

Case Study

Clearview Intelligence SolarLite road studs continued deployment - A2/A20 Kent

Clearview Intelligence SolarLite Road Studs continue to improve driver safety on the A2 and A20 in Kent six years on.

Background

In 2010 Balfour Beatty Mott Macdonald Joint Venture, the appointed Highways Agency Technical Maintenance contractor in Area 4 in Kent, introduced a safety scheme designed to increase driver visibility and reduce accidents on 30km in total of the A2 and A20 in Kent towards the port of Dover. These road networks are heavily trafficked and prone to extreme local weather conditions including moving mist and fog resulting in varying visibility throughout the day and night. The road was notorious for numerous multiple vehicle accidents over the years which was often attributed to fog and poor night time visibility.

Traditional safety methods such as street lighting were not possible in this instance due to the stretches of road passing through a Site of Special Scientific Interest (SSSI) and an Area of Outstanding Natural Beauty (AONB). This status is given to specific areas which are designated to be safeguarded due to their precious landscape whose distinctive character and natural beauty are so outstanding that it is in the nation's interest to protect them.

Solution

Clearview Intelligence flush road studs were deployed for this project run by Balfour Beatty Mott MacDonald, due to their proven track record of reducing night time accidents by over 70% and their nonintrusive nature and use of solar power, therefore not requiring power infrastructure which was perfect for the locality.

The SolarLite flush road studs use 'smart' technology which stores solar energy during the day. Built-in Light Emitting Diodes automatically illuminate from dusk to dawn, marking the road by up to 900 metres in advance, providing drivers with up to ten times more time to react to the layout of the road ahead.

This large project was completed in February 2010 and covered the deployment of over 21,000 studs on 30km of road and therefore required full night closures of sections of the A2 and A20. In order to minimise disruption there were short timescales for completion and sustainability was a key project driver due to the installation taking place in an Area of Outstanding Natural Beauty which has strict guidelines as to the type of actions that could be undertaken.

The use of SolarLite road studs minimised the impact on the environment with no infrastructure or civils work for installation and the use of solar energy to power the studs which do not create light pollution. This was a perfect solution for the area in reducing accidents whilst being sympathetic to the natural environment at the same time.

The project has been so successful from both a safety and environmental perspective that the benefits gained from the installation back in 2010 has warranted the redeployment of the SolarLite flush road studs during further road works. Stretches of road surfacing and repair commenced on sections of the A2 and A20 in Autumn 2013 and Balfour Beatty Mott MacDonald ensured no compromise and that the same levels of road safety were maintained on this stretch of busy road by reinstating SolarLite flush road studs

Key Benefits ▼

- Improved safety for all road users
- Environmentally friendly in an area of natural beauty
- Proven to reduce night time accidents by over 70%
- Totally sustainable harnessing free solar energy
- 10x greater visibility of the road ahead at night
- No light pollution emitted from product