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Preliminary Roost Assessment

Survey site:

Riversleigh House, Station Road, Rossett, Wrexham, LL12 0HE

Client:

John Mackie

Survey date:

1st May 2024

Project:

This report is prepared to inform a planning application for the re-roofing of the residential dwelling.

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

The site survey was undertaken by Kayleigh Davies, BSc (Hons), MSc, Graduate Ecologist (Accredited Agent on Natural Resources Wales Licence: S092694/1).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
01/05/2024	14	67	20	10	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		<u>Site description</u> The site is centred on SJ 3657 2418 and has an area of 0.02ha. It is formed of two residential dwellings, with only building B1 impacted by the proposed development, set in a suburban area. Beyond the immediately adjacent houses and gardens, the local area has a network of hedge-lined fields leading to small areas of woodland, giving bat commuting and foraging value. To the author’s knowledge, no previous ecology reports have been produced for this site. BRD has not been obtained for the site, as given the small-scale of the development and the nature of the site, it is considered that biological record data would not add any significant impact to the recommendations within this report.			

	Marford Quarry, a Site of Special Scientific Interest (SSSI) is located ~955m to the south of the site. This SSSI is described as designated for <i>“butterfly and moth species lists include one and four nationally rare species respectively with additional locally and regionally notable species. On the quarry perimeter, remnants of ancient broadleaved woodland occur indicative of the vegetation over part of the area prior to quarrying.”</i>. the SSSI is connected to site with interconnecting hedgerow boundaries, agricultural land and urban green spaces. A second SSSI, Chwarel Singret is located ~1,996m to the southwest. Described as <i>“Chwarel Singret is of special interest for an exposure through a sequence of deposits that has a major bearing on interpretations of the Quaternary history of north-east Wales. The site is located in a disused quarry, 1 km west of Gresford, in the Wrexham area.”</i> The site is not subject to any designation, and there are no known non-statutory sites nearby.
Field survey results	
<i>Summary of Survey Findings</i>	<u>Foraging Habitats</u> The on-site habitats provide low value foraging habitat for bats. The hedgerow and scattered introduced shrubs allow for foraging opportunities, but the remainder of the habitats largely consists of hardstanding with a stone driveway. The surrounding habitat provides moderate foraging opportunities with residential gardens, urban green spaces and arable fields, pockets of woodland and scattered trees. <u>Building Roosting Value</u> B1 is a two storey, residential dwelling with a Dutch hipped style roof. The building also has a hipped style roof to the rear of the property, with two small single storey extensions. There is an attached storage shed to the western elevation of B1 which is not being impacted by the works. The roof of B1 is of cement tile construction with brick walls

