

Rugeley Flood Alleviation Scheme
Rugeley, Staffordshire, England
Kier Utilities/ Team Van Oord

BIG Biodiversity Challenge Award category: Small Scale Permanent Award

Project overview

The purpose of the works is flood risk management - to reduce the risk of flooding and to protect the local residential and commercial properties.

The permanent works for the project comprise the construction of an earthwork embankment (with a sheet piled seepage cut-off), at the North East end of the existing Hagley Park playing fields, transforming them into a flood retention reservoir capable of storing around 74,000m³ of flood water during flood events. The works also include the construction of a new outfall into Rising Brook and an orifice structure within the watercourse, upstream of the reservoir to restrict flow within the brook.

In order to store the required volume of flow water into the new attenuation area, the southern half of the field is to be lowered.

Were there any specific reasons that led to this project?

The site has been prone to flooding in recent years. The Environment Agency made the decision that flood alleviation was required to help prevent further flooding

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

The site is on an existing community playing field, which it will be returned to after work is completed. The site had little biodiversity other than species identified with amenity grassland.



Ariel view of Rugeley Project

What were the biodiversity measures taken?

This is an urban site with little space for wildlife, so incorporating enhancements was a big challenge, however the site team identified a small opportunity to incorporate an area for invertebrates.

Several small trees needed to be felled on site for the works to be completed, the site team saved the material from being chipped and piled it in a quiet corner of the site.

It is hoped that the newly created deadwood/ log pile habitat will encourage invertebrates and potentially amphibians and reptiles in an area where there is little natural habitat.

Kier site staff came up with the idea of the log pile and wanted to build it themselves. We recognise that this isn't a big or elaborate enhancement but is something that can be very easily replicated on even the smallest site at no cost. We encourage all of our site staff to think of enhancements no matter how big or small with the hope that collectively they will amount to a significant net gain.



Log pile habitat created

How would you best describe the project?

Enhancement

Further information

A log pile habitat is very easy to create, you simply cut logs into similar lengths and stack them in a quiet and undisturbed area, where wildlife can move in without be disturbed. Brash and other organic matter can be placed around the area too if it available.

The site team enjoyed creating the pile and the creative process has acted as team building and a positive effect on team spirit.

What was your personal motivation for carrying out the enhancement?

Our personal motivation was to enhance the local environment and to demonstrate that enhancements, even on small scale can make a difference to wildlife and don't have to be expensive.



Site activity at Rugeley