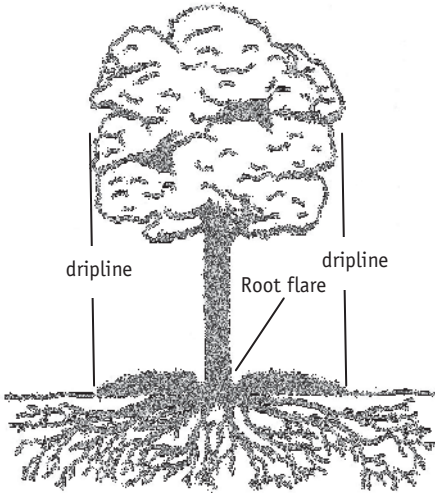
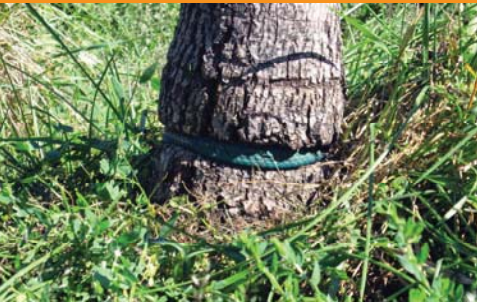




TOYOTA | EVERGREEN
LEARNING GROUNDS
Imagine your city with nature



For large caliper trees like the one above, mulch can be spread 1 cm thick to the drip line.



Don't Strangle Your Trees
Tight wire supports can be deadly for trees. We don't recommend them. Trees need to sway to build strength in the trunk.



Protect them!
Make sure roots are covered.

PLANTING YOUR TREES

FOLLOW THESE SIX SIMPLE STEPS

Step 1: Dig it!

- Use a spade to lift up the turf.
- Dig the hole 2-3 times the width of the root ball.
- Check the depth of the hole as you dig so that the top of the root ball sits 2.5 cm or 1 inch above the surrounding grade
- Make sure the hole is flat at the bottom, not v-shaped and there are no air pockets in between the base of the tree and the ground.
- With your shovel rough up the sides and bottom of the planting hole. In heavy clay, consider fracturing the ground around the hole with a garden fork. This encourages the roots to leave the planting hole.

Step 2: Place it!

- Prune any broken branches and remove all ties and plastic labels from the trunk and branches before the tree goes into the hole. If the tree is tall you won't be able to reach these once it's planted.
- Remove soil from the top of the root ball until you come to the first root. This is called the root flare (see <http://rootflare.com/whywerehere.html>). It is important that soil does not cover the root flare.
- Lay your shovel handle flat on the ground across the planting hole and check to see that the root flare is 1- 2 inches (2 - 5 cms) above the grade of the planting site.

CONSIDERATIONS FOR DIFFERENT ROOT BALL TYPES

Bare Root

- Make sure that these are planted before leaf out in spring and after leaves fall in autumn.
- Ensure that the roots never dry out.
- Spread roots over loosened soil in the hole and backfill pressing firmly.

Container Grown

- Gently loosen the outer roots of the root ball. This will encourage healthy root growth. If your tree's roots are circling the root ball, be sure to spread them out or even cut them away so that this growth pattern stops.

Wire Basket and Burlap

- Peel back the burlap from the top of the root ball and cut with a sharp knife. Remove as much burlap as possible (at least half) without disturbing the roots.
- Remove the top portion of the wire basket with wire cutters after the root ball is placed in the hole.

Step 3: Plant it!

- Backfill the soil up to one third around the root ball to secure the tree in the planting hole.
- Check that the tree is straight from all angles and continue to backfill the soil to halfway up the root ball. Watering at this point will reduce large air pockets and help to stabilize the plant. Roots will not grow through air pockets. Finish backfilling. Break up large chunks of soil as you go to prevent air pockets.



- For smaller trees, perform a tug test to make sure the tree is planted properly. Tug lightly at the base of the tree. If it comes out easily, the hole might need to be a wider or deeper or the soil might need to be packed in tighter.
- To position a large caliper tree (3 inches or 45 mm or more) without damaging its roots, use a 6' section of a 2" x 10" wooden plank positioned on an angle from the edge of the hole to the midline of the root ball and gently nudge the root ball until the tree is straight in the hole. Pulling on the trunk may damage the trunk and roots.

Step 4: Water it!

- Build a soil berm around the outside edge of the planting hole high enough to hold 3 – 5 gallons of water. Don't pile excess soil on top of the root ball as this has the same effect as planting the tree too deep.
- Water inside the soil berm allowing the water to settle the soil around the root ball.
- Water your tree so that the entire root ball is wet.
- Organize a watering schedule to water your new trees for the first 2-3 years until they are established. A schedule will be needed during drought periods after that.

See KEEPING YOUR TREES HEALTHY for more watering tips.

Step 5: Protect it!

- Mulch the root zone. Apply a minimum of half cubic yard of tub ground mulch around the base of the tree 10 – 15 cm deep to a diameter of 2 m from the base of the tree in the shape of a donut (not a volcano!) to control competing weeds, retain moisture and to help keep lawn mowers and string trimmers – the leading cause of trunk damage - at a safe distance. Be sure to pull the mulch away from around the base of the tree to help prevent over-watering and suffocation.
- Install tree protection around your tree (mulch or caging) and make sure any stakes or t-bars are well outside of the root ball. See *Designing for Shade and Energy Conservation*, pp. 77-83. (<http://www.evergreen.ca/en/lq/tdsb-guide.pdf>)

Step 6: Care for it!

- Amend the soil by top dressing with compost. Never use manure.
- Keep weeds away from the root zone as they compete for moisture and nutrients.
- Prune broken branches.
- If contractors damage a tree, insist that they view the damage for future awareness and provide appropriate compensation.
- Consider the use of expanding collars to protect trees from string trimmer damage.
- Be sure to appoint a School Tree Advocate who is responsible for monitoring the care and condition of the trees.

See THE BUCKET METHOD for a cool watering idea.

Tree Protection
Consider these tree protection options:

- Mulch donut
- 3 t-bars with wire mesh caging or plastic snow fencing
- Woven tree basket
- Rocks and garden around the base
- Artistic features
- Plant trees in mulched groves

