



TEXAS A&M FOREST SERVICE

How do I Care for My Tree?

Protecting Tree Roots During Construction

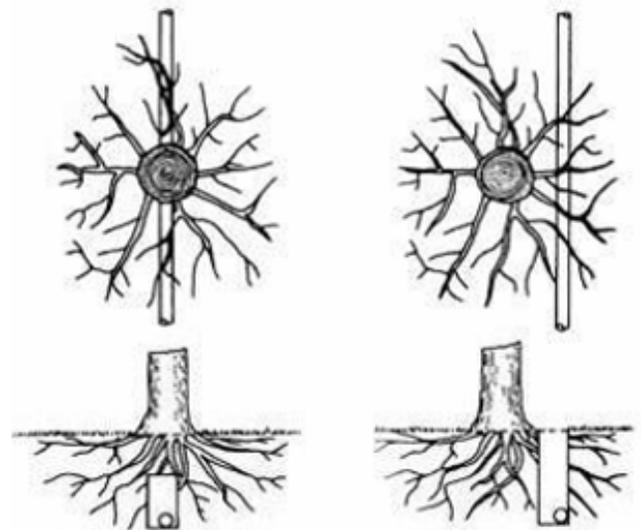
Trees add to value to residential and commercial properties. Existing trees are often one of the main features in the landscape design of new homes or businesses. Unfortunately, many times the trees that are left on site have difficulty surviving the construction activities. This can lead to unsafe or hazardous conditions and expensive post construction removal costs. With planning, communication and cooperation, existing healthy trees can be preserved with minimal effort and expense. Successful survival of trees both during development and in the years following construction is through the protection of roots during the construction process. Three main causes of tree death during and after construction that can be addressed by protection are soil compaction, grade changes and root severance.

The following steps should help you create a workable tree protection plan:

Planning. An ISA certified arborist should be involved in the beginning of the planning phase of the project. Small changes in the placement or design of a building, driveway or utilities can make a difference in whether or not an important tree will survive. Alternative construction methods should be considered when appropriate. If utilities cannot be re-routed away from trees, tunneling or hand dug trenches should be considered in order to minimize the damage to the trees root systems (Figure 1). Develop tree preservation specifications detailing what can and cannot be done around the trees to be preserved. Fines and penalties should be included in these specifications.

Inventory trees on site. Record and map the location, species, size, and health of each tree on the development site. Trees that probably shouldn't be selected for preserving are those with wilted leaves, broken or dead limbs, trunk rot, display poor form, lean heavily over future buildings, or have severe insect or disease problems. These should be removed prior to construction. Identify, map and mark trees to be preserved. Be sure to identify and prune trees that need additional clearance to make room for future structures and construction equipment.

Figure 1



Less damage is done to tree roots if utilities are tunneled under a tree (left, top and bottom) rather than across roots (right, top and bottom).

