



NOCTURNAL BAT SURVEY REPORT

SITE LOCATION

Okell Drive,
Knowsley
L26 7XX

ISSUE DATE

05th September 2023

SEED REF

1649-NBR-V1-A

CLIENT

Enabl

ARBORICULTURAL CONSULTANCY

SEED-ARB.CO.UK

DOCUMENT CONTROL

Date	Author	Checked	Revision
05.09.2023	Emma Anderson	KB	Rev A

NOTE:

Ecological Surveys & Reports provided in association with Collington Winter Environmental Ltd.



COPYRIGHT ©

This report, all plans, illustrations, and other associated material remains the property of SEED Arboriculture Ltd until paid for in full. Copyright and intellectual property rights remain with SEED Arboriculture Ltd.

LIMITATIONS

The contents of this report are valid at the time of writing. SEED Arboriculture Ltd shall not be liable for any use of this report other than for the purposes for which it was produced.

Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

The contents of this report are valid at the time of writing. As the ecological value of a site is constantly evolving and changing, if more than twelve months have elapsed since the date of this report, further advice must be taken before reliance upon on the contents. Notwithstanding any provision of the SEED Arboriculture Ltd Terms & Conditions, SEED Arboriculture Ltd shall not be liable for any losses (howsoever incurred) arising as a result of reliance by the client or any third party on this report more than twelve months after the report date.

Contents

1. Introduction	2
2. Methodology	4
3. Survey Results.....	6
4. Assessment	6
5. Recommendations & Mitigation	7
6. Bibliography	8

1. Introduction

Scope & Purpose

- 1.1.1. Seed Arboriculture Ltd were commissioned by Enabl Limited to undertake Nocturnal Bat Surveys at Okell Drive, Knowsley L26 7XX. This report has been prepared to inform a planning application at the site relating to the demolition of the existing building to facilitate a residential development.
- 1.1.2. The author of this report is Emma Anderson MSc, Assistant Ecologist at Collington Winter Environmental Ltd. The project has been managed and overseen by Katie Bird MEnvSci, ACIEEM Principal Ecologist at Collington Winter Environmental. Katie is highly experienced managing schemes and has produced many ecological reports to inform planning permission.
- 1.1.3. A Preliminary Roost Assessment (PRA) was undertaken at the site in August 2023 as part of the Preliminary Ecological Appraisal. The PRA assessed the building to provide **'moderate'** bat roosting potential due to presence of slipped and lifted tiles, lifted lead flashing, and missing mortar of the building providing potential roosting features or internal access. As such, two further surveys were recommended, as detailed within this report.

Site Location

- 1.1.4. Please refer to Figure 1 for the site location.

