‘Bat Houses’ at Park View Student Village
Newcastle upon Tyne
Galliford Try Building North East and Yorkshire

BIG Biodiversity Challenge Award category: Medium Scale Permanent

Project overview

Galliford Try was awarded a contract by Newcastle University to construct the new £75 million Park View Student Village in Newcastle upon Tyne. The project involved replacing the existing 1970s student halls buildings on Richardson Road near the city centre. The new Student Village will feature a total of 1,277 new study bedrooms across six blocks of accommodation.

As the old student accommodations was home to a multiple roosted bat colony, two innovative and cutting edge ‘Bat Houses’ were constructed prior to the main works commencement in order to conserve and sustain the largest documented colony within Newcastle.

To facilitate this, expert input and advice was sought from E3 Ecologists, Natural England, Newcastle City Ecology and Space Architects.

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

Around 230 protected bats! They were residing in the existing buildings- made up of maternity and transitional roosts. This included a network of strong bat community routes, key foraging area with potential use by individual non-breeding Nathusius pipistrelles and a possibility of hibernation.

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

Given the magnitude of the largest Geordie bat colony - a solution of a parallel scale was required. As all bat species in the UK are protected under Conservation of Habitats and Species Regulations (2010); and it is an offence to disturb bats under the Wildlife and Countryside Act (1981), a carefully considered approach was vital.

Multiple experts were consulted so that the mitigation measures considered not only the roosts, but the strong community routes and key foraging areas of the multiple species using the site were maintained. The solution was effective as it was impressive.

Bat House 1

What were the biodiversity measures taken?

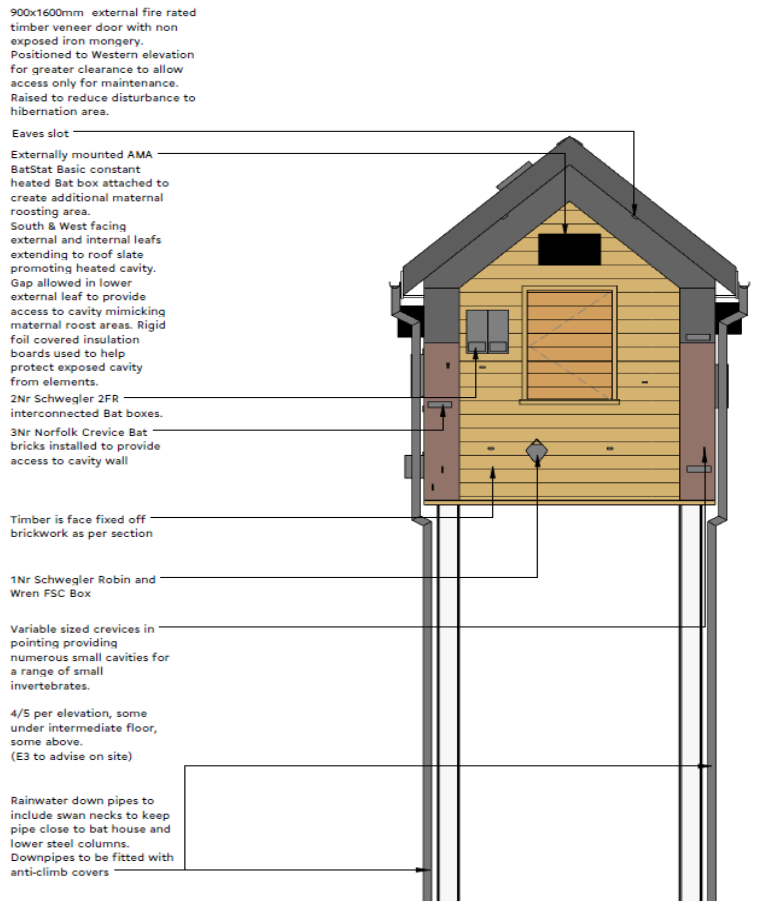
To satisfy Natural England, bat conservation / protection laws and the Local Biodiversity Action Plan, the bat colony was never without a suitable replacement to roost during the construction period. Two new innovatively 'enticing built' bat houses (or bat 'Hotels' as those involved refer to them as) was constructed on site prior to demolition to encourage the roosting bats to move in.

In essence, they were designed to replicate the look and feel of an ideal building for roosting bats with added perks as to further encourage use. The main innovative feature in each house was seasonal heating settings to encourage both maternity roosting and hibernation (which previously was of low possibility in the existing buildings). In addition, there are three points of access on each cavity wall and each house is designed for a variety of bat species to habit (therefore increasing the ecological diversity of the area).

During construction, site teams were informed of the purpose of the houses through toolbox talks. As shown in the photos, the houses were highly noticeable to those in the area and the local community have been very positive over the mitigation measures taken. This was not by chance, but as a result of stakeholder and community liaison meetings prior to the works.

An added bonus of the houses being placed on steel columns ensures the areas below can still be utilised by the students for the which the accommodation has been built for.

Though the two Bat Houses have set an exceptionally high standard of innovative bat accommodation, with similar levels of detailed planning they would be relatively straight forward to replicate on various appropriate sites. With the appropriate knowledge input and craftsmanship, any site could have similar structures.



How would you best describe the project?

A mitigation project that made Bruce Wayne's dreams come true!

Further information

Prior to the surrounding buildings' demolition, the structures supported at a height by steel columns were constructed. They replicated a traditional cavity wall construction, using a timber joist roof and artificial slates. All materials are responsibly sourced and the timber has a CoC / FFC certificate.

House positioning was also an important factor and a flight survey was conducted to identify pre-existing flight routes between roosts to avoid noticeable alterations in flight paths.

It was crucial that once the houses were complete and operational, very little (if any) short or long term maintenance would be required – so the bats would rarely be disturbed. From ground level, only the temperature would need monitoring and odd adjustments if required – a specialised bat expert being responsible for this

All the ecological and / or bat related objectives laid down were met.

A lesson learnt early on was that the effectiveness of the original heating proposal of solar panels would have been limited by the many existing trees. There were also difficulties to overcome in regards to building regulations for wiring and heating. The solution was to incorporate 'off the shelf' heating boxes inside the new structures, to be powered by the mains electric (a more reliable source) with thermostatic controls.

Bat House 2

What was your personal motivation for carrying out the enhancement?

We all wanted our own Batcave when we were younger, now we finally got our chance! In addition, this was the perfect opportunity to facilitate Galliford Try's vision to be leaders in the construction of a sustainable future.