

**Main Campus Urban Forest and Landscape Management Policy**

**Policy Statement:**  
Clemson University is committed to providing a safe, attractive, educational and sustainable campus urban forest that faculty, staff, students, and guests can use as a resource for teaching and learning as well as for respite and recreation. This Main Campus Urban Forest and Landscape Management Policy enables that commitment through the following requirements:

- The Division of University Facilities is authorized to promulgate and enforce procedures and requirements for achieving the purpose of this policy and its implementation ("Main Campus Urban Forest and Landscape Management Plan.")
- All projects, utility modifications, and landscape/hardscape improvements in which trees on University property may be affected shall comply with the Main Campus Urban Forest and Landscape Management Plan.
- This policy does not apply to the University Forest Lands, Research & Education Centers or any other University owned property separate from the main campus.

**Purpose:**  
The University has an aspirational goal of maintaining a zero net loss of tree canopy on its main campus, to the extent possible, through preservation of existing trees and new tree plantings, to retain the maximum aesthetic and functional benefits provided by the multi-aged landscape tree population.

The thousands of large trees on the main campus are the most significant source of the acknowledged beauty of the University grounds; however, many activities and prohibited practices of employees, students, visitors, and contractors can and have caused tree damage, decline, and death.

Trunk and branch damage is caused by cutting, breaking, or attaching objects to them. Root damage, especially in the critical root zone (the area from the trunk extending in all directions for a distance 1.5 times the branch spread) can be even more serious. Damage is caused by vehicle traffic and parking, excavation, utility installation, material storage, etc.

As development of the campus becomes denser, the potential for such impacts will increase. For this reason, all construction/renovation projects shall be carefully reviewed early in the planning process, during the design process, and during the construction process to consider potential impacts on existing trees, damage prevention and/or mitigation approaches, or the necessity of tree removal and replacement. The University has an active landscape tree management, maintenance, and replacement program, and this policy establishes tree protection/preservation as an integral part of that program.

**Responsible Department:** Division of University Facilities

**Approval Date:** May 4<sup>th</sup>, 2015 - Approved by Administrative Council

**Published Location of this Policy:** <http://www.clemson.edu/facilities/about/bolster.html>

**Main Campus Urban Forest & Landscape Management Plan Guidelines and Procedures**

These Guidelines and Procedures are in accordance with Clemson University Main Campus Urban Forest and Landscape Management Policy

**Guideline:**  
A tree may be considered for removal for the following reasons: It is determined to be dead or diseased beyond preservation; its location, condition, or orientation constitutes a safety hazard; its location affects the preservation and maintenance of adjacent buildings; the tree is damaged from the elements or disease to the extent that its appearance is unduly affected; its location is determined to be an obstruction or hazard to utility lines; its location interferes with the construction of facilities and associated site development; or for other appropriate reasons. The determination of trees meeting the above conditions is the responsibility of the Director of the Landscape Services.

**Prohibited Practices & Damage Assessment & Penalties:**

- Hauling, bolting, using trees as anchorage for ropes, power lines, cables, etc.
- Cutting, breaking, skinning and abrasion of roots, branches and bark.
- Damage or removal of the tree protection fencing without approval from the University Arborist.
- Unauthorized filling, excavating, trenching or auguring within "protected root zone".
- Compaction/driving/parking over the "protected root zone".
- Storage of any materials or vehicles within the "protected root zone".
- Dumping of construction waste or materials (including liquids) within the "protected root zone".
- Unauthorized removal or relocation of woody plants.
- Performing University Arborist responsibilities as indicated above.

The penalty for damage to trees 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

For construction projects, the University Project Manager is responsible for monitoring the site and reporting any prohibited practices and damage during the construction process to the University Arborist. The University Arborist will also make periodic site visits. Damage to University trees will include, but not be limited to, any of the prohibited practices listed above and will be determined by the Director of Landscape Services or University Arborist. The University Arborist will notify the Project Manager of the damage assessment. The Project Manager will inform the responsible contractor and/or person, organization, or agent of the value of the assessed damage and work through options for corrective measures. While these guidelines and procedures apply to tree protection, protection of University shrubs, vines and ground covers within the project site area is also of concern.

**Definitions:**

**Professional of Record:** The A/E firm responsible for construction documentation & specification.

**Site Survey:** A measurable site plan that maps existing conditions of a given area being considered for new construction activities. This map becomes the basis for design decisions of proposed built elements and site modifications. The accuracy of such a plan is certified by a registered land surveyor.

**Tree Survey:** A measurable site plan that maps existing trees within a given area being considered for new construction. This survey identifies individual trees and tree groups to be protected during construction. The plan always shows tree protection areas and associated fence lines where land disturbance activities are prohibited. Construction details can be included to address areas where special mitigation factors are required. This plan is part of the construction documents that the contractor is responsible for implementing. The plan is produced by the Professional of Record in consultation with a trained and qualified arboriculturist.

