

THE *Aust* Stab UPDATE

AustStab released a new strategic plan and announced its new Executive make-up at its 20th Annual General Meeting and Gala Dinner in July. The AGM was held at the Yarra Valley Lodge, Chirnside in Melbourne, from 27-29 July. AustStab's new President is David Berg, CEO Stabilised Pavement of Australia, and the new Vice-President is Stewart Geeves, Civil Engineer with Andrew Walter Constructions. The event was also the stage for the release of the winners of the highly regarded AustStab Awards of Excellence. The AustStab segment is this issue of *Highway Engineering Australia* features articles on the new executive and some of the key winners in the Awards of Excellence.

AUSTSTAB EXECUTIVE – COUNCIL 2015

At AustStab's annual conference and AGM in July, the new AustStab Executive was elected.

The new President is David Berg, CEO Stabilised Pavement of Australia, who has had a long term association with AustStab and has been an active member of Council since 2013.

David comes to the role with the support of his peer group. He sees education of the industry as one of the key challenges that is before AustStab, and has recognised this importance by supporting the inclusion of education as a key pillar to the AustStab Strategic Plan for 2015-2018.

Stewart Geeves, Civil Engineer with Andrew Walter Constructions (AWC), is the new Vice President. Stewart is a long term member of the AustStab Council, with 12 years' service.

AWC is one of AustStab's longest term contracting companies, and Stewart is able to

provide insight on the industry from a niche section of the stabilisation market in Tasmania.

Heath Curnow, CEO with the Stabilime Group, has retired as President of AustStab, but will remain an active member of Council moving forward.

Leah Fisher will continue as CEO with AustStab and Greg White will stay-on as the Executive Officer, providing continued stability to the industry.

The AustStab Council endorsed a new strategic plan at the conference, building on the previous strategic plan.

The new pillars of the association will be to work in three key areas, as the technical centre of stabilisation expertise in Australia:

- Education - to continue to deliver work-leading education throughout metropolitan and regional Australia;

- Collaboration - to retain and build important working relationships with state road agencies, national road research organisations such as ARRB, working with tertiary institutions to educate and encourage research, as well as to continue to work with other associations such as AAPA, IPWEA and CCAA; and

- Narration - to continue to tell the stories of success and learnings through vehicles such as the Awards of Excellence, the AustStab website and publications such as *Highway Engineering Australia*.

Pictured below: The new AustStab Executive. Back row: David Berg, Greg White, Stewart Geeves, Warwick Dingle, Brad Brown, Mark Pilgrim, Allen Browne. Front row: Warren Smith, Heath Curnow, Leah Fisher, Brett Fulloon, David Scicluna



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CONTINUAL IMPROVEMENT PROGRAM

Active Blind Spot Detection for ALL Mobile Plant

Stabilime was the winner of the AustStab Awards of Excellence 2015 category for Workplace Health and Safety for a unique active blind spot detection system that has been installed on all plant.

Stabilime operates in local, state and federal government jurisdictions – it works in pavement stabilisation and other civil works.

It operates in accordance with an integrated Management System which incorporates the international standards for safety AS/NZS 4801:2001, quality AS/NZS ISO 9001:2008 and environmental management AS/NZS ISO 14001:2004 as well as adopting a risk management system.

The subject of the Award was based on a continual improvement model of business management.

At the design and development stage of a particular project, a risk assessment for the project was completed. This identified improvements that could be made onsite to assist plant operators with site safety - particularly in the area of plant operation.

A gap was identified between standard factory fitted beepers and spotters used to assist vehicle movements.

The gap analysis found the view from some of the plant did not allow for the operator to confidently negotiate the full operating environment without experiencing blind spots. The plant that was assessed included:

- Centrally mounted stabiliser;
- Computer controlled binder spreader;
- Grader;
- Water truck;
- Padfoot roller;

- Smooth drum roller; and
- Site vehicles.

Two types of devices were installed to allow safe operation of all equipment onsite, even if a spotter was not assessed necessary.

1. Reversing Cameras

These are standard safety devices that you will find on most plant such as cars and trucks, but some of their specialised plant did not have these factory fitted. As a result, a visual Active Blind Spot Detector was fitted to each fleet vehicle.

