



## Excavation and Construction Guidelines Around Public Trees

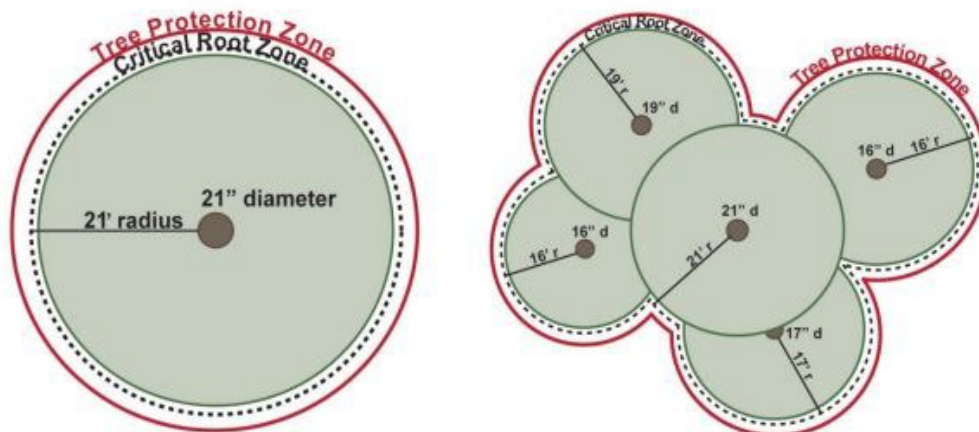
### Planning for Public Tree Protection

Your arborist and builder should work together early in the planning phase of construction. Sometimes small changes in the placement or design of your house or driveway can make a great difference in whether a critical tree will survive. Alternative construction methods can be discussed, such as bridging over the roots as a substitute for a conventional walkway, if flexibility in placement is limited. If utilities cannot be re-routed away from trees, less damaging tunneling and trenching installation techniques exist.

#### **Prior to construction:**

1. Establish a Tree Protection Zone (TPZ), an area where construction activities are prohibited or restricted to prevent injury to preserved trees, especially during pre-construction and construction phases, which includes the Critical Root Zone and/or beyond.
2. A method of establishing a TPZ:
  - The size of the TPZ is determined by the Trunk Diameter measured at 4.5' above ground.
  - Next calculate a circular area above and below ground with a radius equivalent to 1 foot for every inch of trunk diameter.
  - This number gives the distance in all directions that the TPZ must include.
3. Place construction fencing around this area prior to commencing work.
4. Keep construction materials and equipment away from the Tree Protection Zone.

Tree Protection Zone (TPZ) is an area where construction activities are prohibited or restricted to prevent injury to preserved trees, especially during pre- construction and construction, and includes the Critical Root Zone and/or beyond.



## **When construction will impact the Tree Protection Zone:**

1. If construction requires entering the TPZ, 6" of mulch must be placed over the roots to minimize compaction of soil.
2. Any work completed within the TPZ shall be done with hand tools when possible. Use of heavy equipment in the TPZ must be coordinated with the Parks and Recreation Department.
3. Roots that must be removed due to construction shall be cut clean with a sharp saw, not ripped.
4. Exposed roots should be covered with soil and kept moist.
5. No paint or tar shall be applied to damaged roots.
6. No roots shall be cut within 2 feet of the tree's trunk without consulting with the Parks Department staff.
7. When roots are to be cut larger than 2" in diameter, the Parks Department staff must approve prior to cutting.
8. When more than 25% of a tree's roots are required to be cut to complete the project, the Parks Department staff must approve prior to cutting.

### ***Erecting Barriers***

Treatment for construction damage is limited, so it is vital that trees be protected from injury. Set up sturdy fencing around each tree that is to remain, as far out from the tree trunk as possible to provide above- and below-ground protection. Place fence approximately one foot (0.3 m) from the trunk for each inch (2.5 cm) of trunk diameter.

Instruct construction personnel to keep fencing intact, The fenced area must be kept clear of building materials, waste, and excess soil. No digging, trenching, or other soil disturbance is allowed within the TPZ.

### ***Limiting Access***

If possible, allow only one access route on and off the property. All contractors must be instructed where they are permitted to drive and park their vehicles. Often this same access drive can later serve as the route for utility wires, water lines, or the driveway.

Specify storage areas for equipment, soil, and construction materials. Limit areas for burning (if permitted), cement wash-out pits, and construction work zones. These areas should be located away from protected trees.

### **Parks Department Contact Information:**

Jen Sybrant, Urban Forester (406) 260-5133      [jsybrant@cityofwhitefish.org](mailto:jsybrant@cityofwhitefish.org)

Philip Hodge, Arborist (406) 885-0049      [phodge@cityofwhitefish.org](mailto:phodge@cityofwhitefish.org)