

PRELIMINARY ROOST ASSESSMENT

FEBRUARY 2023

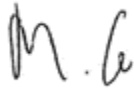
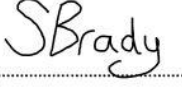
The Rock, Bury

137 The Rock,
Bury
BL9 0ND

U R B A N
G R E E N



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NON-TECHNICAL EXECUTIVE SUMMARY

21 Living are proposing to develop land at The Rock in Bury (hereafter referred to as 'the site'). The proposals include the redevelopment of the onsite building, including associated demolition, to facilitate the development of 13 residential units with associated hard and soft landscaping.

Urban Green have been appointed to undertake a Preliminary Roost Assessment (PRA) of the site.

The survey was undertaken on 15th February following best practice guidance outlined within Collins (2016).

Based on the professional judgement of an experienced ecologist, B1 has been assessed as providing **low** bat roosting potential. This is based on a cumulation of factors including the field survey undertaken, the location of the site and current use of the wider site as an active hospital, and other nocturnal bat surveys completed within the wider site. Therefore, further survey work is required for the proposed works to proceed.

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1 Introduction

1.1 Background to the Scheme

21 Living are proposing to develop land at The Rock in Bury (hereafter referred to as ‘the site’). The proposals include the redevelopment of the onsite building, including associated demolition, to facilitate the development of 13 residential units with associated hard and soft landscaping.

Urban Green have been appointed to undertake a Preliminary Roost Assessment (PRA) of the site.

The author of the report is Max Grindle, Assistant Ecologist at Urban Green. Max has experience providing ecological consulting services for a range of development schemes across the UK, including residential, commercial, mineral extraction and road infrastructure schemes.

1.2 Site Context

The site is located at National Grid Reference SD 80736 11028 and comprises a total area of approximately 0.036ha (see Figure 1).



Figure 1 – Site Extent

The site is located in a dense urban zone within Bury town centre, approximately 550m northeast of Bury Bolton Street train station, for which the associated railway runs to the north and south. The site is bound on all sides by commercial developments, with a road present adjacent to the south. A churchyard featuring a parcel of broadleaved woodland is present approximately 200m west of the site, connected to broadleaved woodland bordering the northern and southern aspects of Peel Way. The River Irwell is

present approximately 735m to the northwest, with a large expanse of open grassland/broadleaved woodland mosaic adjacent to the river at it's closest point to the site.

1.3 Purpose of this Report

This report has been produced to document the methods, results and conclusions of a Preliminary Roost Assessment. The objectives of the assessment include a field survey of the features of interest and assessment of its suitability for roosting bats, following guidance set out in Collins (2016). The assessment will determine whether further nocturnal bat surveys are required to confirm likely absence or presence of roosting bats.

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

2 Methods

2.1 Desk Study

Sources of information used in the desk study are presented in Table 1.

Table 1 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
Online aerial imagery	15/02/2023	Review of satellite imagery.
MAGIC website (www.magic.gov.uk)	15/02/2023	Locations of granted EPSL within 5km of the site.

2.2 Preliminary Roost Assessment

A PRA was carried out on site on 13th February 2023 by Assistant Ecologist Max Grindle BSc QCIEEM.

The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 3rd edition (Collins, 2016). The categorisation within this report is based on that set out in Table 2, which is used as a basis for determining the requirement for further surveys.

Internal access was available during the survey and as such an in-depth assessment was conducted both internally and externally.

Table 2 – Suitability of Buildings and Trees for Roosting Bats (adapted from Collins, 2016)

Category of Suitability	Typical Characteristics	Further Survey Requirements
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	A minimum of three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September, with at least two surveys between May and August.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	A minimum of two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September with at least one survey between May and August.

Category of Suitability	Typical Characteristics	Further Survey Requirements
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Structures: a minimum of one emergence/re-entry survey between May and August. Trees: No further survey required but precautionary methods of felling recommended.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

2.3 Constraints to the Survey

The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

The southern facing portion of the second floor rooftop and a small portion of the second floor rooftop were not able to be surveyed due to a lack of a suitable vantage points from which to observe the features. This has been accounted for in the final assessment of the building's suitability for roosting bats.

A lack of access furthermore prevented a full assessment of the ground floor rooftop cavities. This is not seen as a major constraint as the external features were able to be surveyed extensively, with most external PRFs located on the first and second floors.

2.4 Lifespan for Report

In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until 13th August 2024). After this date, this assessment should be reviewed to determine whether any update surveys are required.

