

There are
2,288km of road
in the Wagga
Wagga Local
Government
Area



ROAD WORKS: Asphalt renewal

The City of Wagga Wagga looks after 2,288km of road and keeping them in good condition requires a variety of approaches to road works. In some high traffic areas renewing the top layers with asphalt, or hot mix, can be the best option.

This involves stripping back and disposing of the top layers of the road and replacing it with steaming hot asphalt, which is laid at around 170°C. The result is a smooth surface that can withstand high traffic volumes.

Asphalt renewal in Wagga Wagga

- ▶ To remove the old material quickly and efficiently, a **Wirtgen Profiler** is used:
 - Features a large spinning drum with 162 hardened steel teeth to break up and mulch the existing road surface
 - This machine is capable of removing 0.3m of material in depth at a width of 2m in a single pass
 - Travels at about 5km/h and weighs over 28 tonnes
 - Powered by a 500kw Cummins diesel.
- ▶ Upon the site being prepared, new Asphalt is dispatched from the contractors plant in Bomen (locally made material).
- ▶ Asphalt is dispatched from the plant at approximately 170 degrees Celsius. The temperature ensures the bitumen / binder in the asphalt is pliable which allows rollers to get good compaction
- ▶ Asphalt has a compacted density of 2.4 tonnes per m3
- ▶ Each delivery truck can carry approximately 10m3 of asphalt per load, this equates to around 22 tonnes each trip



Case study: Tarcutta Street 2016

Council is undertaking asphalt works on Tarcutta Street between Morgan Street and Edward Street in March 2016.

Like most Asphalt projects, the works are being carried out at night to minimise the disruption to road users in what is a high traffic area.

- ▶ This project site is about 6700m2 in area and the works will involve removing 230mm of road surface to reinstate with new asphalt.
- ▶ In volume this equates to 1541 cubic meters of material. Again using density of 2.4 tonnes per m3, this will see 3968 tonnes of new asphalt placed over the period of the project.
- ▶ When you think about each truck carrying approximately 22 tonnes each trip, to transport 3968 tonnes to the site will require over 180 truck movements to and from the worksite. This doesn't include removal of the existing material which requires further vehicular movements to cart the old material offsite to be recycled at a later date.



Receive updates direct to your mobile phone!

The City of Wagga Wagga offers an SMS service to keep impacted residents and road users up to date on the progress of some road projects. Go to the website to sign up for updates on current projects wagga.nsw.gov.au/roads

wagga.nsw.gov.au/roads 1300 292 442