

Case Study

Edinburgh Towpath

Delineation

Background

The Union Canal is a 31.5 mile (50.7 km) canal in Scotland, from Lochrin Basin and the Leamington lift bridge in Fountainbridge, Edinburgh to Falkirk, where it meets the Forth and Clyde Canal.

In June 2008, British Waterways Scotland decided to market the area between Edinburgh Quay and Ashley Terrace Bridge as Edinburgh Canal Quarter. With the canal now largely restored for both boating, walkers and cyclists on the towpath, it is enjoying a new lease of life. Supported by funding from Waste Recycling Environmental Limited (WREN), a non-profit making Environmental Body registered to fund projects which are eligible under the Landfill Communities Fund, the section of towpath between Harrison Park and Viewforth has been widened and resurfaced allowing improved and safer shared use for walkers, cyclists and wheelchair users.

This section of towpath leads directly to the City Centre and is very popular. The towpath is also part of the 10,000 mile national cycle network. However, with the towpath being so close to the water's edge, safety is a major consideration for towpath users, especially during the hours of darkness. Given the aesthetic impact on the location and the rising electricity costs of traditional street lighting, this was deemed not suitable and an alternative, less invasive and more sustainable solution was sought.

"More and more people use the waterway year-round for leisure and commuting to work, so we are extremely pleased with the benefits of installing these small compact solar-powered LED studs within the new upgraded sections of towpath."

Richard Miller British Waterways Scotland

Solution

This 2.5km stretch of the Union Canal towpath has been significantly improved from a night time safety perspective with the installation of 560 Bi-Directional SolarLite Active Road Studs,

which now delineate both edges of the towpath to provide cyclists and pedestrians with more clearly defined guidance and visibility of the path ahead for up to a distance of 900m.

Powered by energy harvested during daylight hours through solar panels built into the surface of the studs, the SolarLite Active Road Studs automatically illuminate during the hours of darkness. With the studs embedded into the surface of the canal towpath and sitting only 4mm proud of the surface, they maximise night time visibility whilst ensuring they are unobtrusive and inoffensive to the towpath's users.

The majority of studs are white studs installed at 10m intervals to mark the edges of the towpath, with red studs at 5m intervals warning of hazards such as the towpath narrowing on approaches to over bridges and finally green studs highlighting towpath entrances and exits. All stud locations were positioned carefully to avoid any impact on the original materials of the canal such as mileposts or cobbled areas.

As the Union Canal is a Heritage site, great care was taken during installation to protect the natural historic fabric and the local environment. Working within the guidelines set out by British Waterways Scotland and ever mindful of the importance of this site, installation was completed within just two weeks using portable core drilling equipment. All flushing water and debris from the installation was collected and removed from site in containers for safe disposal to avoid any pollution to the canal itself.

Key Benefits

- Increased towpath visibility of up to 900m for pedestrian, cyclists and wheel chair users
- Increased safety in the hours of darkness
- The flush profile of the studs are less than 4mm ensuring they are unobtrusive to bicycle wheels, walkers and are wheelchair friendly