



Town of Micanopy
Tree Committee Memorandum

Date: October 6, 2025

To: Planning and Historic Preservation Board

From: Town of Micanopy Tree Committee

Subject: Tree Preservation and Protection Review — Micanopy Area Cooperative School (MACS) Site Plan

The Tree Committee has reviewed the Application for Land Use Approval submitted by JBPro Construction Services for the Micanopy Area Cooperative School (MACS). Our review focused on the preservation of mature live oak (*Quercus virginiana*) trees located within and adjacent to the proposed development area, with particular attention to a large live oak on Parcel 2 measuring approximately 92 inches DBH (diameter at breast height) and 23 feet in circumference, estimated to be between 150 and 200 years old.

1. Purpose

This memorandum provides technical observations and recommendations related to tree protection and site design. The intent is to support compliance with the Town's Land Development Code (Article VII — Landscaping and Tree Preservation) and to promote sound arboricultural practices that protect significant heritage trees during site development.

2. Site Observations

- The root system of the heritage live oak has likely experienced prior disturbance during the construction of NW 8th Street. Given the tree's size and age, additional impacts from nearby paving or septic installation will affect its long-term health.
- The proposed "turnaround area for pick-up queue" and septic drain field are located within proximity to the tree's likely root zone. These activities will alter the soil-root matrix and reduce oxygen availability in the soil, which increases vulnerability to pathogens such as *Armillaria* and *Phytophthora* (root rot).
- Four additional large live oaks along the south property line (DBH 38–49 inches) are also located near proposed construction areas, including septic and drain field components within approximately 15 feet of the nearest trunk.

3. Tree Protection Zone (TPZ) Considerations

The Town's Land Development Code requires the protection of trees during development and authorizes the Town to establish appropriate measures to prevent root disturbance and soil compaction. While the Code does not specify a fixed TPZ formula, arboricultural standards provide useful guidance:

- The International Society of Arboriculture (ISA) defines a **Critical Root Zone (CRZ)** as a radius equal to 12 inches for every inch of trunk diameter. For a 92-inch DBH tree, this would be approximately 92 feet.
- Research by Benson et al. (2019) suggests a 115-foot protective radius for mature live oaks, based on calculations.
- The measured canopy dripline for this heritage oak extends approximately 73 feet from the trunk. Even applying a conservative two-thirds ratio would yield a TPZ of approximately 48 feet, which exceeds the 40-foot TPZ currently shown on the plan.

These comparative standards indicate that the area proposed for protection will not fully encompass the root zone necessary to sustain the tree's health and stability.

4. Recommendations

To promote compliance with the Town's LDC and accepted arboricultural practices, the Tree Committee recommends the following:

1. **Increase the tree protection area** surrounding the heritage live oak on Parcel 2 to encompass the canopy dripline.
2. **Relocate septic and drainage components** outside the recommended protection area.
3. **Establish protective fencing** around all large live oaks prior to construction and maintain barriers until site work is complete.
4. **Avoid grading, trenching, or material storage** within designated protection zones.
5. **Consult a certified arborist** to verify tree protection fencing, monitor during construction, and provide post-construction evaluation.
6. **Coordinate directly with Town staff and the Tree Committee** before finalizing any landscape or grading revisions to ensure compatibility with preservation goals.

5. Summary

The Tree Committee respectfully submits these recommendations to assist the applicant and the Planning and Historic Preservation Board in ensuring the long-term preservation of Micanopy's heritage live oaks. Adjustments to the site layout or protective distances will help balance project objectives with the Town's commitment to protecting its historic tree canopy.

Respectfully submitted,

Town of Micanopy Tree Committee

Paul Cohen
Gary Hunt
Matt Palumbo

706 NE Chokolka Blvd.
PO Box 137, Micanopy, FL 32667-0137
(352) 466-3121 Town Hall (352) 466-4912 Fax
townhall@micanopytown.com