McCarthy and Stone

35 Oakfield, Sale

Bat Emergence Survey Report

2484263

JULY 2023

RSK biocensus
EXPERTS IN ECOLOGY

RSK GENERAL NOTES

Project No.: 2484263

Title: 35 Oakfield, Sale – Bat emergence survey report

Client: McCarthy and Stone

Date: July 2023

Office: Helsby

Status: Rev 00

Author	Emily Shaw	**Technical and quality reviewer**	Will Holden
Signature	[redacted]	Signature	[redacted]
Date:	20 July 2023	Date:	20 July 2023

Project manager	Emily Shaw
Signature	[redacted]
Date:	20 July 2023

Switchboard: +44 (0)330 223 1074 Company contact: Enquiries@biocensus.co.uk

EXECUTIVE SUMMARY

This report presents the results of an internal building inspections of the buildings (Buildings 1, 2, 4 and 5) for bats and dusk emergence surveys for bats carried out at 35 Oakfield, Sale, Greater Manchester, M33 6NB (Grid Ref SJ 78167 92014).

The surveys were carried out between 14 June and 10 July 2023 by RSK Biocensus on behalf of McCarthy and Stone. The objective of the surveys was to establish whether bats are using the buildings to roost, and if so to assess the type and importance of roosts in order to inform the proposed retirement development at the site.

There are five buildings present on the site which are all due to be demolished as part of the proposals. During the preliminary ecological appraisal undertaken on 22 September 2022, the buildings were assessed externally for their suitability to support roosting bats, see *RSK Biocensus – 35 Oakfield, Sale - Preliminary Ecological Appraisal and Preliminary Roost Assessment Report* for further information. The quality of bat roosting habitat within Buildings 1 is moderate while the quality of roosting habitat within Building 3 and the associated walkway is negligible.

During the initial survey only a partial internal inspection was completed for Building 2 and internal inspections for Building 4 and 5 were not undertaken. Therefore, internal inspection were undertaken for these buildings on 14 June 2023 and roosting assessment was updated. The quality of roosting habitat within Buildings 2 was moderate but Buildings 4 and 5 were downgraded to low No evidence of roosting bats was recorded during the internal inspections, but features were present which are suitable for roosting bats, further detail is provided within Section 3 of this report.

Therefore, Buildings 1 and 2 were subject to two further emergence surveys and Buildings 4 and 5 were subject to one further emergence survey. As Building 3 was negligible, no further surveys with regard to bats was recommended.

Four species of bat were recorded during the survey: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*) and Nathusius's pipistrelle (*Pipistrellus nathusii*). Activity levels during the surveys was 'moderate' throughout with most passes comprising of bats foraging along the northern and southern part of the site. Common and soprano pipistrelles were the most abundant species, noctule and Nathusius's pipistrelle recorded to a lesser extent.

One common pipistrelle was observed emerging from the southern aspect of the Building 1 from an end roof tile during the dusk survey on the 15 June 2023. No other roosts were identified during the second dusk emergence survey or during the emergence surveys of Buildings 2, 4 and 5.

Due to the presence of roosting bats within Building 1, the proposed development will need to be registered under Natural England's Earned Recognition (ER) scheme or Bat Mitigation Class Licence (BMCL) system. Natural England aim to process ER and BMCL applications within 10 working days of receipt.

The measures listed within section 4.3 of this report outline the mitigation and compensation measures required to safeguard bats throughout the duration of development. They form a method statement which the contractors undertaking works on site must adhere to.

CONTENTS

1.0 INTRODUCTION

1.1 Purpose of this report

1.1.1 This report presents the results of an internal building inspection of Buildings 2, 4 and 5, carried out on 14 June 2023, and dusk emergence surveys carried out between 14 June and 10 July 2023 for Buildings 1, 2, 4 and 5 at 35 Oakfield, Sale, Greater Manchester, M33 6NB (Grid Ref SJ 78167 92014).

1.1.2 The quality of roosting habitat within Building 3 and the associated walkway is negligible so no further surveys were undertaken.

1.1.3 The objective of the surveys was to establish whether bats are using the buildings to roost, and if so to assess the type and importance of roosts in order to inform the proposed retirement development at the site.

