

# Wider support for 3M™ Diamond Grade™ Sheeting



The work to widen the M25 is well under way. But with no reduction in vehicle numbers, routing traffic through the road works safely is a mission-critical operation.

Over 70 million vehicles use the M25 each year, with the section near Heathrow Airport suffering some of the most severe congestion. In fact, it is one of the busiest motorway sections in Europe carrying over 200,000 vehicles a day. This is largely due to the fact that the M25 is fed at junction 12 by the M3, and at junction 15 by the M4.

It is for this reason that the decision was taken to widen the M25 between these two junctions. The plan? To provide ten lanes between junctions 12 and 14, and twelve lanes between junctions 14 and 15. At the same time, work was also authorised to construct a free flow access road into the new Terminal 5 at Heathrow Airport. This work began in January 2004, with an anticipated duration of 102 weeks, when complete the widened motorway will be able to carry nearly 250,000 vehicles per day.

Motoring organisations, such as the Freight Transport Association, have given their full backing to the expansion plans. External Affairs Director, Geoff Dossetter, has gone on record as saying, "Expansion will improve the performance of UK transport, it will improve the performance of British Industry, and we need to get on with it as quickly as we can."

Terry Williams, Project Manager for the Highways Agency, claims that widening was the only viable option.

*"The only natural thing to do was to widen within the existing motorway boundary. We have the space both for the road works and to manage the traffic. It's the least disruptive and the most economical option."*

Balfour Beatty was chosen in a competitive tender situation as the main contractor for the work. The company has a lot of experience of this kind of project, having been involved in widening other sections of the M25.

One of the major aspects of the tender, was the specification that four lanes of motorway had to be maintained in each direction during the course of the road widening. Associated Asphalt, part of the Aggregate Industries Group, was chosen by Balfour Beatty to be responsible for traffic management.

With the demand that four lanes of motorway be kept open in each direction, the emphasis has had to be on maintaining a safe flow of traffic through the road works. The workforce has been segregated from the motoring public by the use of temporary steel barriers, which have also been used to segregate opposing traffic flows. Heavy goods vehicles are permitted to use the two nearside lanes only, and there is a 40mph maximum speed limit throughout the course of the whole road works, enforced by road signs and police surveillance cameras.

Special authorisation was granted by the Highways Agency to

permit the use of 3M™ Diamond Grade™ Fluorescent yellow reflective sheeting on the majority of temporary traffic signs deployed throughout the roadworks. Most of these give instructions to drivers concerning lane changes and advance warning of the road layout.

*"From our perspective the fluorescent material is far superior to the Class 1 materials prescribed by the regulations," says Richard Pearson, Manager of Traffic Management Division at Associated Asphalt. "It greatly enhances sign conspicuity during daylight hours, especially at dawn, dusk, during poor daylight and in adverse weather conditions. Given the importance of protecting a large workforce in a situation where it has been impossible to reduce traffic flows, it is vital that drivers are given the clearest possible indication of the route that they must follow in order to navigate road works safely. It is our view, and we believe that of independent assessments of signing on the M25, that fluorescent signs out-perform Class 1 reflective materials in every situation where a temporary sign needs to create high-impact."*

Of course, driver safety and indeed driver awareness, are not only down to the quality of the signing. Much has been done to educate drivers about the potential problems they will face during the course of the expansion work, long before they encounter their first road cone.

Awareness campaigns have included info-commercials broadcast at motorway service stations, ferry terminals and airports both in the UK and across Europe. An extensive media campaign has also been put together.

The widening programme will be completed by January 2006. But the work has not been limited merely to expanding the number of lanes available to drivers. The opportunity has been taken to improve the existing motorway by incorporating low noise surfacing and noise absorbent barriers. High cut-off lighting will be installed, which will contain the light within the existing road. The drainage will also be upgraded to include oil interceptors.

Overall, once the work is completed, the Highways Agency is predicting major benefits for users of the M25, and for the nation as a whole. Their own calculations predict that the benefits to the nation's economy from reduced congestion and quicker journey times could be of the order of £250,000 a day. If drivers are helped to negotiate the road works safely through the use of brighter and better signs, then even those drivers frustrated by the temporary delays are likely to consider that the disruption has been worthwhile.