

MARINA EAST DESALINATION PLANT

Singapore  Area: 45,300 sqm



Singapore's fourth desalination plant, the Marina East Desalination Plant (MEDP) was conceptualised through careful understanding of the existing site context. The Park Connector Network (PCN), Singapore's green linkage corridor and active pathway linking major parks and communities around the island, informed the architecture's oval shape. Sinking the building into the ground by seven metres minimised the bulk of its size (two and one-half football pitches) and transformed the building's rooftop into an easily accessed garden and park.

Water Sensitive Urban Design (WSUD) strategies were blended into the design of the building's architecture for rainwater run-off

to be captured in rooftop perimeter gardens. Channeled into water features as cascades and reflecting ponds, water is harvested into retention ponds, cleansed, treated and recycled for use.

As a significant infrastructural building of national importance for Singapore, the MEDP was planned as part of PUB's, NPark's and URA's continuing quest for greening the city. The infusion of a green environment and making the MEDP a part of the PCN green linkage corridor was part of that strategy. Despite its considerable size, the MEDP blends into its site as an important and sustainable, nature-based solution where the landscape is fully integrated into the architecture.



CLIENT:

Public Utilities Board (PUB)

LANDSCAPE ARCHITECT FIRM:

Tierra Design (S) Pte Ltd

LA 5 NAMES WHO WORKED ON THE PROJECT:

Franklin Po, Leong Tattman, Aditi Gupta

ARCHITECTURE FIRM:

Tierra Design Studio

CIVIL STRUCTURE ENGINEER:

Mott MacDonald

LANDSCAPE CONTRACTOR:

Nature Landscape Pte Ltd

LIGHTING DESIGNER:

Incube Pte Ltd

BUILDER:

Keppel Seghers Pte Ltd

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