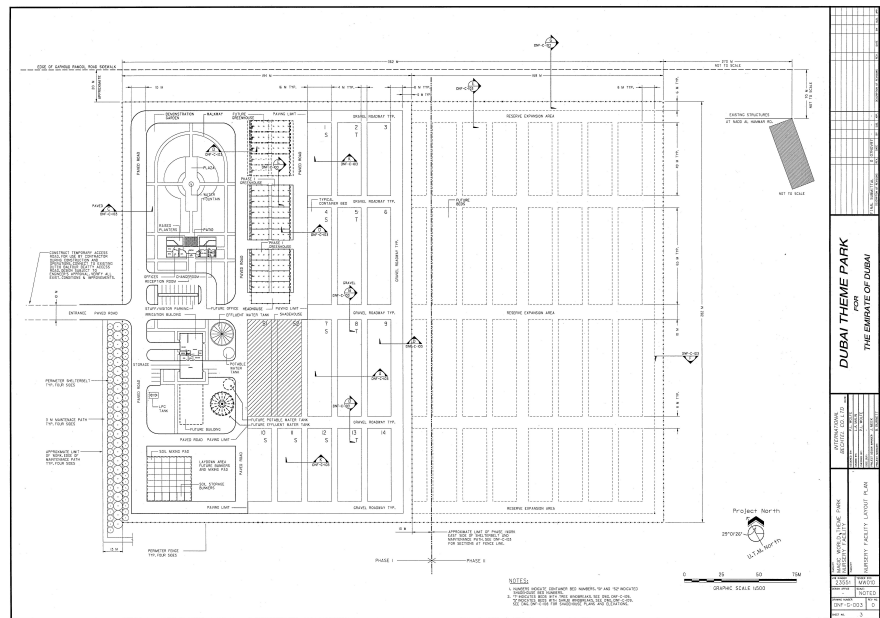


MAGIC WORLD THEME PARK NURSERY

Dubai, United Arab Emirates

Client
Dubai Theme Park Consortium
Bechtel Group

Construction Budget
\$11.5 million construction



The Magic World Theme Park Nursery, designed to be the first facility constructed for the Magic World Theme Park, had a two-fold purpose: Providing a visitor reception center for VIPs, investors, and visitors and facilitating importation of long lead-time plant material needed for the theme park landscaping.

The visitor reception center was located immediately inside the entrance and was sited to align with and face directly on the demonstration gardens. The reception center was designed with an atrium lobby and a conference room immediately adjacent. This allowed visitors to have convenient access to the demonstration gardens, the purpose of which was to showcase the type of plant material for landscaping the Theme Park.

The nursery was designed to be built in two phases. The initial phase of 4.75 hectares was expandible by another 4.50 hectares for a total area of 9.25 hectares. Phase I included the reception center and offices, demonstration garden, an irrigation-warehouse building, water storage tanks-process equipment, greenhouses, shade houses, and container beds. Phase I was designed to allow key facilities such as the irrigation-warehouse building, water storage tanks-process equipment, and laydown area to be expanded for Phase II.

Phase I and Phase II container growing beds were to be used to grow 1-gallon ground covers, 5-gallon shrubs, and trees from 5-gallon to 48-inch box sizes. Internal windbreak structures and the perimeter shelter belt were designed to provide protection from the wind. Beds were to be both drip and sprinkler irrigated with potable or effluent water. Phase II would expand the number of container growing beds by approximately 3.5 fold.

The greenhouse complex consisted of nine 275-square meter climate-controlled greenhouses and a 275-square meter headhouse. Space was dedicated for propagation using both mist and bottom heated benches. The remainder of the greenhouse space was designated for on-growing propagated material. Provisions were made to expand by four more greenhouses during Phase II.

LWA managed and coordinated the work of the consulting architects and civil, electrical, and mechanical engineers in the design of site infrastructure, buildings, and systems for the entire nursery facility as consultants to the Bechtel Group. LWA designed the demonstration garden and site landscaping, irrigation systems, mechanical process systems, greenhouses, as well as prepared full construction drawings and specifications, construction estimates and pricing and performance data.