

Peak District East Visual Impact Provision project Dunford Bridge, South Yorkshire

National Grid

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BIG Biodiversity Challenge Award Category: *Client-led project award*

Project overview

The Peak District Visual Impact Provision is a world-first project to reduce the visual impact of National Grid's infrastructure in the upper Don Valley, South Yorkshire. It's a major engineering project that's created the opportunity to enhance the natural beauty, wildlife and environmental heritage of the stunning Dark Peak landscape.

Date completed: January 2023

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

The overhead transmission line targeted for removal ran through the village of Dunford Bridge and along the popular Trans Pennine Trail – itself constructed on the former Sheffield to Manchester railway.

The former sidings have been reclaimed and designated a local wildlife site – Wogden Foot, managed by Yorkshire Wildlife Trust – due to unusual grassland which had colonised the ballast left behind by the rail works.

An independent, comprehensive ecological survey undertaken before construction work began confirmed a baseline total of 105.07 habitat units on site, across grassland, heathland and shrub and woodland habitat types.



A world-first project, National Grid's VIP scheme in the Peak District National Park removed seven pylons and 1.5km of overhead electricity transmission line for the benefit of landscape and the environment.

Image credit: Benjamin Graham

What were the reasons behind this project ?

The project made use of a £500m Ofgem provision to reduce the landscape and visual impact of existing high-voltage electricity transmission lines in English and Welsh AONBs and National Parks. It was championed by national stakeholders including CPRE and Natural England and consumer-backed.

The line at Dunford Bridge was identified amongst the worst in the country by an independent landscape study, with the project driven and shaped by stakeholders.

Achieving BNG was a key element of the goal to achieve maximum enhancement of one of our most precious landscapes, along with delivering tangible environmental benefits and enhancing public enjoyment and understanding.



Every tree in the Wogden Foot nature reserve due to be removed was fully assessed as to whether its removal was absolutely necessary – 40% of those permitted for removal were retained.



Over 150 local schoolchildren were invited to site to take part in 'minibeasting' and STEM activities with Yorkshire Wildlife Trust.

What were the biodiversity measures taken?

At National Grid, a no-compromise approach to health and safety remains central to all decision-making. On this project the same attitude was taken to sustainability and environmental impacts: every decision was scrutinised around how the natural environment and biodiversity could be managed and improved. This included:

- Retaining 40% of the trees and scrub that were permitted for removal – every tree due to be removed was fully assessed as to whether its removal was absolutely necessary
- Pruning and coppicing rather than removing trees in other areas trees to encourage bats and other wildlife
- Making further enhancements to willow tit habitat, including retaining rotting trees
- Planting 6,000 new locally sourced native trees
- Safely capturing and translocating brown trout in the River Don during the works
- Building ‘refugia’ with cleared vegetation to create homes for amphibian and reptile species including common lizards
- Adopting auguring piles in construction rather than traditional, more impactful techniques to minimise disturbance to roosting bats
- Diverting 99.96% of waste from landfill
- Installing protection zones within the construction area around important flora including orchids
- Carefully storing topsoil so it could be returned to its exact location after construction
- Collecting and harvesting wildflower meadow seeds prior to construction, to use for reseeded at the end of the project
- Monitoring water quality and working with the Environment Agency to ensure no contamination

Throughout the project the local community and stakeholders were engaged via a dedicated Community Liaison Group, to provide advice and local insights. Over 150 schoolchildren were welcomed to site to take part in ‘minibeasting’ and STEM activities.

The net result of the approach has yielded a remarkable 18% forecasted BNG, far surpassing the already ambitious initial 10% target. Furthermore, two pairs of the red-listed willow tit successfully nested at Wogden Foot during construction for the first time in several years.

Further information

This was the first National Grid construction project anywhere in the world to include a 10% BNG commitment over 25 years. The company has entered into a legal commitment to independently monitor results during this period. This process includes regular reporting in the first few years followed by assessments every five years, which are all submitted to Barnsley Council. The first monitoring has confirmed the site is on course for a total net increase of 19.0 habitat units, representing a 18% BNG from the original baseline.

The team has also created three separate biodiversity ‘scrapes’ in Wogden Foot across scrub and meadow habitats, which are set to be monitored and studied by Yorkshire Wildlife Trust, Sheffield Hallam University and local schools.

The project team has received the highest possible recognition from within National Grid for setting an environmental benchmark that is set to influence all future schemes across its international operations. A lasting legacy has been left by demonstrating what is possible where every single member of the project team is fully committed and willing to change the way the company works on a day-to-day basis.

The important achievements have also been recognised by leading figures including Adrian Olivier, Chair of the National Trust’s Historic Environment Advisory Board, as well as Sir David Attenborough, who sent a handwritten note to the project’s Stakeholder Advisory Group chair Chris Baines, specifically praising project’s environmental accomplishments in protecting and enhancing willow tit habitat.



Pruning and coppicing rather than removing trees in some areas was done to encourage bats and other wildlife, with further enhancements made to willow tit habitat



Habitats and refugia were created alongside the construction area as homes for amphibian and reptile species including common lizards

Project Team

- *Client / funders* – National Grid / Ofgem
- *Other design team members* – Morgan Sindall Construction
- *Volunteer organisations*
 - Yorkshire Wildlife Trust
 - Trans Pennine Trail Conservation Volunteers
 - Barnsley Council
 - Stakeholder Advisory Group members (including National Trust, CPRE, Natural England, Campaign for National Parks)
 - Community Liaison Group members (including Dunford Parish Council, Peak District National Park Authority, Barnsley Biodiversity Trust, Friends of Peak District)

What was the motivation for carrying out the enhancement?

National Grid’s vision includes a responsibility to demonstrate its contribution to society. As part of this, its company values have a commitment to always ‘doing the right thing’. The project to remove the pylons in Dunford Bridge has been transformational for the landscape. By giving the environment the same top priority as health and safety and carefully considering the implications of every action undertaken, the project team has also brought huge long-term environmental and biodiversity benefits. Thanks to these efforts, both people and wildlife will be able to enjoy this unique and greatly enhanced landscape for generations to come.



Capturing a magic moment: willow tit spotted in Wogden Foot for the first time in several years, within the habitat specially managed and enhanced by the project team.

Adrian Olivier, Chair of the National Trust’s Historic Environment Advisory Board, commented: “A few years ago, I sat down and wrote a ten-point plan on how to carry out development properly in sensitive settings. It is as though you have not only read and followed our plan, but have actually improved on it. It’s fantastic to see major infrastructure development being implemented so sensitively. It will show others that it can be done.”