
Revision Responsibility: Director of Facility Services and Safety

Responsible Executive Officer: Vice President for Finance and Administration

Source/Reference: [Arbor Day Foundation – Tree Campus USA Standards](#)

PURPOSE

The purpose of the Columbia State tree care plan is to identify practices and procedures used in selection, site preparation, preventive maintenance, evaluation, design, protection, preservation, and hazard removals and replacement.

Note: This plan has been promulgated in partial fulfillment of Arbor Day Foundation's standards for Tree Campus USA designation.

DEFINITIONS

- A. **Caliper** – The diameter or thickness of the main stem of a young tree or sapling as measured at six (6") inches above ground level. This measurement is used for nursery-grown trees having a diameter of four inches or less.
- B. **Canopy trees** – A tree that will grow to a mature height of at least 40 feet with a spread of at least 30 feet.
- C. **Clearing** – The removal of trees or other vegetation of two inches DBH or greater.
- D. **Critical Root Zone** – The minimum area surrounding a tree that is considered essential to support the viability of the tree and is equal to a radius of one foot per inch of trunk diameter (DBH).
- E. **Development** – The act, process or state of erecting buildings or structures, or making improvements to a parcel or tract of land.
- F. **Diameter, breast height (DBH)** – The diameter or width of the main stem of a tree as measured 4.5 feet above the natural grade at its base. Whenever a branch, limb, defect or abnormal swelling of the trunk occurs at this height, the DBH shall be measured at the nearest point above or below 4.5 feet at which a normal diameter occurs.
- G. **Green space** – Any area retained as permeable unpaved ground and dedicated on the site plan to supporting vegetation.
- H. **Green space plan** – A map and/or supporting documentation which describes for particular site where vegetation is to be retained or planted in compliance with these regulations. The green space plan shall include a tree establishment plan, or a tree protection plan, and a landscape plan.

- I. **Impervious surface** – A solid base underlying a container that is nonporous, unable to absorb hazardous material, free of cracks or gaps and is sufficient to contain leaks, spills and accumulated precipitation until collected material is detected and removed.
- J. **Native tree** – Any tree species which occurs naturally and is indigenous within the region.
- K. **Tree establishment plan** – A map and supporting documentation which describes, for a particular site where existing trees are to be planted in compliance with the requirements of these regulations, the types of trees and their corresponding trees for reforestations.
- L. **Tree protection plan** – A map and supporting documentation which describes for a particular site where existing trees are to be retained in compliance with the requirements of the regulations, the types of trees and their corresponding tree for reforestations.
- M. **Tree protection zone** – The area surrounding a preserved or planted tree that is essential to the tree's health and survival, and is protected within the guidelines of these regulations.

POLICY

I. Responsible Authority/Department

The Columbia State Community College Facility Services Department and the Campus Tree Advisory Committee are responsible for the Campus Tree Care Policy.

II. Campus Tree Advisory Committee

The Campus Tree Advisory Committee serves as an advisory committee and shall be responsible for helping to update this plan in conjunction with the Facility Services Department. A list of all members of the Campus Tree Advisory Committee can be found in the Columbia State Community College Committee and Council Guidelines and Appointments in SharePoint.

The committee meets periodically and provides important input into the care and improvement of the campus landscape.

III. Campus Tree Care Policies

A. Planting

1. The planting hole should be dug no deeper than the root ball when measured from the bottom of the root ball to the trunk flare.
2. If the hole is deeper than the root ball, it often results in the settling of the plant above the trunk flare and structure roots which can result in the root ball being planted too deep.

3. The width of the hole should be at least 2 to 3 times the diameter of the root ball with sloping sides.
4. Plants must be set with trunk flare 1”-2” above the existing grade.
5. If the existing soil is of a poor quality, addition of soil amendment as recommended by a soil analysis.
6. The backfill soil should be tamped firm enough to remove large air pockets, but not too firm as to remove all fine air spaces needed for a well aerated soil for root development.
7. Complete the backfill by making sure that the trunk flare is completely exposed.
8. Water the root ball and the planting area deeply.
9. Newly planted trees must receive adequate water routinely during the entire first growing season right up until dormancy in the fall, by irrigation or hand watering.

