



Standard Drawing Report

Date: October 4, 2017

Technical Owner: Civil – Brett I. Kesterson, P.E.

Standard Drawing No. P-581 **Calculation Book No.** n/a

Drawing Title: Typical Street Tree Installation



Expires 06/30/2019

Background Information, Including Reference Material:

American National Standards Institute A300 (Part 6)-2012 Planting and Transplanting

International Society of Arboriculture's Best Management Practices Tree Planting 2nd edition.

Arboriculture: Integrated Management of Trees, Shrubs and Vines, 4th edition.

Assumption Made:

This drawing is intended to be used for trees planted within fully improved right-of-way frontages and medians.

Design Narrative:

Much of the information was provided by the City of Portland Parks and reviewed for compliance with work within the public right-of-way.

This is a relative new drawing, being first developed around 2010. The preparation of this report fostered another review of the drawing. The 6-inch mound of native soil was removed from under the root ball. A mulching note was added at the trunk collar. Depth of root barrier was clarified to be 12" rather than a range of 12"-18". Notes 2 and 5 were removed. Four new notes were added.

Two stakes are required for street trees to provide additional protection from vehicles and other right-of-way uses.

Report made by:
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Title: Senior Engineer

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Discourage the use of tree grates due to additional maintenance requirements. Adjacent property owners in Portland are responsible for maintaining trees within the right-of-way along their frontage. Observations over the years have shown that property owners do not enlarge the grate over time and the tree is damaged as the tree expands.

When tree gates are used, the tree needs to be 2 inches below grade to provide for crown expansion. Otherwise grates tend to be push up by root growth to form tripping hazards when trees are planted at grade with the grate.

2-inches of pea gravel is used to substitute for mulch under tree grates. This helps minimize weed growth and the resulting maintenance. In addition, the pea gravel fills in the space between the grate and root ball to prevent sidewalk debris from collecting in the space.