

City of Ontario

Tree Protection During Construction

1. Existing trees shall be identified and preserved with protective fencing to form a Protected Root Zone (PRZ). This area encircles the tree at the outer most edge of the canopy and protects the roots growing typically within the top 18"-24" of the soil. The PRZ is defined by its "critical root radius." It is more accurate than the dripline for determining the PRZ of trees. To calculate critical root radius, measure the tree's diameter (dbh) 4.5 feet above the ground, measured in inches. For each inch, allow for 1 to 1.5 feet of critical root radius. If a tree's dbh is ten inches, its critical root radius is 10 to 15 feet.
2. Protective fencing shall be installed prior to any earthwork and until work is complete. Fencing shall be three feet to four feet in height and installed at the outer most edge of the canopy or Protected Root Zone (PRZ). The temporary fencing shall be chain link fencing or other approved durable material. Post "Tree Protection Zone – Keep Out" signs on the PRZ fencing.
3. No construction or staging equipment is allowed within the Protected Root Zone including heavy equipment that will compact and damage the roots.
4. No disposal of construction materials or by products including paint, plaster or chemical solutions is allowed within the Protected Root Zone.
5. Natural or preconstruction grade shall be maintained within the Tree Protection Zone. At no time shall soil be in contact with the tree trunk above the root flare.
6. The Protection Zone should be irrigated sufficiently with clean potable water to keep the tree in good health and vigor before during and after construction. Deep watering may be necessary on a weekly basis. Verify depth of irrigation to roots.
7. Apply a 4"-6" layer of mulch in the PRZ, 1 foot away from the trunk, before construction begins.
8. Any work required to be conducted in the ground within the Protection Zone shall be accomplished with an air spade to make roots visible and use of hand tools.
9. Pruning for clearance, if needed, shall be done to prevent damaging branches with large equipment. All pruning shall be in accordance with industry standards, (International Society of Arboriculture or ANSI A300), under the direction of a Certified Arborist.
10. A Certified Arborist shall be present if more than 33% of the root zone is impacted or roots greater than 2" or within 5' of the trunk will be cut, to ensure tree stability and health. Cuts should be clean and made at right angles to the roots. Cut roots back to a branching lateral.
11. Pruning cuts or damaged bark shall be cut clean to heal. Do not use tree seal or paint.
12. Trenches for piping or utilities shall not be constructed with the tree protection zones but shall be re-routed or bored under trees at a minimum of 36" deep.
13. Protect soil and roots from compaction in landscape areas used for driveways, storage or parking with a layer of geotextile fabric and 6" of crushed gravel.