1.2 Landscape context

1.2.1 The *c.*0.25 ha site is within the suburban area of Sale, a small town in Trafford, Greater Manchester. The site is surrounded by residential dwellings with large, connected gardens and well-lit roads. There are small patches of greenspace in the wider surrounding area, such as Ashton on Merseyside Golf club, Weathercock Farm, Walton Park and several playing fields. The wider surrounding area is similar, with the suburban areas of Handforth and Alderley Edge to the north and south. Habitats to the west are semi-rural, with a network of hedge-lined fields and woodlands and ponds.

1.3 Development proposals

1.3.1 The survey was undertaken in relation to the proposed retirement living development at 35 Oakfield, Sale. It is understood that the five buildings on the site will be demolished as part of the current proposed design.

2.0 METHODS

2.1 General

2.1.1 The Bat Conservation Trust (BCT) provides guidance for bat survey work in the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016). It contains guidance for preliminary roost assessment (PRAs). In addition, the interim Guidance Note (Bat Conservation Trust, 2022) was also used to support the emergence survey methodologies. The survey reported here complied with these guidelines.

2.1.2 The new interim Guidance Note from the Bat Conservation Trust provides clarification on the transition away from the standard use of dawn surveys, particularly as a method for presence/absence surveys, in favour of dusk surveys supported by night vision aids (NVAs). The Guidance Note supersedes the 3rd edition (Collins, 2016) and provides technical information in lieu of the publication of Bat Surveys for Professional Ecologists Good Practice Guidelines 4th edition.

2.1.3 The external inspection was completed by Emily Shaw on 22 September 2022 as part of the preliminary ecological appraisal for the site, see *RSK Biocensus – 35 Oakfield, Sale - Preliminary Ecological Appraisal and Preliminary Roost Assessment Report* for further information. Emily is a senior ecological consultant who holds a Class 2 Natural England bat licence (licence number: 2019-39350-CLS-CLS) and is experienced in this type of survey.

2.1.4 The internal inspection was undertaken on 14 June 2023 by Emily Shaw and assisted by Claire Hesketh.

2.1.5 The emergence surveys were undertaken between 14 June and 10 July 2023 by RSK Biocensus Ecologists Emily Shaw, Ben Faulkner, Ben Lappage (holds a Class 1 Natural England bat licence (licence number: 2022-10715-CL17-BAT)), Claire Hesketh, Iveta Nikandrovaite, Joseph Mould, Lewis Wright (holds a Class 2 Natural England bat licence (licence number: 2017-32926-CLS-CLS)), Max McCormick and Lance Rudge.

2.1.6 All surveyors are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and competent at carrying out this type of survey.

2.2 Building inspections

2.2.1 The buildings (Buildings 1, 2, 3, 4 and 5 referenced on Figure 2 (UK Hab Map)) on the site were searched externally and Buildings 1 and 2 were searched internally for bat presence and features associated with bat activity, as detailed in BCT guidance (Collins, 2016) as part of the PEA survey on 22 September 2022, a detailed methodology is provided within *RSK Biocensus (2022) 35 Oakfield, Sale - Preliminary Ecological Appraisal and Preliminary Roost Assessment* report.

2.2.2 Buildings 2, 4 and 5 were subject to an internal inspection and updated external inspection on 14 June 2023. Building 1 was fully inspected in September 2022 so

was not surveyed again. The quality of roosting habitat within Building 3 was assessed as negligible, so an internal inspection was not considered necessary during the updated walkover survey.

Internal inspection

2.2.3 The internal inspections covered all accessible rooms and loft spaces within Buildings 2, 4 and 5.

2.2.4 Bats regularly utilise specific areas within roof spaces, which were searched for any field signs of bats using high-powered torches and an endoscope, where considered necessary by the licenced ecologist. The following features were searched, where present:

- *Roof beams and junctions*
- *Gaps under felt*
- *Dividing walls*
- *Chimney breasts*
- *Gaps in brickwork and mortar*
- *Cracks / holes in woodwork*
- *Floor or other surfaces on which droppings could accumulate*

2.3 Emergence surveys

2.3.1 Following the updated inspections, the quality of roosting habitat was assessed as moderate for Building 1 and 2 while Building 4 and 5 were assessed as low. Therefore Building 1 and 2 were subject to two emergence and re-entry surveys, while Building 4 and 5 were subject to one emergence and re-entry survey.

