

AGS WA TECHNICAL PRESENTATION

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GEOTECHNICAL ASPECTS OF THE GATEWAY WA PROJECT

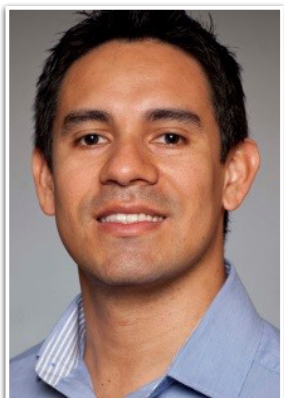
Presented by Dr Giovanny Alvarado,
Principal Geotechnical Engineer, AECOM Australia

Abstract

Gateway WA Perth Airport and Freight Access Project was WA's largest road project, designed to improve the safety and efficiency of one of the state's most important transport hubs. Construction started in 2013 and official completion was achieved in April 2016 ahead of schedule and under budget. The project was delivered as an Alliance.

The scope of works included 11 road bridges, 5 grade separated interchanges, 165 lane kilometres of new road, 7 km of noise and screen walls, 21 km of PSP and local connections (including seven underpasses and one footbridge) and 14,000 m² of MSE wall. Waterproof, reinforced concrete "bath" structures were required to take ramp roadways below a section of the new Tonkin Highway and Leach Highway interchange.

This presentation will provide an insight into the geotechnical aspects of the project including a discussion of ground conditions, detail design considerations, temporary works design and construction considerations. The main technical challenges will be illustrated through particular examples and the multi-disciplinary approach used to overcome these while providing innovative solutions will be described.



Dr Giovanny Alvarado

Dr Alvarado is a Civil Engineer with over 15 years' experience in geotechnical design and construction support for transport, mining and civil infrastructure projects in Australia, Europe and Latin America. He has a strong academic background, including research work on experimental soil mechanics at Imperial College London.

His experience includes highways, rail, tunnels, near-shore infrastructure, bridges, embankments, deep foundations, rock and soil slope design, deep excavations and major ground investigation programs. He also has experience in advanced numerical modelling in 2D and 3D for tunnels, deep excavations and complex soil-structure interaction problems.

Dr Alvarado was the Geotechnical Design Lead for Gateway WA and his involvement in the project spanned tender, detailed design and construction phases.



10 MAY



WA



WHEN

TUESDAY 10 MAY 2016

5.30pm Light Refreshments

6.00pm Presentation



WHERE

ENGINEERS AUSTRALIA - WA
712 Murray Street, West Perth,
Auditorium



COST
AGS/EA Members:
Non-members:

FREE
\$30



RSVP & EVENT CONTACT

To RSVP or for further
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