

BAT SURVEY REPORT

OCTOBER 2023

Plant Hill Road

Manchester

M9 8LX

U R B A N
G R E E N



QUALITY MANAGEMENT

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NON-TECHNICAL EXECUTIVE SUMMARY

Irwell Valley Homes are proposing to develop Land on Plant Hill Road (hereafter referred to as 'the site'). The proposals include the demolition of two onsite buildings and the development of 12 residential units with associated hard and soft landscaping.

Urban Green have been appointed to complete Bat Surveys and a Report of the site. A Preliminary Ecological Appraisal and a Preliminary Roost Assessment were conducted at the site in November 2022. B2 was assessed as having low potential to support a roost, with some Potential Roosting Features (PRF) present on site. One further survey, in the form of a nocturnal emergence bat survey, was recommended to further assess the buildings suitability for roosting bats.

In summary, no bat roosting activity was recorded in relation to the PRFs on B2, with most activity related to foraging and commuting by common and widespread species. As such, no further mitigation in relation to roosting bats is required for B2, though recommendations have been made.

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1 Introduction

1.1 Background to the Scheme

Irwell Valley Homes are proposing to develop Land on Plant Hill Road (hereafter referred to as ‘the site’). The proposals include the demolition of two onsite buildings and the development of 12 residential units with associated hard and soft landscaping. The works are to be mainly constrained to existing hardstanding.

Urban Green have been appointed to undertake further Nocturnal Bat Surveys following recommendations outlined within a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA), undertaken at the site by Urban Green in November 2022.

The author of the report is Toby Mills QCIEEM, Assistant Ecologist at Urban Green. Toby has experience providing ecological consulting services for a range of development schemes across the UK, including residential and commercial schemes.

1.2 Site Context

The site is located at National Grid Reference SD 85185 03450 and comprises a total area of approximately 0.2ha (see Figure 1).

