

CASE STUDY:

Keppel Marina East Desalination Plant

SUMMARY

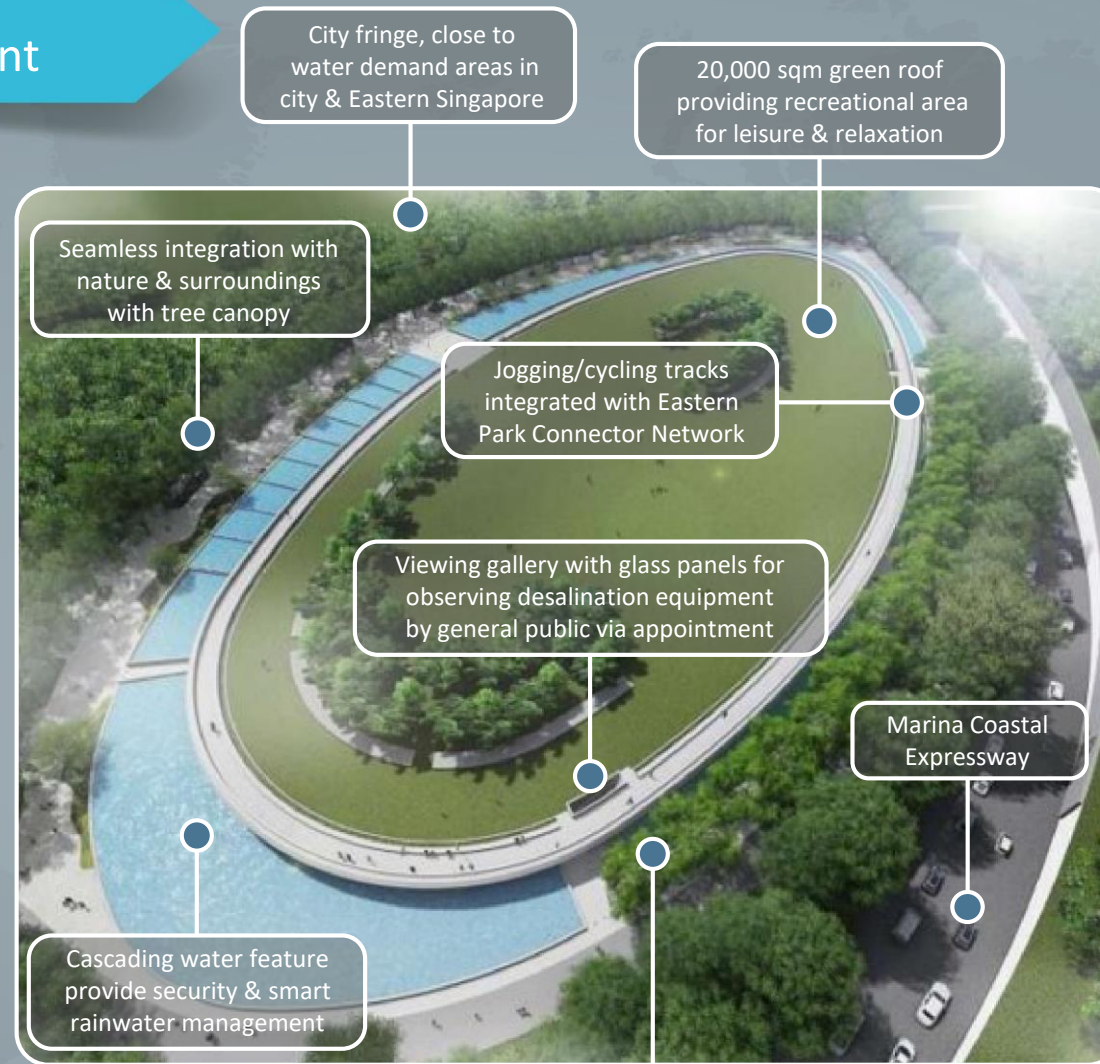
The Keppel Marina East Desalination Plant is the first dual mode plant in Singapore. It provides 30 million imperial gallons of water per day by treating two sources of water: Seawater from the Singapore Straits and stormwater from the Marina reservoir. It is the only treatment plant located at city fringe, near water demand zones in the city and Eastern Singapore.

OUR ROLES

- Engineer to PUB, Singapore's National Water Agency, for the island Republic's first dual mode desalination plant
- Consultant for the plant to be built under the Design-Build-Own-Operate model in four stages:
 - Tender preparation including preliminary design and tender documentation
 - Tender evaluation
 - Financial close
 - Construction

ASPIRATIONS

- Interfacing with a diverse range of stakeholders through the consultation process
- Forming an integrated approach to maximise investment benefits
- Enhancing the environment through sustainable urbanisation made possible by engineering and design excellence



Benefits & Achievements

“ We were tasked to look into the possibilities of conceptualising a dual-mode water treatment facility that will be located close to the city and will not compromise on the aesthetics of Singapore being a “Garden City”

JASON TAN
DIRECTOR, ENGINEERING
BINNIES SINGAPORE

30 million

Imperial gallons of treated water daily

20,000 sqm

Green roof as recreational area for the Republic

Dual Mode

Enables switch between seawater and reservoir water for treatment

23%

Increment to Singapore's water capacity