

Edmond Tree Grants Manual

By applying to receive trees through the Edmond Tree Grants program, participants agree to follow the specifications listed below. Contact Urban Forestry at 405-359-4759 or leigh.martin@edmondok.com with questions about this information.

Tree Planting Technique

Tree planting technique has a significant impact on a tree's long term condition and longevity. In order to set up your new trees for success, trees received through the Edmond Tree Grants program must be planted according to the specifications below.

The Root Collar

A tree's "root collar" is the area where the base of the stem meets the majority of the tree's structural roots. During the nursery production process, the root collar is frequently covered up by soil. However, it is recommended that at the time of planting, the top of the root collar be exposed and planted at or slightly above surrounding grade to prevent negative effects of deep planting (see Figure 1).

Figure 1. Root Collar Detail

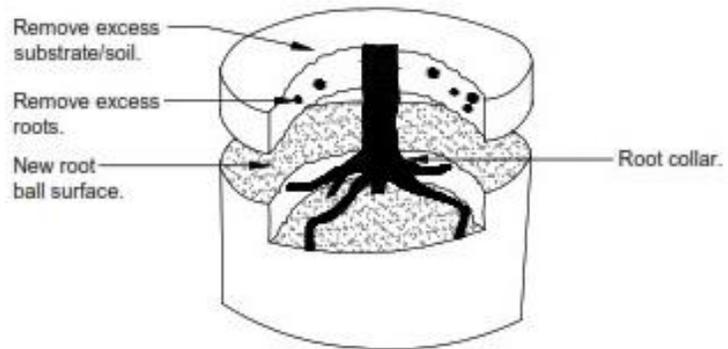
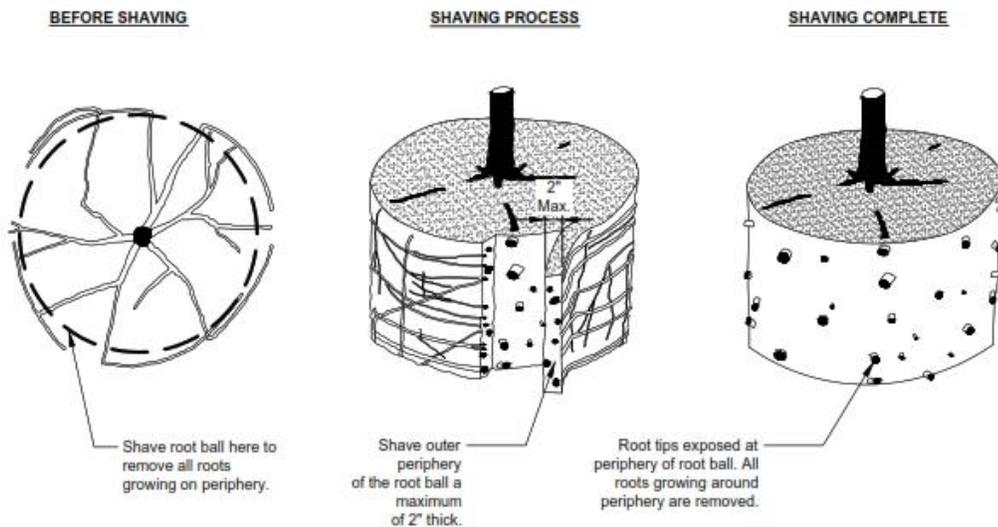


Figure 2: Root Shaving Detail



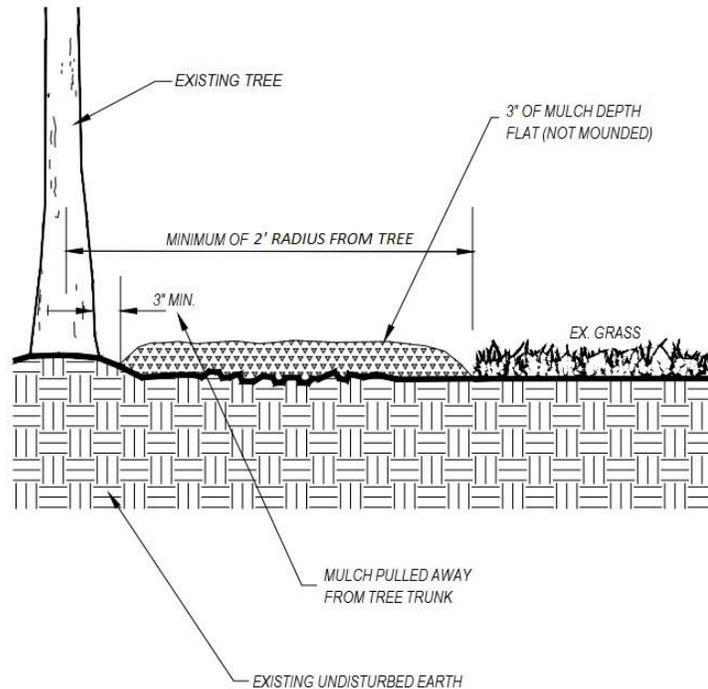
Notes:

