



Public Works Department Landscape Maintenance Division Policies and Procedures

TREE ROOT MANAGEMENT

REVISED 4/6/09

PURPOSE: To establish criteria for construction and maintenance activity involving tree root removal and/or pruning.

POLICY: Whenever digging occurs within the drip line of a tree, the site will be inspected by a City of Irvine certified arborist from Public Works for tree impact assessment. Root pruning may be performed on any tree which the City determines can be safely performed without jeopardizing the health of the tree. If it becomes necessary to excavate within a tree's drip line, every effort shall be made to trench across the tree's roots with a minimal amount of root pruning.

PROCEDURES:

1. Concrete Renovation

- The repair work can be deferred and a temporary asphalt patch used to eliminate any hazard until other steps can be reviewed and implemented.
- The tree can be saved by relocating the sidewalk or curb and gutter.
- The tree can be saved by replacing the concrete with minimal disruption of the roots (alternatives: temporary asphalt sidewalk; use of root barrier fabric; raising the sidewalk grade over the roots; informal walkway; other).
- The repair work can be deferred if it does not create drainage problems or otherwise increase maintenance unnecessarily and is not a hazard.
- The tree may be removed and replanted with a minimum 24 Inch Box replacement tree.

2. Concrete Preventative Maintenance

- Sidewalks that are lifted less than one inch will be ground to a sufficient transition level to adjacent panels of sidewalk to ensure safe movement of pedestrians.
- The tree shall be trimmed in accordance with International Society of Arboriculture standards.
- Root pruning shall be performed to a depth of 12 inches adjacent to the effected sidewalk from tree drip line to drip line unless otherwise directed. All roots must be cleanly cut to encourage good callus tissue and pruned back to the next root node.
- A polyethylene root barrier (deep root product or equal) shall be installed to a depth of twelve inches adjacent to sidewalk with vertical ribs facing toward the tree, for a minimum length of five feet each side of trunk.

3. Construction, Infrastructure Repair or Rehabilitation Projects

- The root protection zone is defined as the larger of the drip line of the tree or the distance from the trunk equal to six inches for each inch of trunk diameter measured at four and a half (4.5) feet above existing grade. At no time shall any equipment, materials, supplies or fill be allowed within the prescribed root protection zone unless otherwise directed by a certified arborist from the City's Public Works Department.
- Should it be necessary to trench within this area, trenches shall be hand dug. No roots larger than two inches shall be cut unless approved by a certified arborist from the City's Public Works Department. All smaller roots that must be cut, shall be hand cut flush with the side of the trench. If at any time 25 percent of the area within the root protection zone is being separated from the trees by a trench, the line shall be located by boring or an alternative location for the trench established.
- The minimum clearance between an open trench and a street tree shall be one foot, or six inches for each inch of trunk diameter measured at four and a half (4.5) feet above existing grade if this method defines a larger distance. The maximum clearance shall be 10 feet. The contractor shall conform to these provisions unless otherwise directed by a certified arborist from the City's Public Works Department.

- Trenches adjacent to trees should be closed within 24 hours; where this is not possible, the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.

4. Recovery Period

- When significant root pruning on a tree is involved, there will be a 24-month period to allow for the tree roots to recover. An exception to this policy may only be made by a certified arborist from the Public Works Department.

5. Release Requirements

- In order for construction work which will impact a tree to begin, a signed release form must be issued by a certified arborist from the City of Irvine. This release shall be based on the condition of the tree and an assessment of the impact of the proposed construction. Mitigating measures necessary to protect the tree will also be stated. In the event a tree must be removed, a signed release will also be issued by the City.

6. Penalty

- It is recognized that failure to abide by these provisions will result in substantial root damage to trees that may not be immediately apparent. The City will therefore assess damages according to the International Society of Arboriculture standards and refer to the City Attorney to bill the responsible party.



Dennis Chiotti, Landscape Maintenance Superintendent 4/6/09 Date