

**ULTIPAVE**

Proven performance

Warm mix asphalt utilising secondary slag aggregates, laid in Bromley

Bromley promotes the use of asphalts producing lower CO₂ emissions

The Challenge

Hawthorne Road is a wide, residential road in the London Borough of Bromley. The road has on street parking and acts as a bus route with several stops along its length. The existing surface was crazed, had multiple utility trenches and there was evidence of deformation which necessitated a deeper level construction than surface course only.

The scheme needed bus diversions so the project had to be completed as quickly as possible to minimise disruption to bus passengers and residents.

Our Solution

The London Borough of Bromley instructed Riney to plane off 85mm and lay 50mm of AC 20 HDM 40/60 binder course and

35mm of ULTIPAVE 10 40/60 PSV 60 surface course.

In line with the London Borough of Bromley's commitment to the use of sustainable materials, the binder course was to be supplied as a Warm Mix Asphalt and the ULTIPAVE used steel slag aggregate.

The shorter curing time of Warm Mix Asphalt enabled Riney to plane off, lay the binder and overlay the surface course in one shift. This enabled the road to be opened in just one day as opposed to the two-day operation normally associated with two-layer construction. By halving the programme, disruption to road users was minimized and associated costs, such as traffic management reduced.

Results and Benefits

The asphalt used to surface Hawthorne Road helped The London Borough of Bromley demonstrate its commitment to reduce CO₂ emissions across its highways maintenance programme. The Warm Mix Asphalt reduced on site fumes by approximately 80% helping to achieve cleaner air targets in the capital and offering public health benefits.

Tarmac delivered an innovative product which allowed Riney to exceed normal outputs and reduce the programme saving time and money.

The London Borough of Bromley has committed to using Warm Mix Asphalt on future schemes.

Additional information

Warm mix asphalt typical saves 10% CO₂ in manufacture which reduces harmful emissions at source.

Steel Slag aggregate is a secondary aggregate produced by the steel industry. An ideal aggregate for base, binder and surface course asphalt products. The properties of steel slag are assessed in accordance with the requirements of the European standard EN 13043 and can produce asphalt materials exhibiting superior properties to those manufactured with primary aggregate.

The strength and alkaline nature of steel slag also make it an ideal material for use in asphalt giving extended life to the pavement design and superior binder adhesion.



Building  our future