2.3.2 Surveyors were positioned with a good view of likely roost-access points, ensuring that all identified features were also covered. Surveys were completed in line with the Bat Conservation Trust (BCT) guidance as highlighted in the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016). However, instead of the standard dusk emergence and dawn re-entry surveys, two dusk surveys on each building were undertaken based on the Interim Guidance Note from the Bat Conservation Trust (Bat Conservation Trust, 2022) and scientific data by Andrews & Pearson (2022) which indicates that bats are normally back in their roost before a dawn survey start time. Therefore, two dusk surveys for each building were considered more appropriate than the standard survey method of a dusk and dawn as they provide a better chance of characterising the known roost and confirming additional roosts at the site. Dusk emergence surveys commenced 15 minutes before sunset and continued for 90 minutes after sunset.

2.3.3 Electronic equipment capable of detecting and recording the ultrasonic echolocation calls of bats in flight was used to record bat activity (Elekon Batlogger M and M2). Species were identified from the characteristics of their calls (including peak frequency, minimum and maximum frequency, call duration, and inter-pulse interval). In addition, three infra-red cameras (Canon XA11 infra-red video camera with

additional external infra-red spotlight and torches) were used. Cameras were positioned with surveyors for the survey.

2.3.4 The surveys were carried out in weather suitable for bats to be active i.e., no heavy rain, no strong wind and sunset air temperature 10°C or above. See *Table 2* for survey dates and associated weather conditions.

2.3.5 Bat calls were analysed using Elekon BatExplorer Pro (v2.1.10.1), whilst IR camera footage was reviewed using VLC media player (V3.0.17). Footage and bat data was analysed by Iveta Nikandrovaite and checked by Emily Shaw.

2.3.6 The weather conditions for the surveys are shown in Table 1 below.

Table 1. Weather conditions for dusk emergence surveys

Date	*Survey type*	*Building*	*Sunset / Sunrise Time*	*Start / End Time*	*Mean Temperature (°C)*	*Wind (Beaufort)*	*Cloud (Octas)*	*Precipitation*
14 June 2023	*Internal inspection*	*2, 4 and 5*	*21:38*	*15:00 – 17:00*	*20*	*1*	*8*	*None*
	Dusk emergence	*2*		*21:24 / 23:08*	*16*			
15 June 2023	*Dusk emergence*	*1*	*21:38*	*21:23 / 23:08*	*21*	*1*	*0*	*None*
21 June 2023	*Dusk emergence*	*5*	*21:41*	*21:26 / 23:10*	*18*	*1*	*0*	*None*
28 June 2023	*Dusk emergence*	*2*	*21:42*	*21:27 / 23:11*	*16*	*2*	*1*	*None*
29 June 2023	*Dusk emergence*	*1*	*21:41*	*21:26 / 23:10*	*23*	*1*	*1*	*None*
10 July 2023	*Dusk emergence*	*4*	*21:35*	*21:20 / 23:05*	*16*	*2*	*5*	*None*

2.4 Constraints and limitations

2.4.1 One loft space within Building 2 was not accessed during the internal inspection on 14 June 2023. Two loft spaces have been inspected as part of the internal inspections for Building 2 and a detailed external inspection was undertaken, and this constraint has been considered when assessing Building 2's suitability to support roosting bats, with a precautionary approach adopted where necessary. Therefore, this is not considered to be a significant constraint to the survey.

2.4.2 Low lighting conditions from torches have reduced the visibility of bat activity in some of the infrared (IR) footage. All cameras were manned by a surveyor throughout the survey, therefore the surveyors were able to visually observe the building throughout the survey, therefore this is not considered to be a significant limitation.

3.0 RESULTS

3.1 Internal Building Inspection

Building 2 – Internal inspection

3.1.1 One loft void was accessible during the updated site visit, located in a flat within the western section of the building.

3.1.2 The loft void is *c.* 2 m x 10 m. The loft is a trussed construction from wooden timbers and the roof is lined with bitumen roofing felt. The loft has a maximum height of *c.* 2 m. There are also two skylights within the roof, resulting in the loft being very light, reducing its suitability for roosting bats. The loft is currently used for storage and with the trussed nature of the loft, the loft is relatively cluttered, reducing its suitability for void dwelling species. The floor is lined with blanket floor insulation. No evidence of roosting bats was recorded within the loft void, but there will be gaps between the roof tiles and the bitumen roofing felt, which provide suitable roosting opportunities for crevice dwelling species.