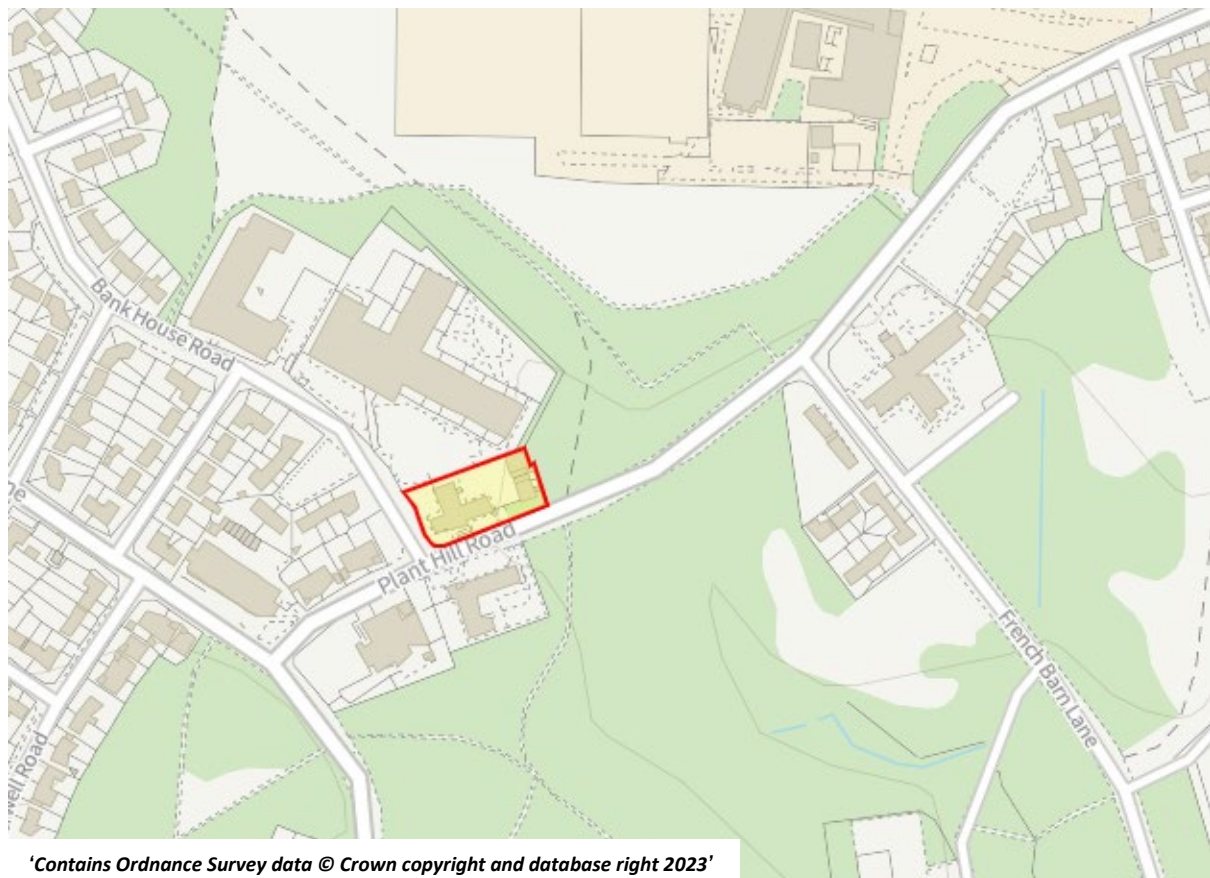


Figure 1 – Site Extent

The site is located in a densely urban area of Salford, approximately 5.5km north of the centre of Manchester. The site is bound by Plant Hill Road to the south and Bank House Road to the west, with residential developments present immediately opposite. Prospect House Specialist Support Primary

School is present immediately to the north, with an area of woodland present immediately to the east. Immediately present to the southeast and south is a large expanse of woodland. Within the wider landscape, managed public open greenspaces are present to the north and east, with a residential estate present to the west.

1.3 Purpose of this Report

This report has been produced to demonstrate the results of nocturnal bat surveys which were completed at the site. The surveys were conducted to confirm likely absence or presence of roosting bats. Appropriate mitigation and suitable roost replacement (compensation) are detailed (if required). The report has been produced in support of the proposed planning application.

Relevant UK legislation of the protection of all UK bats are detailed in Appendix 1.

2 Previous Surveys

A PEA and PRA was completed at the site by Urban Green in November 2022 and is detailed within Report UG_1827_ECO_PEA_01 (Urban Green, 2022). Two buildings (B1 & B2) were located within the site boundary and were subject to a PRA. Please refer to Table 1, which was extracted from Appendix 2 of the PEA report, summarising the assessment. The full PRA is included in Appendix 2.

Table 1 - PRA Summary (UG_1827_ECO_PEA_01, 2022).

Building Reference	Description and evidence	Category of Suitability
Building (B) 1	B1 was a flat roofed building, featuring a staggered elevation between 1-3 storeys. All windows were covered by PVC boarding or metal panelling, with all areas appearing well sealed, with no obvious crevices or PRFs present across the building's extent.	Negligible
B2	B2 was a single storey flat roofed building, featuring a number of corrugated metal garage door entrances along the western aspect. The building had a generally well-sealed façade with the exception of a single PRF consisting of a mortar crack extending along the southwestern aspect.	Low

As B2 was assessed as having low bat roosting potential, a minimum of one nocturnal emergence bat survey was recommended and are to follow guidance set out in Collins (2023).

B1 was assessed as having negligible bat roosting potential and no further surveys are required on B1 for the proposed development to proceed.

3 Methods

3.1 Desk Study

Sources of information used in the desk study are presented in Table 2.

Table 2 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
MAGIC website (www.magic.gov.uk)	10/10/2023	Locations of granted EPSL within 5km of the site.
Greater Manchester Local Record Centre	07/12/2022	Records of bats within 1km of the site boundary.

3.2 Nocturnal Bat Surveys

One emergence survey was undertaken following guidance set out in Collins (2023). The survey was conducted by four suitably qualified ecologists. The survey was conducted using handheld BatScanner and Echo Meter Touch bat detectors. Surveyors were positioned around the features to observe the Potential Roosting Features (PRFs) identified during the PRA. The emergence survey began at least 15 minutes before sunset until approximately 1.5 to 2 hours after sunset.

Summary of the survey details are provided in Table 3. Figure 2 provides a plan illustrating surveyor positions.

