




Preliminary bat roost assessment

Site Location	Lychgate The Warren, Radlett, Herts, WD7 7DU
Document reference	CE4206
Date of Site visit	23 rd March 2023
Report by	Garry Smith – Senior Ecologist Signature:  Tel: 07792064673 Email: info@chaseecology.co.uk

DISCLAIMER

This report/document has been prepared by Chase Ecology for the named client as a Protected Species Survey - Bats. Chase Ecology accepts no liability or responsibility for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared. We confirm that the opinions expressed are our true and professional opinions.

Limitations and Copyright

Chase Ecology has prepared this Report for the sole use of the above named Client or his Agents in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of Chase Ecology. The assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Chase Ecology. Chase Ecology standard Limitations of Service apply to this report and all associated work relating to this site. A copy has been supplied with our original quotation and further copies are available on request

Validity of data

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

Executive Summary

Chase Ecology undertook a Preliminary Roost Assessment (PRA) at the named site. The aim of the assessment was to consider the value and suitability of the structures for roosting bats & nesting birds as detailed below;

<p>Survey Methodology</p>	<p>An internal & external survey was carried out by Elena Vasileva who is accredited to the Natural England class two licence 2017-28032-CLS-CLS and holds five years' experience of bat survey.</p> <p>The assessment is for potential roosting and usage of the structure for bats & nesting birds.</p> <p>See section 3 (Methodology).</p> <p>Additional to the visit further research has been carried out on the Magic.gov database and National Biodiversity Network</p>
<p>Results of Preliminary Bat Roost Inspection</p>	<p>SEE SECTION 6.0</p> <p>Following a preliminary bat roost assessment, it has been identified that both the building and surrounding environments offer value to bats.</p> <p>A 2km search of previous Granted European Protected Species Applications revealed four granted European Protected Species applications for Brown Long-eared, Common Pipistrelle bats.</p> <p>A 2km radius search has demonstrated habitats of value to bats including woodland, parkland, open fields, hedgerows and waterbodies of which support feeding & commuting.</p> <p>The building has evidenced roosting features of value within the roof/ Brickworks which look to offer access and availability to both void & crevice dwelling bats and could not be fully ruled out during the Preliminary Roost Assessment without causing disturbance to materials which in effect may cause disturbance to possible bat roosts within.</p> <p>Internal evidence from bats in the form of 1000+ droppings were observed within scattered areas across the insulation coverings and brickworks and below the ridge areas. Likely activity from Brown Long-eared with a likelihood of a small maternity roost from the level of droppings observed.</p>

Evidence of Nesting Birds	No evidence of nesting birds identified
Requirements for Additional Survey	<p>In line with current accepted guidelines, a structure that has demonstrated confirmed activity/evidence from bats must have a further three emergence or re-entry surveys to confirm activity from bats along with species, volume and roost type.</p> <p>This survey should be carried out within the recommended survey season from May to September with at least two of these visits during the optimal time of May to August.</p> <p>If bats are recorded to be using features of the structure where disturbance would be caused, a Protected Species mitigation licence will be required along with a suitable level of protection and roost creation.</p> <p>See Appendix 2: Bat Conservation Trust flow chart</p> <p>See Appendix 3: Description of the categories used to assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats</p>
Legislation	<p>Evidence of these additional survey requirements are placed upon all LPA's by both Part 4 (50) of The Conservation (of Natural Habitats) Regulations 1994 (as amended 2017) and section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 (which places a duty on LPA's, to have regard, so far as is consistent with the proper exercise of its functions, to the purpose of conserving biodiversity).</p> <p>Furthermore should an LPA approve a planning application (where Bats presence was deemed a likelihood) prior to Bat usage of the area affected by the development being fully understood (known) then should that development result in either the disturbance (including disturbance to behaviours or migration), injury or death of a Bat then the authority and developer could be considered too have acted recklessly under Part 1 (9) of the Wildlife and Countryside Act 1981 (as amended 2016); and as such be guilty of committing an offence.</p> <p>Prior to any planning decision being made, emergence/re-entry surveys must be completed, as stated by Natural England and the Bat Conservation Trust's (BCT) Bat Surveys Good Practice Guidelines.</p>

	This will enable a fuller understanding of bats usage of the building and assess the appropriateness of the level of mitigation.
Predicted Impacts of Development on Bats and Nesting Birds	Further assessment required to confirm or rule out any activity from bats and to assess any disturbance caused during development.
Mitigation and Compensation of Proposed Impacts	Not at this stage
Licensing Requirements for Bats	Not at this stage
Required Actions	See section 6.0 It is advised that no further works take place to the identified areas of value to bats at this stage as this may cause disturbance to bats and their roosts. see section 2.0 of this report

CONTENTS

- 1.0 Introduction
- 2.0 Legislation
- 3.0 Methodology
- 4.0 Results
- 5.0 Plans & Photographs
- 6.0 Conclusion and/or recommendations
- 7.0 References

Appendix 1: Location plan

Appendix 2: Bat Conservation Trust flow chart

Appendix 3: Description of the categories used to assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats

Appendix 4: Emergence Survey Location Points

1.0 Introduction

Brief

1.1 This report will present the findings of a preliminary bat roost assessment and nesting bird survey of the named site and further research of the area online.