Plate 1 – Loft void within western section of Building 2.

Building 4 – Internal inspection

3.1.3 Building 4 is a brick-built garage / historic barn in the northern section of the site. Internally the building is split into two sections, but there is not contained loft void. There is a mezzanine first floor which was accessed to gain a closer view of the roof. The roof is a traditional purlin rafter construction with tie joists present. The roof is lined with bitumen roofing felt, which is in good condition. there is no loft void, but the roof is a traditional purlin rafter construction and is unlined. One gap was noted in the brickwork on the western gable end of the building on the mezzanine level and potential gaps were noted along the wall plate on the northern aspect.

3.1.4 The ground floor was currently used for storage and as such was relatively cluttered. However, gaps were noted where the floor joists of the mezzanine met the wall (see Plate 4), which offer suitable opportunities for individual bats.

3.1.5 However, the building was extremely light and draughty, reducing the overall suitability for bats and only a small number of potential roosting features were record. Furthermore, no evidence of roosting bats was recorded within the building.

Plate 2 – Loft void within western section of Building 2.

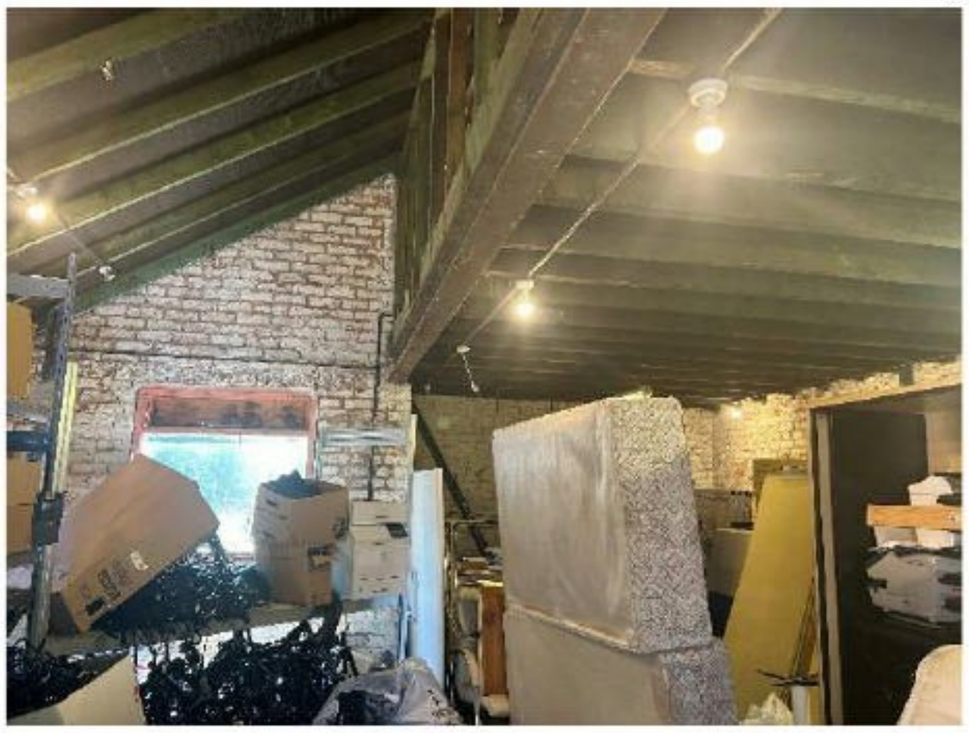

Plate 3 – Loft void within western section of Building 2.

Plate 4 – Loft void within western section of Building 2.

Building 5 – Internal inspection

3.1.6 Building 5 is a brick-built outbuilding in the southern section of the site. The roof is mono-pitched and connected to a brick wall on the eastern aspect. Internally there is no loft void, but the roof is a traditional purlin rafter construction and is unlined. A number of gaps were noted where tiles are missing or lifted, allowing bats access into the building. Additionally, there are gaps behind the end rafter, but these were inspected, and no evidence of roosting bats was recorded. A small numb er of cracks were noted within the brickwork but these were fully inspected with a torch and no evidence of roosting bats was recorded, but the features still remain suitable for use by a single bat occasionally. The building was extremely light due to the windows on the southern aspect of the building and draughty due to the large gaps around the door frame, reducing the buildings overall suitability for bats.

