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Preliminary Roost Assessment

Survey site:

Mill Farm, The Green, Millom, Cumbria LA18 5HL

Client:

Essar PI Limited

Survey date:

5th August 2024

Project:

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

The conversion of the existing barns into residential dwellings.

[Unsubmitted]

PRA survey methodology and legislation can be found in the Arbtech Supplement: **PRA Methodology and Legislation - 2024.**

The site survey was undertaken by Elen Griffin BSc, MRSB (Natural England Protected Species Licence Numbers: 2023-11211-CL17-BAT).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
05/08/2024	19	90	95	16	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 SD 17855 84720 and has an area of ~0.05 ha. It is formed of two existing disused agricultural barns. Beyond the immediately adjacent houses and gardens, the local area has a network of hedge and tree-lined fields leading to small areas of ancient and deciduous woodland, giving bat commuting and foraging value. To the author's knowledge, no previous ecology reports have been produced for this site There are no ESPL listed on Magic Maps within 2km of site. The site is not subject to any designation. Duddon Mosses Site of Special Scientific Interest and Special Area of Conservation is present ~770m east of the site. Fens, bogs ad marshes present within the designated sites may provide some foraging habitat for local bat populations.

Field survey results	
Summary of Survey Findings	<u>External</u> B1 has been split into two (B1a and B1b) for ease of description. B1a, the southernmost barn is a traditional stone-built barn with a pitched slate-clad roof. A high number of gaps were recorded between areas of missing mortar in the external stonework which could be utilised by crevice dwelling bats. Areas of lifted roof tiles were recorded along with displaced ridge tiles. Furthermore, gaps were recorded between the wall tops and the roof verge of the southern gable end which could provide roosting or access features for bats. B1b, the northernmost barn is a traditional stone-built barn with the western elevation being rendered. The roof is also pitched and clad in slate roof tiles. The slate roof looks to be in good condition with well-fitted roof and ridge tiles. Gaps were recorded between the fascia boards and the exterior walls which could provide roosting or access features for bats. Large gaps were recorded between the wall tops and roof verge of the southern gable end which could provide access into the interior of B1b. External and internal gaps in the stone work are considered unlikely to provide hibernation habitat for bats as they are unlikely to be damp or deep enough to provide suitable hibernation habitat. <u>Internal</u> The internal structure of both barn sections are constructed of traditional timber beams including the ridge beam. The roofs have been lined with bitumen felt or similar which appears to be in good condition with no areas of damage or sagging. Gaps were noted between the beams which could provide roosting features for bats. Internal gaps were recorded between areas of missing mortar internally which could also provide roosting features for bats. Internal conditions at the time of the survey;