Site description

1.2 An occupied two storey detached dwelling, see section 5.0 images.

2.0 Legislation

- 2.1.1** All British bats are classed as European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017, making it an offence to:
- Deliberately kill, injure or capture a bat;
 - Deliberately disturb bats;
 - Damage or destroy a breeding site or resting place
- 2.1.2** In addition, all British bats are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly Obstruct access to any structure or place which any bat uses for shelter or protection; or Disturb any bat while occupying a structure or place which it uses
- 2.1.3** If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.
- 2.1.4** In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2010 (as amended). All wild birds, their nests and eggs are protected it an offence to: kill, injure, or take any wild bird; take, damage or destroy the nest of any such bird whilst it is in use or being built; or take or destroying an egg of any such wild bird.
- 2.1.5** Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

3.0 METHODOLOGY

- 3.1** All reporting undertaken by Mr Garry Smith who is an experienced licensed bat ecologist in England [Class 2 registration 2017-28032-CLS-CLS] with over 10 years' experience practical of professional ecological surveys.
- 3.2** Preliminary roost assessments can be undertaken throughout the year and can provide conclusive results, which can save expense and time for Planning Applicants. The optimum time to investigate for the presence of bats is during their active season when signs of presence can be more easily located.
- 3.3** A thorough interior and exterior inspection of the building for bat roosting and potential roosting features was undertaken. Signs surveyed for included droppings, dead bats, feeding remains (beetle, moth and butterfly remains), urine staining and grease marks around crevices and down walls, and any noises such as scratching and audible bat calls.
- 3.4** During the survey, the surrounding area was assessed in relation to suitable habitat that may be of value to bats.
- 3.5** Surveys were conducted following best practice guidelines (Collins, 2016)
- 3.6** All areas of the building internally were inspected with the aid of a 2 million c/p lamp and inspection camera. External features were also inspected where possible and observations were aided with binoculars where needed.
- 3.7** A desk top survey was also completed to establish the biodiversity of the area along with its habitat structures including statutory and non-statutory designations
- 3.8** Biological records were not obtained for this survey

4.0 Results

Desk Study

Environmental record search

- 4.1** A data search from freely available resources was undertaken to assess the names species for distribution/record within a 2km study area which demonstrated records for;

Brown Long-eared
Common Pipistrelle

4.2 Designated sites; Statutory (2km)

Site	Designation	Distance (km)	Direction
None Identified		1	

Priority Habitat Inventory within 2km

HABITAT	Distance (km)	DIRECTION
Deciduous Woodland	0.35	N
Deciduous Woodland	0.45	E
Deciduous Woodland	0.80	S
Deciduous Woodland	1.10	SW
Deciduous Woodland	1.30	SE

None of the above names sites/locations would be effected in any way from the proposed development plan for this site, including both habitats and species.

- 4.3** Aerial photographs of the site were consulted to determine if there are important landscape features surrounding and within vicinity of the site.
- 4.4** A 2km search of previous Granted European Protected Species Applications revealed four granted European Protected Species applications for Brown Long-eared, Common Pipistrelle bats.

Field study

4.5 The Preliminary Roost Assessment for bats was carried by Elena Vasileva [Class 2 registration 2017-28032-CLS-CLS] where the dwelling and surrounding areas were assessed for the possible usages of bats & birds.

External	Features of value to bats	Notes
External Stonework	Yes	The brickworks to the structure have demonstrated a fair level of condition throughout. A vent within the front South facing gable does however offer a gap of adequate proportions to offer a flight path for bats into the main roof void spaces.
Window/door frames	No	No gaps or features of value to bats observed within or surrounding the door/window frames.
Eaves coverings	No	No gaps or features of value to bats observed within or surrounding the eaves areas of the property.
Roof coverings	Yes	The roof coverings have demonstrated a small number of raised tiles across each elevation which look to offer shelter/access opportunities for bats such as crevice dwelling bats which would commonly use for daytime roosting seasonally.