2. Pulsed Radar Object Detection Sensors

These devices integrated seamlessly with other safety devices and gave an extra level of safety that was unattainable with standard safety devices.

The device detected stationery and moving objects behind the vehicle and alerted the driver with lights and sound, which became progressively louder as the object got closer.

Importantly, this system incorporates a pulsed radar which detects objects through particulates such as mud, rain and dust (lime, concrete and crushed rock). Under normal operation, dust is a constant safety concern on insitu stabilisation worksites.

The pulsed radar detection sensors were:

- Energy efficient;
- Easily fitted; and
- Adaptable to extreme weather conditions.

As a result of the installation of the two devices in conjunction with each other, the operation has experienced:

- A significant reduction in minor damage and associated repairs;
- A significant reduction in near-miss incidents and improved employee morale.



CATEGORY 2: EXCELLENCE IN RESEARCH OR EDUCATION

The winner for Category 2 of the AustStab Awards of Excellence 2015 in Research or Education was ARRB Group (formerly Australian Road Research Board) for its continuing research in all areas of pavement stabilisation.

ARRB in conjunction with Austroads

ARRB over the last few years has been carrying out research on pavements which has been initiated and funded by Austroads. The scope of research has been widespread; however there have been three particular projects that have or will greatly advance the practice and use of stabilisation in Australia.

TT1358 Procedures for the Design of Pavements on Lime stabilised Subgrade Materials.

Until the release of this report there was very limited information relating to the structural

contribution of lime stabilised subgrades and the design guide is quiet on the subject.

Three out of five SRA's did not allow for the structural contribution of lime stabilised subgrades; the other two had different methods.

The report gives:

- The mechanistic design of pavements which include lime stabilised subgrades; and
- The use of empirical design charts for design of pavements with lime stabilised subgrade material.

This research has the ability of greatly increasing the use of stabilised subgrades and will be included in the next edition of the Austroads design guide.

TT1825 Design and Performance of Foamed Bitumen Stabilised (FBS) Pavements

There is an interim procedure for the design of FBS pavements; however there was concern that this was not well founded as other conventional pavements. This meant many Australian jurisdictions were unwilling to use FBS to any great extent.

The objectives are:

- Improve the Austroads procedures for the design of FBS materials;
- Identify distress modes; and
- Improve and harmonise national mix design.

Although there is still two years to run on this project, the interim reports have advanced knowledge on FBS to the extent SRA's are greatly increasing the use of the procedures.

**Independent Cement
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Following the positive interim results of the work, the level of interest and engagement in this area has increased across all states.

TT1897 Increasing the Use of Low-cost Modified Granular Materials

The purpose of this project is to provide tools to make use of low cost modified granular materials.

The report will look at the design and use of lightly bound pavements with a UCS in the range of 1 to 2 MPa. This product has been



previously ignored due to lack of research. There are many examples of the use of this product giving a high rut resistant pavement without the negative effect of detrimental cracking.

The research will hopefully develop a design and construction method that will give road designers confidence in using lightly stabilised pavements, especially where conventional pavements are not viable due to geography or local natural materials.

ARRB, by this research, will give many Australian road designers economical and sustainable pavement options which they currently do not use.

INNOVATION IN SUSTAINABILITY THROUGH SURFACE MINING TECHNOLOGY

In March 2015 Accurate Asphalt & Road Repairs (AARR) was awarded the Roads and Maritime Services Contract for the Pavement Rehabilitation of two sections of the New England Highway near Murrurundi in New South Wales.

This project's innovative pre-treatment of the pavement surface using a surface miner, in an in-situ stabilisation project, was the subject of the AustStab Awards of Excellence 2015 Category three Highly Commended Award Winner at the Yarra Valley in Victoria.

The contract consisted of:

- Full service in-situ stabilisation of existing pavement material including pre-milling, spreading and incorporating additive as nominated at the respective sites; compaction and trimming to provide a heavily bound pavement of UCS > 4MPa, meeting the ride requirements of Roads and Maritime Services specification R75.
- Final trimming including saw cutting centre lines and edge lines at 120mm depth 48 hours after trimming, with pavement to be returned to existing levels and cross fall.
- Removal of excess spoil associated with trimming.
- Sealing of stabilised pavement in accordance with Roads and Maritime Services specification R106, and

- Line marking in accordance with Roads and Maritime Services specifications R141 and R142.

