

David Mindess School: White Oak Review

August, 23, 2021

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Assignment:

The Bartlett Tree Experts were requested to review the existing conditions of (1) white oak at the north side of the David Mindess School and to review the potential impacts of proposed construction. Our notes and observations are below.

Existing Conditions:

The following criteria was used in the field to evaluate the tree in the field:

1. Good: Tree Health and condition are acceptable.
2. Fair: Parts of the canopy display undesirable leaf color, inappropriate leaf size, and inadequate new growth.
3. Poor: Most of the canopy displays dieback and undesirable leaf color, inappropriate leaf size or inadequate new growth.
4. Dead:

Tree Type	Genus	Species	Condition	Diameter at Breast Height	Defects	Root Flare (y/n)	Age Class	Canopy Radius	Crown Height
White Oak	<i>Quercus</i>	<i>alba</i>	Good	40''	- Dead branches (4''-6'' - Wounds	Y	Mature	35'	50'

- Specific Notes
 - The tree had a dense canopy with appropriate leaf size and color.
 - Growth rates were typical of species characteristics and no decline was evident in the canopy.
 - The root-flare was exposed and appeared healthy with no visible signs of decay.
 - Minor defects including dead branches (between 2''-8'' in diameter) were located throughout the canopy.
 - Response growth was visible on previous branch wounds throughout the canopy.
 - There were no signs and or symptoms of pest/disease.
 - The root zone had been previously reduced per the construction of a cement retaining wall. Root zone infringement was +/-50% of surface root area.
 - The tree was assigned an age class of "Mature" defined as : "The tree was within its full growth potential."



40" White oak in "Good" Condition

Existing Conditions Continued:



Cement retaining wall at +-10' from the center of tree

Existing Conditions Continued:



Response growth per previous pruning cut

Existing Conditons Continued



Healthy Exposed Root Flare

Potential Impacts of Proposed Construction

- Per the information provided, means and methods of construction, extensive root loss would occur within 2.5 X the DBH (diameter at breast height of the tree) or 8' from the center of the tree.
- Large diameter scaffold limbs (+-14" in diameter) would need to be pruned and or removed to account for construction equipment and to provide building clearance.
- With consideration to the previous constructed retaining wall, the existing trees root system has been greatly reduced by +-50%. The proposed construction would eliminate the existing viable root zone on the north side of the tree and would lead to both short term and long term decline.
- Though white oak has a relatively good to medium tolerance to construction impacts, the proposed construction would reduce/eliminate the majority of the trees root system causing decline in health and increased risk via instability of entire tree.
- With consideration to the existing conditions and proposed construction, the tree is not suitable for preservation.
- If the tree were to be preserved, a Tree Protection Zone of 33' would be required.

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