Plate 5 – View of roof within Building 5.

Plate 6 – Gaps in brickwork in Building 5.

3.2 Dusk Emergence Surveys

3.2.1 Four species of bat were recorded during the emergence survey: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*) and Nathusius's pipistrelle (*Pipistrellus nathusii*). Activity levels during the surveys was 'moderate' throughout with most passes comprising of bats foraging along the

northern and southern part of the site. Common and soprano pipistrelles were the most abundant species, noctule and Nathusius's pipistrelle recorded to a lesser extent. Pipistrelles were observed throughout the surveys, foraging within the gardens particularly to the west and south of Building 1.

3.3 Identified roost

3.3.1 A single common pipistrelle was observed emerging from an end roof tile on the southern aspect of the Building 1 (see Plate 7) during the first survey.

Plate 7 – Location of bat roost within Building 1

4.0 EVALUATION AND RECOMMENDATIONS

4.1 Evaluation of results

4.1.1 The areas of ornamental shrubs, scattered trees and hedgerows on the site provide suitable habitat for foraging and commuting bats. Precautionary measures are required during the works to prevent disturbance to bats may be required during the construction phase of the development.

4.1.2 The quality of roosting habitat for bats within Buildings 1 and 2 was assessed as moderate and Buildings 4 and 5 as low. Building 3 had previously been assessed as being of negligible potential during the PRA in September 2022. The buildings contain a number of potential roosting features, including lifted roof tiles, hanging tiles and lead flashing. However, no field signs of bats, such as droppings, were found during the external or internal building inspection.

4.1.3 Two species of bat were recorded during the bat emergence surveys, common pipistrelle and soprano pipistrelle. Activity was moderate, with a number of common pipistrelle bats observed foraging and commuting, particularly within the garden area to the east and north of the Building 1.

4.1.4 During the surveys, one bat was found to be roosting within Building 1: a common pipistrelle in an end roof tile on the southern aspect. The roost is characterised in the following section.

4.2 Roost assessment

4.2.1 Bat activity and field signs recorded during the survey suggest that Building 1 is used on a casual basis by single or low numbers of common pipistrelles. The bats present are likely to be males, non-breeding females or juveniles. The building is unlikely to be used as a maternity roost.

4.2.2 The environmental conditions (humidity, temperature etc.) and roosting features within the buildings on the site are of poor suitability to support hibernating bats. It is considered unlikely that bats are using the buildings for hibernation purposes.

4.3 Mitigation and compensation measures

4.3.1 Due to the presence of roosting bats within Building 1, the development will need to be registered under Natural England's Earned Recognition (ER) or Bat Mitigation Class Licence (BMCL) system prior to the works taking place. This can only be applied for once planning permission has been granted. Natural England aim to process applications within 10 working days of receipt.

4.3.2 A full European protected species (EPS) mitigation licence is not considered necessary, due to the low number and common species of bats which will be affected by the development.

4.3.3 The measures below outline the mitigation and compensation measures required to safeguard bats throughout the duration of development. They form a method statement which the contractors undertaking works on the site must adhere to: The measures below outline the mitigation and compensation measures required to safeguard bats. They form a method statement which the contractors undertaking works on site must adhere to and will be a condition of the ER or EPS licence:

