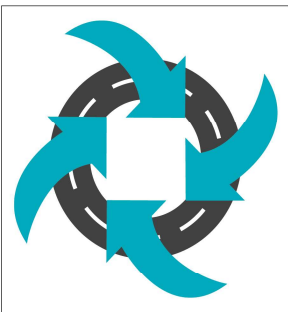


Bay Road Foam Bitumen Stabilisation

Joseph Rugari, SA Stabilisation Manager
Downer Group

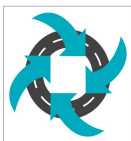
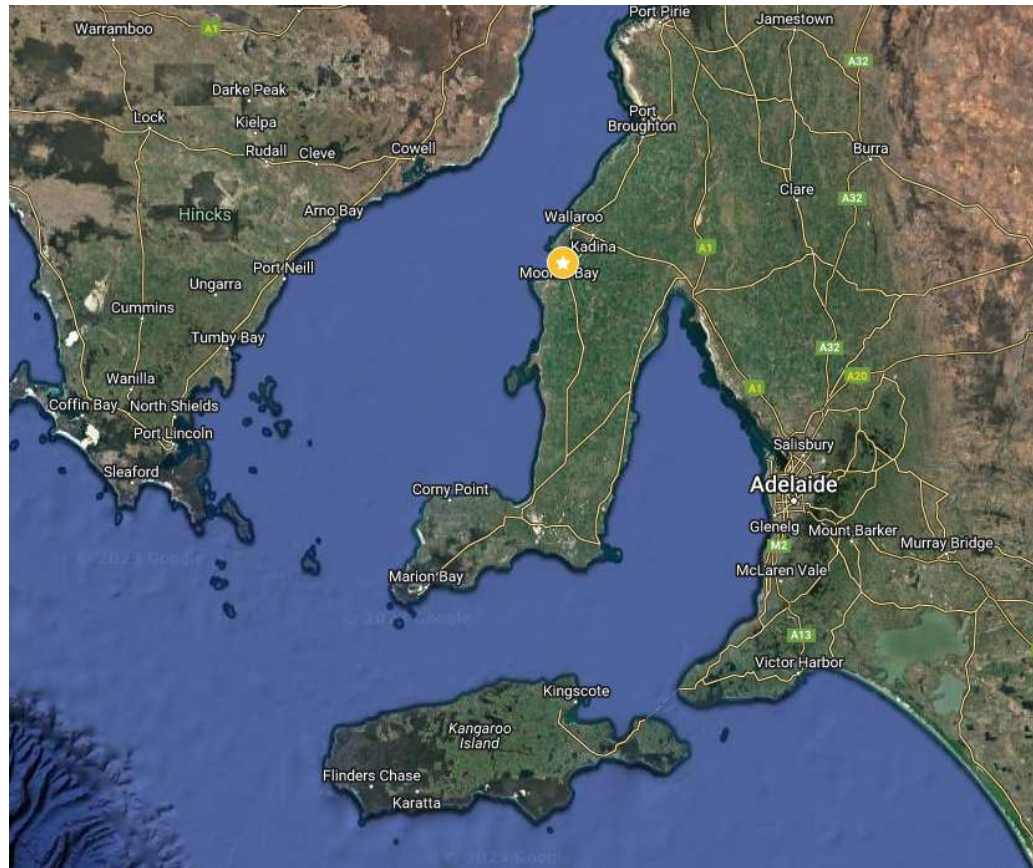


Australian Pavement Recycling and Stabilisation Conference

Sustainable Pavements for Future Generations

Pullman Albert Park, Melbourne • 22nd August 2023

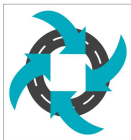
Project Locality



**Australian Pavement Recycling
and Stabilisation Conference**
Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Project Locality



Australian Pavement Recycling and Stabilisation Conference

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

Project Locality

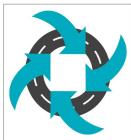


**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pre-Construction



**Australian Pavement Recycling
and Stabilisation Conference**

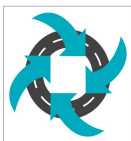
Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023





