

MEMORANDUM

TO: Littleton Conservation Commission

FROM: Weston & Sampson Engineers, Inc.

DATE: February 14, 2024

SUBJECT: Supplemental Tree Planting Plan – 74 and 76 Whitcomb Avenue, Littleton, MA
Littleton Well and Water Main Extension Project
MassDEP File No. 204-0995

As part of the Littleton Well and Water Main Extension Project (the project), Weston & Sampson Engineers has prepared this supplemental tree planting plan to be implemented in conjunction with the Buffer Zone Enhancement Plan for the project on behalf of the Littleton Electric Light & Water Departments (LELWD). The Buffer Zone Enhancement Plan that was submitted for the project (dated February 2024) proposes 52 tree plantings and 122 shrub plantings at the project site at 153 Taylor Street in Littleton. The project is proposing to plant as many trees and understory plantings on site as feasible in suitable locations where they are likely to survive. The project proposes to remove 58 trees within the 100-foot buffer zone, and the 52 tree plantings on the project site do not achieve a 1:1 mitigation ratio of trees lost to trees planted. Thus, the LELWD is proposing to plant an additional 12 trees at an off-site town-owned property at 74-76 Whitcomb Avenue. This will now allow for providing greater than a 1:1 mitigation for the proposed tree removals, plus the additional understory shrub plantings.

The properties at 74 and 76 Whitcomb Avenue are owned and managed by the Town of Littleton DPW and LELWD; both of which are amendable to this planting plan. The site is located within the mapped 100-year floodplain, regulated as Bordering Land Subject to Flooding, and partially within the Riverfront Area associated with Beaver Brook.

The proposed planting locations are depicted on the attached aerial-based plan. A planting table for this site is provided below. The species identified have been selected for their wildlife value as protective cover, habitat, and food sources, and for their suitability for planting in floodplain. If any of the species included in the planting table are not available at local nurseries at the time of the restoration work, suitable substitute species will be selected with approval of Littleton Conservation Commission (LCC) or its agent.

The topsoil in the proposed planting areas will be rototilled, supplemented with loam, and planted. A qualified wetland scientist or arborist contracted by the LELWD will oversee the restoration work and will provide direction on where to install the plantings based on field conditions.

Table 1-1 Restoration and Enhancement Area Plantings – 74-76 Whitcomb Avenue

Species	Plant Size	Plant Quantity ¹	Planting Notes
Swamp White Oak (<i>Quercus bicolor</i>)	2-3" caliper saplings, bare root or 20 gallon min.	4	Acorns are an important food source for wildlife including white-tailed deer, small mammals, turkeys, woodpeckers, and waterfowl.
Red Maple (<i>Acer rubrum</i>)	2-3" caliper saplings, bare root or 20 gallon min.	4	Red maple flowers early in the spring. The leaves and shoots are browsed by deer. Rodents feed on the fruits. Adds important leaf litter.
Hackberry (<i>Celtis occidentalis</i>)	2-3" caliper saplings, bare root or 20 gallon min.	4	Songbirds feed on the berries, which persist into the late winter months. Deer browse the twigs and leaves.
Tree Total		12	

Only plant materials native and indigenous to the region should be used. The plantings should be surrounded with an approximately 3-foot diameter ring of woody mulch to a depth of approximately 2 inches or biodegradable plastic or fiber (which should be stapled or staked to the ground), to reduce the threat of competition from herbaceous species during the first growing season.

Some photos of the proposed planting area are included below. Plantings are proposed along the tree line and along the existing access road leading into the site, as depicted on the attached aerial-based plan.



¹ Assumes an average plant spacing of 20-feet on center.



Planting Notes:

1. The wetland specialist (WS) or arborist may propose substitutions relative to species, size, and quantities if there is limited availability of plant stock at the time of planting. However, any substitution requires prior approval by the LCC or its agent. All plant material shall be purchased from a New England nursery and guaranteed by the site contractor to be in vigorous growing condition.
2. Insofar as it is practicable, plant material shall be planted on the day of delivery. In the event that this is not practicable, the site contractor shall protect, and water stock not planted in consultation with the WS and nursery. Plants shall not remain unplanted for longer than a 3-day period after delivery to the site. Any plants not installed during this 3-day period may be rejected by the WS.
3. Quality and size of plants and spread of roots shall be in accordance with ANSI 260 (REV.1980) "American Standard for Nursery Stock" as published by the American Association of Nurserymen, Inc.
4. All plants shall be planted in transported topsoil that is thoroughly watered. Raise and replant any plant which settles more than 2 inches after planting and watering.
5. Plants shall not be bound with wire or rope at any time to damage the bark or break branches. Plants shall be handled from the bottom of container only.
6. Planting operations shall be performed during periods within the planting season when weather and soil conditions are suitable as determined by the supervising WS. This is typically between April 15 and June 15 and September 15 and November 15. Plants shall not be installed in topsoil that is muddy or frozen. The site contractor shall be responsible for re-setting any plants that

become dislodged or uprooted because of frost heaves or other environmental factors during the first two growing seasons.

7. Set all plants plumb and straight. Located plant in the center of the pit.
8. The LELWD will be responsible for tree maintenance and monitoring for two years after planting.
9. Planted trees shall receive protection from deer and rodent browse through a trunk wrap or similar.

Monitoring Plan

The tree plantings will be monitored twice per year (spring and fall) for two growing seasons by a qualified wetland scientist. The plantings will be monitored and observed wildlife activity and usage will be documented. The annual reports will be submitted to the Littleton Conservation Commission no later than December 31 of each year and will include results from the spring and fall inspections.



Proposed Supplemental Tree Planting Areas – 74 and 76 Whitcomb Avenue, Littleton, MA