

MEMORANDUM

TO: Brandon Kunkle, RLA - Project Manager

FROM: Daniel Biggs, RLA, ISA

DATE: July 17, 2018

SUBJECT: Town of Wayland - Loker Conservation and Recreation Area Tree Assessment

Per your request, June 19th-22nd, Weston & Sampson staff completed an assessment of the existing forested areas at the Loker Conservation and Recreation Area, per Town of Wayland Chapter 193 Stormwater Management and Land Disturbance by-laws and Town of Wayland Conservation Commission Chapter 194 (D-768) Wetlands and Water Resources by-law. The Loker Conservation and Recreation Area is currently utilized as a passive recreation area with patrons utilizing existing trails which are partly in the recreation area and primarily throughout the greater conservation area lands. The project area currently consists of a mowed grass area on the western portion of the site, areas with remnants of pavement from the site's previous use as a Dow Chemical research facility and is bordered by volunteer species and established woodlands. Three ponds with associated wetlands exist on the northern and southern ends of the site.

Three wooded areas adjacent to wetlands were assessed between the 30' and 100' wetland buffer boundaries. Trees between the edge of wetland and 30' wetland buffer were not assessed because there will be no disturbance within this buffer. Upland area trees within the area of proposed disturbance were also included in this assessment.

The tree inventory and assessment identified species, size (DBH), condition, and rating per the *Guide for Plant Appraisal (9th edition, 2000)* authored by the *Council of Tree & Landscape Appraisers*, and *Tree Species Rating Guide for New England* authored by the *New England Chapter of the International Society of Arboriculture (2nd edition)*. Forest stand limits within the proposed areas of disturbance were approximate, measured with a handheld GPS with an accuracy range of 2'-5' under heavy leaf cover. The inventory was conducted during the summer; therefore, the identification of Oak species should be considered approximate—common identifiers (buds/acorns) were not present. Trees greater than 4" diameter breast height (DBH) were assessed, and trees smaller than 4" DBH were noted but not included as part of this study. An herbaceous species inventory was not conducted.

Existing Forest Composition:

The forest areas within the inventory limits consist of a Laurentian Mixed Forest type, a transitional mixed forest between the continent's two biggest forest types: coniferous boreal forest and the eastern deciduous forest. Much of the forest appears to be in a steady state of succession, and the canopy has gradually transitioned from a conifer-dominated landscape to that of a mixed broadleaf-conifer type. The overstory species mosaic is composed of a mix of deciduous and coniferous trees. Evergreen species predominately consist of Eastern White Pine, Red Pine, and Eastern Red Cedar, which are common pioneer species found after disturbance. These conifers are mixed with broadleaf trees in varying abundance on the site—primarily composed of Oaks (Red, Black), Red Maple, Cherry (less frequent), Hickory, and Beech. The dominant canopy species ranged in size from 4" to 33.9". The understory primarily consisted of Serviceberry, Cherry, Glossy Buckthorn, and Alder. Moderate invasive and shrubby species exist within the study area and are primarily located on the fringe/ edges of the forest where disturbance has occurred. The exception to this rule is the Glossy Buckthorn, which can be found distributed throughout the forest area. A uniform groundcover of herbaceous material was present at the time of the assessment. A complete inventory of trees within the study area can be found in the following documents: Attachment A – Wetland Buffer Areas and Attachment B – Upland Areas.

	POOR CONDITION	XS <6"	SM 6"-12"	MED 12"-24"	LRG 24"+	TOTAL
1 LOKER						
2 UPLANDS	46	71	122	86	10	335
3 WETLANDS	2	9	15	26	4	56
4	48	80	137	112	14	391

