

Merry Christmas and a Happy New Year



The Chapter's committee would like to wish all its members a very Merry Christmas and a Happy New Year and wishes all the best for 2008. The committee can now announce the position for chairperson has been filled. Richard Steel, Beca Infrastructure, who has been the committee's Treasurer for the past 2 years, has kindly allowed himself to be put forward to chair the committee through to the 2008 AGM. This appointment left the Treasurer's position vacant which Brendan Bisley, Maunsell, committee member since March 2006, courageously put his hand up for.



Chapter Initiatives for 2008

On 6 December the REAAA Committee met with representatives from a variety of key stakeholder organisations including Transit, Road Controlling Authorities Forum, Roding New Zealand, Ingenium, and ACENZ.

Our objective was to confirm REAAA's role in the sector and in so doing identify the areas where we can provide most value to our members. As an interesting aside, all of the representatives commented on the value of the meeting as an event in its own right and we hope to further develop that sector organisation rapport over the next year. [more](#)

Successful Roadshow and Low Volume Roads Workshop

The 2007 Roadshow was held at the five main centres commencing in Auckland on 19 September and finishing in Christchurch on 25 September. Once again there was a great range of topics which were very well received. The feedback from the 200 attendees has been very positive and with plenty of encouragement to continue the annual roadshows. Copies of the presentation are available on the chapter's website at www.reaaa.co.nz

Organising for the 2008 roadshow is already under way and if you are interested in submitting a paper/presentation please contact the chapter's secretary at lisa.pallister@reaaa.co.nz

2007 also saw the biannual workshop for the Low Volume Roads Workshop held in Nelson from 18-20 July. This was very successful with 153 Delegates attending this year – a record attendance! Presentations from the workshop are available online at www.roads.co.nz

New Zealander Leads one of Australasia's Largest Roding Projects

A New Zealand engineer is leading the design team for the largest road infrastructure project ever to be undertaken in Queensland Australia, with a construction value of A\$2 billion - The North South Bypass Tunnel (NSBT).

The tunnel project comprises two uni-directional 4.8km long, two laned tunnels that will connect north-south traffic under Brisbane, between Bowen Hills and Woolloongabba. The road will carry a significant number of vehicles underneath the city each day, reducing surface traffic and enabling a series of urban enhancements to be completed in adjacent suburbs. [more](#)

124m diameter cutterhead





Volume 23 Spring/Summer 2007

www.reaaa.co.nz

[Join REAAA NZ Chapter](#)

[Newsletter Archive](#)

[2008 Calendar](#)

[Search REAAA Member](#)

Chapter Initiatives for 2008

On 6 December the REAAA Committee met with representatives from a variety of key stakeholder organisations including Transit, Road Controlling Authorities Forum, Roding New Zealand, Ingenium, and ACENZ.

Our objective was to confirm REAAA's role in the sector and in so doing identify the areas where we can provide most value to our members. As an interesting aside, all of the representatives commented on the value of the meeting as an event in its own right and we hope to further develop that sector organisation rapport over the next year.

It is clear that in keeping with our core objectives, REAAA has a valuable sector role to play in disseminating knowledge and information across all three of its constituencies namely; contractors, clients and consultants. It is also clear that we can and should draw more collaborative input from IPENZ, Roding New Zealand, Institution of Civil Engineers and Ingenium as well as our corresponding organisations in Asia and Australia.

As an outcome of the above discussions the committee has since resolved to focus its efforts on improving and developing the dissemination of knowledge and information through three key mechanisms:

- Continued development of the content of the REAAA Web Site
- Annual Roadshow
- Breakfast presentations and discussions

Specific goals and initiatives proposed for 2008 include strengthening of our promotion of the annual Roadshow, increased international content, and consideration of taking the Roadshow to one or two more centres. We also propose to use the international connections of our corporate and institutional members to identify international visitors to present at Breakfast meetings. By meeting travel costs we also hope to ensure a distribution of such events around the main centres. A "Speakers Corner" opportunity at each meeting will be provided to prompt discussion on topics of regional and national importance.