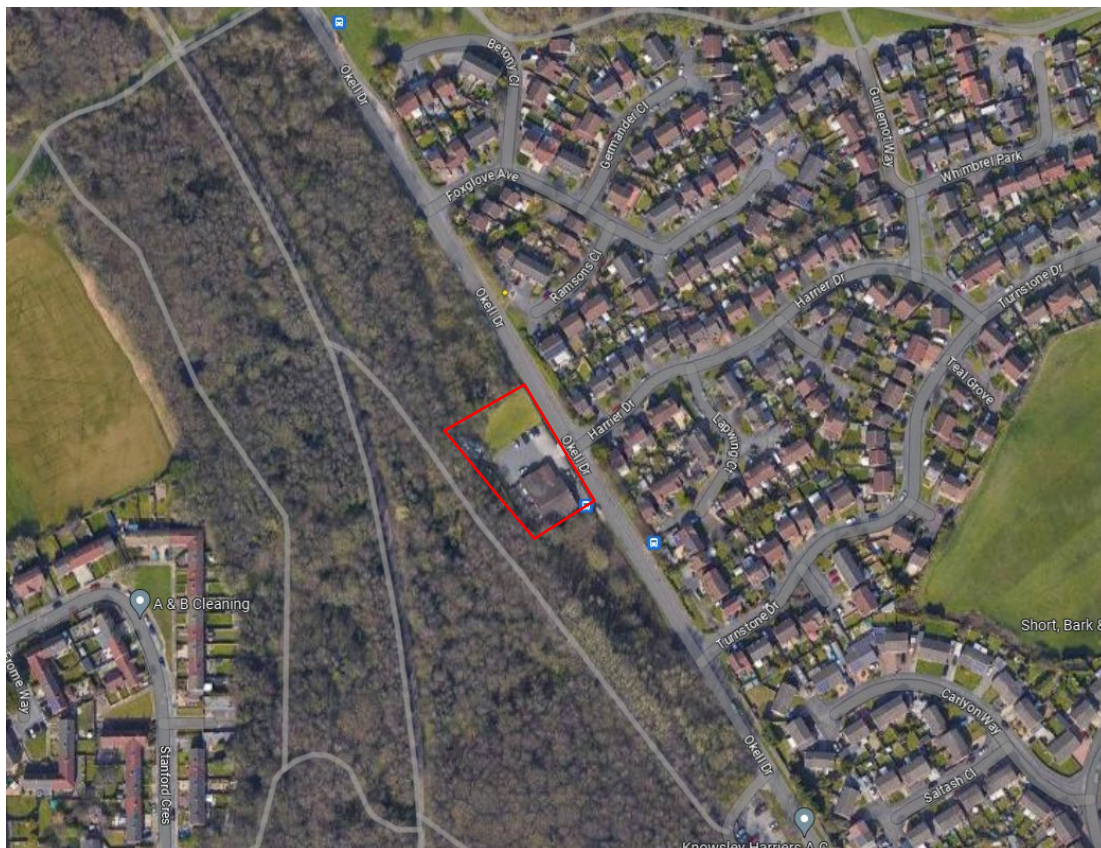


Figure 1 - Site Location Plan

Objectives

1.1.5. The objectives of the PRA are as follows:

- Identify any areas of bat roosting potential within the building
- Assess the value of the building for roosting bats
- Identify the species assemblage of bats using the site.
- Provide recommendations on any further surveys or mitigation required for bats

2. Methodology

Desk Study

Nocturnal Bat Surveys

- 2.1.1. The nocturnal surveys were undertaken as dusk surveys on 16th and 31st August 2023 by four qualified surveyors. An infrared camera (Nightfox Red, Digital Night Vision Goggles) was used during the survey completed on the 31st August 2023; the camera was placed at the western aspect where the majority of PRFs and potential access points were observed to provide assistance to the survey (See Figure 2 referenced as IRC).
- 2.1.2. Please refer to Figure 2 for locations of vantage points (VPs) used during the dusk survey.

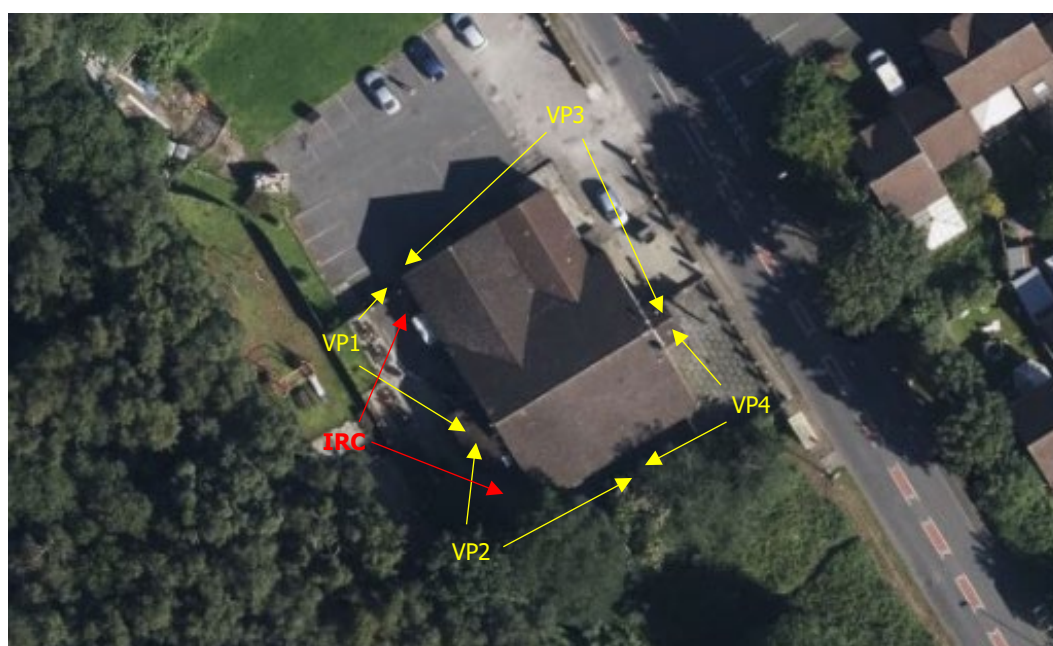


Figure 2 - Site Location Plan

- 2.1.3. The surveys were undertaken in line with guidance as set out in Collins (2016). Surveyors used heterodyne handheld bat detectors. All surveyors were suitably experienced undertaking bat emergence surveys. Please refer to Table 1 below for details of surveyors.

