



**Robert W. Williams and Associates**  
**Consulting Arborists**

16749 Chilberg Avenue, La Conner, WA 98257 (360) 399-1196 (206) 522-7262

Robert Olson

Red Hawk Homeowners Association

20229 29<sup>th</sup> Ave SE

Bothell WA 98012

6 / 26 / 12

**Overview**

The trees in the parking strip between the sidewalks and the roadways at the Red Hawk Community are showing signs of outgrowing their available space. Questions have arisen about their suitability and a request was made to provide recommendations for replacement trees that may be more attractive and appropriate for the setting. In addition; problems have been noticed in the health of several Purple Plum (*Prunus cerasifera*); a recommendation for treatment and spray service was requested.

**Observations**

Of primary concern are the Pin Oaks (*Quercus palustris*) that form a major portion of the trees within the planting strip at Red Hawk. The trees were installed in 1995 and are currently 17 years old. Their diameter at breast height (DBH) ranges between 6" and almost 14". There are also another species of Oak represented, probably a variety of Black



Oak (*Quercus velutina* var.) This species appears to be growing at a slower rate.

The damage and disturbance is, at this point, in the beginning stages and includes:

- Surface rooting; where the sub-surface rooting conditions have driven the roots toward the surface.
- Sidewalk cracking; occurring where trees have reached a certain size and the root growth is now approaching the limits of available space.
- Curb cracking; resulting from the same limitations of rooting space described above.

Measurements were taken and indicate that disturbance to the hardscape features (sidewalk, curb and roadway) occur when the trees reach around 11” in girth. This measurement may be useful in scheduling of the removal and replacement of these trees periodically.

### **Replacement Species**

The following tree species are better suited to the limited planting space. They have also been selected for their other attributes including:

- Good fall color
- Suitable form
- Stable branching structure
- Pleasant leaf form and color
- Ease of maintenance
- Disease tolerance
- Bloom shape and color
- Non-aggressive rooting habit

**Paperbark Maple** (*Acer griseum*) Deciduous tree; upright spreading with rounded crown; reddish bark peeling in paper thin sheets; bright red fall color; maximum height 25’

**Flame Maple** (*Acer ginnala* Cultivar 'Flame') Deciduous tree with round, spreading branches; brilliant orange-red to deep red in fall; extremely hardy; maximum height 20’

**Autumn Brilliance Serviceberry** (*Amelanchier x grandiflora* 'Autumn Brilliance')

Deciduous tree with white spring flowers, bright red leaves in fall; needs good well-drained sandy loam soil; can work as a street tree planting with good air circulation; maximum height 20'–25'

**Red Cascade Mountain Ash** (*Sorbus Americana* 'Dwarfscrown') Deciduous tree producing white flowers in spring, yellowish leaves in fall; tough street tree; drought tolerant; maximum height 20'

**Ruby Vase Parrotia** (*Parrotia persica* 'Ruby Vase') Deciduous tree suitable for street tree garden or container planting that is drought tolerant; orange, red and yellow leaves in fall; maximum height 40'

**Jack Gallery Pear** (*Pyrus calleryana* 'Jaczam') Deciduous tree with dense crown and closely spaced branches; spectacular spring flower set with white flowers; yellow to bright red fall color; maximum height 20'

**Lavalle Hawthorn** (*Crataegus x lavellei*) Deciduous tree with white spring flowers; bronze to copper red fall color; well suited as street tree or landscape tree, roots are not aggressive; maximum height 25'

### **Planting Method**

The ideal time to plant a tree is during dormancy; either in the fall, after leaf-drop, or in early spring before bud-break. Weather conditions at these times are generally cool, and allow plants to establish new roots prior to having to endure the hot, dry conditions of summer.

Dig a shallow, broad planting hole. Make the hole as wide as reasonably possible (as much as 3 times the width of the root ball), but only as deep as the root ball with minimum of 12" inches of loosened soil on all sides of the root ball. The hole should be wide, as new roots will expand more quickly into loose soil. Most urban soils are compacted and unsuitable for healthy root growth.

Identify the trunk flare. The trunk flare is the part of the trunk where the roots spread out at the base of the tree. This point should be visible after the tree has been planted. If the trunk flare is not visible, you may have to remove some soil from the top of the root ball prior to planting the tree. This is critical in

determining how deep the hole should be for proper planting. (See illustration below.)

Place the tree at the proper depth. Before putting the tree in the hole, check to see that the hole has been dug to the proper depth. The majority of the roots on a newly planted tree will develop within the top 12" inches of soil. If the tree is planted too deep, new roots may not develop due to lack of oxygen. It is better to plant the tree slightly high (1" to 2" above the base of the trunk flare), than to plant it at or below the original growing level. This will allow for some settling. To avoid damage when setting the tree into the hole, always lift the tree by the root ball, never by the trunk.

Straighten the tree in the hole. Before you begin backfilling, view the tree from several directions to confirm it is straight. Once you have begun to backfill, it is difficult to reposition.

Fill the hole with soil. Fill the hole about 1/3 full and gently (but firmly) tamp the soil around the base of the root ball. At this time, the wire basket can be removed, and all string and wire should be removed from around the trunk. Fill the remainder of the hole, taking care to pack the soil to eliminate air pockets that could cause roots to dry out.