- 1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.
- 2- Shaving can be performed just prior to planting or after placing in the hole.

Planting Procedure for Container-grown Trees

1. At least 48 hours prior to planting, contact Oklahoma One-Call (811) in order to locate underground utilities.
2. Remove soil from the top of the tree's root ball to expose the root collar. The height of the root ball from the bottom to the base of the root collar will determine the appropriate depth of the planting hole.
3. Dig the planting hole to a width of 2-3 times the diameter of the root ball, but no deeper than the height of the root ball (with root collar exposed).
4. After removing the tree from its container, examine the root ball for circling roots. Straighten circling roots where possible, or shave the outside of the root ball to remove circling roots (see Figure 2).
5. Remove tape, ties, tags and bamboo stakes from the tree's trunk and branches, and place the tree in the center of the planting hole. The root collar should be placed even with or up to 2" above surrounding grade. If the root collar is below surrounding grade, add soil to the bottom of the planting hole, tamping in until the root ball is at the correct height. Check to ensure that the trunk is straight before backfilling.
6. Begin backfilling the hole around the root ball with the original soil from the hole, tamping lightly as it is filled in. It is not recommended to add compost or topsoil to the planting hole. Take care not to place soil back on top of the root ball. Once the hole has been filled in, create a berm around the edge of the planting hole with excess soil and clumps of sod.
7. Spread a 3-4" thick layer of organic mulch such as shredded cedar across the planting hole area, pulling the mulch back away from the trunk a couple of inches (see Figure 3).
8. Thoroughly water in the tree the same day of the planting, in an amount that will ensure that the entire root ball and backfill soil becomes moist.
9. Larger container trees may require stakes in order to stabilize the root ball against strong Oklahoma winds while the tree is establishing roots in the surrounding soil. Apply staking materials according to Figure 4, making sure that the tree has some freedom of movement in the canopy, in order to allow development of trunk taper. Appropriate materials for staking include t-posts and nylon webbing. Posts should be driven in outside of the tree well and angled slightly away from the tree.

Figure 3. Tree Mulch Detail



Tree Establishment Care

Newly planted trees require some regular maintenance while they are getting established in their new environment in order to prevent transplant shock, or stress following planting. When implementing a maintenance plan for your new trees, please follow these recommended practices.

