



**the BIG  
Biodiversity  
Challenge**  
*do one thing*

## **Structures & Tunnels Improvement Portfolio (STIP) Power Road Bridge London, England**

**Client:** Transport for London; **Contractor:** HOCHTIEF UK

### **BIG Biodiversity Challenge Award Category:** *Construction Phase Award*

#### **Project overview**

HOCHTIEF UK undertook a four-year long project to replace a road/rail bridge on the busy North Circular Road for Transport for London. An area of untended scrub land, adjacent to the railway, was identified as being suitable for the site compound. There were no requirements within the scope of works for enhancing biodiversity.

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

A survey carried out before work started revealed nothing of environmental significance, just a few self-seeded trees in poor condition. The area was overlooked by adjacent blocks of flats and was an eyesore with the potential to attract vermin. An excavator with a shaker bucket was used to clear the area so any topsoil would fall to the ground. The topsoil was used to form a 1.2m high bund alongside the new access road. Planted with shrubs and tall grasses, it created both a visual screen and a noise barrier for residential properties who would be affected by the works.

#### **What were the reasons behind this project ?**

During the enabling works, the grass verges on the main road had to be removed and then reinstated on completion. The soils tested clean and were relocated in the newly-formed compound. The team's interest in the natural environment quickly led to some apple trees and butterfly-friendly flowers being planted. This was followed by some tomato plants and a full-scale vegetable garden soon evolved. There were no drivers for this other than the site team's enthusiasm. It enhanced the work environment, promoting team working and togetherness and certainly improved the visual outlook for the neighbours whose properties overlooked the site.



*Untended ground previously used to fly tip. 60 tonnes of rubbish were removed*



*The site team's passion and enthusiasm was evident to all who visited*

### What were the biodiversity measures taken?

Over the duration of the project the vegetable garden caught the imagination of everyone on site including the client team and sub-contractors and became the perfect location for a few team barbeques. Many vegetables were grown including carrots, courgettes, sweetcorn & strawberries, cropping from June through to December. In year three alone 500kg was picked. The team increased their knowledge of horticulture and engaged in lots of healthy eating. Together with flowering tubs and sunflowers it proved to be very attractive for birds and insects and during the winter months staff erected bird feeders and took part in the annual RSBP Garden Watch. At the suggestion of the client the team entered the London Underground 'Stations in Bloom' competition. Initially rejected because they were not a station they won an appeal and scooped several awards including Best Cultivated Garden. The theme for the competition was *Engineering* and a model of the Golden Gate bridge was made from timber waste, painted and planted up with flowers.

The circumstances that lead to the development of the vegetable garden were unique to this project i.e.: location; duration; availability of the soil; space to establish an area; a project team with an interest; a project manager who had the foresight to see the potential benefits for his team and encouraged this activity. There is no reason why similar planting schemes could not be encouraged on other construction projects. It is a fantastic way to build the team and give everyone an interest beyond project delivery.

When the project is completed the soil will be reinstated in the verges on the main highway. The cabins will be removed from the compound at the area will be planted with wildflower seeds *Pollinators Paradise* leaving a wildflower meadow where once was an area for fly-tipping.



*Vegetables galore*



### Further information

The area that became the vegetable garden came into being because a quantity of soil had to be retained and then reinstated as verges at the side of the new highway once the project was completed. By planting up the soil it improved the quality and prevented it from the deterioration that would have occurred if simply stockpiled. If the decision had been taken not to retain it on site, it would have been sent off for reuse elsewhere and then a similar quantity would have been imported four years later. This which would have incurred costs and had an impact on the environment with the additional vehicle movements.

The area of land that became the site compound, whilst belonging to London Underground, had become overgrown and was an area that attracted fly tipping. It had no environmental value and was a blot on the landscape for the residents whose properties overlooked the land.

Clearing the area and developing the planting schemes that the project team undertook certainly attracted birds and insects to the area and enabled them to thrive. It is hoped that the wildflower meadow that is to be planted once the compound is clear will continue to attract birds and insects and be a visual amenity to the local residents.

### Project Team

- Client: Transport for London
- Principal Contractor/Design: HOCHTIEF UK

The project was wholly funded by the project team who bought seeds and plants themselves. Although the team were permitted to enter the Stations in Bloom competition they were denied the £400 normally given to entrants to assist in preparing the gardens

### What was the motivation for carrying out the enhancement?

The project manager Jon Elliot saw an opportunity to engage the team, put the soil to good use and created something that became a focus point over the duration of a long project. This is a fine example of what can be achieved on a 'temporary' construction project in helping create a legacy for the future. It enhanced the team's interest in and knowledge of the natural environment in addition to delivering a quality construction project delivered on time and within budget.



*The Golden Gate Bridge built for Stations in Bloom competition*



*The Hochtief site team*