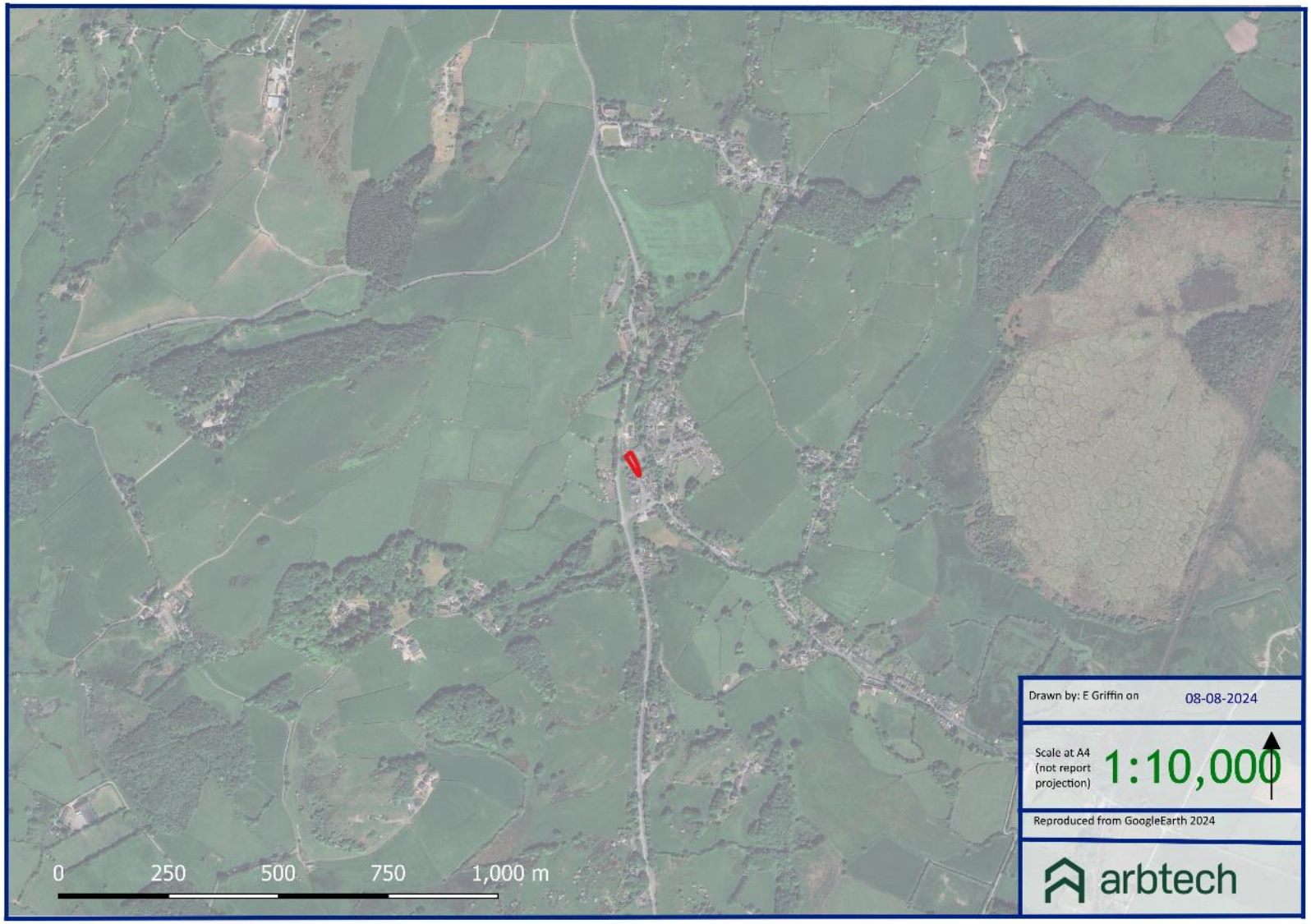
	Temperature: 20.9°C Humidity: 69.6 % Wind: 0.2 m/s <u>Evidence</u> Upwards of 200 droppings, likely pipistrelle bat (due to size, shape and colour) were recorded towards the southern gable end of B1b whilst ~150 droppings, likely brown long-eared bat (due to size, shape and colour) were recorded towards the northernmost gable end of B1b. Moth and butterfly wings were recorded in both B1a and B1b which could be as a result of bat feeding or bird/spider feeding. **B1a is considered to provide high-value habitat for roosting bats** **B1b is also considered to provide high-value habitat for bats. Furthermore, B1b is considered to be a confirmed roost due to the presence of multiple bat droppings internally.**
Foreseen Impacts	As the proposals include the full conversion of B1, any bat roosts within them will be destroyed. This could also result in the death or injury of bats.
Recommendations	Three bat emergence surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive and surveys should be spread at least three weeks apart. Infra-red cameras should be used as an aid with one camera to be placed in each barn. Surveys should be a minimum of two weeks apart. Five surveyors are required to provide full coverage of the building.

	An EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period. If bat droppings were found during the PRA, a sample will need to be sent off for DNA analysis to confirm the bat species present, to inform the EPSL application. Biological records data will also need to be obtained to inform the application.
Nesting Birds	
Summary of Survey Findings	A number of old birds nests were recorded internally within B1a and B1b with dead birds also recorded internally. No evidence of barn owl use was recorded within B1a or B1b. Barn owls could gain access into B1a via openings along the eastern elevation.
Foreseen Impacts	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
Recommendations	Any building or vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active 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. A pre commencement check for barn owl use should be undertaken prior to the beginning of any works.

	The installation of three bird boxes on retained buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings), Bark Boxes Blue Tit 25mm (trees), Woodstone Nest Box (buildings or trees), or a similar alternative brand.

Appendix 1: PRA plan

Appendix 2: Location map



Appendix 3: Proposed plan

None available at the time of writing.

Appendix 4: Photos

Photo/Feature	Description
	Eastern elevation of B1b
	Gaps present between fascias and exterior walls along eastern elevation of B1b

	Eastern elevation roof of B1a and B1b
	B1a eastern elevation with openings into the internal area

	B1a southern gable end with gaps between wall tops and roof verge
	B1a western elevation with slightly raised tiles

	Gaps present along western elevation between fascia boards and exterior walls.
	Gaps present along B1b southern gable end

	B1b western elevation roof
	Interior of B1b with traditional beams, lined roof and gaps present between the roof and wall tops.

 	Interior of B1a with access along the gable end wall top into B1b, lined roof in good condition and high levels of light entering from the openings along the eastern elevation.

	Pip and brown long-eared bat droppings present within B1b.

	Nesting bird evidence present in B1a and B1b

Legal

Version control			
Status	**Issue**	**Name**	**Date**
Final	1.0	Elen Griffin BSc (Hons), MRSB, Consultant Ecologist	09/08/2024