The total area of work required to be stabilised was:

- Site 1 New England Highway at Liverpool Range 11,500m²; and
- Site 2 New England Highway at Kankool 29,300m².

Operating Environment

Stage One of the project involved the in-situ stabilisation of 11,500m² @ 380mm with three per cent 60/40 Slag/Lime blend on the southbound lane of New England Highway at Liverpool Range.

The client provided preliminary core testing results at tender that indicated the presence of some bound pavement layers in limited sections of the work area.

To mitigate these bound layers and to improve overall in-situ mixing, AARR included the use of a 2m Metrecut Profiler to pre-mill the top layer of the entire work area.

Following the normal process for pre-milling AARR crews began to mill the top section of the pavement, with the intention of then running the stabilisers to the full-depth.

However the stabilisers were unable to cut through the bottom layer due to the pavement's excessive hardness. As a result, the operating strategy had to be amended

to include pre-milling and side-casting of the top layer, pre-milling of the bottom layer, replacement of side-cast material and then stabilising to full-depth.

The excessive hardness of the pavement to full-depth was found throughout the work area in contradiction to the qualitative assessment of the core testing provided.

The excessive pavement hardness experienced throughout the work area resulted in unexpected time delays, increased difficulty with heavy traffic flows through the work area as a result of the side-cast material and significant damage to profiling and stabilising plant teeth and blocks.

Challenge and Innovation

Prior to commencing Stage Two of the project a de-briefing was held to assess the impact the excessive pavement hardness had on our operational strategy. It was clear this unexpected factor had caused significant challenges during Stage One.

It was identified that pavement hardness was now a significant factor for Stage Two. The additive rate was also to be increased to five per cent 60/40 Slag/Lime further highlighting the need for efficiencies.

The project team queried, how could an excessively hard pavement through to full-depth be pre-milled to ensure efficient in-situ mixing?



This was the first time a surface miner had been used on the Roads and Maritime Services road network in New South Wales. It was an innovative pre-treatment solution, used prior to traditional stabilisation using a centrally mounted mixer with moisture control.

Results

The innovative approach adopted by AARR in utilising the Surface Miner to pre-mill stage two to full-depth generated a number of important benefits for the industry.

Economic – mitigation of excessive pavement hardness to full-depth, reduction in project time, improved in-situ mixing to full-depth, and reduction in delay costs to commercial transport enterprises

Social – reduced road closure time for the public, industry and the RMS on a major arterial road of the state

Environmental - mitigation of traffic control restrictions, increased work area on-site due to not having to side-cast; so greatly improving site safety, reduction in material exposure to the open environment (i.e. dust, sediment etc).

Conventional Approach

The conventional approach to this challenge involves pre-milling and side-casting of the top layer, pre-milling of the bottom layer, replacement of side-cast material and then stabilising to full-depth. The disadvantages of this approach are that it is costly, time consuming to contractor, client and public, would create traffic control issues on this site and expose more material than necessary to the open environment.

Innovative Approach

After considering the drawbacks of the conventional approach the operations team

carefully researched what other plant options might be available to pre-mill the pavement to full-depth in one pass.

It was discovered there are surface mining machines used primarily in mining operations that have significantly higher power and cutting depth than a conventional road profiler.

After consulting with a number of industry experts AARR procured a 1,000HP Wirtgen Surface Miner that could profile to a depth of 600mm in one pass to a width of 2.5m, as a pre-treatment for the hard surfaces.

PAKENHAM RACECOURSE SYNTHETIC TRACK

The category three winner for innovation or excellence in stabilisation was McMahons for the installation of the Pakenham Racecourse Synthetic Track – Tynong.

The Pakenham Racing Club, in conjunction with Racing Victoria Limited, undertook construction of the new Pakenham Racecourse at Tynong. The new facility provides a synthetic track inside the course proper.

Stabilisation of the synthetic track subgrade was required due to the high water table in the surrounding area, with the racecourse located on Nar Nar Goon-Longwarry Rd in the Koo Wee Rup Swamp. Localised ground water springs also required separate solutions to provide greater bearing capacity.

The construction of the synthetic track was staged around an active training track, with limited hours of operation due to the daily training activities held in the early mornings.

