Reducing carbon emissions and improving efficiencies, National Highways Areas 6 & 8

Project case study



Product

Hanson ERA warm mix asphalt

Main contractor Hanson Contracting

Client National Highways

Volume 22,000+ tonnes

Overview

Use of Hanson ERA warm mix asphalt (WMA) across Areas 6 & 8 to meet key National Highways objectives and efficiencies while reducing carbon emissions.

Project description

Hanson is a key pavement framework provider in National Highways East region (Areas 6 & 8), delivering maintenance schemes as part of Asset Community East (ACE), an ISO44001 community partnership. The ethos of ACE is to engage with all parties to deliver improved customer and safety focused outcomes. This has included development and implementation of 'raising the bar' safety practices and identification of value engineering solutions.

As part of this Hanson has supplied 22,000 tonnes of its ERA warm mix asphalt (WMA) on eight schemes to date, which represents 70 per cent of the total amount of base and binder course laid on the framework.

WMA can help cut the CO₂ emissions associated with asphalt production by around 15 per cent as it is produced and laid at lower temperatures, using 20 per cent less energy and delivering significant carbon savings.

The reduced temperature of the material:

Improves health and safety for contractors as less fumes are created, and the risk of burns lessened.





Allows multiple layers to be undertaken during the same shift, reducing time on site, allowing quicker reopening to traffic without the risk of rutting, and minimising disruption to road users.

 Reduces oxidisation during manufacture, increasing durability.

Using WMAs has reduced carbon emissions by 2kg per tonne of asphalt supplied, saving 44,000kg of CO₂ to date. Its use was also commended in the environmental initiative of the year category in the 2020/21 ACE (Areas 6 & 8) Better Together Awards. Rob Barron, supplier relationship manager for operations east at National Highways, said: "The team at Hanson has continually demonstrated its commitment to supporting both National Highways' carbon reduction strategy and net zero targets through the promotion and use wherever possible use of warm mix asphalt.

"Hanson's continued commitment to best practice is greatly appreciated and will assist hugely in helping to shape the type of materials utilised on future projects with, not only environment benefits, but also enhancing health and safety, as well as improving longevity of network life."

> W: hanson.co.uk E: enquiries@hanson.com ❤ @Hanson UK

Hanson UK 14 Castle Hill, Maidenhead, Berkshire SL6 4JJ T: 01628 774100