MARKET SECTOR:
Commercial

LOCATION:
Newby Bridge, Ulverston
Cumbria, LA12 8NN

CONTRACTOR:
I. T. Shaw & Son Ltd

CONSULTANT:
Iteriad Ltd

INSTALLER:
I. T. Shaw & Son Ltd

Case

STUDY

TOTAL TRAFFIC EXOPAVE (TTE)
National Trust Fell Foot
Car Park

The

BACKGROUND

Situated at the very southern tip of Lake Windermere, National Trust Fell Foot is a great, family friendly location to play, explore and relax.

An ambitious project for Fell Foot's future is being undertaken. Work will include renovating the boathouses; restore the original arboretum, gardens and pathways and improving the vehicular access and car parking facilities.

To enable this work to be completed boat trailers would need to be moved to a new location. A grass area was identified adjacent to the site but would need reinforcing to make it suitable for the trailers some of which were heavy and multi axle.

Our Client's

REQUIREMENTS

A sustainable solution for a reinforced carpark

After assisting with the project at National Trust Acorn Bank, Geosynthetics Ltd were invited by Iteriad Architects to look at the project at Fell Foot.

A meeting took place in April 2016 and ideas for the grass reinforcement were discussed. The site was challenging due to the underlying drainage, slope and risk of flooding from Lake Windermere.

Tel. 01455 617 139
Email. sales@geosyn.co.uk

Our Value Engineered

SOLUTION

Geosynthetics Ltd engineers provided a Technical Recommendation for the build-up based on information the Trust supplied. The work was started in June and further site meetings took place to discuss the sub-base specification and recycling the excavated soil. TTE was installed.

The strength of TTE made it an ideal choice for this project both in terms of the range of vehicles using the surface and the falls on site. Its ability to be installed over a mixture of onsite soil and stone saved costs. After germination TTE would also allow the surface to be used while the grass established.

During its first year, part of the TTE surface unexpectedly became an access road in and out of the site compound. This was used by a variety of construction equipment including excavators and dumpers. In addition to site equipment, the surface also catered for cars, vans, minibuses and 4x4's pulling heavy 3 axle trailers with boats. Even the heaviest loadings did not cause any deformation to the surface due to TTE®'s unique interlocking system and excellent load distribution.

The heavy loadings caused the area to become quite muddy with soil from the tyres of the machines. In November 2017 this was further exacerbated by the weather as some areas of Cumbria saw in excess of 200mm of rain fall in less than 24 hours. The long dry spell in 2018 that affected green areas across the UK also left the grass within the TTE units looking quite parched and withered. However the roots were still protected within the systems chambers so the grass did not die.

By November 2018 the recovery was on the way and the green grass returned. Some over seeding will be needed but overall the surface looks really good and is performing well. This showcases how versatile and robust the TTE® system can be whilst still supporting the loadings required.