think exceptional

national highways

smp alliance

Case Study

M6 NEAR Scheme

WJ Group supports refuge bays retrofit on the M6 to improve road safety

- 22 ERA Bays Installed
- Average Skid Resistance of 78 Achieved
- Completed In 14 Shifts

As part of National Highways' National Emergency Area Retrofit (NEAR) programme, WJ Group has helped install 22 new refuge bays between junctions 21a and 26 of the M6 using its latest coloured surfacing product.

The NEAR scheme introduced by National Highways aims to reduce the distance between emergency refuge bays along smart motorways to provide vehicles and drivers with a safe space to pull over. Having secured £390m from the government during the second Road Investment Strategy rollout, an additional 150 bays are being added across the network.

A critical part of the installation process is ensuring that the new bays have high friction levels to reduce stopping distances and help drivers come to a stop after travelling at a significant speed. Without this, vehicles may skid when braking.
With emergency refuge bays playing an important role in ensuring motorists' safety in situations such as breakdowns, the speed at which they can be installed and maintained is critical in reducing downtime. However, traditional methods for installing approved surfacing solutions can take up to two days per bay to complete as well as requiring workers and vehicles to be on the site for an extended period. In turn, this leads to environmental, safety and cost implications.

To counteract these issues, National Highways asked the Smart Motorway Project Alliance

to create a new solution. To achieve this, WJ Group developed RapidGrip. Combining pigment, aggregate and binder, this solution means that only a one coat application is required, eliminating the need for a sweeper truck and two curing periods.

Created with the support of the SMPA members, it allowed two bays to be completed per shift via a single truck. As a result, WJ Group was able to retrofit all 22 bays across 14 shifts and achieve an average of 78 pendulum test value – the measurement to determine friction levels of a surface –helping drivers safely pull over while travelling along one of the busiest sections of the M6.

When drivers find themselves in the position where they need to pull over on the motorway, they require a safe and dedicated space to do so. With our RapidGrip solution, National Highways is ensuring that drivers are at less risk of skidding when coming to a stop. Innovations such as RapidGrip mean that the installation and retrofit of these bays can be carried out with minimal disruption to the public and ensure workers are not on the road for an extended period, while maximising the safety of road users. - Martin Webb, WJ Group Innovation Director.