

## Waianakarua Bridge and Sharpes Bend



Waianakarua Bridge

Built from local limestone in 1874, this is one of the oldest bridges on the state highway system still in use. It crosses the North Branch of the Waianakarua River.

The bridge was designed by the Otago Provincial Council's Chief Commissioner of Surveys and Works, John Turnbull Thomson, civil engineer and has a Historic Places Trust A classification. The bridge received recognition as a significant



Waianakarua Bridge

structure by the Institute of Professional Engineers in 1990.

The bridge has been subtly widened and strengthened, so that its original

characteristics are retained. The NZ Historic Places Trust was consulted over this work to ensure that the widening and strengthening does not significantly alter the bridge's appearance.

Work carried out by Works Infrastructure involved the removal of existing road surface and excavation of the original earth fill; removal of the existing masonry block sidewalls; construction

of reinforced concrete, "lower" deck, spandrel, walls, wingwalls and a wider (1.8m extra width) "top" deck; replacing of the earth fill within the spandrel walls between the "lower" and "top" deck; the reshaping and replacing of the masonry side walls; installation of a reinforced concrete beam inside and linking the masonry blocks to strengthen the "side walls"; extension and protection of existing masonry wingwalls using reinforced concrete walls.

At Sharpes Bend, the adjacent project at the old poorly aligned railway bridge has

been demolished and replaced with a large Armco underpass, and two bends are currently being bypassed with a realignment through a small forest.

Sharpes Bend



## 12th REAAA Conference

The 12th Conference of the Road Engineering Association of Asia and Australasia (REAAA) will be held in Manila, Philippines, on November 20-24, 2006. The conference is being jointly sponsored by the Department of Public Works and Highways (DPWH), the Road Engineering Association of the Philippines (REAP) and the REAAA Philippine Chapter.

The Conference will provide a forum for all those involved in road operation, management and administration in the region to share knowledge and experiences and build on current professional networks or establish new networks.

A key element of the Conference will be a series of technical sessions where speakers from all over the region will have the opportunity to present the results of current research projects, details of recent projects of interest and experiences gained from the application of research findings and the implementation of civil engineering facilities.

A call for papers has been announced and details can be accessed on the conference's website [www.reaaaconference.com.ph](http://www.reaaaconference.com.ph)

### Contribution and enquires

This newsletter is published for the benefit of members.

Enquires about the chapter and contributions to the newsletter may be directed to:

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## REAAA NZ Chapter Roadshow

The 2005 roadshow was held at the five main centres, commencing in Auckland on Wednesday 31 August and finishing in Dunedin on Tuesday 6 September. Once again there were a great range of topics which were very well received. The feedback from the 180 attendees has been very positive. It was commonly noted that the roadshow enables great networking opportunities and a great forum for exchange of information and innovative ideas. The topics covered during the roadshow are listed below. Copies of the presentations have been sent out on CD to all the attendees.

- 1 An International Perspective of Foamed Bitumen Pavement Recycling, presented by Dave Collings, Loudon International, South Africa.
- 1 International Road Closure Best Practice, presented by John Smith, Fulton Hogan and Ray Edwards, Higgins Contractors.
- 1 Protecting State Highways - What does that really mean?, presented by Transit Regional Managers.
- 1 Use of Column Drains in Landslide Stabilisation, presented by Richard Kaser, GHD.
- 1 Toll Projects in Australia, presented by Dale Turkington and Robert Jamieson, BECA Infrastructure Ltd.
- 1 Local topics.

The committee is looking forward to coordinating another successful roadshow for 2006 and planning will begin in the New Year.

## Austrroads Report

The Austrroads Council met in Perth, Western Australia on 10 November 2005.

The Annual General Meeting was held in conjunction with the Council meeting. The AGM adopted the annual report and the accounts for 2004-05.

An assessment of the progress made in the implementation of the current strategic plan was reported to Council. Overall the implementation is proceeding satisfactorily. Only two specific actions identified in the plan are yet to commence. There is still some work to do in the communications area to increase the awareness and utilisation of Austrroads outputs. This will be a priority for the national office in the remainder of the plan period.

The only significant new priority identified since the adoption of the plan has been the area of skills shortages and capability development within road authorities. A new Capability program has been established to address this emerging priority -Developing capability.

Skill shortages within the road authorities and the road industry generally have been a growing concern. This has been discussed by the Council at the past few meetings. As a result of decisions at the last meeting Council members were invited to nominate one representative to participate in the development of specific project proposals. This group met in September and identified four areas for projects and assigned a lead agency and project team to each. The Council considered and approved the following four projects and respective lead agencies:

- 1 Best practice guide for road authorities in addressing skills shortages and building capacity - MR WA
- 1 Review of tertiary education courses and, where appropriate, development and delivery of post graduate courses to meet the needs of road authorities - DMR Qld
- 1 National marketing plan for careers in road authorities - RTA NSW
- 1 National workforce capability strategy - VicRoads.

It was also decided to set up a new Capability program to oversight the projects and provide a forum to identify and progress issues in this area. Terms of reference for a Capability task force will be finalised by the Executive committee out of session and Council members will be invited to nominate representatives to the task force.

