

January 18, 2021

From: The Belmont Land Management Committee

To: The Belmont Planning Board

Comments by the Land Management Committee for Lone Tree Hill (LMC) in response to the November 11, 2021 Northland memorandum to the Belmont Planning Board. Lone Tree Hill is comprised of Town-owned and publicly accessible open space.

1. Hydrology –

The LMC recognizes that downhill forests may have the ability to adapt to changes in site hydrology, however impact on the health of the “Eastern Woods” on Lone Tree Hill is a concern. The LMC would like the civil engineer peer reviewer, working on behalf of the Town’s adjacent Conservation Land, to address these questions:

- a. How does the pre-construction and post-construction distribution of runoff compare on the east and south sides of Zone 3?
- b. If there is a significant difference in pre and post construction runoff distribution on the east and south sides of Zone 3, are there practical design measures that could be taken to make the post-construction stormwater runoff distribution on the east and south sides of Zone 3 more closely resemble the pre-construction distribution of stormwater runoff?
- c. How will a single exit point from infiltration system #3 affect the distribution of stormwater along the eastern boundary with the public open space of Lone Tree Hill?

2. Plant Selection –

The LMC has the following additional comments on Zone 3 plantings. The Committee’s previous comments on planting were intentionally general since there is not a definitive plant list, but only a sample plant list from which the ultimate design will draw. The following requests are more specific to that sample list:

- a. The committee requests that the Planning Board requires a final plant list and planting plan as part of the project review, and that the Town, specifically the Land Management Committee, and public has an opportunity to comment on the final list and plan. We are particularly concerned about all planting buffers immediately adjacent to Lone Tree Hill Conservation Land and that the selected plants support the ecology of the Lone Tree Hill Conservation Land.
- b. *Deciduous Trees* - The LMC would like the following comments to be reflected in the applicant’s plant selection decisions:
  - i. *Oaks*: Based on observations of the success of oak trees in Zone 1 and 2, and the ecological advantages of oaks, the committee requests that the Planning Board stipulate that the applicant employ oaks (genus *Quercus*) to make up at least 80% of the total deciduous tree plantings for Zone 3.
  - ii. *Additional Oaks to be added to the plant list*: To expand the choices of oaks available for use, the following species should be added to the Plant List. Due to its ease of transplanting and general availability, Swamp White Oak should be added to the list of deciduous trees. White Oak is often hard to find and

transplant but should remain on the list. Scarlet Oak and Pin Oak should also be added to the plant list.

iii. *Additional species*: The listed Black Gum, DED-resistant American Elm, Red Maple and Tulip Tree may also be used as associates within a principally oak palette.

c. *Coniferous Trees*: The LMC supports the use of Eastern White Pine, Eastern Red Cedar, Eastern White Cedar, White Spruce and American Holly, Limber Pine.

d. *Shrubs and Flowering Trees*: Among the shrubs and flowering trees, the LMC supports the use of the native genera and species on the list: *Amelanchier*, *Betula nigra*, *Hamamelis*, *Aronia*, native Azaleas, *Clethra*, *Cornus* (should exclude Korean Dogwood, *Cornus kousa*, which is invasive), *Fothergilla*, *Ilex*, *Itea*, *Juniperus*, *Myrica*, *Rhododendron*, *Rhus*, and native *Viburnum* species. Invasive Viburnums such as *V. dilatatum* are not recommended for use.

3. Turf Grass

The LMC has no further comments.

4. Naturalized Vegetation

Invasive species are one of the most serious problems facing the LMC at Lone Tree Hill. We are concerned that an adjacent property may inadvertently become another source of additional invasive plants.

The LMC requests that detail be provided regarding the treatment and ongoing maintenance of areas on the planting plans designated “buffer area to be naturalized” and “buffer area to naturalize”, specifically:

- a) Measures that will be taken to establish desirable native species.
- b) Measures will be taken to prevent the areas from being colonized by undesirable invasive species during and after their establishment period.
- c) Measures will be taken to maintain the established area to ensure invasives are identified and removed in a timely way?
- d) With regard to the large sloping area below the fire lane designated as “buffer area to naturalize”, the LMC recommends reforestation in addition to the proposed seeding with a New England Upland Restoration Mix. Proper reforestation will result in a landscape compatible with the public open space and resistant to colonization by invasive species.

The McLean campus natural areas mentioned in our notes were examples of the what the committee would like to see as an intended outcome. Though the applicant correctly points out that the McLean natural areas may well have been the result of reduced maintenance and fortunate opportunistic succession rather than the product of design intent, the LMC requests the applicant to provide a detailed intentional plan that the applicant expects to produce results similar to the naturalized landscapes at McLean Hospital.

5. Trail Head Locations – LMC agrees with Northland’s comments

6. Boundary Markers – LMC agrees with Northland's comments
7. Governing Documents – The LMC requests that the governing documents, where appropriate, stipulate landscape maintenance responsibilities for the control of invasive plant species in project natural areas, particularly along boundaries with the public open spaces. Of particular interest at this time are: Glossy Buckthorn, Japanese Knotweed, Bittersweet, Poison Ivy, Black Swallowwort, Tree of Heaven, Celandine, Garlic Mustard