Initial Treatment Options

Pavement Type 2 - 4,100m ²	Pavement Type 3 - 17,900m ²
<p>Granular Wearing Course 14/7 mm S20E Double Spray Seal Prime, AMCO @ 1.0 l/m², or emulsion equivalent Base Course 1 PM1/20QG 150mm Base Course 2 PM1/20QG 150mm Subbase 1 PM2/20 150mm Subbase 2 PM2/20 150mm Total Thickness 600 mm</p>	<p>Granular Wearing Course 14/7 mm, S20E Double Spray Seal Prime, AMCO @ 1.0 l/m², or emulsion equivalent Base Course 1 PM1/20QG 130mm Base Course 2 PM1/20QG 140mm Subbase 1 PM2/20 200mm Total Thickness 470 mm</p>
<p>Deep Lift Asphalt Wearing Course AC10M C320 40mm Intermediate Course AC14M C320 70mm Base Course 1 AC14M C320 70mm Base Course 2 AC14M C320 70mm Prime, AMCO Basecourse PM2/20 150mm Type A(1) 150mm Total Thickness 550 mm</p>	<p>Deep Lift Asphalt Wearing Course AC10M C320 40mm Intermediate Course AC14M C320 70mm Base Course 1 AC14M C320 70mm Prime, AMCO Basecourse PM2/20 150mm Total Thickness 330 mm</p>



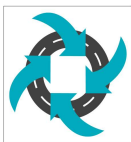
**Australian Pavement Recycling
and Stabilisation Conference**
Sustainable Pavements for Future Generations
 Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

Final Pavement Treatments

Pavement Type 2 – 4,100m ²	Pavement Type 3 – 17,900m ²
<p>Foam Bitumen Stabilisation</p> <p>Wearing Course AC10M C320 40mm 290mm Foam Bitumen Stabilisation (3% C170, 2% Lime) Top up and shape correct with PM2/20 as required</p> <p>Total Thickness 340 mm</p>	<p>Foam Bitumen Stabilisation</p> <p>Wearing Course AC10M C320 40mm 200mm Foam Bitumen Stabilisation (3% C170, 2% Lime) Top up and shape correct with PM2/20 as required</p> <p>Total Thickness 240 mm</p>



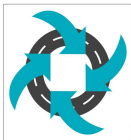
**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

During Construction



**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023





Treatment Comparison

Granular	Deep Lift Asphalt	Foam Bitumen Stabilisation
<p>Profiling 21,795 T of spoil 11 Shifts (2000 T per shift)</p> <p>Lay Granular Layers 26,100 T of imported granular 43 Shifts (600 T per shift)</p> <p>Spray Seal 22,000 m2 3 Shifts (7500 m2 per shift)</p>	<p>Profiling 15,500 T of spoil 8 Shifts (2000 T per shift)</p> <p>Lay Granular Layers 9,400 T of imported granular 16 Shifts (600 T per shift)</p> <p>Lay Asphalt Layers 10,200 T of asphalt 23 Shifts (450 T per shift)</p>	<p>Lay Granular (Top Up) 4,300 T of imported granular 7 Shifts (600 T per shift)</p> <p>Stabilisation 22,000 m2 of insitu-stabilisation 327 T of C170 @ 190°C, 194T of hydrated lime 14 Shifts (1500 m2 per shift)</p> <p>Lay Asphalt Layers 2,100 T of asphalt 5 Shifts (450 T per shift)</p>



