

“We are very pleased with the outcome of this project and so is our customer. It’s great to see the teams collaborate to make this happen successfully and then see the final result of that effort.”

Alex Boylen, estimator

Solutions

Sustainable Construction

ULTIGLOW in Durham County

Durham County Council (DCC) approached Tarmac to find a solution to improve the visibility of a national cycling network route in South Hetton, known for being a former mining village in Durham.

The cycling route is used by overseas visitors, long-distance runners, walkers, and cyclists, as well as being very popular for local communities to go about everyday activities for travel and recreation. By day, the route has always been popular but difficulties in wayfinding during the hours of darkness meant the path was off-putting for users in the darker evenings and nights.

After suggesting several bespoke options to the local authority, the team at Tarmac proposed a distinctive and innovative solution: glow in the dark pathways, to eliminate the challenges faced without the need for additional lighting, which can come at a higher cost and consume electricity.

Tarmac’s ULTIGLOW uses a specialist asphalt system which is laid in the same way as a conventional asphalt surface and provides the same practicality and durability properties as that of a traditional hot rolled asphalt surface course. What sets ULTIGLOW apart is its bioluminescent chippings, perfect for brightening low lit areas and bringing footways to life at night. The chippings are laid by hand before being compacted, as would happen in regular asphalt laying.

The benefits of this system are numerous, while maintaining the same performance qualities of traditional asphalt – a popular solution requested by local authorities across the country. The new pathway is more structurally sound than the previously laid unbound material, thanks to the durability of the asphalt, meaning pedestrians and cyclists can be sure footed on their journeys along the pathway.



The real difference is the glow in the dark nature of the asphalt resulting in rural pathways like this one in County Durham being much more accessible and visible to use throughout all hours of the day.

A key priority for DCC as they sought a solution to improve visibility was avoiding the intrusion of added streetlights. Using bioluminescent asphalt is a unique answer to this problem, since it means that light pollution can be kept to a minimum, particularly important in rural areas such as South Hetton. Tarmac’s surfacing technology also means that, once installed, there is no additional energy required to light up the area, as would be the case with traditional street lighting. With the pressures of high energy costs and the transition to a net zero society, the new pathway will deliver low energy benefits for years to come.