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Preliminary Roost Assessment

Survey site:

85 Hamilton Road, Earley, Reading RG1 5RB

Client:

JETArch Design Limited

Survey date:

12th August 2024

Project:

This report is prepared to inform a planning application with the Reading Borough Council. The proposal is described as:

A new single storey garage in addition to a three-storey rear extension including basement level following the demolition of an existing extension

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Consultant (2023-11066-CL17-BAT and 2024-11998-CL08-GCN)						
Date of survey		Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
12/08/2024		31	57	5	17	None
PRA Survey Factor		Detailed using desk study and site survey. Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.				
See PRA plan in Appendix 1, location plan in Appendix 2, proposed plans in Appendix 3 and photos in Appendix 4.						
Background and Site Location						
Summary of site and desk Study		Site description The site is centred on National Grid Reference SU 73605 72558 and has an area of approximately 600sqm. It is formed of two buildings, hereby referred to as ‘B1’ and ‘B2’, surrounding garden, individual trees, hedgerows, and associated hardstanding. Adjacent to the site to the north, east, and south are other residential dwellings connected to the site through hedgerows with scattered trees, and adjacent to the site on the west is a main access road. Limitations A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report. These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation. Designated Sites Two statutory designated site with bat qualifying interests was identified within 2km of the site. Highwood Local Nature Reserve (LNR) – located ~1,200m east				

The site has exotic tree species which were part of an arboretum (collection of trees) in the house grounds and include giant redwoods and monkey puzzle. It is a fine example of mixed lowland woodland with an attractive heathland area. This could be an important local habitat for foraging, commuting and roosting bats.

Maiden Erleigh Lakes (LNR) – located ~1,800m South-east

Habitats include lowland mixed deciduous woodland, ancient semi natural woodland and eutrophic open water. This could be an important local habitat for foraging, commuting and roosting bats.

EPSL data

A review of the MAGIC database returned five granted bat EPSLs within 2km of the site boundary, listed in the table below.

EPSL reference	Approx. distance from site	Bat species affected	Licence start date:	Licence end date:	Impacts allowed by licence
EPSM2010-2126	~320m south-west	Common pipistrelle	02/09/2010	31/08/2012	Destruction of a resting place.
2014-500-EPS-MIT	~650m south-east	Common pipistrelle and soprano pipistrelle	29/04/2014	30/09/2016	Destruction of a resting place.
EPSM2010-2266	~840m south	Common pipistrelle and brown long-eared	01/09/2010	28/02/2011	Destruction of a breeding site. Destruction of a resting place.
2014-3941-EPS-MIT 2014-3941-EPS-MIT-1	~880m north-east	Common pipistrelle and soprano pipistrelle	21/10/2014 17/12/2014	30/11/2019 30/09/2019	Damage of a resting place. Destruction of a resting place.
2014-441-EPS-MIT	~1,400m east	Common pipistrelle and soprano pipistrelle	14/04/2014	30/09/2019	Damage of a resting place. Destruction of a resting place.
2016-22301-EPS-MIT	~1,500m west	Common pipistrelle	21/04/2016	20/04/2021	Damage of a resting place.
2019-44194-EPS-MIT	~1800m north-west	Common pipistrelle and soprano pipistrelle	01/02/2020	31/03/2020	Destruction of a resting place.

