

Walmart Parking Lot Redesign

Lakeland, Florida

for Walmart and Kimley-Horn Associates



Walmart's plan to upgrade their existing Lakeland store into a super center required creating a plan for healthy trees. Many of the oaks, flanking Walmart's entrance were suffering and dying from little available soil – typical of many urban sites. The goal was to be able to grow large trees that provide at least 50% canopy coverage over the parking area while maintaining an adequate number of parking spaces. The trees and their soil volumes would help cool and cleanse the air, shade parked cars, manage stormwater on-site and reduce run-off consistent with LID practices.

The Kestrel Design Group for DeepRoot, reviewed preliminary site details and assessed the Walmart site plans; providing cell layouts tailored to the project. For each parking island option, Kestrel prepared a cell layout that could be duplicated within the lot.

Silva Cells are engineered to support pavements up to AASHTO H-20 Standards, while allowing for vast amounts of uncompacted soil within their matrix. The Silva Cell Integrated Tree and Stormwater System was installed as a part of the Tree Protection and Landscape Plan for the site.

Installation Summary:

- Total soil volume per tree: 1,000 ft³
- Number of trees: 16
- Total Silva Cells: 800, double stacked
- Tree Species: Multi-Trunked Muskogee Crape Myrtle, Japanese Privet, Little Gem Southern Magnolia, Date Palm, Southern Live Oak, Cabbage Palm, Bald Cypress, Chinese Elm, Lacebark Elm

SERVICES PROVIDED

- + Silva Cell design and layout



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