Policy Name: Construction Site Tree Protection

<table>
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<th>Effective Date: 2/16/2015</th>
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<th>Department/Area/Division: LG/FG/FA</th>
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<tr>
<td>Department/Area Policy #: LG-2.2</td>
<td>Departmental Contact: Donna McCray, Director of Facilities Operations and Grounds Use Permit</td>
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Purpose:
The purpose of this policy is to provide standards and guidelines to be followed at all construction, renovation, and building sites on campus, in order to ensure that all vendors, construction contractors, and subcontractors (both UA and outside entities) collaborate to ensure the safety and well-being of the UA campus forest.

Policy Statement:
The health and appearance of the campus forest is a vital commodity that should be protected for the future enjoyment of all visitors, students, faculty and staff. As such, the following guidelines have been established. These guidelines are not inclusive and may be subject to change. This policy applies to all entities performing construction, renovation, or remodeling projects on the property of the University of Alabama.

Policy:
A project specific Tree Protection Plan is required for all construction projects that will impact existing trees and landscape. The Plan is to be provided by the project Civil Engineer. This Plan will be submitted with other documents as part of the overall project approval process. It should be a separate document and shall include, but will not be limited to the following information:

1. Proposed site plan.
2. Proposed grading plan.
3. Proposed utilities.
4. All existing trees showing (Diameter at Breast Height (DBH) of tree and Drip line).
5. Trees to be removed for new construction.
6. Trees to remain showing Root Protection Zone (1.5' per 1" of diameter at breast height, measured 4.5' from the ground)(ex. 10" Oak Root Protection Zone = 10" x 1.5'= 15' radius from the edge of trunk).
7. Root Protection Zone Barrier Detail (minimum 4' chain-link fence supported by 2" diameter post driven 2' into the ground with one 3' wide gate for maintenance, fence shall have an 8½”x11” sign which reads Root Protection Zone, Do Not Disturb).
8. Photos of the trees to remain with graphics showing where the canopy will need to be trimmed for construction of building.

The Tree Protection Plan shall be submitted at the 60% design review stage. At this time, there shall be a pre-construction meeting on site with the UA Project Manager, UA Field Coordinator, Campus Landscape Architect, and Civil Engineer. This meeting will be to review the Preliminary Root Protection Zones (staked out with flagging by the Civil Engineer), determine limitations, and discuss concerns regarding trees in the construction site. At this meeting, Alternatives (as defined below) should be discussed if they are required. After approval, the Tree Protection Plan is to be adhered to throughout the construction process. Prior to the start of any site activity, the tree protection barriers specified and 4" of pine bark mulch covering enclosed area must be installed by General Contractor or other entity as specified by UA. The tree protection barriers must remain in effective condition until the start of landscape construction in the immediate area of the project. The UA Project Manager is to coordinate relocation of trees.
After the Root Protection barrier has been erected there shall be no:

- Breaking of branches, scraping of bark, or unauthorized cutting.
- Nailing or bolting.
- Using trees as anchorage or using trees as temporary support in any way (including cabling around any part of the tree).
- Unauthorized filling, excavating, trenching, or auguring within protected root zone.
- Compaction of protected root zone by vehicles, equipment or pedestrians.
- Storage of any materials.
- Dumping of construction waste or materials within the protected root zone.
- Disposal of liquid waste, concrete sleuth, gas, oil, paint, or any other contaminants, which may impact the protected root zones.
- Removal of tree protection barricades or construction fencing prior to completion of project.

Required maintenance of the Root Protection Zone by UA Facilities and Grounds or other entity as specified by UA, will include:

- Provide 2" of water over the Root Protection Zone through the duration of construction.
- Any roots or branches that extend beyond the Root Protection Zone which require pruning must be pruned by a qualified Arborist or other tree professional as approved by the UA Landscape Architect. All pruning of tree roots and branches must be in accordance with good arboricultural standards. Roots located outside the Root Protection Zone that are to be pruned must first be exposed by hand digging or by using a low pressure hydro-vac method. This will allow a proper pruning cut and minimize tearing of the roots from equipment.
- The Root Protection Zones will require up to four (4) annual applications of deep root aerification and fertilization depending on the length of the project. One application will be made at the beginning of construction. The second application will be made during construction. The third application will be made at the completion of construction. The fourth application will be made prior to the one year crosstown.

Throughout the duration of construction there will be on-going and unscheduled site inspections of the Root Protection Zones. The UA Landscape Architect will conduct these inspections. Violations and damages will be handled according to construction department guidelines and specifications. The Landscape Architect will notify the UA Field Coordinator and General Contractor of any damages to the trees or deficiencies in tree protection. Upon notification of damage, the contractor will correct any deficiencies cited immediately. The General Contractor shall contact the university's representative if any part of the Root Protection Zone has been compromised. The Certificate of Substantial Completion will not be issued until after final tree inspection by Project Manager, Campus Landscape Architect and General Contractor.

It shall be the duty of the UA Project Manager, based on recommendations from the UA Landscape Architect, to enforce the provisions of the contract specifications and the tree protection plan. Damages shall be assessed as described in the landscape protection plan and in accordance with the University of Alabama guidelines.
The UA Field Coordinator is responsible for monitoring the site and reporting any prohibited practices and damage during the construction process to the UA Landscape Architect. The UA Landscape Architect will also make periodic site visits. Damage to campus trees will include any of the prohibited practices listed above and will be determined by the UA Landscape Architect. The Project Manager will be notified by the UA Landscape Architect of the damage assessment and will issue a deductive change order to contract for the amount of damages. The value of tree damage will be assessed and fines levied up to 100% of the value listed below:

1"-3" caliper     $200/inch  
3"-6" DBH         $300/inch  
6"-9" DBH         $400/inch  
9"-12" DBH        $500/inch  
12"-15" DBH       $600/inch  
15" DBH or more   $700/inch  

Alternatives are any prearranged variations of work within the Root Protection Zone. These alternatives will allow for flexibility of specific requirements which arise during construction and will be considered on a case by case basis.

Definitions:
Not applicable

Other Department and/or Divisions:
Construction Administration
Enterprise Operations
Office for Academic Affairs
Office of Research and Economic Development
Office of University Advancement
Office of Community Affairs
Office of Financial Affairs and Treasurer