

DESIGN GUIDELINE 013639

TREE PRESERVATION

Scope

This document outlines requirements for tree preservation on the University of Michigan campus – including tree surveys, rankings, relocation, removals, replacements and protection.

Related Sections

U-M Design Guidelines

[4.4.1 Landscape](#)

U-M Master Specification Sections:

[MS 7.0 015639 Temporary Tree and Plant Protection](#)

Related Documents

[U-M Tree Preservation Policy](#)

[Vegetation Assessment](#)

Tree Surveys

Tree surveys will be completed during the pre-design phase for campus development projects. The survey will identify existing trees located within the bounds of the site as well as within any surrounding areas that may be affected by the project. The University Forester (UF) shall categorize the trees on the survey as follows:

- Memorial trees (including tree tag #) and their associated plaques
- Trees to remain and be protected (trees ranked 1, 2 or 3+/-)
- Trees that can be relocated (transplanted)
- Trees recommended for removal (trees ranked 1, 2 or 3+/-)
- Trees that are of low quality (trees ranked 4 or 5)

Tree rankings are decided by the UF based on site surveys and/or on-site analysis and the Grounds Services Tree Evaluation Methodology (Methodology). The Methodology, developed by Grounds Services (Grounds) lead staff, is based on International Society of Arboriculture evaluation standards and more than 50 years' combined experience evaluating and maintaining trees on the Ann Arbor campus. The Methodology is used to provide a condensed evaluation of tree quality for planning and construction purposes utilizing a ranking system of 1 to 5. Determining factors in the ranking of campus trees include species, form, health and condition and aesthetic value.

Grounds Tree Evaluation Methodology Ranking:

- 1 – “Significant” Tree
 - High quality species with quality form
 - Excellent health and condition
 - Provides significant aesthetic value to the space
- 2 – “Above Average” Tree
 - Quality/routine tree species
 - Above average form for the species
 - Good health and condition
 - Provides good aesthetic value to the space
- 3 – “Average” Tree
 - Routine tree species
 - Some health or condition problems
 - Average form or some deformation
 - Provides aesthetic value to the space
- 4 – “Below Average” Tree
 - Routine/low quality tree species with below average form
 - More than average health and condition issues
 - Provides little aesthetic value to the space
- 5 – “Poor” Tree
 - Low quality species with poor form
 - Serious health and condition issues
 - Detracts from the aesthetic value to the space

A tree ranked 3 requires one of the following additional categories:

- + : Indicates the tree is young, in good health, and/or provides a horticultural benefit to the site,
- - : Indicates the tree is old, of declining health, and/or is of low quality.

If the preliminary survey includes trees ranked 1, 2 or 3+ or memorial trees recommended to be relocated or removed, it shall be submitted to the Associate Vice President for Facilities and Operations (AVPFO) for approval. The survey shall be accompanied by a written summary prepared by the Campus Planner (CP) and developed in cooperation with the DM and the UF that describes the significance of the trees and the reasons for relocation and/or removal.

When a small woodlot or natural area exists, and it is more efficient for the UF to conduct a visual assessment of the site, the UF shall document the overall quality and variation of species on the site prior to tree removal. A Vegetation Assessment shall be provided by the UF to the CP and DM using an aerial photo or site plan with accompanying notes in lieu of providing a survey. The assessment needs to include the following identifying details:

- Project area, name and location
- Labeled adjacent roadways
- Names of individuals, and their department, who conducted the assessment
- Date
- North arrow
- Ranked trees
- Common and scientific tree names
- Qualitative notes/clarifying comments regarding the site or existing vegetation

The tree survey or Vegetation Assessment as approved, shall be provided to the Design Professional (DP) by the DM. The DP shall develop building and site concepts in accordance with the requirements identified on the survey. Deviation from the tree designations as shown on the tree survey will not be permitted.

Relocation and Removal

Relocation and transplantation of existing trees will be accomplished by either tree spade or by the balled-and-burlapped method. The UF along with the CP will determine the new location.

Removal includes cutting the tree down and debris disposal. The decision to remove a tree ranked 1, 2 or 3+ can only be made by the AVPFO. This includes removals requested during any phase of a project, including the initial design phase and construction operations.

Specific procedures for removal, relocation and replacement include:

- During design, the UF and DM will decide whether the removal will be completed by in-house crews or by the Contractor.
- The DM will give the UF a minimum of two weeks' notice before removals take place, unless there is a safety concern. In these cases, the DM will give the UF as much notice as possible.
- The project responsible for removing the trees will fund the cost of transplantation or permanent removal by cutting the tree down.
- If the Contractor is removing trees, instructions shall be provided that felled trees and all associated debris shall be removed from the project site within 24 hours.

Protection

Existing trees that are to be preserved shall be protected during all phases of the construction project. See MS 015639 – Temporary Tree and Plant Protection Specification.

Specific procedures for protecting trees include:

- The Contract Documents (CDs) shall identify all trees to remain and to be protected, including those outside the construction limit line.
- The protective zone around each tree shall be clearly identified. The protective zone for trees ranked 1 to 3+/- shall not encroach on the canopy dripline unless there is a compelling reason why this is not practical. In such a situation, approval for the deviation must be obtained from the UF and CP.
- For other trees, the protective zone shall extend to the tree canopy drip-line where possible.
- The CDs shall instruct the Contractor that no activity, including parking or storage of materials, will be allowed within the protective zones and that protective fences or other methods of protection will not be moved, removed or altered.
- The UF or designated Grounds representative will be allowed to periodically inspect the tree protection areas for compliance. The UF will contact the university Project Manager with concerns. If there is not sufficient resolution, the UF will pursue higher administrative action up to the AVPFO in a timely manner.