





AUSTRALIAN GEOMECHANICS SOCIETY

### Joint Technical Session – Wednesday, 20<sup>th</sup> February 2019.

Venue: Engineers Australia Auditorium, 3/8 Thomas St. Chatswood. Register via this link: https://portal.engineersaustralia.org.au/event/sydney-heads-rail-tunnel-0 or more information contact Derek (<u>derek.avalle.da@gmail.com</u>) or Phil (<u>phil.clark@rms.nsw.gov.au</u>) CPD - Engineers Australia (EA) members participating in ATS and AGS technical sessions. Light refreshments/drinks: 5.30pm. Presentation, Questions/discussion: 6.00 – 7.15pm.

# A joint - ATS and AGS - SYDNEY TECHNICAL PRESENTATION

## A SYDNEY HEADS RAIL TUNNEL

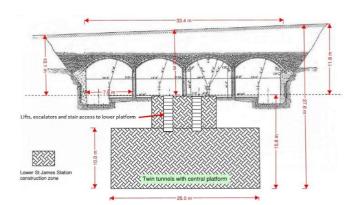
## A NEW RAILWAY CORRIDOR WHICH ALSO PROMISES SIGNIFICANT CHANGES TO THE WAY SYDNEY GROWS

#### Presented by Ted Nye, B. Eng(Civil), Dip. Eng(Civil), FIEAust, CPEng, NPER

A rail tunnel under Sydney Heads would connect the Sydney CBD through to Gosford via a 60km long tunnel extending from Bondi Junction Station on the Eastern Suburbs/Illawarra Line. Brookvale would become a new satellite CBD, only 20 minutes train travel time from the Sydney CBD. Ultimately the project could morph into a faster rail link between Newcastle, the Sydney CBD and Canberra. Another option would be to connect the proposed Sydney Metro West to the Eastern Suburbs railway line via the existing Martin Place Station. The Town Hall Station lower platforms of the Illawarra Line would then be connected directly to St James Station's new lower platforms via new tunnels. New tunnels, south of St James Station, could then be taken to Malabar for example. The project would also reduce urban traffic congestion and more broadly, improve road safety, by reducing the number of cars on our roads.



A rail tunnel across Sydney Heads



New lower platforms under St James Station



#### TED NYE – DIRECTOR - E J NYE & ASSOCIATES PTY LTD

Ted is a consultant specialising in underground engineering for transport related projects, although he is also currently involved with a pumped storage hydro project. He commenced his career on the Melbourne Underground Rail and after extensive experience gained overseas moved to Sydney as the Design Team Leader of the land tunnels of the Sydney Harbour Tunnel. More recent experience includes the Sydney Airport Line soft ground tunnel, road and bus tunnels in Brisbane, and road tunnels Melbourne and Sydney (in the past year as a specialist advisor). Other recent rail projects being the Melbourne Metro (client side) and Sydney Metro Stage 1 (design). The initial concept of a rail tunnel under Sydney Heads, Ted conceived as far back as 1996 and canvased the idea to the then Statewide Roads. The concept has been further developed during 2017 and 2018 with support from industry colleagues Peter Prince and Dr Sam Lackey.