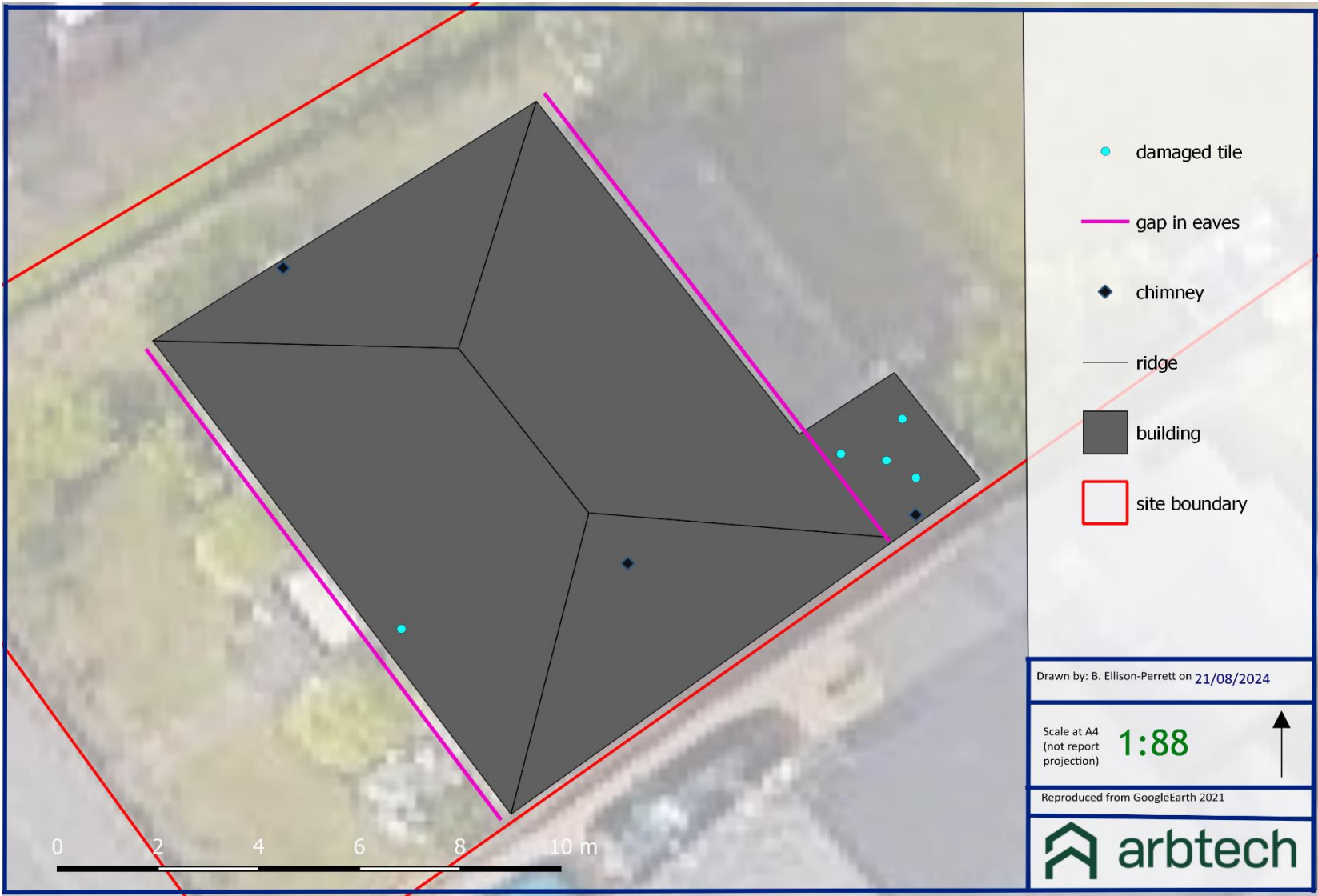
Field survey results	
Summary of Survey	Roosting habitat – B1
Findings	<u>Exterior</u> Building 1, which covers approximately 106sqm, is a detached three storey, brick built dwelling with a hipped roof clad in slate tiles, with a single storey rear extension also clad in slate tiles. The building does not have a loft space but has an eaves space which is open and spans the entire perimeter of the building. The roof and ridge tiles are in very good condition with only one visible half broken roof tile present. The doors and windows are wooden framed and appear in excellent condition with no suitable bat roosting sites. There are three chimneys present that have a concrete base, two of which have lead flashing present, these are well sealed and have no gaps under which bats could roost. The brickwork around the building appears in excellent condition with no gaps or cracks within which crevice-dwelling bats could roost. There are gaps in the soffits on the west, east, and south elevations allowing access into the eaves space in which bats could potentially roost inside. There are raised roof tiles present on the single storey rear extension just below the ridge. <u>Interior</u> The main loft space within B1 is converted living space. There is an eaves space which is open and runs the perimeter of the building. The roof structure is built from modern timber beams and is lined with a breathable roof membrane that is in good condition around the entire eaves space. The internal wall and floor of the eaves space is lined with mineral wool insulation. The floor is un-boarded and inaccessible on all sides of B1. There are many cobwebs present along the entirety of the eaves space indicating a lack of bat activity, with daylight entering through holes along the bottom of the eaves around the west, east, and south elevations, likely through the gaps in the soffits identified on the external inspection. Approximate internal dimensions: 30 long x 1m wide x 1m high (floor to ridge height). <u>Basement</u> The basement is used to store items and has a second room within it. The items and surfaces were searched for evidence of bats as droppings can accumulate on surfaces. However, no droppings or insect feeding remains were observed. The windows and doorways leading into the basement are well sealed and have no obvious entry points for bats indicating a likely absence of any bats.

	Roosting habitat - B2 B2 is a flat roofed, brick built garage. Due to lack of any noticeable bat roosting features, B2 is assessed as having negligible value for roosting bats. Conclusions B1 has low value for roosting bats. Gaps present on the on the west, east, and south elevations between the brickwork and the soffit box would allow access for roosting bats into the eaves space. No evidence of roosting bats was found internally in B1 along the eaves space. Additionally, a broken tile on B1 and raised tiles on the single storey pitched roof could provide roosting habitat for crevice-dwelling bats such as common and soprano pipistrelles. However, during the previous bat emergence surveys undertaken on B1 (Arbtech, 2022), no bat roosts were identified at the site and very little bat activity was noted. Garden trees could be used by local bat populations foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.
<i>Foreseen Impacts</i>	<u>Roosting habitat</u> The proposed development will result in the renovation to this building. This could potentially result in damage or destruction of any bat roosts that may become present and could cause disturbance, death, or injury to bats. <u>Foraging and commuting habitat</u> The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development will include the use of lighting which could spill on to bat roosting, foraging, or commuting habitat and deter bats from using these areas.
<i>Recommendations</i>	The building is in the same condition as the previous surveys- Preliminary Roost Assessment and Bat Emergence Survey (Arbtech, 2022) which identified no bat roosts onsite and very little bat activity was noted. Therefore, owing to the nature of the proposed development and the low potential for impacts to bat roosts, further bat surveys are considered to be disproportionate. It is anticipated that any risk to bats can be reduced

	to an acceptably low level through the implementation of a precautionary working method during and post-development. This will include the following measures: • Works will be scheduled during the winter months (November to March) when bats are least likely to be present, insofar as is possible. • A toolbox talk will be given to contractors to make them aware of the possible presence of bats on the site. • An inspection of the potential roost features identified in this report will be undertaken prior to works commencing. • The potential roost features will be removed by hand (where a risk still remains following the pre-commencement inspection) prior to any mechanical demolition. Delete if no demolition proposed. • In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low level lighting used in conjunction with hoods, cowls, louvers, and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.
Nesting Birds	

<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on site during the surveys; however, the gaps in the eaves has suitability for nesting birds, as outlined in the previous preliminary roost assessment (Arbtech consulting ltd, 2022).
<i>Foreseen Impacts</i>	The proposed development could potentially result in the destruction or the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	The works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the roof should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active bird nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged.

Appendix 1: PRA plan



Appendix 2: Location map



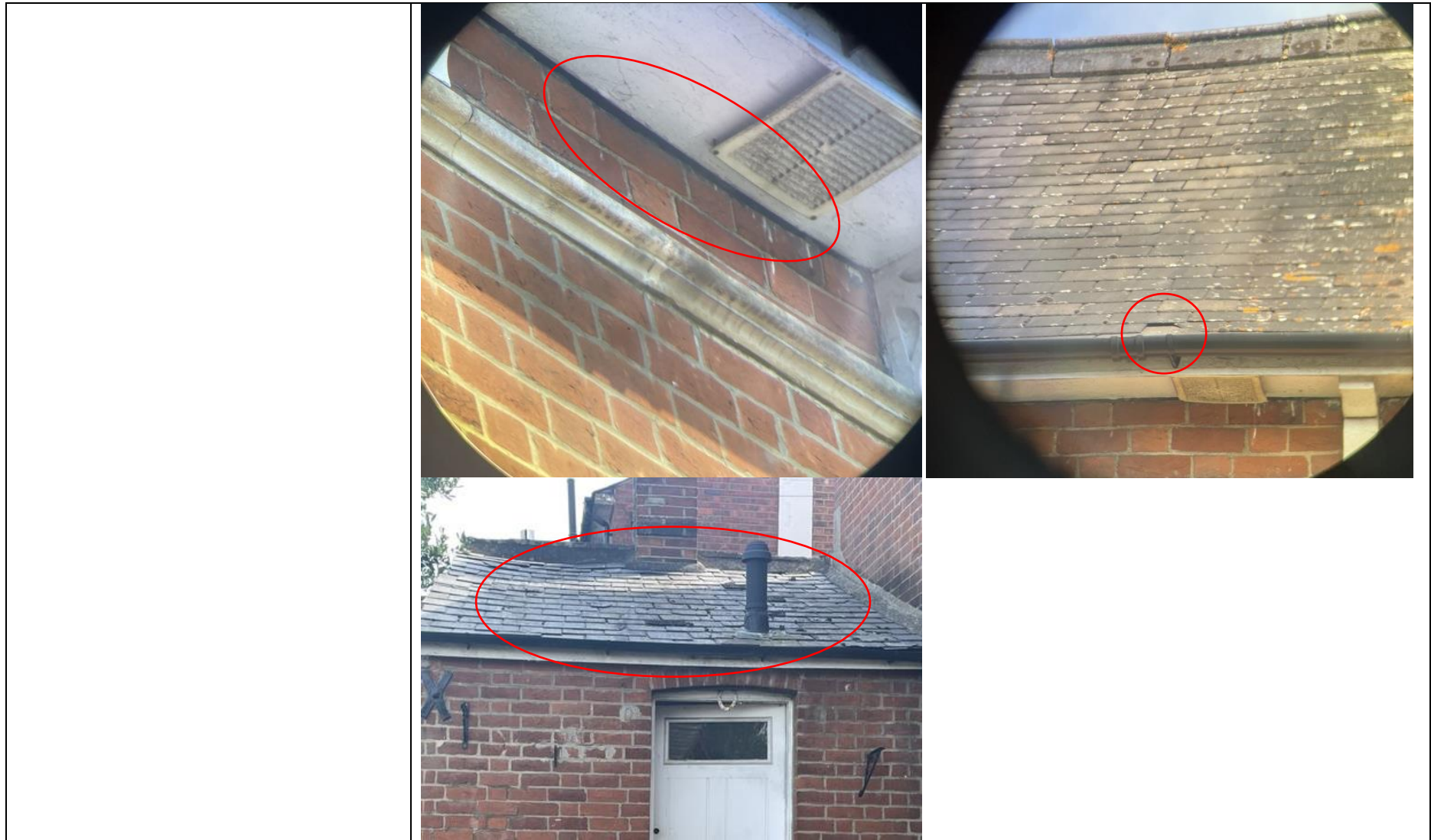
Appendix 3: Proposed plan

Not available at the time of writing this report.

Appendix 4: Photos

Description	Photos
Overview of the building exterior	





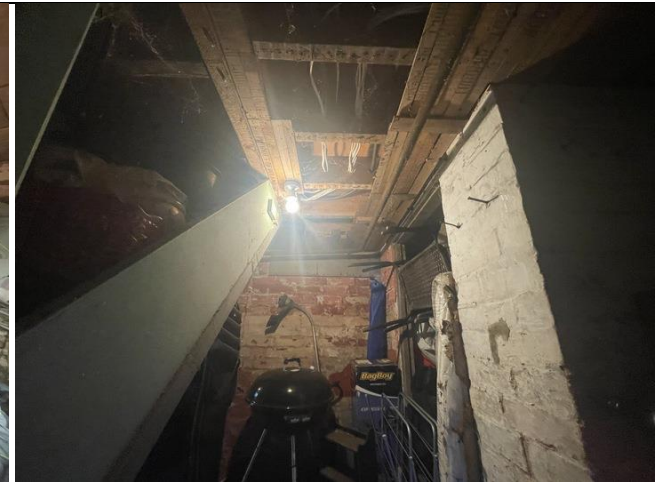
Overview of the interior and eaves space in B1

Photographs show the lack of loft space in B1, with the ridge beam present in the upstairs rooms, and the roof membrane present lining the roof inside the eaves space, the lack of hard flooring to be able to stand on, and daylight entering the eaves space through the gaps in the soffits.



Overview of the interior, as well as the window on the exterior of B1 leading into the basement.

The photos show dense cobwebs present and lack of entry and exit ways from the basement, indicating a likely absence of any bats.



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