3 Results

3.1 Site Context

The site is located in a dense urban zone within Bury town centre, approximately 550m northeast of Bury Bolton Street train station, for which the associated railway runs to the north and south. The site is bound on all sides by commercial developments, with a road present adjacent to the south. A churchyard featuring a parcel of broadleaved woodland is present approximately 200m west of the site, connected to broadleaved woodland bordering the northern and southern aspects of Peel Way. The River Irwell is present approximately 735m to the northwest, with a large expanse of open grassland/broadleaved woodland mosaic adjacent to the river at its closest point to the site.

3.2 EPSL within 5km

As detailed by MAGIC (2023), a total of ten granted European Protected Species Licences (EPSL) relating to bats are present within 5km of the site. Details regarding the licences and their approved actions are detailed in Table 3.

Table 3 – Granted EPSL within 5km of the site

EPSL Reference Number	Approximate distance from site	Related Species	Terms of Licence
EPSM2012-4607	670m northwest	Common pipistrelle	Allowed for the destruction of a resting place in 2012.
2015-8936-EPS-MIT-1	1.4km southwest	Common pipistrelle	Allowed for the destruction of a resting place between 2015-2020.
EPSM2012-5060	1.7km west	Common pipistrelle	Allowed for the destruction of a breeding site between 2013-2015.
2018-33380-EPS-BDX	2.3km west	Common pipistrelle	Allowed for both the damage and destruction of a resting place and breeding site in 2018.
EPSM2010-2617	2.7km east	Common pipistrelle	Allowed for the destruction of a resting place between 2011-2012.
2014-3807-EPS-MIT	3.3km north	Common pipistrelle	Allowed for the destruction of a resting place between 2014-2015.
2015-15221-EPS-BDX	3.8km southwest	Common pipistrelle	Allowed for both the damage and destruction of a resting place and breeding site in 2015.
2020-45495-EPS-MIT-2	4.2km north	Common pipistrelle	Allows for the destruction of a resting place between 2020-2025.
EPSM2009-1596	4.7km southwest	Common pipistrelle	Allowed for the destruction of a resting place and breeding site between 2010-2012.
2020-48009-EPS-MIT	5km southeast	Common pipistrelle	Allowed for the destruction of a resting place in 2020.

3.3 Field Survey

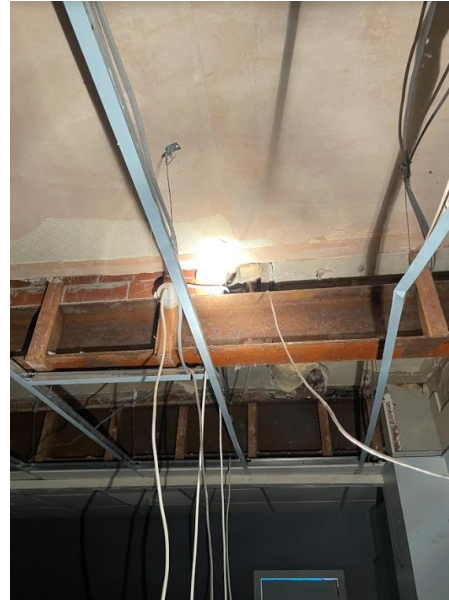
The building (B1) comprised a disused commercial property with an associated rear courtyard. The building featured a number of different building materials on the outer walls along with slate tiles across all rooves. The property featured pitched roofing, layered over three separate floors, and an underpass from which the rear courtyard can be accessed.

3.3.1 Internal

The ground floor was in a state of disrepair, with extensive damage present in the majority of the internal walls and ceilings. A false ceiling was present, with the tiles mostly having been removed or had fallen to expose insulation material and electrical wiring, with crevices present leading into the cavity below the first floor.



Photograph 1 – Damaged false ceiling



Photograph 2 – Damaged false ceiling

A cellar space was present beneath the building, accessible from the main ground floor where an open hatch was exposed, leading to a staircase. This floor featured extensive damage to the ceiling, with the cavity below the ground floor fully exposed and open gaps visible into the floor above.



Photograph 3 – Cellar with removed ceiling



Photograph 4 – Damage within cellar

The first floor was comprised of a hallway which extended out into multiple rooms. Multiple rooms featured windows, though no access from the outside was present. One room to the south of the first floor featured a loft hatch, extending into the first floor ceiling cavity. This cavity was generally well sealed,

with no access visible from the outside, although several small tears in the insulation were present. Multiple cobwebs were visible, with no evidence of bats present within the void.

