

SATIN Case Study Loch Earn Railway Path Shared-Use Path



November 2017



Scottish Access
Technical Information
Network

Background

'**Loch Earn Railway Path (LERP)** – is a multi-year, multi-phase project which aims to re-establish the old Caledonian railway line between Comrie and St Fillans, before eventually ending at Lochearnhead (total length approx. 20km). The project was the vision of St Fillans Community Trust and, without their considerable and continued involvement throughout, this project could never have happened let alone be the considerable success it has been. **Phase 1** of the project involved re-establishing the Glentarken Bridge; a major factor in the entire route as it restored a link which would have otherwise been impassable due to a 30m drop where the original railway bridge had been removed. **Phase 2** saw the construction of a 2.5m wide DBM surfaced path from Tynreoch to St Fillans' Station Road. **Phase 3** is located around the picturesque village of St Fillans and totalled approx. 3.6km of shared-use active-travel path. This section of the route begins in Dalchonzie and connects with the Phase 2 route at Tynreoch.



Technical Detail

Having re-established the Glentarken Bridge in Phase 1, followed by completion of a farm by-pass link in Phase 2, the next prioritised barrier in Phase 3 was to re-open the original railway tunnel near St Fillans. Security fencing had been erected around the tunnel entrance, to restrict access due to the presence of toxic gases, however local path users had created new desire lines up and over the tunnel area. These routes were typically very steep and not ideal for many users to gain access beyond this obstacle.



Technical Detail (contd.)

The tunnel, which was closed due to signs of a toxic gas, had to be regularly checked by a specialist to determine if it could be re-opened. Thankfully, the go ahead was given allowing the existing drainage ditches to be cleared. This ensured surface water could be effectively removed whilst also restricting any further vegetation build up (leading to toxic gas being produced).

Further work was undertaken, within Phase 3, to a steep cutting where small trees and shrubs had inhabited the rock face. Tree specialists were engaged to remove any vegetation that would detrimentally impact the path or potentially impact the safety of path users.



Part of this work also required the construction of natural-looking, steep embankments through this cutting section. The solution was to introduce pre-seeded hessian erosion control matting which would help to revegetate these steep machine-cut faces whilst also protecting the exposed surfaces from surface water erosion until the vegetation could be fully established.



A 100% natural coir fibre erosion control matting was sourced from Greenfix. The chosen material was graded as 'Type 3' meaning that it is suitable for slopes of over 45 degrees. It was pre-seeded with a seed mix that had been approved by the Loch Lomond and Trossachs National Park Authority. The matting was secured using proprietary wooden pegs which would naturally decompose in time. The use of timber ties allowed the embankment to look as natural and 'untouched' as possible while still providing support for the matting during the settling-in period. Seed germination was very rapid noting that these works were completed late Spring 2017 and therefore ideal for establishing a healthy sward.





Project Outputs and Outcomes

The route sections constructed in Phases 1 – 3 amount to almost 9km of shared use path and has been a huge success with all users. It has created a safe shared-use active travel route between the local communities of Comrie and St Fillans; something that was previously only possible by travelling along the busy and dangerous A85 trunk route. Phases 4-6 will look to take the route west from St Fillans toward ochearnhead and the vision is to see these works fully completed within 2022.

In creating this new route, the use of the erosion control mats has enhanced the natural look of the area whilst also protecting the embankments from eroding.

In order to achieve a gradient-friendly link the path had to be zig-zagged across the hillside' This would not have been possible without the erosion control mats providing support to the cutting and embankment faces.

Evaluation

Although the vision it is still not entirely complete, the constructed phases provide a popular, safe and award nominated active travel route across sections which were previously very difficult, if not impossible, to cross. Total costs for Phases 1-3 amount to just under £1.2m.

The erosion control matting has helped stabilise the soils across very steep embankments and cuttings and will, over time, biodegrade to leave stable and durable vegetated slopes. The cost for the matting including installation was around £90/m².

Key Learning Points:

- Involve a specialist consultant to help develop the path design: they will help to ensure the route complies with current best practice and is built to the required specification.
- Appraise the route within the context of the local access network. Ensure that it is or will be integrated with the local network rather than an addition to it.
- Look for opportunities to work with partners, who may be responsible for neighbouring land, to make sure the entire route of the trail meets accessibility standards.
- Involve local groups that represent path users in planning the trail, and be prepared to respond to their concerns.
- Meeting the Countryside for All standard improves access for everyone, not only disabled visitors.
- Draw up tight contract specifications and supervise contractors carefully, especially if they have little experience of building easy access trails.
- Where possible, ensure all aspects of the work are included in the project plan and budget.
- Where ownership or responsibility for a facility is shared, work closely with neighbours and partners to develop a cohesive plan.
- Build in an on-going maintenance budget to ensure the trail continues to meet accessibility standards and does not fall below them due to erosion or other factors.
- Allow flexibility in the budget for essential features like drainage or other specialist engineering solutions.

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