

*ULTILAYER HD*

# Proven performance

Low texture heavy duty asphalt to resist daily HGV traffic

## The challenge

This heavily used narrow section of road is the main route for many Mendip quarries hauling aggregates, asphalt, and concrete. Daily trafficking by HGV's combined with a poor subgrade meant severe deformation and joint failure. This required frequent patched repairs and regular resurfacing, including at least once in the previous five years. The client, Somerset County Council were looking for a new long-lasting surfacing solution to break the recurring cycle of failure and repair, deliver better value for the council's budget and avoid frequent disruption to local road users, residents and businesses. It was also important that resurfacing work was completed quickly to minimise delays. Full depth reconstruction was ruled out as too costly and time consuming. It would also have involved excessive plant movements and haulage to and from the site and additional risk of damage to the adjoining stone wall of the Abbey grounds and nearby historic buildings.

## Our solution

After detailed discussions between Tarmac's Contracting technical team and Technical Product Support Manager, an innovative pavement design was chosen by the client. This would combine a 100mm ULTILAYER HD 20 Bin PMB heavy duty binder course with a 50mm depth ULTILAYER HD 10 Surf PSV65 PMB surface course. Both the binder and surface courses incorporated a high-performance polymer modified binder. Tarmac's ULTILAYER is designed to be a low texture heavy duty solution that has delivered exceptional performance on heavily trafficked routes and evolved roads with challenging underlying ground conditions. This solution would offer improved durability and deformation resistance to cope with the regular HGV traffic. It could also be completed much quicker and with less disruption than full depth reconstruction of the road.

## Results and performance update

Surfacing work was carried out in Feb 2019 and completed in just two days compared to the estimated five day road closure required for full depth reconstruction. This meant far less disruption for local people and reduced traffic management costs for the client. There was also a reduction in carbon emissions through reduction in materials and associated haulage and a reduction in standing traffic from road closures. Since work was completed in February 2019 this road has been closely monitored, including a visit in November 2021 when the material was confirmed as performing extremely well with no visible deformation or cracking. This is a stark contrast to the performance of the previous surface and represents major progress for the client in tackling this important but problematic section of road.



Building **our** future