



Australian Geomechanics Society

Sydney Chapter

“A Brief Introduction to the Monitoring of Urban Tunneling Projects”

Dr David Bassett (MA., PhD., MICE. CEng.)

Monday 16 June, 2008

Parsons Brinckerhoff, Level 27 Ernst & Young Centre, 680 George Street, Sydney

(see map below for venue location)

Light refreshments at 5.30 pm for 6 pm meeting

SYNOPSIS

In this short talk, Dr Bassett will set out a complete philosophy of planning, installing and assessing instrumented tunnelling projects in soft soils and hard rock ground. Approaches to observing and recording factors such as tunnel displacement, vertical settlement and horizontal strains will be discussed, along with the purpose, importance and correct procedure of implementing effective monitoring systems. The various parameters affecting any tunneling project will be explored, and effective methods to measure, analyse and react to these covered.

The aim is to give the attendee the tools needed to assess their own project and clearly appreciate the confidence and value a well structured monitoring program can provide. The presentation will be followed by a question time, in which Dr Bassett would be glad to answer any questions from the floor.

ABOUT THE SPEAKER

Following graduation from Cambridge University in 1959, Dr Richard Bassett joined Binnie & Partners, working on the design of a number of large dams in Hong Kong, Iraq and North Wales, pioneering early instrumentation of soft foundations.

In 1962, he returned to Cambridge to complete a PhD. on the fundamental behavior of soil. He then joined Engineering and Power Development Consultants, heading up their geotechnical section where he oversaw construction of a number of major dam, road, defence and power projects.

Dr Bassett returned once again to Cambridge, this time as a member of staff where he worked on both industry and research projects for partners such as Balfour Beatty and the NE road construction units.

In 1971, Dr Bassett moved to London University where he was Head of Geotechnics at University College London until his retirement in 2006. There, his research continued to be dominated by the investigations of deformations and failure mechanisms within civil engineering structures. His expertise has been used in areas as diverse as embankment design, reinforced earth structures, ground anchoring, road cuttings, foundations and tunnels.

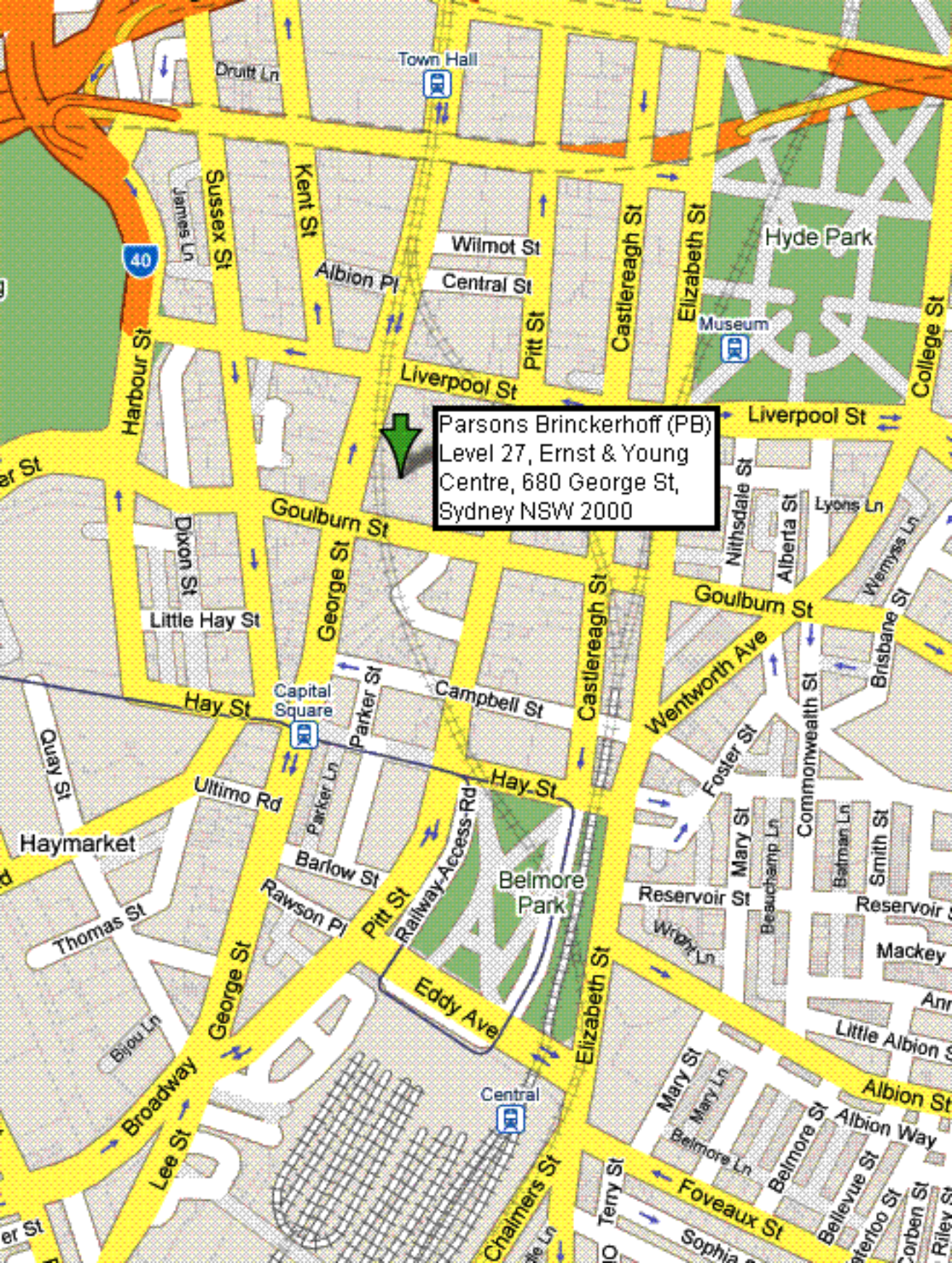
Building on his long background of engineering expertise, and his experiences on the Mansion House and Heathrow Express Tunneling projects, Dr Bassett developed electrolevel monitoring systems and what has come to be known as the Bassett Convergence System.

Since his retirement, Dr Bassett has been a lead consultant to the ITM-Soil group of companies.

*For further info. contact
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*Attendance may be credited (1 point)
towards Continuing Professional
Development requirements*





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