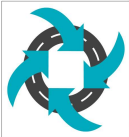
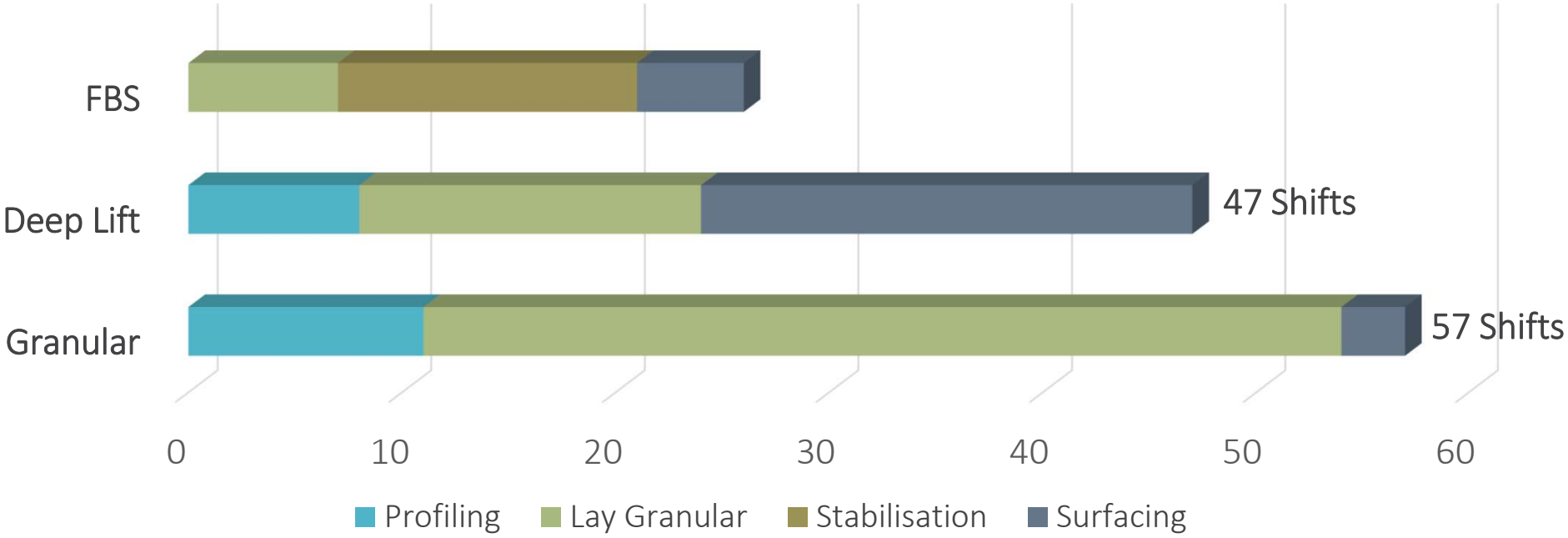
**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

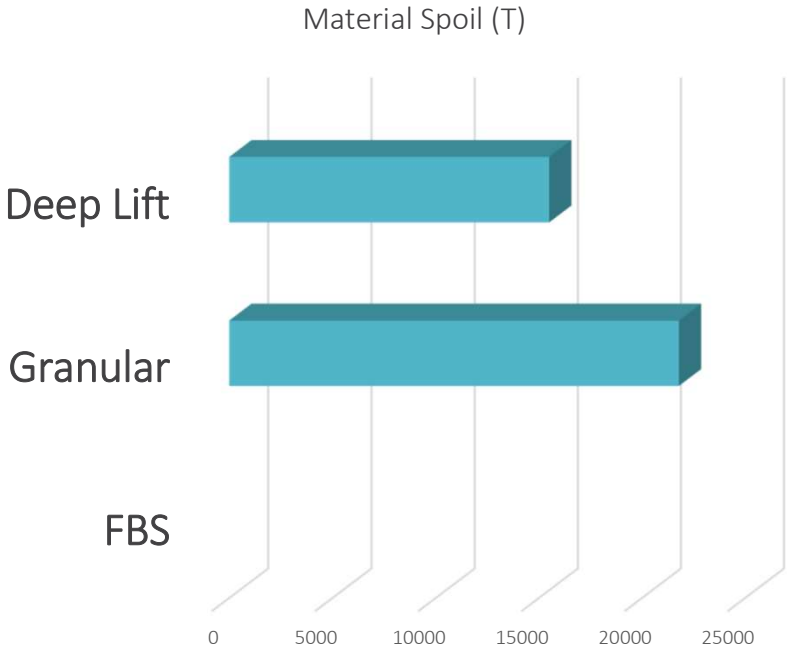
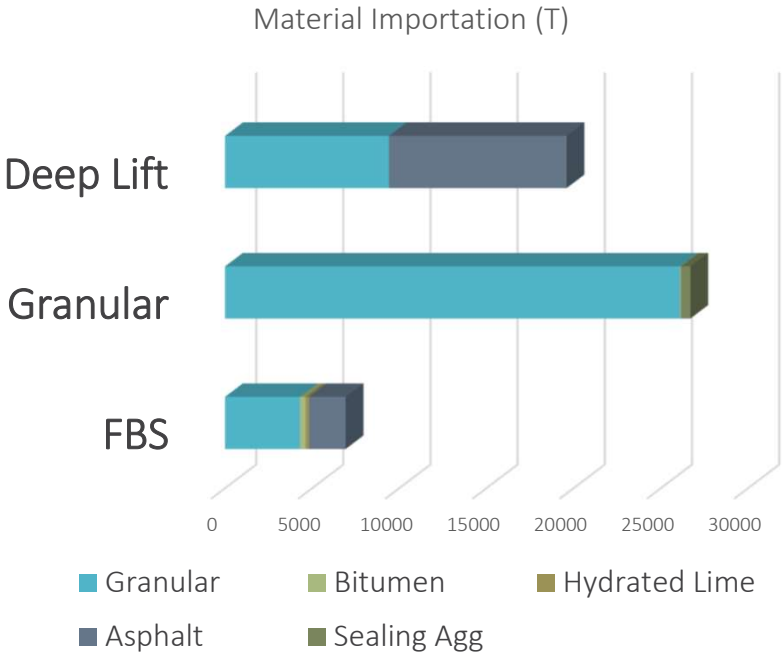
Program Comparison