	with gabled dormer and bay windows. There are two chimney stacks on the roof of B1. The eaves are brick, and well-sealed. The windows and doors are wooden. The building is in overall in good condition. Suitable roosting features noted: ➤ Sections of missing mortar are noted under the ridge-tiles of the buildings, with crevices created suitable for roosting crevices dwelling species. ➤ There is a lifted tile on the northern elevation, however, no gap is visible. ➤ There is damage to the brickwork on the western elevation of B1, which is likely to provide access to beneath the tiles of this section. ➤ There is led flashing on the southern dormer window of B1, with a crevice, likely, only suitable for small numbers of roosting crevice dwelling species. <u>Interior of B1</u> There is one loft space present within B1. The loft consists of breathable membrane lining, wooden beams, exposed brick walls and mineral wool insulation. Sections of the loft are obscured from view due to the brick partitions. The loft is unboarded, and due to the mineral wool insulation covering the beams, a safe route of access could not be determined, therefore the loft was viewed from the loft hatch. Therefore, potential bat roosting features or evidence, if present, may have been missed. These limitations have been factored into the conclusions and recommendations of the report. ➤ The lining is in overall good condition with no visible signs of sagging or damage that would allow bats to enter the space. ➤ Sunlight was not observed entering the space, suggesting no ingress points for bats.
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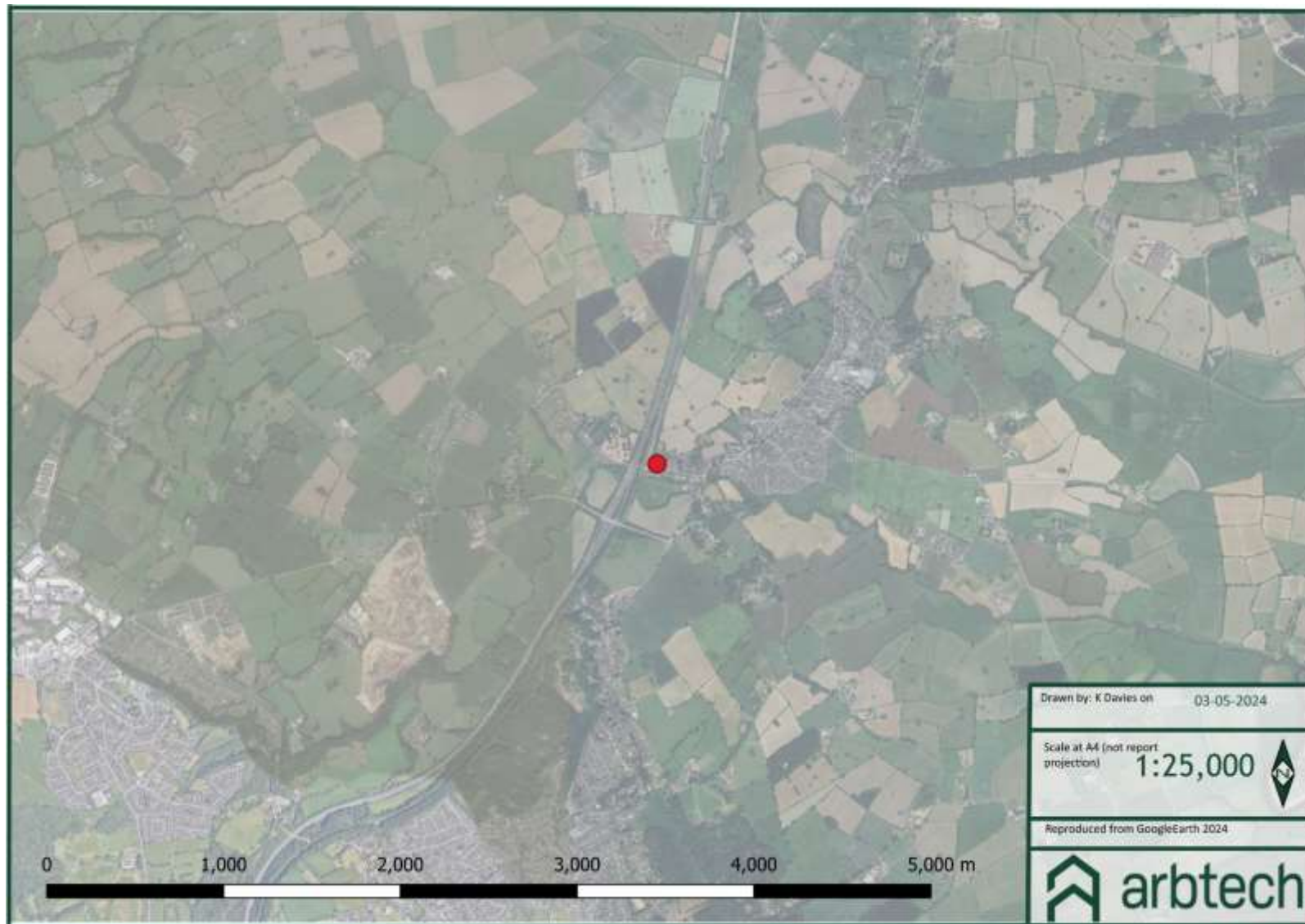
	➤ A single dropping was found near to the loft hatch. Only one dropping was found within the space. As only one dropping was found, this does not confirm a roost is present, the dropping may be from exploratory behaviour or may be historic. ➤ The temperature of the loft was 7°C and the humidity was 56%. B1 has moderate habitat suitability for roosting bats due to the small number of roosting features present and the single dropping present.  <i>Figure 1 - the dropping found in B1.</i>
<i>Foreseen Impacts</i>	As the proposals include the re-roof of B1, this will impact suitable roosting features present. the work may lead to destruction of bat roosts if present, and the death or injury to a bat if present.
<i>Recommendations</i>	Two bat emergence/re-entry surveys are required on B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building.

	The survey visits should be completed during the optimal survey period mid-May to August inclusive and at least three weeks apart. Four surveyors are required to provide full coverage of the building's elevations to look for emerging/re-entering bats. Infrared cameras should also be employed with each position as part of the survey to see where any specific roost locations are located. If any bat roosts are confirmed from this survey schedule, a further two surveys are required to inform an application to Natural Resources Wales for a bat license which would be required to re-roof the building as it would involve the destruction of roosts. This is applied for with the help of a class 2 licensed bat ecologist after planning permission is granted, but before commencement of works. Habitat creation could be considered to enhance opportunities at the site for foraging and commuting bats post development: night scented flowers, native trees and native flowering shrubs.
Nesting Birds	
<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on site during the surveys.
<i>Foreseen Impacts</i>	None.
<i>Recommendations</i>	The installation of two bird boxes on buildings on site will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings), Woodstone Nest Box (buildings or trees), or a similar alternative brand.

Appendix 1: PRA plan



Appendix 2: Location map



Appendix 3: Photos

PHOTO	DESCRIPTION
	Overview of B1.

	Example of the tiles on the southern roof elevation with location of flashing with a small crevice present.
	Overview of the western elevation of B1 with location of missing mortar (yellow circle) and the damaged brick (blue circle).



Overview of the northern elevation.



The norther roof structure.



The eastern roof structure.



The habitats on site.



Overview of the loft space.



The brick wall partition preventing view from the remainder of the loft.

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Version control			
Status	Issue	Name	Date
Draft	0.1	Kayleigh Davies, Graduate Ecologist (Accredited Agent on Natural Resources Wales Licence: S092694/1)	03/05/2024
Proof	0.2	Nicole Gullan BSc (Hons) MRSB TechArborA, Senior Ecological and Arboricultural Consultant	12/05/2024
Final	1.0	Kayleigh Davies, Graduate Ecologist (Accredited Agent on Natural Resources Wales Licence: S092694/1)	15/05/2024