

The David Attenborough Building Green Roof Cambridge City Centre

Kier Construction – Eastern region

BIG Challenge 2015 submission category: Large scale permanent

Project overview

The David Attenborough Building is a twentieth century design icon that contains laboratories for Mathematics, Metallurgy and Zoology.

It provides a place of work, research and study for 500 Cambridge Conservation Initiative professionals: 160 University staff, 90 PhD, 100 final year undergraduate students, and museum staff. It will also house four million specimens from around the world.

Kier's £38.5m refurbishment aimed to restore it to its original form and upgrade the building fabric to modern standards, enhancing sustainability and energy efficiency.

This a pioneering refurbishment project with bespoke Sustainability Framework targeting fifty sub-themes of sustainability.

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

There were no previous biodiversity conditions on site, the roof was empty space in the city centre of Cambridge.



Photo: Artists impression of green roof & photovoltaic panels

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

One of the client's main project drivers was to enhance sustainability and energy efficiency of this late 20th century building, so the concept was both client and contractor-led.

The project is also under BREEAM and a bespoke sustainability framework.

What were the biodiversity measures taken?

Kier transformed 60% of the roof area into a low maintenance green roof, by planting seeds which will grow naturally.

This green roof will provide a habitat for birds and invertebrates, at the bat boxes installed will provide a new habitat for bats.

At the same time, the green roof will reduce rainwater run-off and improving the building's insulation.

Local bodies, Cambridge Botanical Garden and the Cambridge Conservation Initiative, were heavily involved in the planning of the green spaces, and the plants used were identified in the Cambridge City Nature Conservation Strategy and represent local landscape.

Once the green roof is fully established, it will result in a biodiversity net gain.

How would you best describe the project?

An enhancement.

Further information

Inside the building a living green wall also runs the full height of the atrium, and will reflect planting from around the world.

This is watered by rain water collected on the roof, making it a low maintenance planting system.

As the green roof and green wall have only recently been installed, the long term benefit can only be predicted: to result in biodiversity net gain and a new habitat for birds and invertebrates.

What was your personal motivation for carrying out the enhancement?

At Kier, we are passionate about improving sustainability and are pioneers in the subject pushing the boundaries on every project.

This is one of the most sustainable projects carried out by Kier. Construction will always have impact on the area, and we try to reduce negative impacts and provide long lasting positive influence from our activities.



Photo: The expanse of the green roof