Australian Pavement Recycling and Stabilisation Conference
Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Material Use Comparison

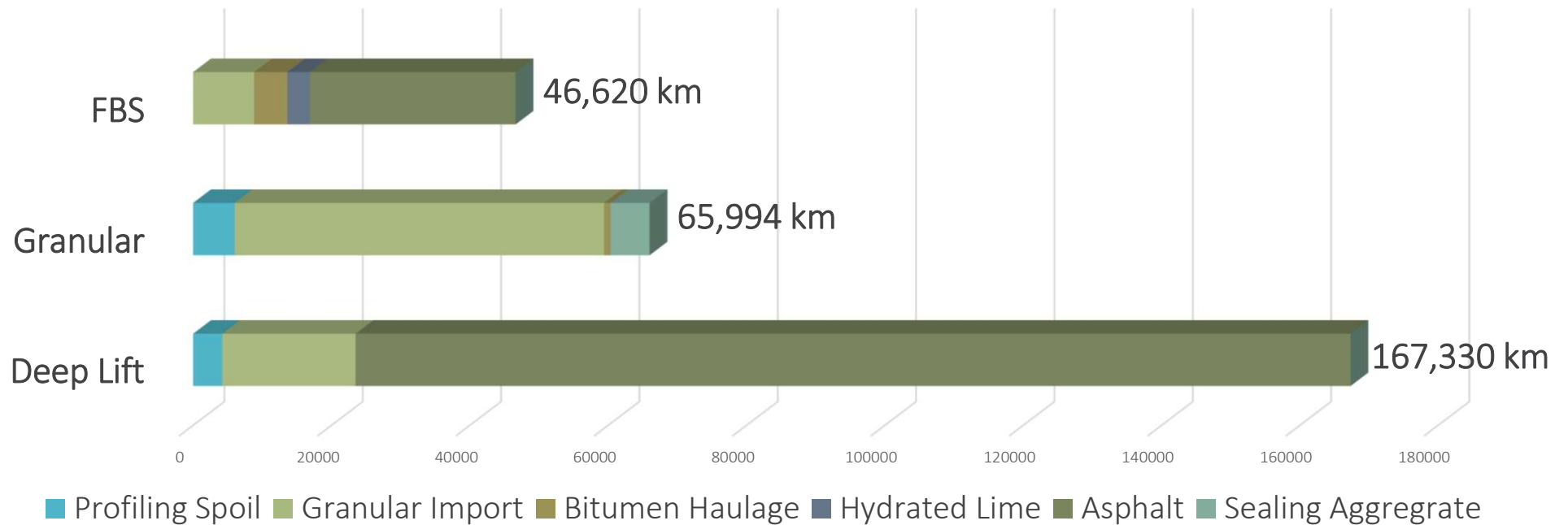


Australian Pavement Recycling and Stabilisation Conference
Sustainable Pavements for Future Generations
 Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

Haulage Movement Comparison

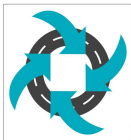


Australian Pavement Recycling and Stabilisation Conference
Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association

Post Completion



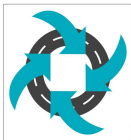
**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023





Thank You



**Australian Pavement Recycling
and Stabilisation Conference**

Sustainable Pavements for Future Generations
Pullman Albert Park, Melbourne • 22nd August 2023



Pavement Recycling and Stabilisation Association