Stabilising works were required to be completed in a short space of time to meet deadlines for the opening race at the new facility. Treatment area for the synthetic track (including chutes) was in excess of 38,000m² of lime stabilisation.

This was followed-up with a concurrent treatment of cement stabilisation, again in excess of 38,000m². These treatments, as well as localised sections of Double Lift stabilisation and isolated patches at 'off track' sites, totalled over 76,600m² of stabilisation in one week.

The three main objectives of the initiative were to:

- Water-proof the subgrade to allow year-round operation without soft clay contamination and moisture influence of the pavement layers (comprised of No Fines Crushed Rock and Open Graded Asphalt to facilitate drainage).

- Produce a pavement that will be robust enough to withstand the loadings of horses' hoofs and maintenance vehicles.
- Provide a stable subgrade/construction platform for drainage and pavement works.

Operating Environment/Context

There are several different types of treatment required at Pakenham Racecourse due to the high point loads on the pavement from the horses' hoofs. These treatments ranged from 300mm stabilisation of the insitu subgrade material (dispersive in nature), up to double-lift stabilisation in areas prone to water ingress from localised ground water springs.

Limited construction hours were available due to the need to minimise disruption to horse training. To achieve this tight timeframe, two stabilisation construction crews were run concurrently.

The Initiative

20mm No Fines Crushed Rock Removal

– Construction had begun conventionally, with proof roll on the untreated subgrade being carried out. Following proof roll, the placement of the drainage layer of 150mm thick 20mm No Fines Crushed Rock had been carried out on approximately 15,000m² of the track. When wet weather was encountered, problems in the subgrade became evident. Without stabilisation, construction of the track would not have continued on schedule.

Lime Stabilisation – The subgrade material was treated with three per cent lime. The lime treatment of the existing material was to assist in drying the existing base prior to cementing providing all weather access. The lime in this treatment helped to waterproof areas of the track affected by localised ground springs.

Cement Stabilisation – The base material was then treated with three per cent cement. The cement treatment of the subgrade material provided a bound layer that gave additional strength and was designed to mitigate material migration from the base into the drainage layer.

The stabilisation process was completed in seven days for 76,666m² of treatment area, over a variety of treatment depths and

methods, which was far more efficient than other treatment methods considered.

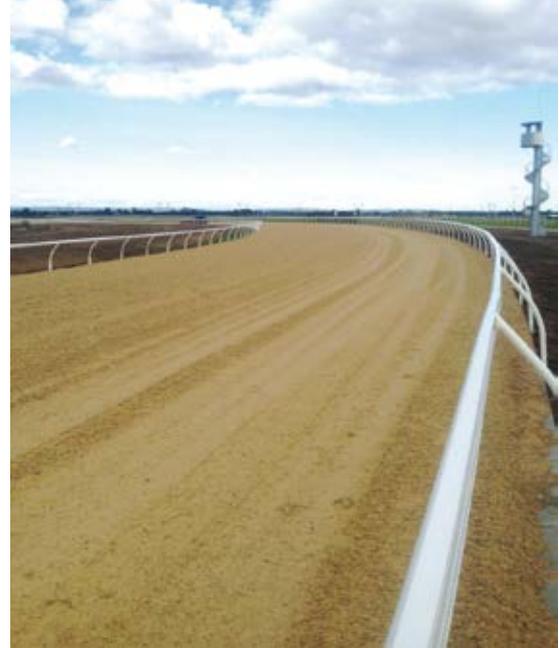
Alternative Options

Alternatives considered included the use of a Geo-Composite Membrane to waterproof the subgrade and provide a physical barrier between the subgrade and the drainage layer or delaying works until a dryer season.

The Composite Membrane was comprised of two A24 Bidim fabrics, welded to either face of a polyethylene liner. This option was:

- Significantly more expensive than the stabilised alternative;
- Increased the required construction time due to procurement lead time, as well as installation/welding of the liner;
- Carried a higher risk - the liner could have been damaged during excavation and installation of the drainage lines, and by other construction traffic; and
- Geo-Composite may not have delivered the same structural integrity as Lime and Cement Stabilisation.