B. Landscaping

Landscaping utilizing trees on the Columbia State Campus will strive to adhere to the approved tree list (see Recommended Tree Species).

C. Maintenance and Removal

1. Preventive Maintenance Pruning – The Facility Services Department systematically prunes trees annually through a preventive maintenance pruning program. Preventive maintenance pruning is conducted on an as needed basis at this time. The need for pruning is many times based upon campus safety considerations.
2. Fallen Limb Removal - When limbs fall from trees on campus, members of the campus community can call in or make a service request to the Facility Services Department and by staff inspection to promptly clean up the debris. Every attempt will be made to clean up dropped limbs within the same day, depending on the severity of the storm and the extent of the tree damage. The Facility Services Department reviews the campus for loose or unsafe limbs following severe storms.
3. Hazard and Emergency Tree Removal – When a tree removal request is made, the Facility Services Department evaluates the tree in question and makes the determination for removal or not based on the result. If the tree is considered a hazardous tree, it is then scheduled for removal. All hazardous trees have two things in common, a significant defect and a potential target for falling on a building, car or pedestrian. Most tree removals are done by staff or contractor.

D. Recommended Species

In 2014, a tree inventory was conducted by Village Trees, LLC. As an outcome of this inventory, a recommended tree list was generated (see Recommended Tree Species). The Campus Tree Advisory Committee will review this recommended tree list to determine if any of these species should be removed from this list or if any species should be added to this list.

Additionally, a list of prohibited trees was generated during this survey (see Prohibited Tree Species).

E. Managing for catastrophic events

In the event of severe weather conditions such as tornadoes or hurricanes, falling trees will be removed by Facility Services Department staff or an outside tree removal company. Roads and streets shall be cleared first, then access to critical buildings, administration, buildings with critical labs, library, student center, etc. in that order. In the advance of severe weather conditions, all necessary equipment shall be checked for readiness and safety by staff.

IV. Protection and Preservation Policies and Procedures

- A. Tree protection zones shall be established and maintained for all trees to be preserved in a construction site.
- B. Construct a simple barrier for each tree or grouping to protect the trunk and root systems. This reduces damage from heavy equipment and trucks. Wood, plastic or chain link 4' fencing would be suitable.
- C. Install the barrier fence for every inch diameter of that tree's diameter breast height (DBH), provided that in no case shall the protection zone be less than a radius of 2.5 feet.
- D. No root raking shall be allowed within any tree protection zone at any time during clearing, grading or construction of a project.
- E. No equipment or vehicle shall be parked or construction material stored, or substances poured or disposed of or placed within any tree protection zone at any time during clearing or construction of a project.
- F. To the extent possible, all site work shall be planned and conducted in a manner that will minimize damage to protected trees from environmental changes such as altered site drainage or any other land disturbance within or immediately adjacent to the critical root zone of the tree.

V. Goals and Targets

- A. Add 10 new species of trees to the Columbia Campus.
- B. Label 30 new species of trees on the Columbia Campus.
- C. Achieve recognition as a Level II Tennessee Certified Arboreta under the Tennessee Urban Forestry Council.

VI. Tree Damage Assessment

Columbia State shall have the Facility Services Department conduct an assessment on low profile trees and provide recommendations for removal to the Campus Tree Advisory Committee. In cases of emergency, the Facility Services Department has approval for removal of trees from campus. If high profile trees are damaged, an outside consultant may be contacted to provide an assessment on the tree.

VII. Prohibited Practices

Columbia State trees may not be used for any purpose to include signs, art work, banners, climbing and or any activity that in any way would be detrimental to the trees.

VIII. Observation of Arbor Day

Columbia State will annually conduct an event to celebrate and observe Arbor Day. This event will not necessarily fall on the recognized Arbor Day, but it will occur at a time convenient to the College. It will generally fall in the month of April.

IX. Communication Strategy

Maintenance and care of the tree population will be communicated via the internet website. Tree protection guidelines are communicated to the project managers for inclusion in project specifications.