

KING'S COURT AKA FLORAL COURT AND CARRIAGE HALL COVENT GARDEN, CENTRAL LONDON

AECOM Infrastructure and Environment Ltd, Sir Robert McAlpine

BIG Biodiversity Challenge Award Category: Small scale

Project overview

AECOM partnered with Sir Robert McAlpine (SRM) to deliver 12 green roof areas in a new building in Covent Garden bringing associated benefits to a prominent Central London location, encouraging more biodiversity: pollinating insects including bees, food for bats and hopefully bringing back House Sparrow to this part of London.

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

The site is located in a densely urban area lacking virtually any green habitat. It comprised a building, a few trees in a courtyard and a few shrub plants. It was of low biodiversity value. The objective of the ecology recommendations was to create an island of biodiversity and to connect the site with other such foci in the Central London area, such as the Wild West End, by reducing the distance between islands. This has increased the biodiversity of Central London and supports the London Borough of Camden's policies on green roofs and sustainability.

What were the reasons behind this project ?

SRM and AECOM were keen to maximise the biodiversity enhancement of the site and surrounding locality by striving for a BREEAM excellent development. This has been achieved through a combination of green roofs, soft landscaping and artificial habitats and forms an integral part of SRM's Corporate Social Responsibility objectives and the objective of overall biodiversity gain pursued by the AECOM Ecology Team for all appropriate developments.



Green roof recently finalised. N. Pigula (SRM)



Trees and planters in courtyard. N. Pigula (SRM)

What were the biodiversity measures taken?

This project is an example of how to maximise opportunities for biodiversity utilising small areas and creating green roofs and other habitat at different levels of a building, which all add up to a substantial increase in the biodiversity of the site. This comprises 12 new areas of green roof as well as planters and trees in the courtyard and at basement level.

The project comprised two main measures:

- Creation of a diversity of valuable habitat with a particular focus on insects and other invertebrates utilising a range of vegetation and substrate types from loam to pebbles. The green roofs were seeded with carefully chosen plant species to support pollinating insects and birds year round as well as meeting criteria in terms of aesthetic appeal. The gain in biodiversity will contribute to habitat connectivity across Central London, e.g. the Wild West End initiative.
- Provision of the habitat and associated features to support a colony of House Sparrow. Support for House Sparrow (and other birds) has been created with shrubs and trees for roosting, food sources including the green roofs, water and installation of sparrow terrace nest boxes (and two other generic bird boxes).

A five-year management and monitoring plan has been created. This will be included in the facilities management of the building with AECOM ecologists undertaking monitoring.



Green roof with piles of pebbles. N. Pigula (SRM)



Green roof. N. Pigula (SRM)

Further information

The green roofs were installed in winter and were seeded in late spring. Our AECOM ecologist went to site and provided advice mid-installation about the care of the green roofs and advised on the seed mixes to be used that were also compatible from a landscape perspective, and overall construction from the habitat viewpoint. The green roof and range of substrates have increased biodiversity at the site and the local area, and it is hoped that birds including House Sparrow will further add to this. A benefit of applying to the BIG Biodiversity Challenge was to encourage the ambition to achieve significant gains for biodiversity.

There has been a concerted effort to ensure that the links including communication between client, contractor and ecologist have worked to deliver the project as conceived and planned. This has been successful and was a key element in delivering biodiversity gain and the success of our project. The role of awards in providing incentive to achieve the above and beyond is really important.

Project Team

- Sir Robert McAlpine
- AECOM Infrastructure and Environment Ltd

What was the motivation for carrying out the enhancement?

All members involved in the project from SRM and AECOM were keen to provide much needed habitat for local wildlife in a dense urban area with lack of natural habitats and opportunities, coupled with an improvement in connectivity across the Capital.

House Sparrow has undergone a dramatic decline in the Capital and there is an imperative to support the recovery of this iconic London species.



Trees and planters at roof level at construction stage. N. Pigula (SRM)



Sparrow terrace erected on building wall. C.Fenton (AECOM)