

AAPA 2017 NSW OUTSTANDING PROJECT AWARD WINNER



GERRINGONG UPGRADE PROJECT – MOUNT PLEASANT TO TOOLIJOOA ROAD

This project upgraded the Princes Highway from Mount Pleasant to Toolijooa Road, 42-50km south of Wollongong, NSW.

The project was the first of three stages in the Gerringong to Bomaderry Upgrade Project and it had significant community, stakeholder, environmental and technical challenges, including maintaining access to adjoining farming and dairy properties, minimising traffic disruption, major adjustments to services and protection of wetland areas and numerous streams.

The project delivered 7.5 kilometres of four-lane divided carriageway including two new interchanges providing access to Gerringong and Gerroa.

Project features:

- A new dual carriageway with a median barrier
- Overall ride result of NASSRA 22 or IRI of 0.90
- All of the SMA was placed under traffic control with detailed planning.
- Pavement makeup was a heavily-bound base with three layers of asphalt including a SMA10 A15E wearing course
- Two new interchanges and a rail over-bridge replaced a railway level crossing
- The wearing course on the bridge was DG14 AR450 which achieved an exceptional ride result of NASSRA 17 or IRI of 0.70
- Improved highway flood immunity to a level of a 1 in 100-year flood.

Fulton Hogan Industries partnered with Fulton Hogan Construction, delivering the project from design to completion in May 2017. The 'One Team' approach benchmarked itself against best practice, focusing on stakeholder relationships by:

- Establishing a collaborative, open and honest environment with the client (RMS), project verifier (Hyden/APP JV) and the designers, ensuring free flow of information and ideas

- Establishing and maintaining a culture that promoted the key values of integrity, respect, teamwork, innovation and commitment, and fostered open thinking.

The client said: "At completion, the long-term integrity of all pavements was not just achieved, but exceeded our expectations."

Construction achievements:

The project achieved the required texture depth at opening of 35mm SMA of 1.2mm without any major rework and an average IRI ride of 0.90.

Construction was staged to ensure traffic flow and minimise closures. Works were scheduled to exclude lane closures during public holiday weekends and school holidays.

A safety improvement plan was endorsed by senior executives and no LTIs or MTIs occurred for the placement of flexible pavement.

The team worked closely with the designers and the client to produce best-for-project outcome. Incorporating Fulton Hogan's research and development knowledge into the pavement design, the asphalt mix designs were upgraded to help achieve a high-quality finish that surpassed expectations.

Frequent meetings continued until the end of the project with the monitoring of production and quality as well as oversight of new initiatives such as enhanced mix designs and methodologies for placement.

With thorough knowledge on SMA, the One team approach rescheduled the works and placed the final layer of SMA during the warmer November and December months. This prevented issues with air voids associated with accelerated cooling of SMA.