

Landmark Trees

May 2016

Development Services Handout L-XX

Purpose

The purpose of this handout is to clarify the definition of "landmark tree" pursuant to Bellevue Land Use Code (LUC) Chapter 20.20.900, Tree Retention and Replacement for the purpose of determining thresholds for "rare, uncommon, unique or exceptional" trees on sites undergoing development, in order to establish appropriate tree protection measures.

Background

Bellevue LUC Chapter 20.20.900, Tree Retention and Replacement, provides means for protecting trees in Bellevue. Under this chapter, landmark trees are given priority for retention. Landmark trees are defined in Bellevue LUC 20.50 as:

"Certain significant trees are considered landmark trees based on their size, species, condition, cultural/historic importance or age. The Director shall specify thresholds for trees to be considered for landmark status."

This handout provides clarification for determining trees that should be considered for landmark status as well as the standards and procedures for marking this determination.

Size Thresholds

Trees with a diameter at breast height (dbh), defined in this handout, that is equal to or greater than the threshold diameters listed in Table 1 are considered landmark unless they fail to meet the risk criteria discussed in the following section. For all species not listed in Table 1, the threshold diameter is 30" or 65% of the largest documented diameter for a tree of that species in Washington, whichever is less, as noted in Champion Trees of Washington State by Robert Van Pelt.

Measurement of Tree Diameter

Diameter at breast height (dbh), which means the diameter of a tree trunk measured at 4.5 feet above average grade, is used in determining the diameter of existing trees. Where a tree has a branch(es) or swelling that interferes with measurement at 4.5 feet above average grade or where a tree tapers below this point, the diameter is measured at the most narrow point below 4.5 feet. For trees located on a slope, the 4.5 feet is measured from the average of the highest and lowest ground points or, on very steep slopes where this is not possible, the lowest practical point on the uphill side. Where a tree splits into several trunks close to ground level, the dbh for the tree is the square root of the sum of the dbh for each individual stem squared (example with 3 stems: $dbh = \sqrt{[(stem1)^2 + (stem2)^2]}$

Risk Assessment

Trees that meet the size threshold discussed above shall be considered landmark trees unless DSD finds that the tree or trees should be removed based on a risk assessment produced by a qualified professional. In making this determination, a qualified professional will consider crown size, structure, disease, past maintenance practice, potential damage to existing or future targets, risk mitigation options, and, when development is proposed, the likelihood of survival after construction.

To undertake tree risk assessment as part of a development application, a qualified professional shall have a minimum of 3 years' experience in tree evaluation and shall have worked directly with the protection of trees during construction, as well as having one of the following credentials:

- Society of American Foresters (SAF) Certified Forester;
- International Society of Arborists (ISA) Certified Arborist with Tree Risk Assessor Qualification.

Sources

Champion Trees of Washington State, 1996, by Robert Van Pelt.

Table 1: Size Thresholds for Common and Naïve Bellevue Trees to be considered for landmark status.

Species	Threshold Diameter
Native Species	
Oregon ASH – Fraxinus latifolia	24 in
CASCARA – Rhamnus purshiana	8 in
Western Red CEDAR – Thuja plicata	30 in
Pacific CRABAPPLE – Malus fusca	12 in
Pacific DOGWOOD – Cornus nuttallii	8 in
Douglas FIR – Pseudotsuga menziesii	30 in
Grand FIR – Abies grandis	24 in
Black HAWTHORN – Crataegus douglasii	8 in
Western HEMLOCK – Tsuga heterophylla	24 in
MADRONA – Arbutus menziesii	8 in
Bigleaf MAPLE – Acer macrophyllum	30 in
Dwarf or Rocky Mountain MAPLE – Acer glabrum var. Douglasii	8 in
Vine MAPLE – Acer circinatum	8 in
Oregon White or Garry OAK – Quercus garryana	8 in
Lodgepole PINE – Pinus contorta	8 in
Shore PINE – Pinus contorta 'contorta'	12 in
Western White PINE – Pinus monticola	24 in
Western SERVICEBERRY – Amelanchier alnifolia	8 in
Sitka SPRUCE – Picea sitchensis	8 in
Pacific YEW – Taxus brevifolia	8 in
Non-native Species	
Orchard (Common) APPLE – Malus sp.	20 in
Atlas CEDAR – Cedrus atlantica	30 in
Deodor CEDAR – Cedrus deodara	30 in
Incense CEDAR – Calocedrus decurrens	30 in
Flowering CHERRY – Prunus sp. (serrula, serrulata, sargentii,	23 in
subhirtella, yedoensis)	20 11
Lawson CYPRESS – Chamaecyparis lawsoniana	30 in
Kousa DOGWOOD – Cornus kousa	12 in
Eastern DOGWOOD – Cornus florida	12 in
American ELM – Ulmus Americana	30 in
English ELM – Ulmus procera	30 in
GINGKO – Ginkgo biloba	24 in
Common HAWTHORN – Crataeus laevigata	16 in
Washington HAWTHORN – Crataegus phaenopyrum	9 in
European HORNBEAM – Carpinus betulus	16 in
Common HORSE CHESTNUT – Aesculus hippocastanum	30 in
Red HORSE CHESTNUT – Aesculus x carnea	30 in
KATSURA – Cercidiphyllum japonicum	30 in
Littleleaf LINDEN – Tilia cordata	30 in
Honey LOCUST – Gleditsia triancanthos	20 in
Southern MAGNOLIA – Magnolia grandiflora	16 in
Paperbark MAPLE – Acer griseum	12 in
Japanese MAPLE – Acer palmatum	12 in
Norway MAPLE – Acer platanoides	30 in
Red MAPLE – Acer rubrum	25 in
Sugar MAPLE – Acer saccharum	30 in
Sycamore MAPLE – Acer pseudoplatanus	24 in
MONKEY PUZZLE TREE – Araucaria araucana	22 in
Pin OAK – Quercus palustris	30 in
Red OAK – Quercus rubra	30 in

Austrian Black PINE – Pinus nigra

24 in

Ponderosa PINE – Pinus ponderosa	30 in
Scot's PINE – Pinus sylvestris	24 in
London PLANE – Platanus acerifolia	30 in
Flowering PLUM – Prunus cerasifera	21 in
Coastal REDWOOD – Sequoia sempervirens	30 in
Giant SEQUOIA – Sequoiadendron giganteum	30 in
Japanese SNOWBELL – Styrax japonica	12 in
American SWEETGUM – Liquidambar styraciflua	27 in
TULIP TREE – Liriodendron tulipifera	30 in

This document is intended to provide guidance in applying certain Land Use Code regulations and is for informational use only. It cannot be used as a substitute for the Land Use Code or for other city codes, such as the Construction Codes. Additional information is available from Development Services at Bellevue City Hall or on the city website at www.bellevuewa.gov.

For land use regulations that may apply to your project, contact the Land Use Information Desk in Development Services. Phone: 425-452-4188. E-mail: landusereview@bellevuewa.gov. Assistance for the hearing impaired: dial 711.