

Derby and Derbyshire Waste Treatment Centre

Derby, Derbyshire

Interserve Construction Limited

BIG Biodiversity Challenge Award category: Medium Scale Permanent

Project overview

A state of the art Derby and Derbyshire Waste Treatment Centre due to open in 2017 and will employ 49 permanent Facilities Management employees. The facility is being built for Derby City and Derbyshire County Councils as part of a 27 year contract joint venture between Interserve plc and Shanks Group plc,. Interserve is constructing the Mechanical Biological Treatment facility (MBT), a Materials Recycling Facility and a 'gasification' Advanced Thermal Treatment facility - at a cost of approximately £145 million.

The facility will sort waste being diverted from landfill to recover ferrous and non-ferrous metals, as well as plastics, to be recycled. Non-recyclable waste is then processed into a Refuse Derived Fuel (RDF), which will fuel the gasification process. Once operational, the facility is expected to generate enough energy to power 14,000 homes.

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

This had been a disused brownfield site for 30 years, but this was the only known lizard occupied site in the Derby area. The common or viviparous lizard was present on site and had to be relocated prior to construction

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

Mitigation for the lizard population was part of planning and ecological licence conditions. Interserve and the client wanted to ensure that the lizard population was protected therefore worked closely with Derbyshire Wildlife Trust.



Signage on site

What were the biodiversity measures taken?

Interserve hired RPS Consultants to manage the lizards' relocation, working closely with Derbyshire Wildlife Trust. Lizards were caught by placing a suitable number of refugia mats across the site, which the lizards would use to either bask upon or shelter underneath. The site could be declared free from lizards if none were observed after 5 consecutive visits.

The site was divided up into segregated sections, including a strip of vegetation preserved as an area to which the lizards could be relocated. By making this area attractive to the lizards, and by cutting the grass onsite very low to encourage migration, RPS ensured that the lizards would not attempt to move back on to the site. The team had to act quickly as it was crucial to move them all before the lizards started to hibernate for the winter. In this case, the lizards would hide in deep and inaccessible places, leaving the team unable to relocate them until the following summer, delaying the construction process significantly. However the process was successful and a total of 80 lizards were entirely relocated by October 2014.

The team also built hibernacula(shelters in which the lizards can seek refuge and/or hibernate) using spare logs and sticks found onsite. In addition, Derbyshire Wildlife Trust, Interserve and GHD Consulting Engineers have designed and installed a unique kind of kerb for the pavements onsite. Kerbs on construction sites usually feature large holes to facilitate surface water drainage, but holes this size might result in lizards, as well as common toads (another priority species) to fall into the kerb gulley and get washed away. To ensure their safety, therefore the team fitted a specially designed curb featuring several narrow slots too small for lizards to fit through but big enough to allow for effective drainage.



Kerb specially designed to prevent lizards and toads from entering the drainage system:

How would you best describe the project?

Mitigation

Further information

The lizards are now safely contained in the top left corner of the site, with specially preserved long grasses of the kind these lizards typically like to occupy.

The Derbyshire Wildlife Trust still visits the site regularly to inspect the lizard habitat. They will soon be occupying a larger space, as the Consultants intend to extend the current area to create a "lizard corridor" for them to occupy freely. The site has been landscaped to be of maximum benefit to the lizard population.

What was your personal motivation for carrying out the enhancement?

The site team were all keen to protect this important UK species. Staff and sub contractors were all involved.



One of many hibernacula built on site from site won material: