Castle House, Bristol

Preliminary Bat Roost Assessment

On behalf of Evans AV Staging Ltd

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Contents

1 Executive Summary

Avondale Ecology completed a Preliminary Bat Roost Assessment including desk study and building inspection for the conversion of an existing warehouse to 14 flats.

The site is not of any notable botanical interest and there will not be any significant impacts on important habitats. The warehouse has negligible suitability to support roosting bats. There were no obvious access points, limited suitable internal features, no evidence found on internal inspection, and high levels of surrounding light spill. Some gaps in the brickwork to the front of the building round the downpipe were checked and appeared covered with cobwebs, with no evidence of current use by bats. Again, to the rear, the stone wall adjacent to Gaunt's Ham Park had isolated crevices with winter roosting potential. There was no evidence of current use.

There is low potential for nesting birds and evidence of active nests was found internally. There is some potential externally, especially on the hopper and parapet of the roof.

Proximity of the rear of the site to the park means there is potential for mammals such as badgers and hedgehogs to access the site if the rear/side stone wall is removed. If this wall is removed during works either entirely or in part, then the below avoidance/mitigation measures should be followed.

The site is exempt from BNG due to less than 25sqm of habitat being present.

The following avoidance and mitigation measures will be required:

Avoidance/Mitigation Measures

- Pre-works check to be done on isolated features in external brickwork to ensure no bats are present.
- Tree protection measures in accordance with BS5837.
- Sensitive external lighting design.
- If building demolition/roof removal works commence during bird nesting season (March – August), a pre-commencement nesting bird check will need to be completed by an ecologist. If active nests are found, they will need to be retained along with a buffer area until chicks have fledged.
- If the wall adjacent to Gaunt's Ham Park is removed entirely or in part during works, then on-site excavations should be covered overnight or fitted with escape ramps suitable for use by species such as badger and hedgehog.
- Works to cease immediately and an ecologist contacted for advice if any protected species such as are unexpectedly found or suspected to be present when an ecologist is not present on site.

Enhancement Measures

- Additional habitat creation such as native hedgerow or green wall planting along site boundaries could be considered.
- Bat or nesting bird provision could be incorporated into the new building if there are any suitable locations.

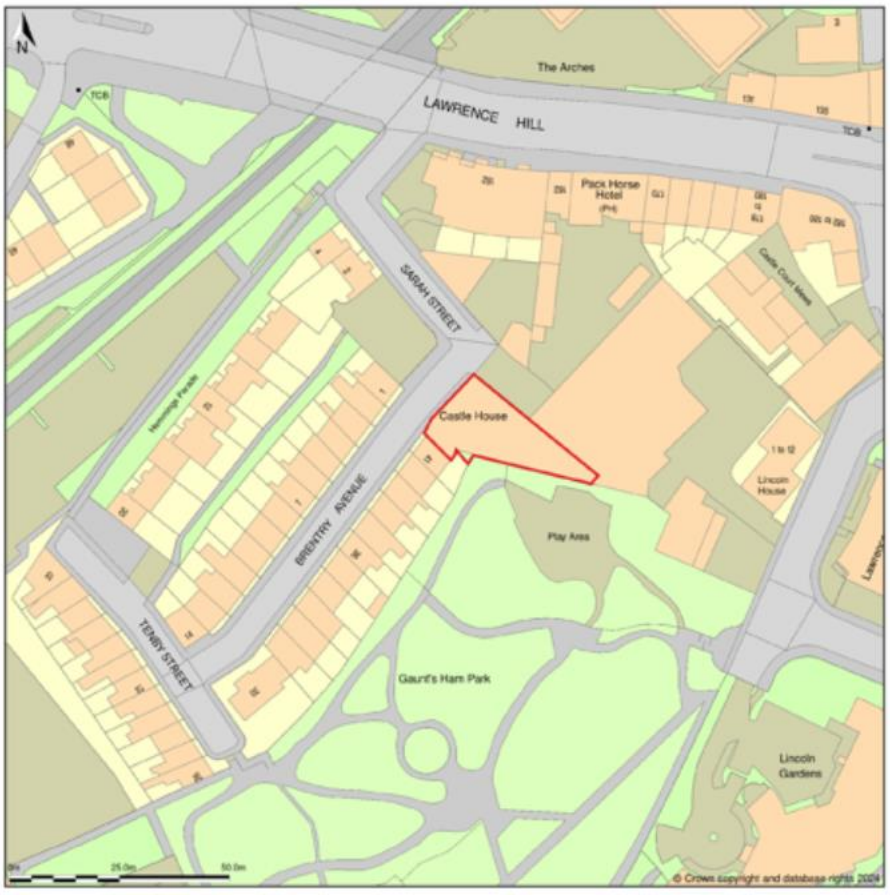
Please be aware that a survey of this nature can only provide a snapshot of the site's ecological importance. Please note that the survey results and any recommendations contained within this report will remain valid for two years following the date of survey.

2 Introduction

2.1 Introduction and Aims

Avondale Ecology was commissioned by Evans AV Staging Ltd to complete a Preliminary Bat Roost Assessment for the conversion of an existing warehouse to 14 flats at Castle House, 42 Brentry Avenue, Lawrence Hill, Bristol BS5 0DL (Ordnance Survey grid reference ST 60690 73320). The site location is shown in Figure 1.

Figure 1 Site Location



2.2 Objectives

The survey included the following objectives:

1. To assess whether proposals may have an impact on designated sites for nature conservation;
2. To provide an assessment of likelihood of protected or notable species being on or in the vicinity of the site, based on a desk study and search for evidence or potential within the site;
3. To assess, record and map the suitable features for protected species, including an assessment of whether the building had evidence or potential to support protected species;
4. To record any habitats of ecological importance and make a record of any botanical species present and identify if any habitats are Habitats of Principal Importance;
5. To complete an ecological impact assessment based on detailed design and current site conditions;

6. To detail requirements for further surveys and/or a mitigation licence(s), if needed; and
7. To update requirements for avoidance, mitigation, compensation and enhancement measures and also suggest working practices to meet legislative and best practice requirements.

2.3 Legislation

There are several different Acts of legislation and regulations which refer to the protection of wildlife of relevance to the site. The regulations of direct relevance to the site are summarised below.

There are 18 species of bats in the UK, all of which are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside Act, the "Habitats Regulations" and the CRoW Act 2000 together make it an offence, among other things, to recklessly, intentionally or deliberately:

- Disturb roosting bats or obstruct access to their roosts;
- Disturb a significant number of bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Kill, injure or capture (or take) bats.

A bat roost is defined as "any structure or place (including trees) which any bat uses for shelter or protection". Because bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bat(s) are present at the time.

Statutory protection is given to nesting birds in the UK under the Wildlife and Countryside Act (WCA) 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to intentionally or recklessly disturb species listed on Schedule 1 of the Act while they are nest building or at/ near a nest with eggs or young, or to disturb the dependent young of such a bird.

Hedgehogs are not protected by law but are afforded due consideration in the planning process as a result of being listed on Section 41 of NERC Act 2006.

Habitats of Principal Importance (HPI) (formerly called 'priority habitat' under the UK BAP process) are afforded consideration in the planning process through Section 40 and 41 of the NERC Act 2006, although they are not given statutory protection in their own right.

Under the Environment Act 2021, all qualifying sites must achieve at least 10% biodiversity net gain as calculated through habitat, linear or river units in the Defra metric spreadsheet. As less than 25 square meters of habitats will be removed, Biodiversity Net Gain is not applicable.

This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

3 Methodology

3.1 Desk Study

A Bristol Regional Environmental Records Centre (BRERC) data search was not completed in this instance due to the scale of the proposals and nature of the habitats present. In addition, BRERC only publish bat roost records to a 1km resolution. Internationally and nationally designated sites up to 1km from the site and designated sites for mobile species such as bat and bird species up to 10km from the site were identified using MAGIC maps (magic.gov.uk). Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats. A search for Natural England protected species licences and eDNA records for great crested newt within 1km was completed using MAGIC maps. In addition, Bristol Council's planning portal was searched for any evidence of protected species having been a consideration in other recent planning applications in the immediate area.

3.2 Preliminary Bat Roost Assessment

An internal and external building inspection was undertaken in accordance with *Bat Surveys for Professional Ecologists - Good Practice Guidelines*. 4th Edition ([redacted], 2023), *Bat Mitigation Guidelines* (English Nature, 2004 and Reason and Wray, 2023) and *The Bat Workers Manual* ([redacted], 2004). The survey was completed by [redacted] (Natural England bat survey licence holder 2018-36720-CLS-CLS) and [redacted] on 14 July 2025. [redacted] has 19 years' of bat survey experience and [redacted] has two years' experience. Interior and exterior features of the building was searched where accessible for evidence of use by bats. Any constraints to the survey are detailed in Section 3.3. The exterior of the building was observed from ground level paying particular attention to potential access points for bats into the building fabric. Signs of bats can include live animals, corpses, noises, droppings, urine staining, feeding remains (e.g. moth and butterfly wings) and scratches. Evidence of nesting birds was also recorded. The building and any trees within 10 m were categorised for bat roosting potential using the criteria in Table 1.

Table 1: Bat Roost Potential Categories
(Category descriptions drawn from [redacted], 2023 and [redacted], 2004)

Roost Potential	Description
Confirmed	Confirmed signs of bat presence/ occupation (droppings, oily staining around entry points, insect remains, odour, scratching) or actual bat presence (live or dead bats).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion. (Note: Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).

There is no semi-natural habitat within the footprint of works, although adjacent habitats were noted and assessed for their potential to support legally protected or otherwise notable flora and fauna.

3.3 Constraints

There was full access to the site. The roof could not be viewed in its entirety from vantage points at ground level. Suitability for bats and nesting birds was assessed based on the general condition and type of construction, with precautionary assumptions made where the roof was not fully visible.

Wildlife use habitats in a dynamic manner and use may change from year to year or between different seasons. Wildlife can also colonise new areas, and surveys only provide a snapshot of use.

4 Results

4.1 Desk Study

4.1.1. Designated Sites

There are no designated sites within 1km of the site. The closest statutory designated site is Avon New Cut Local Nature Reserve (LNR) at 1.6km to the south west, associated with the River Avon. There are no statutory designated sites for highly-mobile species such as bats or nesting birds within 1km. The proposals do not meet Natural England's SSSI Impact Risk Zone criteria.

4.1.2 Protected and Notable Species Records

Bristol supports a high bat biodiversity for a city, with at least 12 species recorded. There are no Natural England bat mitigation licence records within 1km. There are two bat mitigation licences within 2km showing on MAGIC mapping, both are for common pipistrelle *Pipistrellus pipistrellus.*

Other mammals including badger *Meles meles* and hedgehog *Erinaceous europaeus* also have a relatively widespread distribution within Bristol. Slow worm *Anguis fragilis* are frequently found within gardens in Bristol, but other reptile species occur rarely.

Birds of Conservation Concern (RSPB, 2021) are often recorded associated with buildings (e.g. swift *Apus apus*, house sparrow *Passer domesticus*, starling *Sturnus vulgaris*, etc.). There are no recent local records for swift on the RPSB Swift mapper. There is a mitigation licence on MAGIC mapping for great crested newt (GCN) approximately 130m to the north east, although there is no pond visible on Ordnance Survey, MAGIC or Google mapping. This GCN location is also the other side of a busy dual carriageway A-road.

4.1.3 Additional Information

There are no local, recent planning applications with relevant ecological information on Bristol Council's planning portal.

4.2 Site Description

The site comprises a large warehouse, internally subdivided, and with a small area of adjacent hardstanding for access. The site is in Bristol on a residential road, with commercial properties nearby. Gaunt Ham Park lies to the south of the building, with a separating high boundary wall.

4.3 Preliminary Bat Roost Assessment

Photographs of the site are provided in Appendix A. The current and proposed plans are provided in Figure 2 and 3.

There is one building within the site, a large warehouse constructed from block walls, concrete floors and a mixture of corrugated asbestos and perspex panels for the roof. Internally, the roof structure is constructed from steel beams, with no loft cavity, and is internally open to the rafters. There are small gaps between the panels of approximately 2cm wide, and overlaps of around 10cm between roof

panels. The warehouse is internally subdivided into different rooms, most of which are lit by windows or perspex panels to the exterior. Some of the rooms are sealed from others by closed and sealed doors. No bat access points could be seen. All wall vents were fitted with a grill, which would prevent bats from entering internal areas of the building.

Externally, the brickwork is largely in good condition, with intact and sealed mortar. Small buddleia *Buddleja davidii* and maidenhair spleenwort *Asplenium trichomanes* are growing out of cracks on the front (west) elevation but have not damaged the brickwork. There is a downpipe to the left of main door which had some cracks and crevices progressing to approximately 15cm. These have negligible potential to support summer roosting bats due to being unlikely to hold a stable warm temperature, but they have low potential to support hibernating bats. No evidence of roosting bats was found during an inspection with an endoscope. There is a security light and streetlights illuminating the front (west) of the building which further reduces the potential to roosting bats to be present.

There is a well-sealed stone/concrete parapet wall around the gable ends of the building. Some areas behind parapet walls could not be seen from ground level.

To the rear, the site is adjacent to Gaunt's Ham Park, a typical urban playground and park. A large stone wall defines the boundary. There are occasional, mostly shallow (less than 10cm deep) gaps in the stone wall. Although these are unlikely to support summer roosting bats due to lack of stable warm temperatures, but there is a low risk of use by hibernating bats. No evidence of use by bats was found during inspection using torches or endoscopes. Two mature sycamore trees are within 50cm of this wall.

No evidence of nesting birds was found and there was no obvious access for nesting birds into the interior of the building. There is potential for nesting birds to use exterior roofs, although no evidence of nesting birds was seen externally.

5 Impact Assessment and Recommendations

5.1 Mitigation and Avoidance Measures

5.1.1 Bat Species

The warehouse has negligible potential to host summer roosting bats. The building appears to be very well sealed and in good condition. On thorough inspection, no evidence of roosting bats was found. There were some crevices in the brickwork at the front elevation, to the left of the door, where work has been done to the downpipe. These were cobwebbed and had no current evidence of bat use at time of survey, but bats use roosts dynamically – moving between areas seasonally. Therefore, inspection of these crevices must be repeated with an endoscope immediately (no more than 48 hours) prior to building works commencing. The south façade of the rear boundary wall with Gaunt's Ham Park had crevices in the stonework which could be suitable for winter roosting bats, but with no evidence of use found. If these crevices will be repointed, a pre-commencement inspection of these features will also need to be completed.

If bats or their roosts (e.g. accumulations of droppings) are unexpectedly found during works, all activities must cease immediately and an ecologist contacted for advice. A Natural England licence would then be likely to be required for works to proceed lawfully.

Even though there is nearby lighting, best practice should be followed including designing lighting sensitively in accordance with *Bats and Artificial Lighting at Night* (ILP, 2023) to avoid any impacts on nearby potential bat habitat. External lighting must only be used where absolutely necessary. Features such as PIR sensors or short-duration timers and wall mounted, bollard and/or downward-facing lights should be used for external lights. Floodlighting should be avoided.

5.1.2 Nesting Birds

No evidence of nesting birds was found. However, there were features with potential for nesting that could not be fully seen from the ground, specifically the parapet walls and hoppers. If works commence during main bird nesting season (i.e. commence during March to August inclusive), a pre-commencement nesting bird check will need to be completed no more than 48 hours before roofing or building demolition works commence. If any active bird nests are unexpectedly found, all works must cease and an ecologist must be contacted for advice. The nest would need to be left undisturbed until chicks have fledged. This can take up to six weeks.

5.1.3 Great Crested Newt

There is negligible risk of present of great crested newt due to the distance and dispersal barriers from existing colonies. If great crested newt are unexpectedly found at any time, an ecologist must be contacted for advice.

5.1.4 Other Mammal Species

There is no suitable habitat at present for other mammal species. However, if the wall adjacent to Gaunt's Ham Park is removed entirely or in part during works, then on-site excavations must be covered overnight or fitted with escape ramps suitable for use by species such as badger and hedgehog.

5.1.5 Trees

Two mature sycamore trees are located within 50cm of the stone wall adjacent to Gaunt's Ham Park. Any work done to the stone wall will be within the root protection zone of these trees. Tree protection measures should be implemented in accordance with BS5837 – *Trees in relation to design, demolition and construction.*

5.2 Enhancement Measures

Native planting such as boundary vegetation or climbing species could be installed. Night flowering plants would be particularly beneficial.

Features for nesting birds such as a house sparrow terrace could be included in the reconfigured roof structure as an enhancement measure (see RSPB Sparrow Terrace Nest Box - RSPB Shop). Swift nest boxes could be placed under the eaves or swift bricks could be built into the external fabric of the building. These should be sited at least 4m above the ground, and on either a north or east facing aspect. Other bird nest boxes should be sited at least 2m above ground level in a location where it is unlikely to be disturbed or accessible to predators and ideally on a north facing elevation or out of direct sunlight as much as possible.

Integrated features for roosting bats could be considered. Options for bat roost creation include:

- Roost feature in new soffit/fascias created by leaving 2-3cm access gaps or holes or installing a soffit bat box (see Soffit Bat Box (wildcare.co.uk)). Ideally, the soffit would be wood or roughsurfaced (i.e. not uPVC) for this option to be most effective;
- Bat tubes such as Schwegler 1FR;
- Bat bricks such as Ibstock brick or Habibat box; or
- Attached bat boxes such as Schwegler 2FE or Beaumaris woodstone boxes, although these often degrade more repidly or become detached over time.

These features are fully enclosed and so would prevent bats accessing any inhabited spaces within the property. Bat roost features are usually installed at least 3-4m in height to maximise their chance of use and ideally installed on south/west elevations.

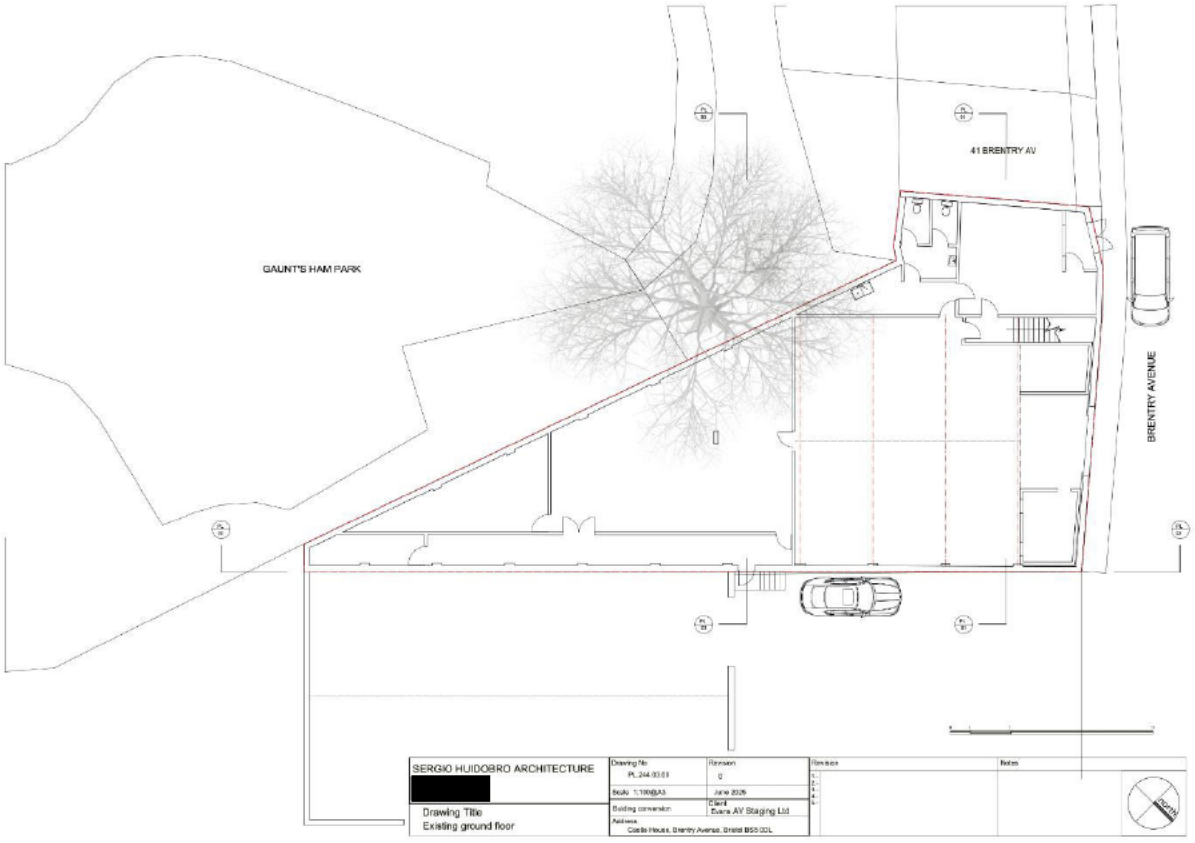
In accordance with British Standard BS42021 Integral Nest Boxes recommends a ratio of one feature for each residential unit. Eight bird nesting features and six bat roost features would be proportional to the proposals, if suitable locations for installation are available.

Figure 2 Existing Main Elevation and Ground Floor Plan

SERGIO HUIDOBRO ARCHITECTURE
[redacted]
Drawing Title
Existing main elevation

Drawing No	Revision
PL_244.06.03	0
Scale 1:100@A3	June 2025
Building conversion	Client: Evans AV Staging Ltd
Address: Castle House, Brentry Avenue, Bristol BS5 0DL	

Revision | Notes

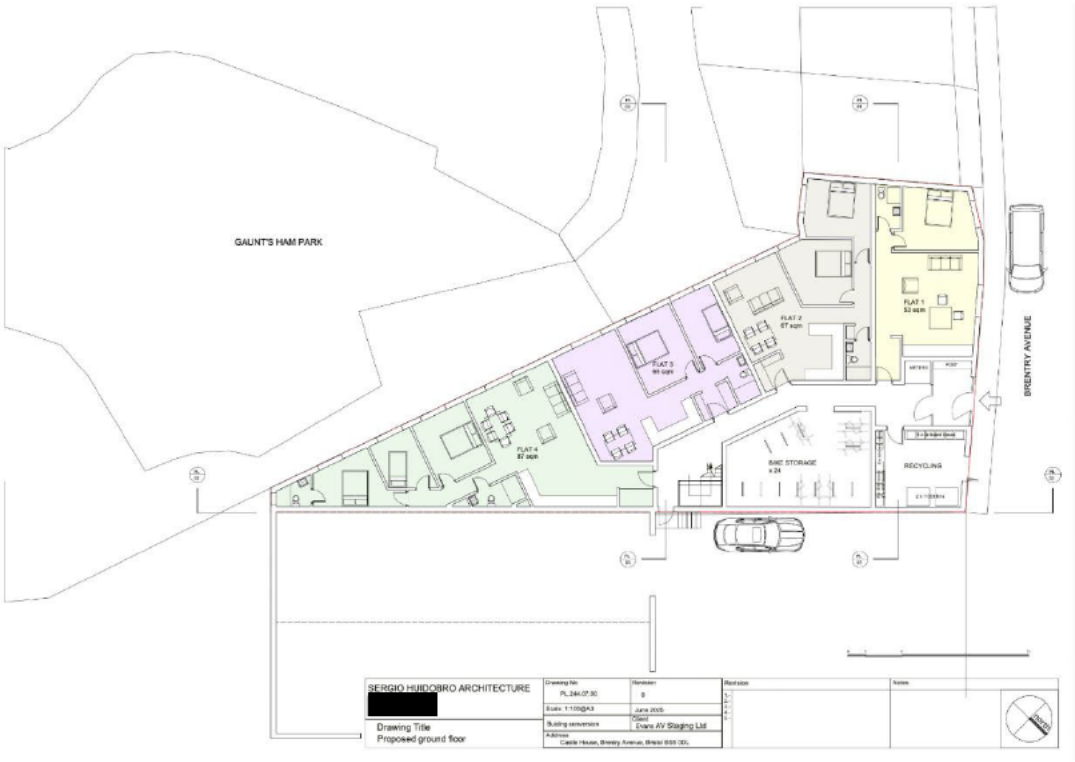


SERGIO HUIDOBRO ARCHITECTURE
[redacted]
Drawing Title
Existing ground floor

Drawing No	Revision
PL_244.03.01	0
Scale 1:100@A3	June 2025
Building conversion	Client: Evans AV Staging Ltd
Address: Castle House, Brentry Avenue, Bristol BS5 0DL	

Revision | Notes

Figure 3 Proposed Main Elevation Ground Floor Plan



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[redacted]. (2023). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 4th Edition. Bat Conservation Trust, London.

English Nature (2001). *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

Institute of Ecology and Environmental Management (2018). *Guidelines for Preliminary Ecological Appraisal.* IEEM, Winchester. Available at www.ieem.net/docs/GPEA_web.pdf .

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JNCC (2010). *Handbook for Phase 1 habitat survey - a technique for environmental audit*.

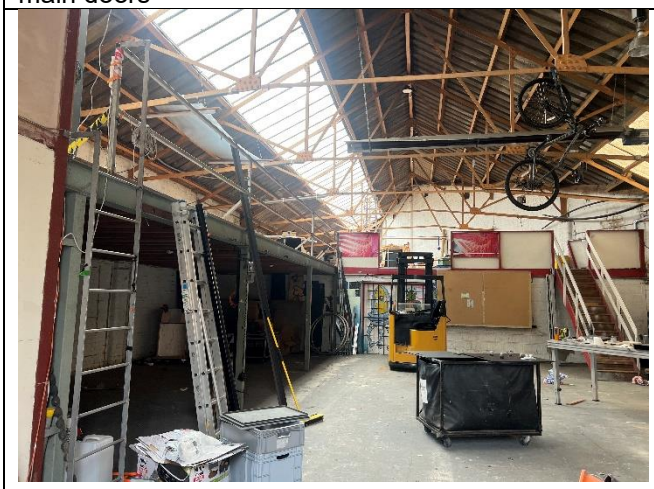
RSPB (2021). *The Population Status of Birds in the UK - Birds of Conservation Concern 5*.

