



• Tennyson Reach Residential Development



Client: Mirvac Group
Value: \$300M
Completion Date: 2010

Our team identified the conflicts between services at the early stages of design to create a more efficient design process.

Tennyson Reach is a luxury residential unit development located on the old Tennyson Power Station site on the bank of the Brisbane River at Tennyson. This fully integrated luxury riverfront residential precinct was designed to complement the Queensland Tennis Centre, and comprises three residential apartment buildings, 1.87 hectares of public riverfront parkland, and residents' health and wellbeing facilities, including a state-of-the-art gymnasium, a lap pool and recreation pools and an on-site café. The three residential towers of 9, 10 and 11 levels respectively sit over a single, 8600m² two level basement.

The development went on to win a highly commended Award in the Building and Structure category of the Engineers Australia (Queensland) Awards of Excellence.

Challenge

Due to the site's proximity to the river and its location next to a high voltage easement, Opus engineers were required to implement clever design solutions.

They also needed the structural design to accommodate specific architectural requirements, such as varying unit layouts and large open span areas.

Solution

A membrane-free hydrostatic basement slab and a unique shoring system was used to bridge the high voltage easement. These designs provided solutions to the challenging site constraints.

The Opus team utilised Revit software for building information modelling to streamline the co-ordination between disciplines through 3D clash detection.

Value

Opus' use of Revit software allowed the identification of conflicts between services at the early stages of design and created a more efficient design process.

Overall Opus' structural solutions provided a cost effective building for the client whilst still maintaining a high quality for this luxury development.

Services Provided: Structural Engineering

Tools Used: Revit

opus.com.au/projects/tennyson-reach-residential-development