



ULTIGRIP

Proven performance

Skid resisting asphalt

THE CHALLENGE

A stretch of the strategically important A34 in Cheadle, Stockport, a key arterial route linking Cheshire and Manchester, was suffering from repeated failure of the high friction surfacing at a number of key signalised junctions. Large traffic volumes including cars, HGV's and buses meant very high stresses for the road surface. This had resulted in repeated delamination of the HFS and damage to the underlying surface course on the three-lane approach where traffic from the M60 motorway joins the A34. The client, Stockport Metropolitan Borough Council, were keen to explore a long-term solution that would end the disruptive cycle of failure and repair. Ideally this would need to be implemented without the multiple road closures required by a conventional surface course and HFS approach.

OUR SOLUTION

While discussing the available options, Tarmac suggested using ULTIGRIP, their innovative high skid-resisting asphalt. ULTIGRIP uses an advanced modified clear binder, which is pigmented to assist with colour demarcation, together with bauxite aggregate and is specifically designed to provide a tough textured finish with a comparable skid resistance to conventional High Friction Surfacing (HFS). Since it is laid in one homogeneous layer it can be installed quickly within a single road closure. It also avoids the common delamination problems associated with HFS. ULTIGRIP is BBA HAPAS certified as a Clause 942 thin surface course. It has been proven to be extremely durable with the first site in Derbyshire completed in 2001 still performing well, with a measured SCRIM of 0.67 in April 2018. In comparison, HFS has been found to require interventions as early as 3 or 4 years after laying in order to ensure a consistent running surface and SCRIM performance is maintained.

RESULTS AND BENEFITS

Surfacing work was completed as planned, on a single night shift. The working window was tight (00:30-02:00) as the busy strategic road had to be open for traffic as soon as possible. The existing failed HFS and surface course was planed off and 135 tonnes (1420m² at 40mm thick) of dark grey ULTIGRIP was laid on the approach to two signalised junctions. The client was impressed by the speed of completion and quality of the work. As expected, there was a significant reduction in programme time which meant cost savings for the client and reduced closures for road users. ULTIGRIP has a long-term record of use on the UK road network, demonstrating proven durability, which is expected to deliver significant savings in whole life cost on this scheme. Detailed analysis on savings in costs and carbon emissions for ULTIGRIP compared to HFS is available by contacting your Tarmac Technical Product Support Manager.