



1 The Canterbury Earthquake National Memorial at dusk. 2 Inscriptions on the walls of the memorial. 3 The scenic bank surrounding the memorial area.

## CANTERBURY EARTHQUAKE NATIONAL MEMORIAL

GHD for Otakaro

Project Location: Christchurch



Slovenian Architect, Grega Vezjak, won the design competition for the Canterbury Earthquake National Memorial, and chose to work with GHD for the delivery of the \$7m project. The memorial is a place for people affected by the 2010/2011 earthquakes, in particular the families who lost loved ones. It is an open-air structure and follows the curved path of the Avon River through Christchurch. It comprises a 110 m long marble-clad wall inscribed with the names of those who lost their lives in the earthquakes. The nature of the project emphasised the importance of delivering a quality outcome to the community and key stakeholders.

Unique challenges included the physical constraints of the proximity to the river, street services and ground conditions, as well as a testing environmental, political and social context.

The project, managed by Otakaro and constructed by Brian Perry Civil, was unique to GHD because it involved all design disciplines – Civil Engineering, Structural Engineering, Services Engineering, Geotechnical Engineering, Water Engineering, Traffic Engineering, Planning and Architecture.

Through inter-team collaboration, solutions to unique challenges were developed, notably:

- Use of powerful river modelling as a design aid to minimise the environmental impact on the river flows and wildlife;
- Use of permanent vinyl sheet piling for improved structural durability and simplified constructability;
- Highly refined intelligent lighting system, designed to limit light spill for protection of the river wildlife and to avoid shining waste light into the night sky; and
- A highly durable design and submersible electrical and structural design for flooding conditions.

### Judging & Copyright Statement

This project is an entrant in the 2016 INNOVATE NZ Awards of Excellence competition. The winners will be celebrated at our Awards Gala Dinner on Saturday, 12th August 2017 in Taupo.

Images and text remain copyright of ACENZ and the consultant firm entering the project. Users are asked to give credit to the photographer where this is specified. ACENZ and INNOVATE NZ are trademarks of the Association of Consulting Engineers New Zealand.