



**The Garden at 120**  
**City of London**  
**Sir Robert McAlpine**

## **BIG Biodiversity Challenge Award Category: *Project of the Year (up to 5ha)***

### **Project overview**

The Garden at 120 is London's first truly public green roof space situated on the 15<sup>th</sup> floor of Fen Court. With an 'English Garden' theme the 2,200m<sup>2</sup> garden creates a space that will inform and inspire future tall buildings as the city grows upwards.

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

Fen Court replaced an existing building which covered the same footprint. Prior to redevelopment, the site had no public roof space or ecological value as determined by the project ecologist. The site was assessed in line with the UK Post-2010 Biodiversity Framework, the London Biodiversity Action Plan (LBAP) and the City of London Biodiversity Action Plan (CoLBAP). Based on the site survey, ecological enhancement measures were targeted for swifts due to their decline.

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

There was a planning requirement for a publicly accessible space from the project outset. With few large open or green spaces in the City of London, the Corporation of London see the 'fifth' elevation of buildings as an opportunity to redress this balance.

The client sought to go beyond this requirement, to maximise the biodiversity value of the space and leave a lasting public legacy. The size of the site meant there was an opportunity to provide more than a 'pocket park'.

A client-led landscaping design competition was held, with the landscape architectural practice Latz and Partner the eventual winner.



*The roof garden (centre of image) as seen from street level*  
*(Sir Robert McAlpine)*

## What were the biodiversity measures taken?

The design proposal took the angular geometry of the building as its starting point, introducing two large pergola structures above a gently rolling landscape. These pergolas became the support for a forest of Wisteria trees, forming a lush canopy. The original landscape design added the weight of four storeys, so the building structure and roof design had to be revised and optimised. This demonstrated the commitment to the roof garden and took collaborative work from all of the project team to achieve.

The garden occupies all of the accessible roof area including a promenade allowing 360-degree walks around the building's perimeter with views across the London skyline. A water feature runs the along the southern edge forming a long seat offering additional views. The roof garden is fully accessible to the public with no booking required.

In the first 3 months since opening, 70,000 people visited the garden with numerous events being held, demonstrating its impact and popularity. The intention is that the garden inspires others to provide opportunities for biodiversity to flourish and for people living and working in the area to also enjoy the benefits.

Envisaged as an 'English Garden' in the sky, our sustainability team worked with the client and architect to choose the best species for attracting local pollinators and increasing biodiversity. Swift boxes were installed to provide spaces for this migratory species. The garden comprises of four different areas boasting more than 3,000 plants.

The landscape design achieved a BREEAM rating of Excellent, achieving a positive change in ecological value equating to a 50% increase above the maximum BREEAM requirement. Eric Parry Architects also consulted with an expert on Wisteria cultivation to optimise the landscape design development. An irrigation system and long-term management plan are in place to ensure the ongoing maintenance of the environment.



Wisteria climbing pergola structure  
(Sir Robert McAlpine)



Selection of planted species (Sir Robert McAlpine)



### Further information

Garden species: 85 Wisteria Trees; 146 linear m wall planting including: 53m self-clinging climbers, 50m wire trellis trained climbers, 25 apple and pear cordons, 8 fan-trained fig trees; 353m<sup>2</sup> bulbs, grasses, perennials borders; 121m<sup>2</sup> box parterres including: 125m box hedging, 52m<sup>2</sup> shrubs and perennials. A 5-year Landscape and Habitat Management Plan was established to ensure suitable maintenance to retain the ecological value and minimise damage and disturbance. The intention is that the landscaping is kept peat-free and pesticide-free. An annual monitoring report will be produced which will assist with demonstrating success. The irrigation system uses a combination of reservoirs and drip irrigation. All plants grow in a continuous layer of growing medium that extends under all areas. This is a pure-mineral substrate consisting of lava, pumice tuff and zeolite tuff which is lightweight with high water and nutrient-retaining capacity. To provide the best growing conditions the substrate has been complemented with 10% compost to be replenished periodically in accordance with best practice. The garden is signposted and advertised to the public in various ways. There are visible signs surrounding the building directing the public along the passageway to the lift which opens directly onto the walkway with no need to enter the building. There is a dedicated website for the garden (thegardenat120.com), providing information including the ability to view and book events. There has been significant media and social media interest in the building since opening, with the space also being featured on the BBC's Gardener's World (broadcast 31/05/2019).

### Project Team

- Client: Generali Real Estate
- Main contractor: Sir Robert McAlpine
- Specialist contractor: Permasteelisa Group, Littlehampton Welding, Frosts
- Architect: Eric Parry Architects
- Landscape architects: Latz+Partner
- Engineer: Arup
- Ecologist: Watermans

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

The motivation was to take the requirement of providing a publically-accessible space and to maximise the opportunity, creating an inspiring environment that maximises the biodiversity impact and leaves a lasting public legacy in the heart of the city.



*Installation of final planting  
(Sir Robert McAlpine)*



*Swift boxes installed on pergola structure  
(Sir Robert McAlpine)*