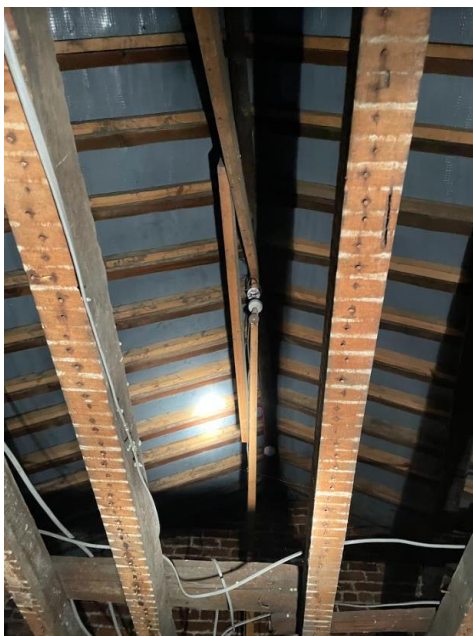


Photograph 5 – First floor loft void



Photograph 6 – First floor loft void with tear in insulation fabric present

The second floor comprised a set of empty rooms featuring bare brick walling and windows, some of which were boarded. The ceiling extended up to the roof, with no loft void present. The ceiling was found to be in a well-sealed condition, with no tears in the insulation material or gaps in the roofing allowing light within the building. A fireplace was present, extending into a chimney from which fallen debris was present. Long wooden beams spanned the length of the pitching.



Photograph 7 – Second floor rooftop



Photograph 8 – Beams present within second floor rooftop

3.3.2 External

Externally the building comprised a mixture of exposed brick, slate tiled, and mortared walling. The southern facing wall covered all three floors and was well sealed across all aspects, with no obvious PRFs visible. The roof was unable to be surveyed due to a lack of a suitable vantage point from which to be viewed.



Photograph 9 – Southern aspect of B1



Photograph 10 – Southern aspect of B1

An underpass was present under the first floor of B1 (see Photograph 9), leading to the rear courtyard. The roof of the underpass featured numerous PRFs, with extensive damage exposing potential gaps and cavities.



Photograph 11 – Rotting wood exposing crevices within the underpass



Photograph 12 – Damage to the underpass roof exposing gaps in the insulation material

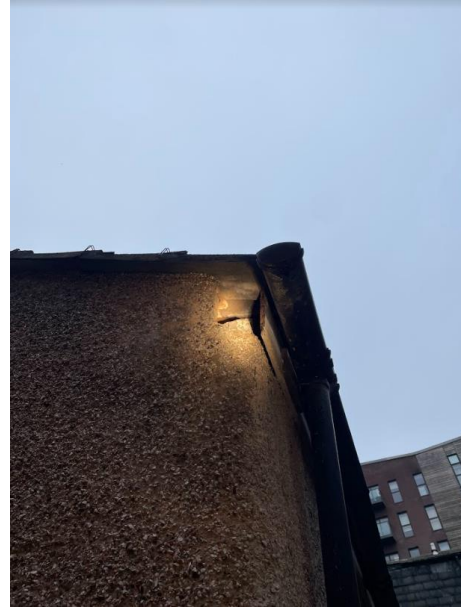
The rear courtyard was in a state of disrepair, having not been managed for some time. Three pitched rooves were present across three individual floors, all in various states of disrepair. No large external

lighting was present apart from some security lighting attached below the ground floor eaves and pointing towards the ground. It is possible that this lighting is motion triggered, and furthermore may not have been powered at the time of the survey.

The ground floor roof had an extensive gap beneath the eaves on the northern aspect, possibly leading into the roof cavity (see Photograph 14). The roof tiling above this section was well sealed, providing suitable tight cover for bats to roost within.

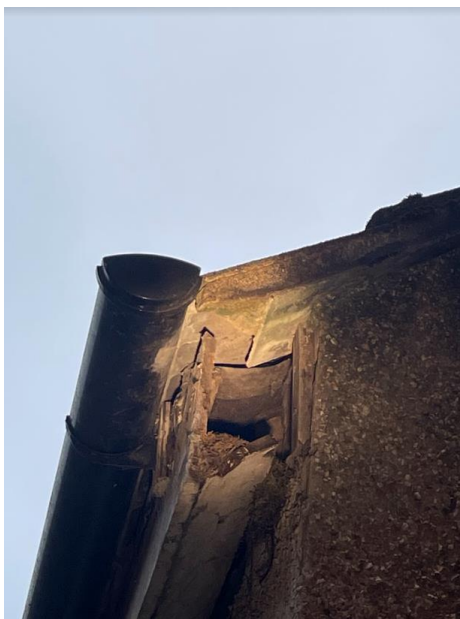


Photograph 13 – Rear courtyard featuring multiple pitched roofs



Photograph 14 – Gap below the eaves on the northern aspect of the ground floor roof

A second gap in the eaves was present along the southwestern aspect of the ground floor roof (see Photograph 15). This was similar to the previous PRF, with well-sealed roofing above, providing tight cover for bats to roost within. This also served as a suitable PRF.



