



BRISBANE AIRPORT CAR PARK

PROJECT CASE STUDY CS 003

Project:

Brisbane Airport Car Park

Location:

Brisbane – Queensland

Client:

Brisbane Airport Corporation

Main Contractor

Laing O'Rourke

Engineer:

Robert Bird Group

Geotechnical Engineer:

Golder Associates

Pile Type:

Foundation Piles

Pile Installation Process:

Driven Precast Concrete

Project Duration:

June 2010 – Oct 2010

Project Value:

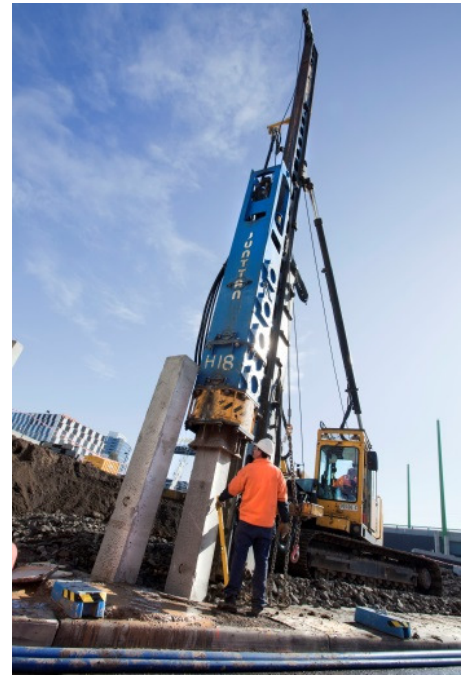
\$5M

Frankipile Australia was the specialist foundations & geotechnical contractor selected to install the piled foundations for the Brisbane Airport Car Park.

The car park was one part of a significant upgrade of the Brisbane Domestic Terminal, providing 5,300 undercover car spaces across nine levels, state-of-the-art way-finding technology, and innovative safety and security measures. The building features an eight level kinetic public art installation consisting of 250,000 rotating aluminium panels.

Ground conditions at the site comprised 20m of relatively soft marine deposits above denser sands, with the piles founding in the very dense gravels which overlie the basalt bedrock at depths of around 30m.

Frankipile Australia installed over 1,000 driven precast concrete piles to support this new structure.



Frankipile's design engineers were able to analyse multiple load cases consisting of gravity, earthquake and vehicle effects across hundreds of individual foundation elements to provide an economic and rational piling solution within the time frames required by the project team.

Coordination of the design elements with other members of the design team, the Client, and the Brisbane Airport Corporation's independent verifiers was crucial to the success of the project.

Piles were installed using latest generation Junttan piling rigs with accelerated hydraulic driving hammers to ensure efficient site operations.





Locations

Sydney

Level 1, 4 Burbank Place
Baulkham Hills NSW 2153
Ph: 02 8866 1100
Fax: 02 8866 1101
Email: sydney@franki.com.au

Brisbane

43 Holt Street
Eagle Farm Qld 4009
Ph: 07 3292 3333
Fax: 07 3292 3399
Email: brisbane@franki.com.au

Melbourne

Level 2, Building 4
540 Springvale Road
Glen Waverley Vic 3150
Ph: 03 9590 2700
Fax: 03 9561 7598
Email: melbourne@franki.com.au

Perth

Unit 3, 16 Hammond Road
Cockburn Central WA 6164
Ph: 08 9414 9644
Fax: 08 9414 9677
Email: perth@franki.com.au



Frankipile manufactures precast piles in specialist casting facilities. An ISO9001 certified Quality Management System ensures the reliability of the entire process through design, casting, transportation, installation and testing.

Frankipile also has the ability to rapidly set up remote casting facilities for specific projects where cost savings can be realised through reduced transportation requirements.



Other related services offered by Frankipile include:

- Large Diameter Bored Piles;
- Enlarged Base "Franki" Piles
- Continuous Flight Auger Piles;
- Retaining Systems (Secant, Solider Piles, Sheet Piles, etc.);
- Displacement Piles.