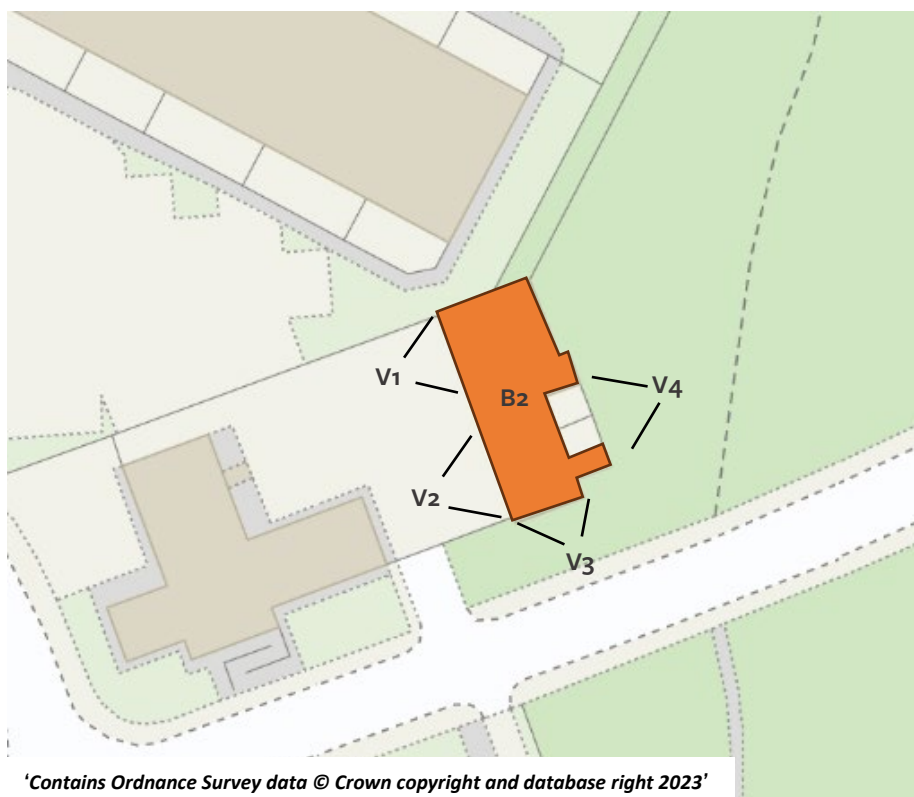


Figure 2 – Surveyor vantage points for B2

Table 2 - Emergence Survey Details

Date	Sunset/sunrise time	Survey time	Surveyors	Weather conditions at sunset
21/09/23	19:10	18:55-20:40	V1- Nathan Morton V2- Barnaby Gardner V3- Shannon Brady V4- Toby Mills	Temp: 13°C Cloud cover: 1/8 oktas Wind: 1 Beaufort Precipitation (Ppt): None during survey

Barnaby Gardner QCIEEM – Assistant Ecologist with two years’ bat survey experience.

Toby Mills QCIEEM – Assistant Ecologist with two years’ bat survey experience.

Shannon Brady QCIEEM – Senior Biodiversity Net Gain Consultant with two years’ bat survey experience.

Nathan Morton – Seasonal Ecologist with one year’s bat survey experience.

3.3 Constraints to the Survey

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.

3.4 Lifespan of Reports

In accordance with the BCT guidance (Collins, 2023), the details of this report will remain valid for a period of **18 months** from the date of the first survey (i.e. until 21st March 2025) (CIEEM, 2019). After this date, or after such a time at which the site or proposed works are changed, this assessment should be reviewed to determine whether any update surveys are required.

4 Results

4.1 Desk Study

The results of the desk study completed are demonstrated in Table 4.

Table 4 – Desk Study Results

Information Sought	Details
Locations of granted EPSL within 1km of the site.	950m west- (REF: 2014-1562-EPS-BDX) Granted for impact on a breeding site and destruction of a resting place for common pipistrelle (<i>Pipistrellus pipistrellus</i>). Granted from 2014-2015. 950m west- (REF: 2014-1364-EPS-BDX) Granted from 2014-2015, related to common pipistrelle. No information regarding type of work permitted was provided.
Records of bats within 1km of the site boundary.	32 records of bats were returned within the data search, including 10 records of roosts relating to common pipistrelle, unidentified pipistrelle bat species (<i>Pipistrellus</i> sp.), and unidentified bat species (<i>Chiroptera</i> sp.), and 22 records of bats relating to common pipistrelle, soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), common noctule (<i>Nyctalus noctula</i>), daubenton's bat (<i>Myotis daubentonii</i>), unidentified pipistrelle species, and unidentified bat species. The closest records concerned a common pipistrelle and unidentified pipistrelle species bat roost located approximately 300m west of the site in 2013. All species are protected under the Conservation of Species and Habitats Regulations 2017, the Wildlife and Countryside Act 1981 and are listed as a priority species under the Greater Manchester Local Biodiversity Action Plan (LBAP). Soprano pipistrelle and common noctule are furthermore listed under Section 41 of the NERC Act 2006.