Photograph 15 – Gap below the eaves on the southwestern aspect of the ground floor roof

The second floor roof did not visibly display any PRFs, with the roof tiling appearing to be in a well-sealed state. The northern aspect of this rooftop was not able to be surveyed due to a lack of a suitable vantage points, though this served as a relatively small part of the roof.



Photograph 16 – Third floor wall and second floor rooftop

Lead flashing was present below the tiled portion of the third-floor wall, being shown to have lifted extensively providing further possible PRFs, though this was unable to be ascertained by visual assessment. Some gaps were also present above the flashing along the lowest layer of tiles. The third floor rooftop was visible from the farthest section of the rooftop, with the tiles appearing to be in a well-sealed state.

3.3.3 Summary

Overall, the building does provide suitable features that could support a bat roost, including damaged tiling, lifted lead flashing, gaps within eaves, and deteriorated wooden panelling. Where the northern aspect of the building featured all of the identified PRFs and relatively low disturbance by artificial lighting, the southern aspect was well sealed and surrounded by streetlights.

The nearest suitable commuting and foraging habitat within the wider area was located 200m west of B1. Although this area featured good connectivity to a railway line and large areas of urban woodland and greenspace, as well as a river, B1 features very little suitable habitat for bats in all other directions.

Due to the limited number of suitable PRFs located within the building, with no features situated along the southern aspect where there is extensive street lighting, and the building's location nearby little suitable foraging and commuting habitat, B1 has been assessed as featuring **low** bat roosting potential.

4 Recommendations

4.1 Proposed Development

21 Living are proposing to develop land at The Rock in Bury (hereafter referred to as ‘the site’). The proposals include the redevelopment of the onsite building, including associated demolition, to facilitate the development of 13 residential units with associated hard and soft landscaping.

4.2 Further Survey

Based on the professional judgement of an experienced ecologist Building 1 has been assessed as providing **low** bat roosting potential.

Therefore, further survey work is required for the proposed works to proceed.

A minimum of one dusk emergence or dawn-re-entry survey is to be undertaken on site to confirm presence or likely absence of roosting bats. All surveys should be undertaken in accordance with the current BCT guidance (Collins, 2016).

The surveys would involve situating a number of suitably qualified surveyors around the external faces of each building, focusing on the areas adjacent to buildings scheduled for demolition, to monitor for bats emerging from potential roost locations (dusk emergence survey) or entering potential roost locations (dawn re-entry survey) for a specified amount of time. The surveys should be completed between May and September (inclusive). It is anticipated that three surveyors will be required to fully cover the entirety of the building.

If bats are identified roosting within the buildings on site, a minimum of three surveys will be required to inform a Natural England EPSL. The surveys will identify what bat roosts are present and will in turn clarify what mitigation will be required as part of the EPSL. Roost provision, lighting and timescales will be considered as part of the licence.

An EPSL can only be submitted once full planning permission has been granted and all wildlife conditions have been discharged.

4.3 Lighting Mitigation

Proposed lighting should follow the protocols outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and the Bat Conservation Trust’s “Bats and Artificial Lighting in the UK” (2018). Lighting recommendations include:

- 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 areas currently not excessively artificially lit, namely the site courtyard to the north.
- 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.

5 Conclusion

B1 was assessed as featuring **low** bat roosting potential. As such, further surveys relating to roosting bats are required for the proposed works to proceed.

6 References

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Third Edition). The Bat Conservation Trust, London.

Bat Conservation Trust / Institution of Lighting Professionals (2018). Guidance Note 08/18: Bats and artificial lighting in the UK. Bats and the Built Environment series.

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

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

Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.

Appendix 1 – Relevant Legislation

Bats

All species of bat are listed on Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of *The Conservation of Habitats and Species Regulations 2017*, making them *European Protected Species*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely to:
 - impair its ability to survive, breed, or rear or nurture their young;
 - impair its ability to hibernate or migrate.
 - affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*)
- Lesser horseshoe bat (*Rhinolophus hipposideros*)
- Bechstein's bat (*Myotis bechsteinii*)
- Barbastelle (*Barbastella barbastellus*)
- Greater mouse-eared bat (*Myotis myotis*)