

## PRESIDENT'S MESSAGE

## THE RECYCLING OF RECYCLED STABILISED PAVEMENTS.

BY DAVID BERG

The recycling of stabilised pavements has become more prevalent with state and local governments taking the opportunity with industry to develop strategies of recycling the pavements as they reach the end of the life cycle.

A common question asked throughout the industry for many years has been: how the stabilised layers will be treated at the end of their life? Over the past few years the economical, environmental and social benefits have shown the importance of stabilisation in the ongoing rehabilitation of our pavements for the second time.

Limited funding encourages our road builders to look at opportunities to drive the dollar further and rehabilitate previously recycled pavements. There are significant





savings with the recycling of existing materials needing only limited new materials to site, no excavation costs and no disposal costs.

Of recent times we have witnessed state road agencies and local government recycling all types of previously stabilised pavements. These include previously lime-stabilised, cement-stabilised, deep lift heavily bound cementitiously stabilised and even foamed bitumen stabilised pavements. Recycling these pavements, using a stabilisation method, increases the pavement life again.

The common reasons for the rejuvenation of these pavements are:

- Reaching the end of design life.
- Increased traffic volumes.
- Poor subgrade.
- Thin pavements.

By using stabilisation options, SEE (social, economic, environmental) benefits will be pronounced for the stakeholders:

**Social:** The process is speedy and has less disruption to local residents and motorists, as they are able to use the road during the reconstruction process.

**Economical:** Achieving major cost reductions against conventional or total reconstruction. Savings of 50 to 70 per cent are achievable.

**Environmental:** There is no need for new quarry material to be imported, no disposal of materials to landfill, fewer truck movements minimising the CO2 emissions and minimising the carbon footprint. With the recycling of the pavements, waste materials including slag and flyash are often utilised.

As with all rehabilitation projects, testing



to produce a valued design life is essential for guidance in the delivery of the desired quality product. The on-site work procedures should also offer a safe work environment whilst carrying out the stabilisation to best practice.

Local government roadways, fatigued after more than twenty years' service with higher than original traffic loadings, have been rehabilitated successfully. This has reignited design life back into the pavements with the addition of varying additives including lime, cementitious, polymer and foamed bitumen.

Deep lift heavily bound pavements have been recycled using slow setting cementitious blends or the use of foamed bitumen.

## Recycling of a foamed bitumen pavement that had a poor subgrade underneath.

The foamed bitumen pavement had been down for 12 months and was profiled and side cast, the subgrade treated and the foamed bitumen pavement reinstated with the introduction of a minimal amount of lime.

AustStab, along with the road agencies, are monitoring the progress of the rehabilitated recycled pavements and develop further opportunities for the engineers to utilise one of the most responsible techniques of rehabilitation for our road network.

AustStab looks forward to providing further information to the industry in relation to recycling of previously recycled pavements. Please feel free to contact Leah Fisher or me through AustStab.

## CEO'S MFSSAGE

BY LEAH FISHER

As we enter the Christmas/New Year period, it is often a good time to reflect on the year that has been and look forward to the New Year.

Throughout Australia the stabilisation industry has experienced the same cycles as other civil infrastructure businesses this year. The Queensland and Western Australian markets have been strongly affected by the decline in the mining sector and the end of the flood recovery funding in Queensland. A stronger market in New South Wales and Victoria has provided stability

At AustStab we maintained a consistent management structure and put in place a new strategic plan that the members have been working on over the past 12 months, and hope that this has provided a buttress for our members during these ambiguous times

I recently met with some of our members on the east and west coast and was pleased to see that the feelings of confidence are returning. Our key issues remain central and we advance with a clear path on these matters.

Recognition of the AustStab/ARRB Accredited Contractors scheme as the benchmark for providing a level playing field for all stabilisation operators throughout Australia is our number one issue in all states. We welcome, and in 2015 continued to receive, new members to the industry. They are willing to comply with the requirements of the industry-based standards for conducting stabilisation operations and providing plant and materials to the market. This requires the right people, plants and

experience operating in accordance with industry developed AustStab standards and Austroads methods. We continue to lobby in this space. I look forward to 2016, hopeful that more state road agencies and local government bodies will adopt the accreditation scheme as the minimum standard for conducting stabilisation operations. I am pleased that we have received notification that the first product being considered for an interim certificate under ARRB's TIPES product evaluation scheme is for an AustStab member.

Educating specifiers and councils are our next key objectives. In 2015 we released the second edition of the Pavement Recycling and Stabilisation Guide. This well-received publication from our library is used by members to help achieve this. Complimentary copies of the guide continue to be provided to students of the CPEE In-situ Stabilisation Course, which in 2015 was delivered to in seven locations to more than 100 students. Details of how to order this guide are included in this edition of the *Roads & Civil Works Magazine*. Details of the forward program for 2016 are available on the AustStab and CPEE websites.

In 2015 we also released the first edition of the Unsealed Pavement specification, which is based on the DOTARS-funded works of 2007 to 2010. In 2016, AustStab will release at least two additional printed publications, a commemorative publication celebrating 21 years since our incorporation and a further guide to the construction of in-situ stabilised pavements. Further exciting work on state and AustStab stabilisation specifications will be completed.



RECOGNITION OF THE AUSTSTAB/ ARRB ACCREDITED CONTRACTORS SCHEME AS THE BENCHMARK FOR PROVIDING A LEVEL PLAYING FIELD FOR ALL STABILISATION OPERATORS THROUGHOUT AUSTRALIA IS OUR NUMBER ONE ISSUE IN ALL STATES.

In 2016 we will continue with further trials, more training, more publications, more education of industry through tradeshows and alliance engagements.

I look forward to our brand and website refresh early next year, as well as our 21st Annual General Meeting and Conference to be hosted on the Gold Coast in 26 to 28 July 2015 and other strategic initiatives.

Without the tireless support of our executive, council, members, particularly our active volunteers, sponsors, industry partners and colleagues the fantastic achievements and industry leading expertise of AustStab would not be possible. For all of your efforts in 2015 I thank you, and wish you and your families a safe and happy Christmas break.

With hope and optimism I look forward to the strengthening of this support in 2016.

ROADS DEC/JAN 2016