**Tree Protection Plan:** A measurable site plan that maps existing trees within a given area being considered for new construction. This survey identifies individual trees and tree groups to be protected during construction. The plan always shows tree protection areas and associated fence lines where land disturbance activities are prohibited. Construction details can be included to address areas where special mitigation factors are required. This plan is part of the construction documents that the contractor is responsible for implementing. The plan is produced by the Professional of Record in consultation with a trained and qualified arboriculturist.

**Critical Root Zone:** The area from the trunk extending in all directions for a distance 1.5 times the branch spread

**Protected Root Zone:** The area that is one and a half the distance of the tree canopy dripline outward from the trunk (1.5x the radius)

**Tree Protection Area:** An area identified in the Tree Protection plan to be kept free of physical or chemical influences that may damage trees.

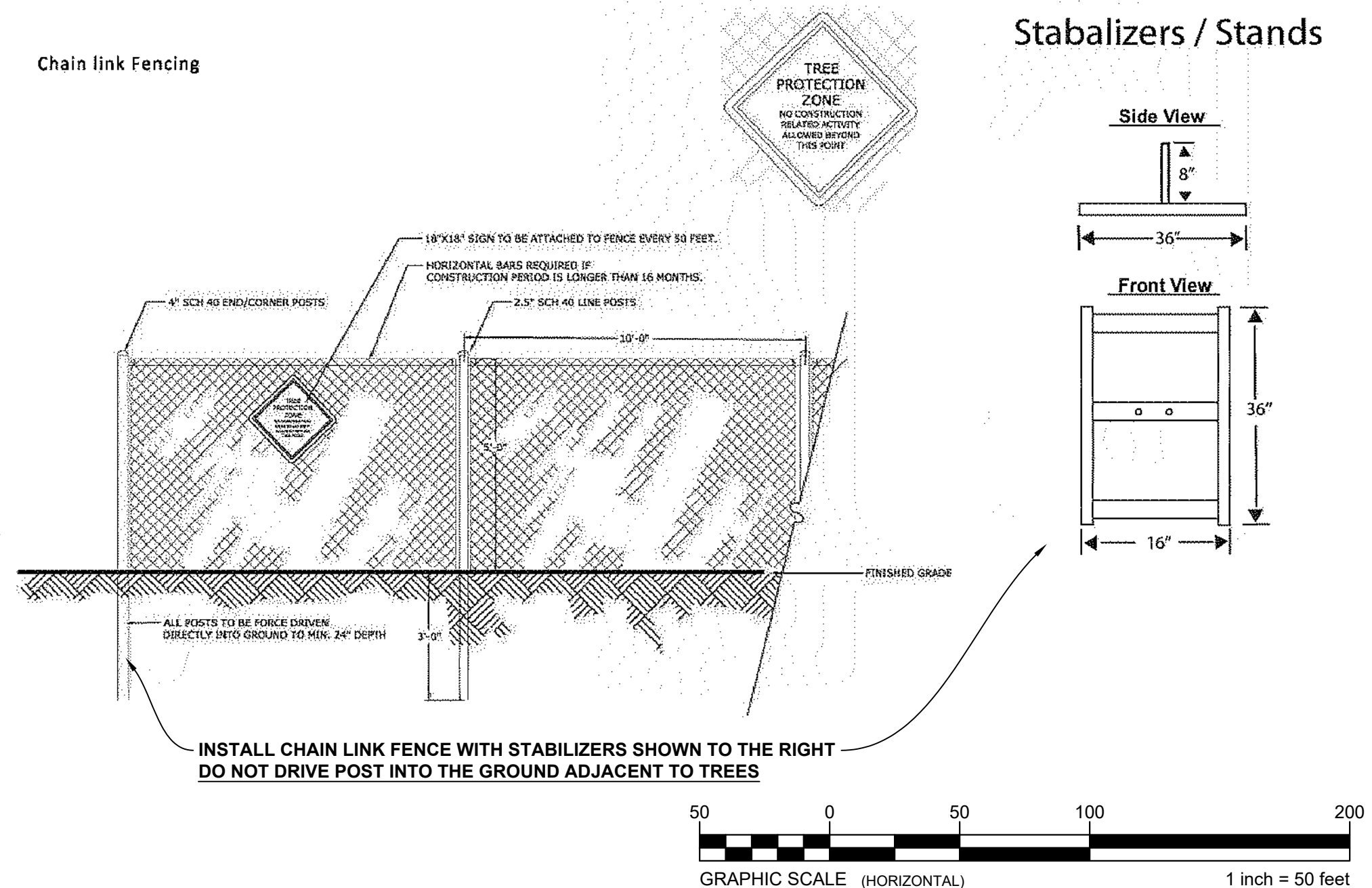
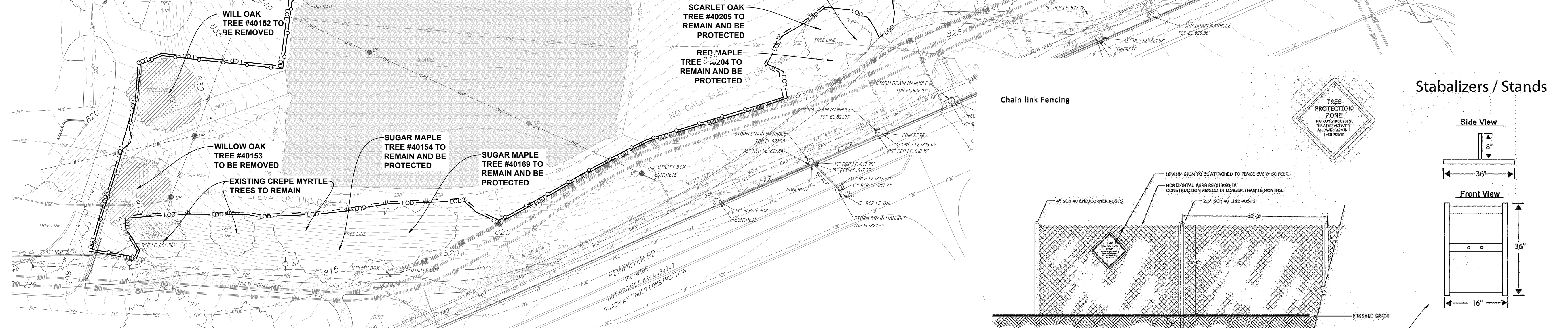
**Tree Protection Fencing:** 6' chain link fence placed on the circumference of the "Protected Root Zone".

