

Bugs and Bees

Barking, Essex

MVB – JV (Morgan Sindall plc, VINCI Construction & Batty Seletanche)

BIG Challenge 2015 submission category: Pollinator

Project overview

Construction of a wildlife habitat (11m²) within an area of waste ground at Beckton Sewage Treatment Works, located in an urban area of Barking.

Three plots were created within which plants chosen specifically for bees were planted. Waste 'poly pipes' were also used as planters and to construct a 'bug hotel'.

The area was created by the Lee Tunnel's environment team. The pipes, which would otherwise have been thrown away, were cut into suitable sizes and painted prior to being potted up.

The cost was approximately £75. The Lee Tunnel is a 6.7km tunnel which will run beneath the London Borough of Newham from Beckton to Abbey Mills.

It is being constructed as part of the Thames Tideway Improvement Scheme, and will help prevent more than 16 million tonnes of sewage mixed with rainwater from overflowing into the River Lee every year.



Photo: Wildlife area nearing completion

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

The biodiversity enhancement was created within an area of gravel which had started to be colonised with weeds. As it had no purpose, it was proposed that a section of it be utilised to construct some form of wildlife habitat.

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

There were no specific conditions which led to carrying out the work, other than the desire to create an area for wildlife, specifically bees which are under threat.

What were the biodiversity measures taken?

The biodiversity measures taken were the planting of flowers and herbs attractive to wildlife, specifically bees, and the construction of a bug hotel.

Quite a large quantity of poly pipe off cuts were on site, so rather than dispose of them as waste, it was looked at ways in which they could be reused. In addition to the poly pipes, all the rest of the materials used to make the bug hotel were also reused waste items.

A new area of habitat has been created, albeit a small one, which requires very

little maintenance. The idea can be easily replicated and is inexpensive, as other than the plants, compost and one plant trough, no other materials were purchased.

Operatives from the project were involved in sourcing, preparing the poly pipes for reuse and delivering them to the work area. All of the other work was undertaken by the Environment Team.

All the plants were chosen specifically for their attractiveness to pollinators, specifically bees. Those planted at ground level and in the shorter pipes, also had to be unattractive to rabbits which are prevalent in the area.

Plants included strong smelling herbs such as rosemary, chives and thyme, and prickly plant species such as sea holly and thistles.

How would you best describe the project? An enhancement.

Further information

Installation firstly involved setting out the designated area and then removing any weeds within it.

Three planting plots were then set out and the gravel and top 200mm or so of made ground was removed and replaced with compost.



Photo: Bug hotel

Planting of the plots was then carried out and the gravel replaced. The poly pipes were planted, sited in designated spots and potted up.

The bug hotel was then constructed from poly pipes supported by a wooden frame. The pipes were then

filled with reused waste materials suitable for overwintering insects.

Objectives for the activity have been met in that the creation of a new wildlife area was successful, and in the choice of plants, as can be seen by the bees that regularly visit them.

In terms of lessons learnt, the presence of rabbits in the area should be appreciated and their tendency to eat practically anything.

Originally one of the beds was sowed with wildflowers and planted the poly pipes with bee loving species such as Scabious, however these were soon decimated by the rabbits, so the planting scheme had to be rethought.

The poly pipes we sited after this were also a lot higher - beyond the reach of rabbit teeth.

What was your personal motivation for carrying out the enhancement?

To create a habitat for wildlife, specifically pollinators such as bees which are in decline.

To reduce the amount of waste disposed of, by creating a productive use for poly pipe off cuts.

This was a relatively simple and inexpensive thing to create, but will hopefully have some benefit to pollinators and insects in the area.



Photo: Polypipe planter