

## PAVEMENT SOLUTIONS

# Proven performance

### TARMAC CBGM

The ultimate in high performance pavement solutions

#### CHALLENGE

As a key industry partner, Tarmac were a key supplier to this major scheme to convert the 7.8km stretch of road between Brynmawr and Tredegar from a three lane single carriageway to a two lane dual carriageway. It was part of a bigger project to improve the 40km length between Abergavenny and Hirwaun, intended to reduce journey times, relieve congestion in towns and villages and facilitate economic regeneration. In addition to providing value for money, key considerations for this project were to minimise impact on local road users over the duration of the project and to minimise the impact on the environment.

#### OUR SOLUTION

A central part of Tarmac's proposal involved installing their RMX400 Rapid mobile plant on site, capable of producing 400 tonnes of CBGM per hour. This approach offered a number of benefits. Using site won materials and blast furnace slag helped to reduce the costs and carbon emissions associated with primary aggregates. Processing these materials on site minimised the need for inbound and outbound haulage. This reduced vehicle movements and emissions which helped to meet one of the project's stated aims of minimising the impact on local road users and the environment.

#### RESULTS AND BENEFITS

Around 140,000m<sup>2</sup> of CBGM were produced on site and laid at 150mm. Cement Bound Granular Mixtures are a cost effective and potentially more sustainable alternative to conventional asphalt construction. Using either natural and/or recycled and secondary aggregates, mixes can be designed in order to meet the needs of most infrastructure projects. In this case the project also used a GPS guided paver to install the CBGM base, which improved accuracy and helped to save time and cost, to help keep the project on time and on budget.