



**Tensar**®

**ROADS AND  
PLATFORMS**

The success of this trial, on Soldiers Road, saw the method adopted by the council on roads across the region.

## Rolling TriAx out across Queensland

Tensar TX160 is helping to repair roads damaged by storms and floods in towns along North Queensland's coast.

### CLIENT'S CHALLENGE

Whitsunday Regional Council needed to urgently repair potholes, rutting and cracking in several major roads in Bowen, on the north east coast of Queensland, caused by a series of storms and floods.

### TENSAR SOLUTION

Tensar TriAx geogrid, backed with a separation geotextile, was used to mechanically stabilise the granular layers of one of the worst-affected roads, providing a stable foundation for the new asphalt surface. The success of this trial, on Soldiers Road, saw the method adopted by the council on roads across the region, with 75,000m<sup>2</sup> of the geogrid/laminate installed.

### Soldiers Road

Subgrade Stabilisation

📍 Bowen, North Queensland

### BENEFITS

**Fast and effective** solution to repairing damaged roads

**Reduced pavement costs** as fewer materials used

**Increased pavement life** and lower maintenance burden

**Use of laminate** economised geotextile requirement



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## PROJECT BACKGROUND

Bowen is a coastal town about 1,200km north of Brisbane, in Queensland, Australia. A series of storms and flood events had damaged some of the town's major roads, causing potholes, ruts and cracks to form in the asphalt surface.

Whitsunday Regional Council needed a solution for repairing the roads that would be economical and that would increase pavement performance and trafficking life, resulting in lower maintenance and repair costs.

Tensar's Australian distributor Geofabrics Australasia PTY Ltd proposed using Tensar TriAx geogrid incorporated into a road's granular layers to create a mechanically stabilised layer that increased stiffness of the entire pavement structure and reduces the risk of rutting, cracking and potholes.

When load is applied, the granular particles partially penetrate through the geogrid's apertures, confining and restraining them from moving both vertically and laterally, helping to deliver road pavements that can be thinner, capable of carrying higher traffic loads or have longer operational lives than those built to traditional designs.

The approach was trialled on Soldiers Road, one of the worst affected routes in Bowen. A composite laminated product of TriAx geogrid and a separation geotextile (to prevent fines moving up into the pavement structure) was used, as it was faster than installing two separate layers.

The trial was such a success that the council has now used the Tensar solution on repairs to a number of affected roads in the region under the Australian Government's Natural Disaster Relief and Recovery Arrangements work packages.

Client:

**Whitsunday  
Regional Council**

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