Addition of a Class 2-20mm crushed rock layer – rejected due to possibility of contamination from the untreated sandy clays in the subgrade, as well as the associated impacts to the construction program and budget (supply and haulage, as well as placement).



Outcomes

1. Productivity

By providing additional resources, two crews were able to run concurrently to reduce the project duration and complete works in time to allow others to install subsequent pavement and synthetic track.

2. Protection of Pavement and Endurance of Track

The lime and cement stabilisation process eliminated the reoccurring problems with structural integrity and water ingress that have existed in the past with the subgrade in this locality.

HUGHENDEN AIRPORT RESTORATION PROJECT

Hughenden Airport Restoration project was the Category Four winner of the AustStab Awards of Excellence 2015 for Stabilisation in Local Government.

In 2012, devastating floods caused saturation damage to western Queensland's Hughenden Airport. Considerable repair work was required to the airport pavements and in April 2014 Flinders Shire Council appointed FKG Group to rehabilitate the runway, taxiway and parking apron. The \$6.5million contract also included the full installation of aeronautical ground lighting.

The project faced considerable challenges including a tight 12-week turnaround, a remote site location and limited availability of local materials.

Through an innovative and collaborative partnership and a focus on sustainable

environmental management, the airport project was delivered on-time, absorbed an extra 23 per cent in scope and produced considerable environmental benefits, including spoil-neutral completion and the limited usage of local resources.

The key objective of the project was to deliver rehabilitated pavements at the airport ahead of the client's funding deadline of 30 June 2014.

The client, Flinders Shire Council, commissioned the use of Foamed Bitumen Stabilisation (FBS) pavement material with recycling of the existing pavement material.

Applying FBS methodology meant that scarce local pavement materials could be utilised at an increased modulus, allowing the overlay thickness to be reduced; decreasing reliance on virgin quarried material.

FKG Group's role was to ensure the recycled existing material and imported FBS pavements would meet specifications. In addition FKG Group would work with the client to stabilise the unsuitable subgrades with a lime/cement additive which alleviated the need to import gravels to achieve a working platform.

Specifically, FKG Group was contracted to:

- Provide in-situ engineering stabilisation solutions to unsuitable materials resulting in re-use of 16,000 tonnes of existing materials;
- Co-ordinate overseas laboratories to conduct FBS design mix testing within required timeframes;
- Manage logistics at a rural and remote project site to ensure materials arrived on time or could be delivered if required; and
- Safely manage multiple on-site concurrent activities.

Challenge 1: Scarce Local Pavement Materials

Pavement materials are scarce in western Queensland and Flinders Shire Council faced a major environmental challenge in how to best manage this limited resource.

That challenge involved striking a balance between using some resources from local quarries whilst ensuring there remained enough local materials available for future works. The next closest quarry – in Townsville – was a nine hour return trip and this was a cost the project could not afford.

The solution involved applying FBS technology to the local material. This not only made the project affordable, but also injected money into the local economy. To support the FBS base pavement, the existing pavement was cement stabilised to provide an increased modulus to support the new base material.

Challenge 2: Un-expected poor Subgrades

Too often existing materials are not utilised because they do not offer a consistent formula that can be specified. However, due to the collaborative project delivery approach of Flinders Shire Council and FKG Group, the project team was able to propose a method which would recycle the existing materials using a blend of lime and cement to stabilise the subgrade.

During construction a larger quantity of unsuitable subgrade materials was discovered than expected. To address this concern two

options were examined by Flinders Shire Council and FKG Group.

Removing and replacing unsuitable materials with engineered material

This approach was rejected as local quarries could not supply the additional materials in time and the imported material was outside budget constraints and took longer to establish the bridging effect over the softer materials.

Applying a treatment incorporating a mix of lime and cement into the existing material became the accepted option. It took less time to bridge the soft subgrades, accounted for the variability in the in-situ material and allowed all other operations to continue as planned.

Foamed Bitumen design mix testing

The pavement design for the rehabilitation of Hughenden Airport included FBS of new base course material ???. The documented specification had been compiled by a consultant using various standards from around Australia and overseas. FKG Group's in-depth understanding of this product allowed variations to be proposed to suit local materials and processes, all of which were approved by the client.