For an update from PIARC the latest newsletter is available from the following page on the Austrroads website: [http://www.austrroads.com.au/wra\\_newsletter.html](http://www.austrroads.com.au/wra_newsletter.html)

## City Care's training model wins best practice award

City Care's pre-apprentice work skills programme was lauded at the recent 2005 Rooding Excellence Awards, winning the InfraTrain NZ Best Practice Award.

The company's unique training scheme offers unemployed youth and school-leavers the opportunity to participate in paid employment through a series of rotational placements covering the varied trades at City Care. The programme offers the trainees a pathway to a career in the contracting sector in roading, horticulture, water and wastewater, building services or fleet services. At the end of the 10 month programme, trainees are encouraged to apply for an apprenticeship in their area of interest.

Faced with industry-wide skill shortages and concerned with the social issue of high youth unemployment, City Care developed the programme in 2002 as a means of securing a pool of young skilled staff to allow the company to continue to grow sustainably in the future. The programme has been offered in Christchurch on an annual basis since then and was expanded to include Tauranga this year.

City Care programme manager Louise Green says that City Care has recruited 68 young people through the programme over the last three years, with a retention rate of 70%. "The really great thing is that, in addition to the positive results for the company, the trainees have really blossomed", says Green. "Their range of skills and their personal confidence levels have improved enormously and, for many of them, it has completely turned their lives around".

A good example of this is Hohepa Witana, who is also known as "G". G had a tough upbringing in South Auckland, where he got in with the wrong crowd and had been in trouble with the law. He joined City Care's pre-apprenticeship programme in 2004 and is now a valued and

experienced member of the company's surfacing and paving crew.

G has been on the 'straight and narrow' for 3 years now and he says that his job at City Care has changed everything in his life for the better. "The best thing is getting up in the morning and knowing I have a purpose for the day", says G. "It's made me look at other people and try to help them out. I've been there and now I know how good it is on the other side. I've got a family now and I'm really getting things together".

Anthony Skipper, a graduate from the first pre-apprentice intake in 2002, is also full of praise for the positive effect City Care's programme has had on his life. Skipper admits that he found his pre-apprenticeship year challenging. "I didn't have a great work ethic back then. I couldn't get out of bed in the morning, couldn't prioritise and felt under pressure. I'd never had a proper job before and didn't have any confidence," says Skipper.

However, Skipper proved to be a good all-rounder and showed promise in many of the 20 trades at City Care. Eventually he chose roading construction and has been mentored by Foreman Jeff Anderson for the last 2 years. Anderson says that Skipper has come a long way, from someone who knew nothing about roading



2005 Pre-apprentices in Christchurch

to being really skilled and valuable to City Care now. "Anthony is not scared of hard work and is always thinking ahead. He has developed a great work ethic and values, and is really proud to be at City Care".

Skipper's strong social skills and willingness to take on responsibility have resulted in



Hohepa Witana

him being the first pre-apprentice to become an AWUNZ union delegate. He is very enthusiastic about progressing his career further. "I'm aiming to be 2IC within the next year - I want to be a boss. I get on well with people and I'm really comfortable where I'm at right now. I'm really confident - I guess you could say that I'm ambitious now that I've found something I like", says Skipper.



2005 Pre-apprentices in Christchurch

Green attributes the programme's success to its holistic approach. "The company has worked with a number of partners, including Work and Income, Methodist Mission, CPIT, Workplace Chaplaincy Services, other contracting companies and local schools, to ensure the success and ongoing sustainability of the programme", says Green. City Care also worked with Infracore to develop a meaningful new qualification for the trainees - an NZQA Level 2 National Certificate in Civil Infrastructure.

According to Green, most of the trainees are progressing onto higher qualifications (level 3 and 4 on the NZQA framework) contributing to City Care's strategic goal of upskilling the company's workforce to tradesperson level.

## Note from the Chairman



First of all I would like to wish you all a Merry Christmas and Happy New Year.

This last year seems to have been an especially challenging one for everyone, no matter whether they work for a road controlling authority or are either a consultant or a contractor. Next year looks like more of the same. The increasing workload across all elements of transportation planning, project investigation, design and construction has highlighted the staff and skill shortages that have built up over time. When this is coupled with the changes in perspective that the LTMA and LGA require the NZ industry has found itself in the need of significant growth and upskilling.

The industry's initial response to this has been for there to be unprecedented levels of both staff movement and international recruitment. However while the latter is providing new skills and people, albeit still with a need to gain a NZ perspective, the former is akin to rearranging deck chairs.

One of the other responses over the last year or more has been an increase in the number of courses and training events each year. These are developed, paid for and delivered by a wide variety of different organisations and have widely varying standards, value and attendance. It is important when people and skills are such a tight resource that training investments are well targeted, delivered and received. It is therefore important that the level of coordination and planning in the industry increases. Over the next year we in the NZ Chapter of the REAAA will make an effort to work with the various agencies involved and establish processes and responsibilities for overall coordination of training needs and delivery.

We see this as a key area where we can add value to our members in 2006.

In the meantime have a happy and safe break and we will see you all again in the New Year.

Mike Rudge  
Chairman

### 2007 Low Volume Roads workshop

The date has been set for the 2007 Low Volume Roads Workshop. The 2 day workshop is to be held at the Rutherford Hotel, Nelson, on 19 and 20 July 2007.

### 2006 INGENIUM Conference

The 2006 Conference Organising Committee is currently putting together another great INGENIUM Conference to be held in Auckland from 8 to 10 June 2006. Please update your diaries.