4.2 Nocturnal Surveys

4.2.1 Dusk Emergence

Bat activity was recorded throughout the survey, with common pipistrelle being the only species recorded. One record of unidentified species, possibly brown long-eared (*Plecotus auritus*), was recorded by V3 but was not identified by any other surveyor, and therefore cannot be verified, and could possibly be common pipistrelle social calling. Both commuting and foraging behaviour was identified during the survey in proximity of all vantage positions.

The first bat was recorded at 19:32, approximately 22 minutes after sunset, by V3, relating to a commuting common pipistrelle. Several commuting individuals were recorded throughout the survey until 19:38, when the first activity of foraging was recorded at V4, attributed to a peak count of three individuals foraging above the building semi-consistently throughout the survey until 20:26, with lots of potential social calls recorded. The final record was attributed to a commuting common pipistrelle, identified by all vantage points at 20:35.

No emergence activity was recorded, and no bat roosts were identified at any PRFs on B2 during the survey.

4.3 Assessment

Foraging and commuting activity was recorded to be present on site, with only common and widespread species being identified within the local area. Foraging activity was present above B2, and there was commuting activity recorded throughout the survey.

No bat roosts were identified at any of the PRFs during the survey, as no bats were identified interacting with B2. As such, it is anticipated that the site is solely used for commuting and foraging purposes.

5 Mitigation Recommendations

5.1 Impact Assessment

No bat roosts were identified onsite, but activity was present in the form of foraging and commuting. As such, no further surveys or mitigation relating to roosting bats is required to facilitate development.

Due to the presence of commuting and foraging activity on site, construction may impact bat activities through increased levels of artificial lighting.

5.2 Lighting Mitigation

All bats have some degree of sensitivity to artificial, night-time lighting. Introducing artificial lighting to areas that are not currently illuminated may sever important bat flight lines and discourage bats from using roost provisions.

It is advised that a light mitigation plan is produced to assess the pre- and post-development changes in lighting and to advise on an appropriately sensitive lighting scheme as part of the development.

Lighting mitigation should follow 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” (2018).

Construction lighting should not be directed towards retained and surrounding habitats including the broadleaved woodland and grassland. The construction lighting may impact bats which are sensitive to light. Directional lighting will be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.

An External Lighting Scheme had not been produced on the writing of this report. As such, the following recommendations are to be considered within the scheme during its condition, to minimise impacts of lighting. The recommendations are as follows:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill, where appropriate.

- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas, where appropriate.
- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating any suitable retained bat habitats, particularly the tree lines and grassland to the east of the site, that are potential commuting and foraging habitat for bats.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use, where appropriate.
- Column heights of lighting can be considered to minimise light spill.

6 Conclusion

This Bat Survey Report has met the objectives of the report, by demonstrating the following:

- The results of nocturnal bat surveys undertaken on site, detailed in Section 4.2.
- An assessment of the Potential Roosting Features identified on site, detailed in Section 4.3
- Appropriate mitigation, detailed in Section 5.

7 References

Bat Conservation Trust (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Fourth Edition). The Bat Conservation Trust, London.

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Hutson A. M. (1993). Action Plan for Conservation of Bats in the United Kingdom. The Bat Conservation Trust, London.

Joint Nature Conservation Committee (2004). Bat Workers Manual. JNCC, Peterborough.

Urban Green (2022). Preliminary Ecological Appraisal of Plant Hill Road. Ref: UG_1827_ECO_PEA_01.

Appendix 1 – Relevant Legislation

Legislation relating to European Protected Species (e.g. bats)

European Protected Species and their resting places (e.g. bat roosts) are protected under the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CROW) Act 2000, and the Conservation of Habitats and Species Regulations 2017.

The Conservation of Habitats and Species Regulations 2017 transpose the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European Protected Species' (EPS), and the adaptation of planning and other controls for the protection of European Sites. EPS are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2017.

Appendix 2 – Full Preliminary Roost Assessment

Extracted from Appendix 2 of the site PEA (Urban Green, 2022)

Building Reference	Description	Evidence	Category of Suitability
B1	B1 was a flat roofed building, featuring a staggered elevation between 1-3 storeys. All windows were covered by PVC boarding or metal panelling, with all areas appearing well sealed, with no obvious crevices or PRFs present across the building's extent.		Negligible

Building Reference	Description	Evidence	Category of Suitability
B2	B2 was a single storey flat roofed building, featuring a number of corrugated metal garage door entrances along the western aspect. The building had a generally well-sealed façade with the exception of a single PRF consisting of a mortar crack extending along the southwestern aspect.		Low