**Compaction:** Soils whose structure has been altered due to vehicular, heavy equipment and foot traffic.

**Drip-line:** The vertical line beginning at the outermost portion of the canopy of a tree and extending to the ground.

**Caliper:** The trunk diameter measured 6" above the ground.

**DBH:** Diameter of trunk, measured at breast height (4.5 ft above ground).



**NOTE:**  
UNDER NO CIRCUMSTANCES IS THE CONTRACTOR TO DISTURB ANY LAND OUTSIDE OF THE LIMITS OF DISTURBANCE.

**LEGEND**

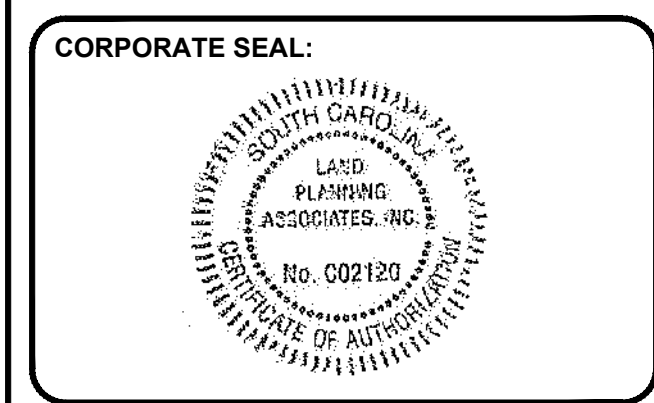
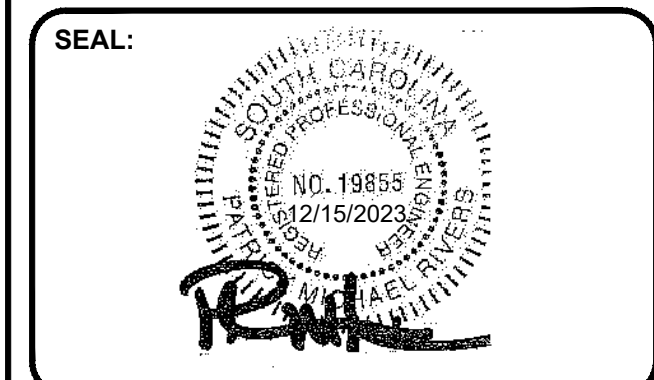
	TO BE REMOVED
	LIMIT OF DISTURBANCE
	TREE PROTECTION

**NOTE:**  
NO CONSTRUCTION SHALL BEGIN UNTIL ALL TREE PROTECTION HAS BEEN INSTALLED.

**NOTE:**  
CONTRACTOR SHALL CONTACT UNIVERSITY ARBORIST PRIOR TO INSTALLING TREE PROTECTION.

**REVISIONS:**

NO.	DATE	DESCRIPTION	BY



**LAND PLANNING ASSOCIATES, INC.**  
CIVIL ENGINEERING

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110 WEST 1ST AVENUE - SUITE A  
EASLEY, SC 29640  
864.242.6072  
design@pa-inc.net

**CLEMSON UNIVERSITY**

**R-1 / KITE HILL PARKING EXPANSION**

**ISSUE FOR CONSTRUCTION:**

PERMIT DATE:   
 BID DATE: 12/15/2023

DRAWN BY: CAS  
DESIGN BY: CAS  
CHECKED BY: PMR  
DATE: 12/15/2023  
SCALE: HORIZ. 1" = 50' VERT.   
JOB NUMBER: 23.018

**TREE PROTECTION PLAN**

**C-104**  
(H12-T050-CB)

