

Case Study

pedeSOLAR with SolarLite

Active Road Studs

Improving safety for pedestrians on railway crossings

Background

Tangley foot crossing on the Redhill to Shalford Junction Line is a rural footpath crossing the railway. Accessible from two entrances, the site suffers from poor visibility at night and has no artificial light sources.

Additionally, the crossing runs askew from one side of the tracks to the other, increasing the risk of someone stumbling and falling on to the anti-trespass guards. Combined with steep steps on either side adjacent to the live railway lines, the crossing presented a significant public safety risk.

In recognition of the need to improve safety for pedestrians crossing the tracks at designated sites in remote, poorly lit areas, Network Rail selected Tangley as a trial location for the installation of pedeSOLAR panels.

Solution

The pedeSOLAR panels combine two proven technologies in one unique solution designed in collaboration by Clearview Intelligence, STRAIL (UK), and KRAIBURG STRAIL GmbH & Co. KG.

Based on STRAIL's proven pedeSTRAIL level crossing system, the pedeSOLAR panels incorporate Clearview's SolarLite solar powered active studs.

"The effectiveness of the pedeSOLAR solution is testament to the collaborative partnership between STRAIL (UK), Kraiburg, and Clearview Intelligence. Combining Clearview's expertise in developing smart, sustainable lighting for transport applications with our vast experience in creating safe, reliable level crossings for the rail sector, we have succeeded in producing a unique and reliable solution to improve safety and visibility for rail crossing users."

Gordon Finlayson, STRAIL (UK) Ltd

The studs use ultra-bright LEDs to provide superior visibility up to 900m and give reliable all night, year-round performance. They have UK Type Approval for the Department for Transport and have been installed on highways, level crossings, footpaths and cycle routes across the world to enhance safety.

The pedeSOLAR solution offers increased safety by delineating crossing edges for pedestrians and cyclists crossing the railway tracks at remote, poorly lit locations.

Importantly, pedeSOLAR does not require any wiring, trenching, or electricity supply and the sustainable energy harvesting power supply means that there are no ongoing operational costs. The studs are pre-installed in the panels by STRAIL and delivered complete and ready for installation. The design is vandal-proof and has been awarded product acceptance by Network Rail for use throughout the UK.

The solution has since been successfully installed at other locations including Hempstead Cutting in Sussex and Clappers Lane foot crossing in Sussex and can be easily replicated at other remote railway foot crossings which would benefit from better delineation and improved safety conditions.

The pedeSOLAR can be ordered from www.strail.com

Key Benefits

- Clear delineation of the crossing edges protects pedestrians and cyclists from straying on to the rail tracks
- Value for money due to low installation costs, no ongoing operational or maintenance costs, and vandal-proof design
- Provides a consistent, reliable source of light without adversely impacting on local light pollution levels
- No trip hazard and safe for cyclists to ride over