between 35' from the edge of the pond to about 90' from the wetland.

#### **Proposed Landscape Project:**

\* The goal of the work is to reduce the amount of undesirable trees such as Black Locusts and Norway Maples, improve the natural appearance of the wooded area, and develop subtle view corridors to the pond as viewed from the Library. Remove one Pitch Pine which is in danger of falling on the building. Refer to the landscape plan to see the view concept and planting mitigation plan. The work includes tree removal, falling one Black Locust tree to leave in the woods for increased animal habitat, plant native shrubs and trees, and apply herbaceous seed mix as needed for mitigation. There will be minimal disturbance to the soil, reducing any chance of erosion.

\*Tree removal timing: Tree removal will be done during the dormant season, roughly between December 1 and March 30 to reduce insect infestation and avoid bird nesting periods.

Tagged with orange ribbon: It is proposed to remove 4 Black Locust, 3 Norway Maple, 1 dead Oak, and 1 Pitch Pine that is a threat to the building. There are some Locust and Norway Maple saplings and stump growth to be removed. Resulting debris to be removed.

Tagged with blue ribbon: It is proposed to cut one leaning Black Locust tree that will be left for habitat purposes. It will be cut and left on the forest floor as habitat for wildlife.

\*Revegetation: See the attached landscape plan with the proposed mitigation and restoration of native plant species listed with sizes and quantities, including 23 three gallon shrubs and 9 trees for the buffer zone to benefit the wildlife habitat and develop root systems for soil stability. Twenty three woody shrubs including Summer Sweet, Winterberry, and Arrowwood will be planted as groupings and

amongst the other plants in the wooded areas. Nine trees will be planted about 10' to 15' on center, including Tupelo, Red Bud, and American Holly. One invasive Multiflora Rose will be removed by hand near the removed large Pitch Pine near the fifty foot buffer line to make space for the American Holly tree planting area. Any disturbed areas will be seeded with a Native Warm Season, or Harmony seed mix and selected areas will be seeded with native Deschampsia Hair Grass. This would include over-seeding the pathways to the pond and fire well.

**Planting:** The plants will be pocket-planted using organic soil amendments as needed. The newly planted native plants will not be mulched. Any disturbed areas between the plants can be seeded with a native grass mix.

**General Sequence of Work and Management:** Removal of trees is planned for the Spring or Fall, between December 1 and March 30. Plantings are to be installed soon after any clearing is done, weather permitting. New plantings will be watered by hand or with temporary above ground hose and soaker hose irrigation for a period of three years to get the vegetation established. It is proposed to allow occasional hand pruning of the new plants for three years to remove dead wood, help maintain healthy growth, and to monitor the introduction of invasive species which are to be removed by hand. Stump growth can be monitored with occasional pruning of the Black Locust and Norway Maple trees.

**Work Protocol:** The contractor will inform the Conservation Agent prior to work commencing and, if needed, will meet on site to review the project and Order of Conditions.

**Alternative Analysis and Projections:** Alternatives to the proposed landscape are limited. The proposal has allowed for mitigation and restoring the lot with native species within the 100' buffer line. The removal of the stump growth Locust trees and other undesirable species will enhance the overall appearance of the forest setting and allow for some filtered view of the pond. The environmental benefits of adding more understory shrubs and trees include increased stability of the soil, increased vegetation for wildlife habitat, and overall more native plants resulting in less human disturbance. The removal of trees within the buffer zone will cause little environmental impact to the site. There will be more light available for the understory plants to grow. Periodic removal of invasive and non-native plant species will help reduce their spread. The three year management of the plants with irrigation will help the new native plants survive as they adapt.

Alternative control of the invasive Norway Maple would be to cut and swipe the cuts with herbicide, repeat as needed using glyphosate applied by a licensed applicator. Apparently this method may not be permitted on town owned property.