Internal	Features of value to bats	Notes
Membrane coverings	Yes	A felt membrane covering was observed throughout the main roof void spaces below the roof coverings. Such features would offer further roosting features for bats between the membrane and roof

		tiles where external gaps likely provide access.
Floor coverings	No	Insulated coverings.
Protruding daylight	Yes	Clear daylight observed through the vent to the South facing brickworks.
Evidence from bats	Yes	Internal evidence from bats in the form of 1000+ droppings were observed within scattered areas across the insulation coverings and brickworks and below the ridge areas. Likely activity from Brown Long-eared with a likelihood of a small maternity roost from the level of droppings observed.
Restrictions	No	Full access available during the survey.

Limitations

4.6 Many species of bat in the UK are crevice dwelling, and signs of bats and bats themselves can be difficult to find within a building or within areas that are inaccessible such as the gaps within roof coverings, eaves and cavities within the stonework's.

5.0 Plans & Photographs

Image 1 – South facing elevation of the property where a vent within the brickworks offers adequate access opportunities for bats within the roof void spaces where droppings have been observed



Image 2 – Internal view from within the roof void spaces as per image one above



Image 3 – North facing elevation of the property



Image 4 – Taken from the West facing roof coverings where a number of gaps of adequate proportions to offer value to bats were observed

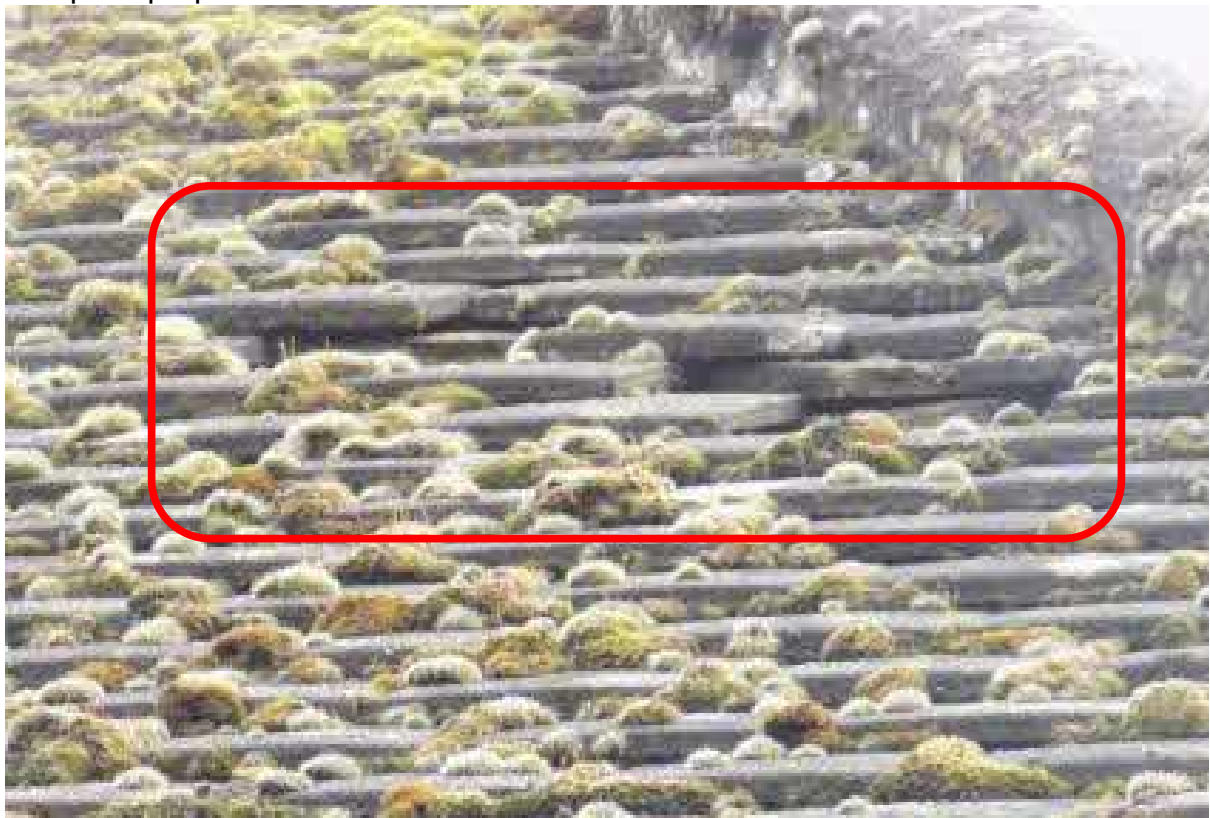


Image 5 – Close view of the main eaves coverings which have demonstrated a fair level of condition throughout



Image 6 – Internal view from within the main roof void spaces of the property



Image 7 – Internal view from within the main roof void spaces of the property



Image 8 – Activity from bats within the form of bat droppings across multiple areas of the roof void spaces with dense piles below sections of the ridge



Image 9 – Further images of droppings within the main roof void spaces of the property