Appendices

Appendix A Site Photographs

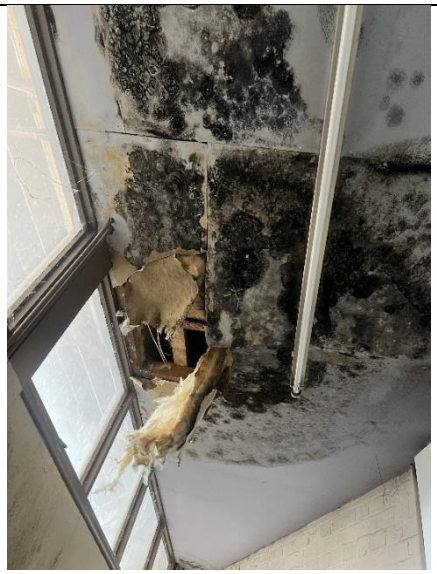
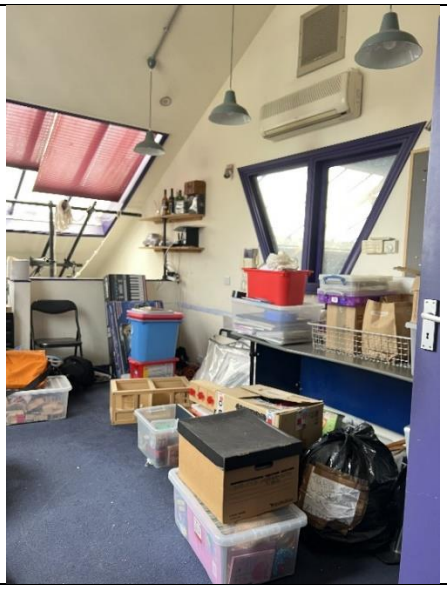
A1 Main elevation. Crevices in brickwork are around the white downpipe seen to the left of the main doors

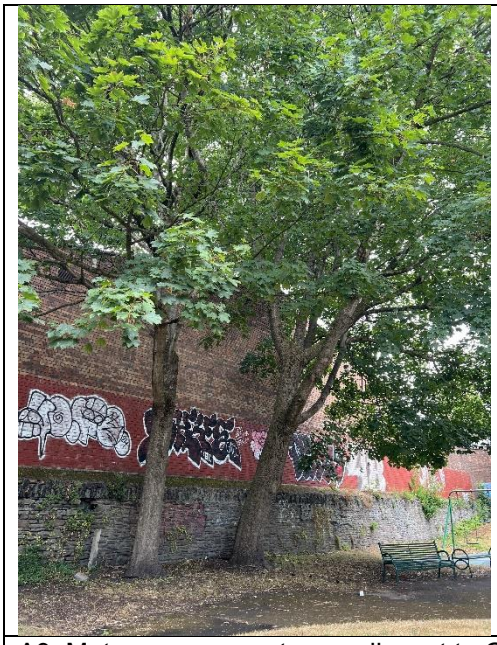
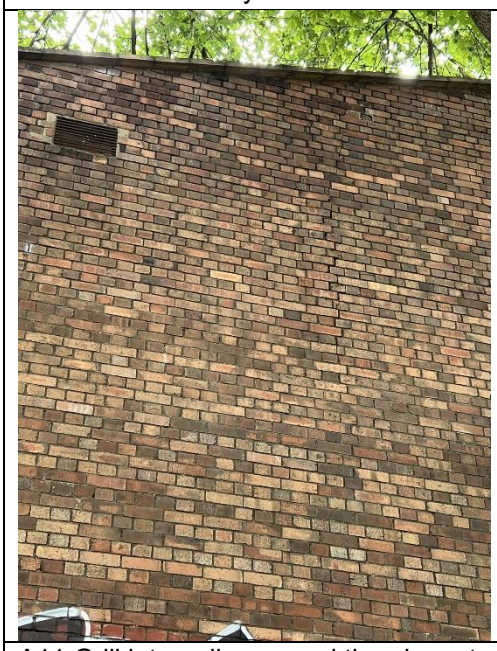
A2 Main elevation showing streetlighting, and parapet wall on roof



A3 Internal views showing perspex roof panels lighting the interior, and no loft space

A4 Internal roof structure and roof in good condition

	
A5 One of the internal rooms with plyboarded ceiling and a hole. This room is lit by daylight and no bat access to be seen.	A6 Loft space that has been boarded. Windows and no bat access could be seen
	
A7 Mezzanine level allowed good access to inspect roof internally. No evidence or access points seen.	A8 Downpipe to the left of main door had some cracks and crevices

	
A9 Mature sycamore trees adjacent to Gaunt's Ham Park boundary	A10 Some crevices in the stone wall adjacent to Gaunt's Ham Park
	
A11 Grill internally covered the air vents to prevent bat access. The crack in the brickwork offers future potential for bats if it enlarges.	