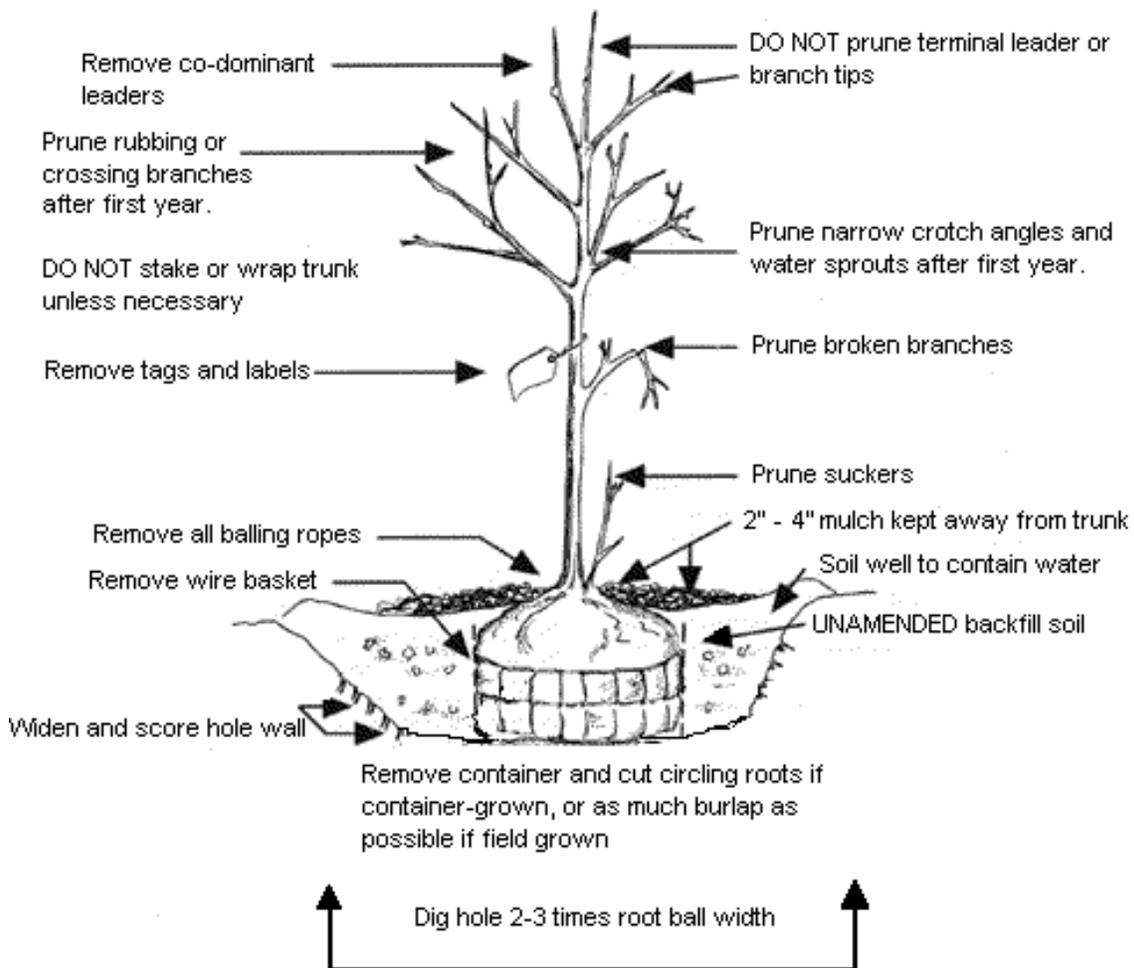
Stake the tree (if necessary). If the tree is firm within the soil ball, and the top is generally in proportion to the size of the root ball, staking may not be necessary. Studies have shown that trees will establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting. However, protective staking may be required on sites where lawn mower damage, vandalism or windy conditions are concerns. Support staking and ties should be removed after 1 growing season. A wide, flexible tying material should be used so that injury to the trunk is minimized.

Mulch the base of the tree. Organic matter applied to the base of the tree. It serves to hold moisture, moderate soil temperatures, reduce competition from grasses and weed and reduces mechanical injury from mowers and string trimmers. A two to four inch thick layer is ideal; fertile mulch is preferred in this case; well composted manure should be applied. Care should be taken not to

cover the trunk of the tree with mulch, as it can cause decay of the bark at the base of the tree.

Follow up care. Keep the soil moist, but not soaked. Over-watering will cause leaves to turn yellow or fall off. Water trees at least once a week (unless significant rain is received), and more frequently during hot, dry weather; when the soil is dry beneath the surface of the mulch, it is time to water. Other follow-up care may include minor pruning of branches that were damaged during the planting process. Wait to begin corrective pruning until after the first season of growth in the new location.

Fertilization is not recommended during the first growing season. Low nitrogen, slow release fertilizer is suggested for fertilization in subsequent years.



## Other Issues



Several Flowering Plums (*Prunus cerasifera* var.) on SE 202nd and 27th SE Drive have some die-back and indications of previous infestation by Western Tent Caterpillar (*Malacosoma californicum pluviale*). The damage is not extensive and where die-back has occurred the

deadwood may be pruned out during the dormant season. You may also consider an application of horticultural oil during dormancy and an application of low toxicity insecticide such as *Bacillus thuringiensis*, should tent caterpillars re-appear.

### Tree Nursery Referrals

Urban Forestry Services, Inc.

(360) 428-5810

Olympic Tree Nursery

(425) 483-9254

### Tree Spraying Services

AAA Spray

(425) 672-4970

Washington Tree & Lawn Care

(888) 362-3626

Robert W. Williams, Consulting Arborist

Certified Arborist #0176A

Certified Tree Risk Assessor #362