- The project ecologist will deliver a toolbox talk to the contractors responsible for the destructive works, prior to commencement. The talk will cover bat ecology, bats and the law, and what to do if bats or field signs of bats are found during the works.
- As per the requirements of the ER and BMCL applications, an updated building inspection must be undertaken by an appropriately licensed ecologist within the three months prior to submission of the licence application to ensure that conditions on site have not changed. This will be required if the licence application is submitted after 10 October 2023.
- The low numbers and common species of bats likely to be affected, as well as the proposed soft demolition techniques, negate the need for timing restrictions in relation to this development
- Prior to the destructive works to Building 1, one Schwegler 2F (or similar model if not available) bat box will be fitted to a mature tree (which will be retained) within the proposed site boundary, as specified by the supervising ecologist. The bat box will be located on a southerly aspect, where it will receive the maximum amount of sunlight. It will be sited at a height of between four and six metres and away from any potential disturbance (including external lighting). Once bats have occupied a bat box, they may only be disturbed by a licensed bat ecologist. The bat box may be left in situ as an enhancement or removed following the demolition of Building 1.
- Prior to the start of destructive works of Building 1, the known roosting area will be inspected by a licensed bat ecologist. The ecologist will use an endoscope where necessary to examine inside the roost access points, to further confirm the presence or absence of bats and direct works accordingly.
- Sensitive areas of Building 1, such as end roof tiles and hanging tiles, are to be removed by hand, under the direct supervision of a licensed bat ecologist. If a bat is discovered during the works, the bat will be captured by hand by the supervising ecologist and transported to the bat box. If the bat is harmed or emaciated, it will be taken to the nearest animal hospital or bat carer if deemed necessary by the onsite ecologist.
- If works cannot be carried out in the winter months (November to April inclusive), a pre-commencement emergence / re-entry survey of Building 1 is to be undertaken immediately prior to the destructive works. The survey will monitor the current activity on site and occupied roosting locations to direct works accordingly.
- As part of the scheme one Ibstock Enclosed Bat Box 'C' will be integrated into the southern aspect of the newly constructed building. It will be sited at a height of between four and six metres and away from any potential disturbance (including external lighting).

REFERENCES

Andrews & Pearson (2022) Review of empirical data in respect of emergence and return times reported for the UK's native bat species Version 6. Available here: https://drive.google.com/file/d/1DeGHxyr9-p5XH6R6CRimsmquVD188WY8/view

Bat Conservation Trust (2022), Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys. Bat Conservation Trust, London.

Collins, J. (2016), *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conservation Trust, London.

Collins, J. (ed) (2016), Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). Bat Conservation Trust, London.

RSK Biocensus (2022) 35 Oakfield, Sale – Preliminary Ecological Appraisal and Preliminary Roost Assessment Report

FIGURES

Figure 1 – Site location

377850 377900 377950 378000 378050 378100 378150 378200 378250 378300 378350 378400 378450

392250 392200 392150 392100 392050 392000 391950 391900 391850 391800 391750

Legend:

Site Boundary

Rev	Date	Description	Drn	Chk	App
00	27/07/2022	2484263	SW	ET	SW

Oakfield Sale

RSK biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 1:

Site Location Plan

0 25 50 75

Metres

SCALE: 1:2,000 @ A3

N W E S

REV 00

Document Path: C:\OneDrive\RSK Group\RSK Biocensus - 06 GIS - 2484263 - Phase 1 Survey 35 Oakfield Sale\03 - APRX\2484263 - Oakfield - Figure 1 - Site Location Plan.aprx

Figure 2 – UKHAB map

Legend:

- Site Boundary

UKHAB Habitats

- Modified grassland
- Buildings
- Other developed land
- Artificial unvegetated unsealed surface
- Suburban mosaic of developed/ natural surfaces
- Other hedgerows
- Built linear features
- Conifer -- Mature
- Tree -- Mature
- Target note
- Secondary codes

Secondary Codes:

17 - Ruderal/ Ephemeral
66 - Frequently Mown
69 - Fence
230 - Garden
231 - Vegetated Garden

Rev	Date	Description	Drn	Chk	App
00	03/10/2022	2484263	TG	SW	EC

Oakfield Sale

RSK biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 2:

UKHAB Habitats Map

0 3.5 7 10.5
Metres
SCALE: 1:300 @ A3

N W E S

REV 00

Document Path: C:\OneDrive\RSK Group\RSK Biocensus - 06 GIS - 2484263 - Phase 1 Survey 35 Oakfield Sale\03 - APRX\2484263 - Oakfield - Figure 2 - UKHAB.aprx

APPENDIX B: LEGISLATION

Bats

All species of British bat are protected by The Wildlife and Countryside Act 1981 (as amended) extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat while it occupies a bat roost.

Bats are also European Protected Species listed on Schedule 2 of The Conservation of Species and Habitats Regulations 2017 (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats, including in particular any disturbance which is likely (a) to impair their ability - (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) hibernate or migrate, where relevant; or (b) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

RSK biocensus
EXPERTS IN ECOLOGY

RSK Biocensus is owned by RSK Environment Ltd
Registered office
Spring Lodge, 172, Chester Road, Helsby, Frodsham, England, WA6 0AR, UK
Registered in England No. 04364279
www.rsk.co.uk