Member's comments on the above initiatives would be welcomed by the committee.



Volume 23 Spring/Summer 2007

www.reaaa.co.nz

[Join REAAA NZ Chapter](#)

[Newsletter Archive](#)

[2008 Calendar](#)

[Search REAAA Member](#)

New Zealander Leads one of Australasia's Largest Roding Projects

A New Zealand engineer is leading the design team for the largest road infrastructure project ever to be undertaken in Queensland Australia, with a construction value of A\$2 billion - The North South Bypass Tunnel (NSBT).

The tunnel project comprises two uni-directional 4.8km long, two laned tunnels that will connect north-south traffic under Brisbane, between Bowen Hills and Woolloongabba. The road will carry a significant number of vehicles underneath the city each day, reducing surface traffic and enabling a series of urban enhancements to be completed in adjacent suburbs.

John Bridgman, Director - Transport at global engineering consulting firm Maunsell relocated from New Zealand to Australia in mid 2006 to lead a design team of over 250 people at its peak, as Project Director.

Maunsell (with their joint venture partner Parson Brinckerhoff) have been engaged by the contractor Leighton Contractors and Baulderstone Hornibrook Bilfinger Berger Joint Venture (LBB JV) as the lead designer and are responsible for the civil and structural design of the surface and southern roadheader tunnelling work.

Maunsell is also managing the tunnel designers and geotechnical consultants designing temporary tunnel support and providing concept design for tunnel ventilation, fire protection, lighting, communications and security systems.

The tunnel is the first project to get underway as part of Brisbane's Transport Plan and the first critical component of Lord Mayor's TransApex vision that aims to reduce deficiencies in Brisbane's urban road networks.

Brisbane City Council (BCC) has chosen to deliver the NSBT using a Public Private Partnership (PPP) model that will see a private consortium, RiverCity Motorway (RCM), build, own, operate and maintain the tunnel for approximately 45 years.

This massive project is a challenging and complex undertaking and some of Maunsell's top New Zealand engineers have been relocated to Australia to work on the project. Multiple worksites have been established across the city during construction, creating work for around 1500 people at its peak.

The total length to be excavated is 6.8km from end to end which includes a 4.8km tunnel as well as associated road connections. 3.5 million tonnes of spoil will be removed and 280,000 cubic metres of concrete used to construct the tunnel.

Due to local geology, in particular the hard Brisbane Tuff rock and Neranleigh-Fernvale Formation, a combination of tunnel excavation methods have been used. Most of the tunnel will be constructed by two A\$50 million tunnel boring machines (TBM), which have a rate of progress of 16-20 metres a day and compressive strength of between 80 and 150 MPa.

Eight roadheaders digging approximately 2 metres a day will work on other aspects of the tunnel such as ramps access tunnels and merges.

LBB JV has designed its construction process to minimise the impact on business and residents living and working near construction sites. The tunnel machinery will be lowered down purpose built construction access shafts and tunnel enclosure buildings will be built above the shafts to help reduce the impact of noise and dust on the local community.

Construction commenced in September 2006 with contract completion expected in October 2010.

The tight construction program called for a 120 strong design team to be mobilised at the project site to work collaboratively with the contractors, managed by Maunsell. In all, over 500 designers from 10 countries worked on the project over the 60 week design schedule.

Winning the engineering design contract for the NSBT confirms Maunsell's reputation as a leading design consulting firm in transport and adds to their impressive portfolio of iconic Australian and New Zealand project wins.

For more information contact:

Richard Garrett
NZ Marketing Manager
Ph: 09 366 0136 Mob: 0274 720 020
<mailto:richard.garrett@maunsell.com>
www.maunsell.com



124m diameter cutterhead



Tunnelling at kangaroo point