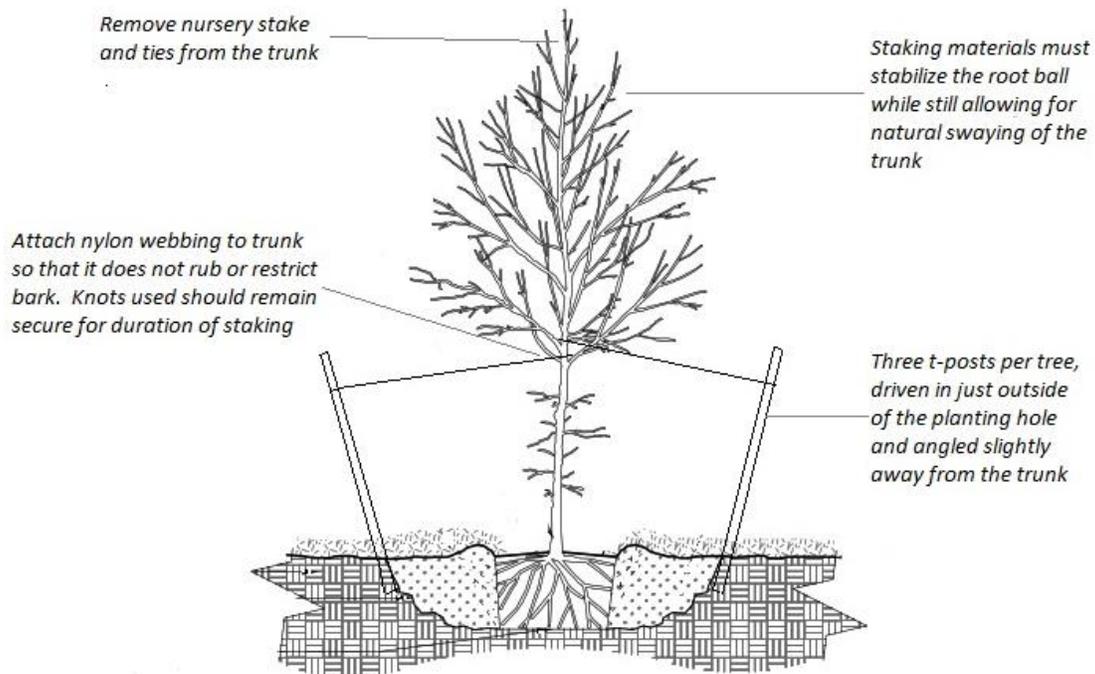


Figure 4. Tree Staking Detail

Water

- Newly planted trees require regular watering as they establish roots in the surrounding soil. Apply enough water to soak the root ball and tree well area, generally about 5 gallons per inch of trunk diameter.
- During the dormant season, water should be applied once every other week when there has been less than one inch of rainfall. During the growing season, increase this to once per week. During the hot, dry conditions of the summer, a watering session once every 4-5 days may be necessary.
- Too much water can be just as harmful as too little, and soil that remains consistently moist can lead to stress and potential root rot. Wait at least a few days in between waterings in order to allow soil to dry out slightly.
- Acceptable watering methods include watering by hand using a garden hose or buckets, filling a slow release irrigation bag, or installing drip irrigation. Trees require larger quantities of water on a less frequent basis than lawn sprinkler systems provide, so lawn irrigation must not be substituted for these methods.

Tree Well Maintenance

- Mulch helps to retain soil moisture and adds minerals to the soil. It should be monitored after planting to ensure that it remains pulled away from the bark, to prevent trunk decay. Organic mulch will break down over time, and may need to be replenished. A depth of 3-4" is recommended for mulch application, and trees can benefit from a broad mulch ring reaching to the drip line (edges of the canopy).

- Some lawn maintenance services will perform “cut and fill” around tree wells, which involves removal of soil around the perimeter of the tree. The soil is then often placed back on top of the root ball. This practice is discouraged, since it can damage absorptive roots that are close to the soil surface and cause stress as a result of the added soil over the root ball.
- Instruct lawn care providers to avoid operating string trimmers and mowers near tree trunks. Damage from this equipment can create wounds that girdle the trunk and contribute to tree stress and decline.

Fertilization

- Most well-adapted tree species can become established without requiring soil amendments or fertilization.
- Fertilization of trees (including application of compost) is only recommended in response to the results of soil testing. If a mineral deficiency is suspected, have the soil tested in order to determine what amendments are needed and create a treatment plan based on that information.
- When minerals are applied in excess, this can sometimes cause greater stress for trees and nearby plants, in addition to the negative environmental impacts of runoff into local waterways.

Pruning

- Trees should not be pruned at the time of planting, with exception of broken or dead branches.
- Wait a couple of years to begin performing structural pruning, after the tree has had some time to become established. It needs that energy for root growth! For recommendations about pruning young trees, view the International Society of Arboriculture’s fact sheet: https://www.treesaregood.org/portals/0/docs/treecare/Pruning_YoungTrees.pdf.

Stakes

- Monitor stakes to ensure that trees have flexibility of natural movement, while still supporting the root ball.
- Stakes should be removed no more than one year after planting.

Pests and Disease Issues

- Pest and disease issues frequently occur when trees are experiencing environmental stress. Following the recommendations above can help to create favorable growing conditions for your trees that will hopefully reduce instances of these problems.
- Urban Forestry is available to consult with you on issues that your trees are experiencing. Contact Leigh at 359-4759 or leigh.martin@edmondok.com for assistance.