Table 1 - Bat Survey Details

Date	Sunset/ Sunrise Time	Start	Finish	Surveyors	Weather Conditions
16/08/2023	20:38	20:23	22:08	VP1 – Dean Robinson VP2 – Miles McGaffighan VP3 – Kira Lawton VP4 – Sam Penrhyn-Lowe	Temp: 18 Celsius Cloud: 6/8 Wind: 1 max (Beaufort scale) Rain: None

31/08/2023	20:09	19:54	21:39	VP1 – Dean Robinson VP2 – Michael Boucher VP3 – Kira Lawton VP4 – Sam Penrhyn-Lowe	Temp: 14 Celsius Cloud: 8/8 Wind: 0 max (Beaufort scale) Rain: Light at start of survey
------------	-------	-------	-------	---	--

- 2.1.4. Due to the surveys being conducted by observation during low light conditions, this may cause constraint of visual assessments. No surveyors were visually constrained during the survey, other than that of low light conditions, and all potential roosting features were observed throughout the survey time period.

3. Survey Results

Dusk Survey (16/08/2023)

- 3.1.1. Bat activity was recorded minimally throughout the survey with only common and widespread species identified. The first bat was identified at 20:57 by VP1 and was a common pipistrelle (*Pipistrellus pipistrellus*) that was heard but not seen. VP1 recorded only common pipistrelle intermittently between 20:57 and 21:55, with both commuting and foraging behaviours observed. VP2 also recorded exclusively common pipistrelle between 21:08 and 21:55, with both commuting and foraging behaviours observed.
- 3.1.2. Activity was recorded in fewer frequencies on the eastern aspect of the building by VP3 and VP4. Common pipistrelles were observed commuting across the site, while soprano pipistrelle (*Pipistrellus pygmaeus*) was heard not but seen twice throughout the survey.
- 3.1.3. **No roost locations were recorded during the dusk survey.**

Dusk Survey (31/08/2023)

- 3.1.4. Bat activity was recorded minimally throughout the survey with only common and widespread species identified. The first bat was identified at 20:19 by VP2 and was a common pipistrelle that was seen commuting along the south boundary treeline. VP2 recorded common pipistrelle intermittently between 20:19 and 21:18, with both commuting and foraging behaviours observed. One instance of soprano pipistrelle was heard but not seen at 21:19. VP1 recorded exclusively common pipistrelle between 20:26 and 21:27, with both commuting and foraging behaviours observed.
- 3.1.5. Activity was recorded in fewer frequencies on the eastern aspect of the building by VP3 and VP4. Common pipistrelle bats were observed commuting and foraging across the site, while soprano pipistrelle bats were heard not but seen six times throughout the survey.
- 3.1.6. A review of the camera footage was completed, where no bats were identified emerging or re-entering.
- 3.1.7. **No roost locations were recorded during the dusk survey.**

Assessment

- 3.1.8. Bat activity was recorded throughout the survey with only common and widespread species being identified within the local area. Foraging activity was mainly recorded along the southern and western boundary treelines.
- 3.1.9. No bats were observed emerging from any potential roosting feature during the survey, as such, roosting bats are deemed likely absent.

4. Recommendations & Mitigation

Impact Assessment

- 4.1.1. The proposed development works will include the full demolition of the existing building. There is not considered to be a risk of injuring and/or killing bats or disturbing/destroying a known bat roost as a result of the proposed works. As such, Natural England European Protected Species License (EPSL) is not required to be obtained prior to any works being completed on the building. **If in the unlikely chance a bat identified during the works, all works will cease and an ecologist contacted immediately.**

Lighting Mitigation

- 4.1.2. The site recorded general bat activity and foraging and commuting around the site. While no significant commuting corridors were recorded, it is important to maintain favoured foraging pathways by using low-level lighting and suitable habitat both re-and post-construction.
- 4.1.3. The following measures will be implemented in the final proposed lighting strategy, following the guidance outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and BCT’s “Bats and Artificial Lighting in the UK” (2023):
- Keep site lighting to minimum levels.
 - LED lighting with a warm white light to be used over cool white light (<2700Kelvin).
 - Lighting feature peak wavelengths greater than 550nm.
 - Light placement to be downward facing to prevent excess horizontal or vertical light spill.
 - Avoid illuminating habitats of value.
 - Use of time security lights should be set on motion sensors and using short, 1-minute timers, to minimise light use.

Summary

- 4.1.4. The building was not found to support roosting bats any species. Only common and widespread species were identified foraging throughout the survey.
- 4.1.5. As no bats were identified emerging from the building, it is not anticipated that roosting bats will be impacted by the proposed development. No further surveys are required with the proposed development.
- 4.1.6. It is recommended that lighting mitigation measures are implemented to protect foraging and commuting bats within the local area.

5. Bibliography

- Bat Conservation Trust (2018). Bats and Artificial Lighting in the UK: Bats and the Built Environment Series.
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition. The Bat Conservation Trust, London.
- Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- Mitchell-Jones (2004). Bat Mitigation Guidelines: Working Today for Natura Tomorrow. English Nature.
- Mitchell-Jones and McLeish (2004). Third Edition Bat Workers' Manual.