



Tree protection during construction

The following steps will help to preserve trees on your site that will enhance your property value, provide wildlife habitats, reduce

energy bills and provide an environment you will enjoy for many years to come.



if you start before
construction

begins, protecting
trees on construc-

tion sites can be
inexpensive, sim-

ple and yield very
satisfying results.

The following steps
will be helpful in

planning the
development of
your site.

Walk The Site

Before your architect or engineer designs your site on paper, walk the site with them and a certified arborist. Pick the trees you would like to save and have the arborist assess their overall health. Different species of trees vary in their ability to overcome the stresses associated with construction and environmental change; the arborist will be able to provide guidance in these matters.

Accurate Location Is Essential

Once you have chosen the healthiest and best species of trees on your site, mark these trees and have a surveyor locate them on your site plan. Accurate location is essential, as the entire site will be designed around these trees. Inaccurate location can lead to expensive redesign and damage to or removal of otherwise healthy trees.

Protecting Trees With Buildings And Other Structure Placements

Sit down with the architect or engineer to discuss and sketch the placement of all buildings and associated structures that best protect the trees. Don't forget things like asphalt or concrete drives or patios, pools, and underground utilities such as telephone, water, sewer, cable TV and electrical lines. All of these can cause severe root damage if not located at a reasonable distance from the tree. The tiny "feeder" roots, which take in water and nutrients, require oxygen to live and function properly. Because they need oxygen, they are located in the top layer of soil and organic matter on the forest floor. It is absolutely critical to protect this layer (and the roots that live there) from disturbance. Since a great percentage of these roots occur within the drip line (the edge of the canopy), trees are best protected by having all construction and trenching done outside this canopy.

SUCCESS



TREES

Compaction: the "Silent Killer"

Have the architect or engineer specify tree barricades around protected trees on the site plan. These fences are critical in protecting feeder roots from being crushed by the compaction of the soil from driving or parking vehicles near the trees. Compaction is the "silent killer" of the trees on construction sites. Make sure barricades are made from sturdy, high visibility material (such as orange safety fence attached securely to 2x4 posts) and are placed as close to the drip line as possible.

Specify Tree Protection

Put a clause in your building contract specifying tree protection and penalties if protected trees are damaged or removed. Meet with your contractor and walk the site to review which trees are protected.

Take Care Installing Additional Landscaping

When you landscape, don't forget that installing irrigation lines and plant material can also damage root systems; therefore, it is best to install them beyond the area(s) protected during construction. Ask your landscaper to follow the seven principles of xeriscape when designing the landscape and irrigation and be sure to put a rain gauge on your irrigation system. Both of these measures will help conserve water. Saving understory plants during construction helps preserve our native plant species and protects wildlife habitat.

Monitor the work being done on your site to be sure that tree protection guidelines are followed. A certified arborist should be consulted to help with problems due to damage during construction.



The South Carolina Urban & Community Forestry Council is a nonprofit organization whose mission is to foster stewardship of urban and community forests. For more information, call 803-896-8864.