Flinders Shire Council chose FBS over other traditional materials such as asphalt. For the council, this solution was not only cost-effective but it also meant materials could be sourced locally. The 12-week construction timeframe caused challenges for the project

team including its ability to conduct foamed bitumen mix design testing.

After reviewing material available from two local quarries FKG Group determined the FBS product could be manufactured to the required specifications.

A further challenge was that the Department of Transport and Main Roads' (DTMR) materials laboratory could not complete the mix design testing in the required timeframe, due to the volume of other FBS works requiring testing.

The decision was made to send materials from the two local quarries offshore to be tested. The product met and exceeded the design criteria and a joint decision to proceed was made.

The choice of FBS pavement allowed a thinner overlay thickness which significantly reduced the amount of gravels and select fills required.

FKG Group shared its knowledge with the Department of Transport and Main Roads which enabled the department to refine its own FBS designs.

The Hughenden Airport project has demonstrated an environmentally sustainable solution involving scarce local resources. The treatments applied in the project have allowed local materials to be used whilst also meeting the elevated design specifications required for higher axle loading applications.



HIGHLY COMMENDED: MATTHEW KOVESS

Downer nominated Matthew Kovess as Young Stabiliser of the Year in the AustStab Awards of Excellence 2015. Matthew received a Highly Commended Award.

Matthew holds a Bachelor of Engineering (Civil & Infrastructure, RMIT), Certificate IV Project Management, and achieves an Advanced Development for Managers at the Melbourne School of Business. His career began with Goulburn-Murray Water (G-MW) in 2006 based in Tatura, rural Victoria as project engineer.

Matthew joined Downer in 2009, initially working with the High Pressure Water Retexturing and Microsurfacing businesses delivering projects across Victoria and Australia.

In 2011 he transitioned into the Victorian Stabilisation business; initially as the project engineer, then taking over as manager in early 2012. Matthew's team of eight has delivered over 300 individual projects for small civil contractors, tier one contractors, local governments and road authorities, all of which he carries with pride and authority.

Matthew has been a Downer representative for AustStab and has been heavily involved in leading project management of Foamed Bitumen Trials in Victoria in conjunction with Austroads and the VicRoads authority. He participated in the IPWEA Regional Network series in 2013 "Doing more with less" on behalf of AustStab.

Matthew has also been involved with the Victorian AustStab working group and is an active member of AustStab. He has been part of the training and promotions group for AustStab, carrying out presentations to the Swinburne University as part of the Australian University Guest Lecture Programme on behalf of AustStab.



He also contributes articles on behalf of AustStab for inclusion in print media.

Matthew Kovess is a young ambitious and dynamic engineer. He is technically knowledgeable in road stabilisation whilst being personable and able to interact with clients, striving to deliver value-for-money outcomes. Matthew has a keen interest in early contractor involvement with councils to ensure the best value solution is delivered.

He is married and surrounded by a large extended family on both sides; he enjoys being active and social, playing various sports with and against friends. He has a keen interest in AFL (Essendon supporter) and enjoys being hands-on, rebuilding an old Holden and renovating his bathroom, with mixed results.

YOUNG STABILISER OF THE YEAR: DAMIAN VOLKER



Since joining TMR in 2005, Damian has provided technical assistance to many stabilisation projects and continues to provide valuable input into all aspects of stabilising projects, including design, construction, research and development of TMR specifications.

Damian has demonstrated his ability through providing analysis and solutions that effectively address problems and challenges frequently encountered during pavement stabilisation on multiple projects.

Those projects included foamed bitumen stabilised sections on the Gore Highway and Warrego Highway, as well as subgrade stabilisation on the Flinders Highway and Waterford-Tamborine Road projects.

Throughout his work in this area, Damian's expert advice and innovative approach has contributed to significant improvements in production, quality and efficiency on a wide variety of stabilisation projects.

He has adopted learnings from these projects into his own presentation, which outlines issues that stabilisation projects are likely to encounter, and how these can be avoided by proactive measures.

As well as contributing these suggestions to projects, Damian has made a major contribution to enhancing the recent reviews of TMR specifications for lime, cement and foam bitumen stabilisation respectively.

The process adopted for these specification reviews was to involve our stabilisation industry partners, AustStab, and key regional staff in a number of workshops.

