

UNIQUE MIAMI MIXED-USE PROMENADE

Silva Cells support concrete rain gardens & parking area



The installation around the water gardens begins.

The pedestrian mall on Lincoln Road in Miami Beach has been a magnet for sun worshipers and Miamians alike since the 1960s, when Morris Lapidus created the now-iconic shapes and plantings along the seven block stretch between Washington Avenue and Lenox. Events such as Art Basel Miami Beach and buildings by renowned architects are part of the vibrant cultural scene in the city.

Three new projects were recently added to this impressive mix, all of which utilized Silva Cells to meet their design goals: 1111 Lincoln Road, New World Symphony, and New World Symphony Park.

1111 Lincoln Road is the first of these to be completed. Envisioned by Robert Wennett and materialized by Swiss architects Herzog & de Meuron, the designers wanted to use this site to reinvent the idea of tropical modernism. This mixed-use project is at the corner of Alton and Lincoln and includes residences, retail spaces, parking and a single block extension of the famous pedestrian mall, all designed by

Raymond Jungles, Inc. Many of the original Morris Lapidus tropical architectural treatments were inspiration for the reinterpretation.

The new pedestrian mall is studded with water gardens, planting areas and varying-width stripes of Portuguese black and white mosaic that act to tie the original mall to the extension. The treatments for each large native Florida tree included openings with rain gardens, mangrove habitat and plenty of healthy, biologically active tree soil. James Urban, FASLA worked with Raymond Jungles as a consultant on the site design for the large specimen trees, recommending Silva Cells as the best way to efficiently place large quantities of loam for the trees need beneath the planned gardens.

This project is a great example of nonstandard Silva Cell applications, as well as the DeepRoot Urban Solutions design team approach to unique site requirements. While the Silva Cells are designed to meet AASHTO H-20 loading, this installation dictated that they support concrete rain gardens and containers of extremely hydric soils appropriate for recreating the local intracoastal habitat and the mangrove planting in an urban setting. The DeepRoot Urban Solutions design team determined that these large concrete planters would actually put less loading stress on the Silva Cells than our standard designs.



Two Bald Cypresses in mangrove water garden.

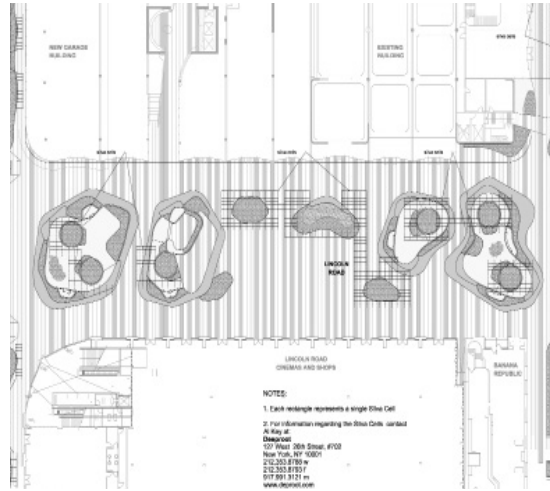


Lincoln Road surface parking lot

Contractor GT McDonald installed the Silva Cells. Some Cells went in below the water table after determining that, with strict dewatering protocols and proper aggregate placement, it would not affect the structure of the water gardens. The salinity of the surrounding soil was tested during construction and it was found that the fresh water on the site combined with the salt water to create a brackish mix to which the 24" Bald Cyprresses are well suited. The surface parking lot to the north of the pedestrian mall in back of 1111 Lincoln Road also received Silva Cells to support large tree growth in a parking lot application which featured angled parking and lots of native vegetation, including large trees.

The result is stunning. Large Live Oak, Kapok, and Bald Cypress rise majestically above the pedestrian mall, their shady native ecosystems offering an urban respite from the hot sun.

Also, in Miami Beach, Raymond Jungles, Inc. sought to increase the availability of lightly compacted soil volumes for trees at the New World Symphony and at its adjacent garage. On those sites, Silva Cells were installed for the specimen multi stem live oaks by the grand entrance to the new Frank Gehry designed theatre and exhibit space.



Lincoln Road mangrove water gardens surrounded by Silva Cells

Lastly, West 8 has included Silva Cells at the adjacent New World Symphony Park, on another specimen multi stem live oak.

Miami Beach, with its international reputation for design, art, food and international culture certainly has committed itself to growing large trees as a backdrop to this energetic city.

Installation Summary:

- Total bioretention soil per tree: 400 ft³ (11.3 m³)
- Number of Silva Cells: 860 frames and 860 decks
- Installation date: Winter 2009
- Installation type: Trees
- Project designers: Raymond Jungles
- Owner: City of Miami

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