

**RG Group Brunel House
Bristol
Unite**

BIG Biodiversity Challenge Award Category: *Project of Year Award (up to 0.5 ha)*

Project overview

Grade II listed building in central Bristol being converted to student accommodation, duration 44 weeks, 812 people involved, 0.4 ha, £9.8m. Former council offices with dilapidated green areas. The façade had to be retained, the building was of historical importance with its connections to Isambard Kingdom Brunel & Bristol

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

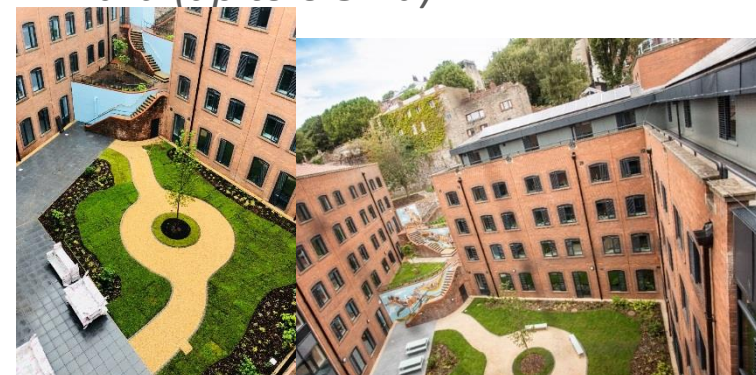
Ecology survey identified populations of scarce plants on site - ivy broomrape, bee orchids & common spotted orchids. 6 habitat types within the site which were assessed as low ecological value. The horse bazaar structure covered in dense vegetation was identified as foraging habitat for bats, whilst wooded areas provided habitat for a range of common bird species. No evidence of or potential for bat roosting was found. No evidence of nesting birds was observed at the time of survey. Planning requirements - ecological management plan, relocation of flora, 15 swift & 5 bat boxes

What were the reasons behind this project ?

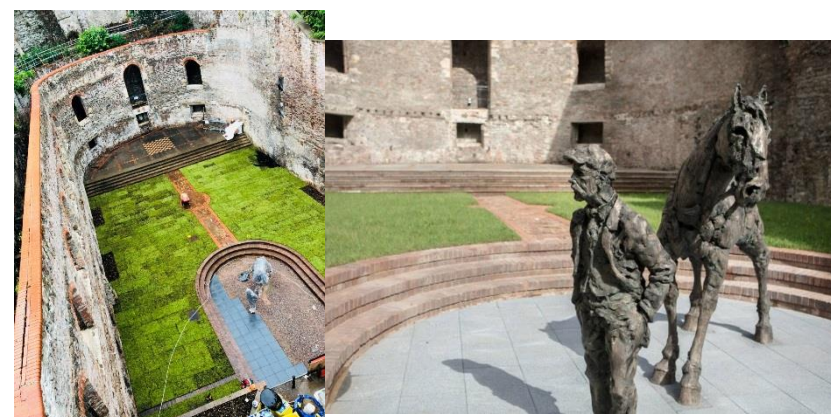
Since 2016 RG subscribed to the BIG Challenge & have an ongoing aim to leave the areas we work in biodiversity positive, protect the existing environment and provide local communities areas that benefit them and wildlife.

BREEAM credits & planning conditions were applicable, however we decided to go beyond these. We wanted to connect not just with the onsite team, but end occupants, local university groups and feed into national and local conservation groups.

The end aim was to leave biodiversity positive, attractive green mindfulness areas for people to reconnect to nature along with maintenance plans for the long term



Central courtyard, wildflower turf, native planting Photo by Paul Groom



Restored horse bazaar and restored art work with wildflower planted areas and foliage left for insects Photo by Paul Groom

What were the biodiversity measures taken?

On visiting site it was apparent that there would be scope to turn it into a great biodiversity project and include the wildflower turf part of the CIRIA 2017 prize, we had 200m². The next step was to speak to the RSPB and ask for them to review the scheme to make recommendations to enhance the proposals, we added in 131m² extra wildflower turf, 218m² wildflower seeded & 370m² flowering lawn areas. We translocated the bee orchid & common spotted orchid and retained ivy broomrape where possible.

Following RSPB proposals enhancements were understory planting of native shrubs, natural debris topography providing invertebrae interest, retainers included solitary bee habitat.

Increased swift boxes to 20 and installed solar powered call system to increase chances of birds using, changed location.

Change of Schwegler nest boxes to 3S to help starlings which are in need of conservation but cannot access small holes.

Relocated bat boxes for greater uptake chances. Upgrade of boxes to recycled materials by UK company with 10% of proceeds going to Bat Conservation Trust.

6 bee bricks from Buglife (we liaised with Buglife and BumbleBee Conservation trust also)

Kidney Vetch planted for small blue butterfly – it is declining in the UK and has been spotted around the Bristol area.

Carrot Mining Bee is a rare species but has been previously spotted in the area planted wild carrot to promote food sources. Shrill carder bee in danger of extinction, the wildflower mix provides its food source.

A large number of the team were involved in activities such as initial vegetation clearance through to making habitat areas from surplus materials and final seed sowing. Via links with conservation groups we managed to introduce the local University Gardening Group – Roots – to the end occupiers for ongoing involvement. Consultations & enhancements easily replicable on projects.



Interpretation Boards, Photo Paul Groom



Swift boxes on final building, Photo by Paul Groom

Further information

The enhancements were programmed in as part of the works with any extra involvement being done voluntarily by the site team. It was very motivational for the project team to be involvement in the end biodiversity and great enjoyment was taken at being able to “get gardening” for want of a better word and escape from the pressures of the build. Some of the items such as bird boxes were due to be installed anyway it was just trying to think smart about them to maximise their potential. By engaging local conservation group Buglife it allowed us to assess what was most beneficial to Bristol & allowed introduction of Roots Community Gardening Club, part of the local university, who will assist with ongoing maintenance, studies and surveys on the site, these surveys will then feed back into the conservation groups records. The national impact was considered via Bumblebee Conservation allowing us to tailor the wildflower mix and add in planting (packets of seeds picked up by the team and planted) specifically for endangered species, again these can be monitored by the ongoing gardening club. We had all interested parties feed into the habitat management plan and increased it from 5 years to 10 years. We delivered a project that protected existing flora and fauna, increased habitat and provided new areas for rare UK species. The residents have engaging green areas that aid social and mental wellbeing, the local community gardening group are involved with ongoing maintenance and valuable wildlife studies

Project Team

Client / funders – Unite, Other design team members – FPCR & East Midlands Landscaping, Volunteer organisations – Bumblebee Conservation, Buglife, Roots Community Gardening

What was the motivation for carrying out the enhancement?

When all’s said it’s doing things like the BIG challenge that make a difference. You can have a good project/day at work or you can have a great project/day, across the board for all team members the thing that makes the difference is getting engaged and being involved – this challenges enables that. It is a win-win situation, our company get staff more likely to stay and be attentive in their work, individuals feel more involved, appreciated and motivated and it benefits community/wildlife. For our clients they have a project they can feel proud in and take up the mantle.



Insect hotel, bird boxes on retained tree areas Photo by Paul Groom



Bird, bat, insect boxes on existing structure with left log piles/materials and foliage for foraging Photo by Paul Groom