

Hawthorn Services, A19 Roadside Enhancements

North East England

Sir Robert McAlpine

BIG Challenge 2015 submission category: Large scale permanent

Project overview

As part of the project, a 30 year concession to Design, Build, Finance and Operate (DBFO) 120km of the A19, between Dishforth in North Yorkshire and the Tyne Tunnel Sir Robert McAlpine have undertaken numerous measures to enhance the biodiversity of the road network.

This work is part of a long-term landscape planning and management strategy, creating meaningful and long-lasting benefits to the local ecology.

What were the biodiversity conditions on site, prior to the enhancement?

A large portion of the road network is within the County Durham Magnesian Limestone belt, an area of unique and internationally important habitat; however, prior to Sir Robert McAlpine's involvement when the A19 DBFO was initiated, there was limited consideration given to the existing biodiversity and the verges were planted with low biodiversity value standard highway grasslands and woodland plots.



Photo: Site clearance (2012)

Were there any specific conditions that led to you carrying out this work?

As part of the refurbishment of the service station located on the A19 near Easington County Durham, ShellUK removed a woodland/shrub plot which was screening their service station.

The site consisted of planted trees and shrubs in poor condition. The SRM consultant ecologist (PCA Ltd) was asked to determine the habitat value of the area and it was noted that the plot was within an area of internationally important Magnesian Limestone habitat.

Whilst the soil conditions on the site were not ideal for the development of a wildflower meadow, PCA Ltd recommended that works should be undertaken to try and increase the quantity of wildflower species.

What were the biodiversity measures taken?

- The remaining shrubs were cleared, with woodchip removed off site and stumps ground out.
- The site was then sprayed off with a contact systemic herbicide and encouraged to regenerate.
- Regrowth was monitored with plant species

- recorded and the development of unwanted species controlled.
- The consultant ecologist recommended that additional wildflower seed, containing specific Magnesian Limestone habitat species be imported and applied to the plot to increase the quantity of required species. It was recognised that Durham Wildlife Trust (DWT) managed a number of Magnesian Limestone specific wildflower sites that bordered onto the A19 road network, including for a SSSI site at Hawthorn Dene, which was within a mile of the service station. DWT were contacted and, following a series of meetings, an arrangement was made for DWT to provide brush collected seed from their Hawthorn Dene site.
- The consultant ecologist were engaged to record grass and wildflower species present on site, contribute recommendations to the management regime and to carry out annual visits to monitor for wildflower establishment and discuss any changes to the site management.



Photo: Early stages of reinstatement (2013)

How would you best describe the project?

An enhancement.

Further information

The site is being assessed on an annual basis to monitor the establishment of the grassland.

The monitoring is both with regard to the establishment of species as well as the identification of any required management and aftercare measures. Although at a relatively early stage in the reinstatement process, the latest survey has enabled a number of conclusions to be drawn. In particular:

- The sward is now largely closed with good cover throughout the reinstated habitat.
- Levels of typical pioneer and weed species have declined significantly over the past year.
- Several characteristic species of Magnesian Limestone grassland, for example, Kidney Vetch, Fairy Flax and Hoary Plantation have established over the past year.
- The level of young establishing Bramble, Dog-rose and Hawthorn remains a potential concern and probably means that targeted removal of these species is likely to be required. Levels of growth will therefore be removed and control measures built into the annual management programme as necessary.
- Now well established, the grassland is being managed by means of an annual late summer cut, with all arisings being removed from site.

What was your personal motivation for carrying out the enhancement?

Sir Robert McAlpine have been involved in the on-going management of this section of the A19 for many years and the current contract runs for the next 12 years.

Despite the works described above being outside of the contractual obligations, there is strong recognition of the importance of the local biodiversity, and the role that this stretch of road can play in providing important improvements to the ecology.



Photo: Cover has been established throughout (2014)