

CASE STUDY

## IMPROVING ROAD SAFETY IN RECORD TIME WITH LITHGOW CITY COUNCIL



### PROJECT OVERVIEW

LOCATION	Browns Gap Road Lithgow, NSW
DATE	February 2009
SCOPE	4km shoulder-widening
MATERIAL	960 tonnes AC14 hotmix asphalt

### SOLUTION

When a dangerous four kilometre stretch on the Browns Gap Road required urgent repairs, Lithgow City Council called in the expertise of the Sharpe Bros team and their innovative Sidewinder machine.

The safety upgrade and widening project, which was funded by the Roads and Traffic Authority Black Spot Program, was originally estimated to take two weeks, but was completed in a record seven days.

With minimal traffic delays and disruption to residents, the team quickly and effectively widened the narrow sections of the road and fixed the soft, crumbling edges using 960 tonnes of AC14 hotmix asphalt.

### TECHNOLOGY

The patented Sidewinder technology, developed by the Sharpe Bros family company, enables road widening and edge repair works to be completed in a single process, without the need to block off and replace the entire road, thus minimising delays for motorists.

The unique Sidewinder train of equipment includes a purpose built machine which digs a neat trench along the side of the road, and another to fill the excavated trench with hotmix asphalt or other materials.

The Sidewinder can pave from one to three metres wide, while the controlled layer depths enable consistent compaction and increased strength at the road edge.

### BENEFITS

**Faster and more efficient** – It was estimated the job would take several weeks using traditional methods, but was completed in just one with the Sidewinder

**Saving lives** – According to the Australian College of Road Safety, the sealing of crumbling road edges can reduce the number of run-off and head-on crashes by 60 per cent

**Minimal traffic disruption** – Lithgow residents were impressed by the minimal traffic disruption, thanks to the Sidewinder's ability to repair road edges in a single process

**Longer lasting roads** – The Sidewinder edge repair process produces consistent pavement layers with consistent compaction which results in stronger, longer lasting roads

**Cost effective** – Lithgow City Council saved significant money, time and valuable resources using the Sidewinder technology

**Joint partnerships** – Lithgow City Council staff worked closely with Sharpe Bros' highly trained specialists to ensure a seamless understanding of the environment, the product and the desired outcome.

### TESTIMONIAL

"Sharpe Bros have proven technology, provide quality results quickly, and are a professional outfit. Their Sidewinder equipment is very impressive, saving our council time, money and resources – we will certainly be using the 'Green Machine Team' again for future projects."

Chris Schumacher, Acting Group Manager Operations, Lithgow City Council

**LITHGOW  
MERCURY**

Thursday 26 February 2009, Pg 3

## Safer driving on Gap Road

Narrow roads and soft edges can spell disaster for motorists, so an innovative machine designed to quickly and efficiently fix the problem will be a welcome sight on Browns Gap Road over the next fortnight.

The shoulder widening project, along about four kilometres of Browns Gap Road, was initiated by Lithgow City Council and funded through the RTA's Blackspot Program.

The work is expected to take less than two weeks, with minimal disruption to commuters and nearby residents.

"Lithgow Council is delighted to be working with the civil contracting and road maintenance company, Sharpe Bros, in providing much needed safety improvements to this road," Operations Manager at Lithgow City Council, Stephen Darlington, said.

Sharpe Bros has designed a range of award winning equipment, including the "Sidewinder" road edging machine, which will enable the project to be completed in a fraction of the time normally taken.

Joint Managing Director of Sharpe Bros, Michael Sharpe, said the family

company had spent millions of dollars to develop a series of technologies to repair and widen roads, without extensive reconstruction and traffic delays.

"A job that would normally take at least a week can be completed in a day at a much lower cost," Mr Sharpe said.

"The usual way of repairing broken edges or widening a road is to dig up a substantial amount of the road before resurfacing, which takes a long time, causes major traffic disruption and is very costly.

"The Sidewinder process, which extends the life of the road and reduces traffic disruption, uses one purpose-built machine to dig a neat trench along the side of the road, and another to fill the excavated trench with hotmix asphalt or even recycled road gravels."

Mr Sharpe said more Councils were using the Sidewinder to fix road edges due to the environmental, safety, quality and cost benefits the process provided.

According to the Australian College of Road Safety, the sealing of crumbling road edges can reduce the number of run-off and head-on crashes by 60 per cent.

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## Roadworks time halved

If you wanted to see the revolutionary new Sidewinder asphalt machine in action repairing the edging to Browns Gap Road near Lithgow ... you're too late.

The upgrading and maintenance works initiated by Lithgow City Council are now complete, making the four kilometre stretch wider, safer and stronger.

The project, funded through the RTA's Blackspot program, was completed in a record seven days, with civil

contractors Sharpe Bros using their innovative Sidewinder machine.

Joint Managing Director of Sharpe Bros, Michael Sharpe, said in this case a job that was estimated to take two weeks was completed in one.

"Residents and commuters can now enjoy travelling on a safer and improved Browns Gap Road.

"We are delighted to have been able to showcase our new award winning technology in the Lithgow Council

area," Mr Sharpe said.

The patented Sharpe Bros technology can repair dangerous, crumbling road edges in a fraction of the time taken by more traditional methods, which involve blocking off the whole road and replacing entire sections.

The Sidewinder quickly and efficiently replaced only the damaged road edging along Browns Gap Road, saving Lithgow City Council time and money.