The workshops went through the specifications in great detail and resulted in many changes which are advantageous for TMR and the

industry. During these workshops, Damian was able to contribute significant expert advice based on his extensive field experience and gained wide respect for his contributions.

Damian has assisted his Director of Pavements Rehabilitation (Jothi Ramanujam) by ensuring that where a particular type of stabilisation is recommended, the technical support and expert advice is such that the project will have an excellent prospect of success.

For example; the Gentle Annie project south of Rockhampton, near Raglan, has just been successfully stabilised with triple blend (lime, cement and flyash) to improve the sub base.

It is notable that this approach did not require any additional subbase material. This was followed by additional paving material and bitumen stabilising the base. This maximised the use of existing materials and resulted in enhanced sustainability.

Damian's innovative contribution to this project was the incorporation into the pavement of old highly cemented and heavily cracked bases, which would previously have been removed and replaced.

He achieved this by an innovative process which involved working with the stabilising contractor to pulverise the profiled material and then carefully blend it with limited imported granular crushed rock material. This approach resulted in a cost saving of over 10 per cent for the project.

Damian has played an important role in AustStab training courses in stabilisation practices throughout Queensland and brings his valuable experience and approach to these courses.

He always displays a friendly and helpful attitude in giving his advice and goes out of his way to illustrate complex issues in a simple way that the audience can readily understand. He adopts a similar open and collaborative approach in his dealings with contractors at pre-close of tender and prestart meetings, and Mr Ramanujam often receives feedback on how helpful participants found his advice.

Damian's approach to his work has been recognised within the Department, and led to him winning the Chief Engineer's award on two occasions in 2012 and 2013 and 2014 'Unleash Potential' TMR Cubie nomination.

HIGHLY COMMENDED: CHRISTOPHER CLEATON – STABILISED PAVEMENTS OF AUSTRALIA

A graduate of The University of Wollongong, Christopher (Chris) Cleaton has achieved much in the field of road stabilisation and pavement recycling.

Entering the role of Area Manager (for Southern NSW) for Stabilised Pavements in 2012, Chris quickly came to terms with the technical, people management and project management demands of his new role in the private sector.

If it is possible to have rounded experience as reflected in one's career achievements, Chris has achieved this in a very short space of time.

Technical skills

Chris has excelled in his ability to consider the challenges facing a range of clients to develop and submit designed and fully costed rehabilitation options. He has achieved this through a balance of using his own initiative and harnessing the experience of those around him.

Some design and construct solutions that Chris has successfully promoted and delivered to metropolitan clients range from surface cement stabilisation treatments, two-layer subgrade and upper pavement treatments, foamed bitumen stabilisation, and combinations of the above using polymer modified seals and asphalt surface finishes.

Communication skills

Chris has proven capable of communicating well and building relationships of trust and respect with clients. Throughout the design and construction phases of projects he has been able to provide sound, best-value full service stabilisation solutions for his various metropolitan and rural clients.

Chris has been instrumental in developing initiatives to facilitate communication between employees involved with administration and procurement, and in the field.

He has also taken it upon himself to create and administer the Stabilised Pavements of Australia Facebook page, which has included project photographs and stories that have proved informative to subscribed clients and motivational to staff involved in the projects.

Commitment to advancement of stabilisation

Despite his relatively short time in the stabilising industry, Chris has established himself as a knowledgeable and valuable member of stabilising projects. He has recently secured large works programs with metropolitan councils which were previously unaware of the full benefits of stabilisation. The works have been successfully completed ahead of program and with minimal public disruption or complaints.

Project specific experience

Chris was successful in winning a major full service works package let by the Roads and Maritime Services for the rehabilitation of the Barton Highway.

The treatment employed by the RMS and successfully delivered by SPA was for the 275mm deep foamed bitumen stabilisation of the existing roadways surface, finishing with a 10mm primer seal prior to a final RMS supplied wearing course. All works were performed under a night time Road Occupancy Licence.

Conclusion

Chris is a leading role model for young engineers who are not only interested in beginning a career in stabilisation, but are seeking to break into any industry. His achievements in the field of stabilisation as applied to road rehabilitation and, as an employee of Stabilised Pavements of Australia, speak for themselves. His management team was delighted to nominate him for the AustStab Awards of Excellence Young Stabiliser of the Year 2015. He received a Highly Commended Award.