Image 10 – Further images of droppings within the main roof void spaces of the property



Image 11 – Further images of droppings within the main roof void spaces of the property



6.0 Conclusion and recommendations

All recommendations provided in this section shall be on Chase Ecology's current understanding of the site proposals and current planning application, correct at the time the report was compiled. Should any aspect of the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate

- 6.1** Following a preliminary bat roost assessment, it has been identified that both the building and surrounding environments offer value to bats.
- 6.2** A 2km search of previous Granted European Protected Species Applications revealed four granted European Protected Species applications for Brown Long-eared, Common Pipistrelle bats.
- 6.3** A 2km radius search has demonstrated habitats of value to bats including woodland, parkland, open fields, hedgerows and waterbodies of which support feeding & commuting.
- 6.4** The building has evidenced roosting features of value within the roof/ Brickworks which look to offer access and availability to both void & crevice dwelling bats and could not be fully ruled out during the Preliminary Roost Assessment without causing disturbance to materials which in effect may cause disturbance to possible bat roosts within.
- 6.5** Internal evidence from bats in the form of 1000+ droppings were observed within scattered areas across the insulation coverings and brickworks and below the ridge areas. Likely activity from Brown Long-eared with a likelihood of a small maternity roost from the level of droppings observed.
- 6.6** In line with current accepted guidelines, a structure that has demonstrated confirmed activity/evidence from bats must have a further three emergence or re-entry surveys to confirm activity from bats along with species, volume and roost type. This survey should be carried out within the recommended survey season from May to September with at least two of these visits during the optimal time of May to August.
- 6.7** If bats are recorded to be using features of the structure where disturbance would be caused, a Protected Species mitigation licence will be required along with a suitable level of protection and roost creation.
- 6.8** It is advised that no further works take place to the identified areas of value to bats at this stage as this may cause disturbance to bats and their roosts. see section 2.0 of this report

7.0 References

Bat Conservation Trust. 2012. Bats and Buildings. Bats and the Built Environment Series. London. Bat Conservation Trust. 2018.

http://www.bats.org.uk/pages/bat_boxes.html (Accessed July 2021).

Bat Conservation Trust. 2018.

Bats and Artificial Lighting in the UK.

Bats and the Built Environment Series. London. Collins, J. (ed). 2016.

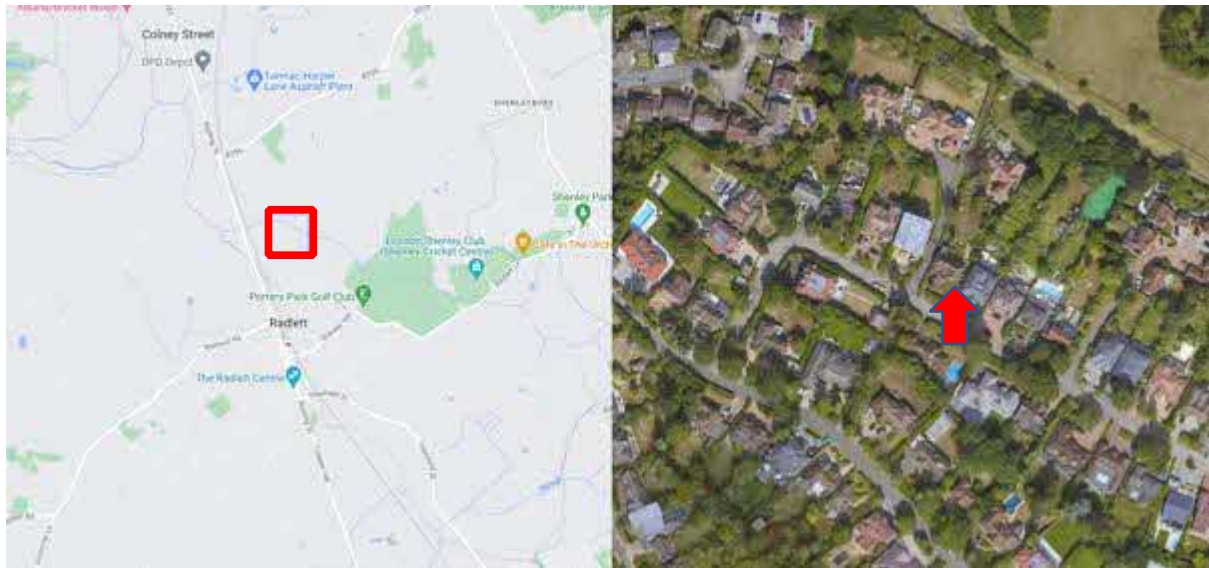
Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition/
Interim Guidelines

Bat Conservation Trust. Multi-Agency Geographical Information for the Countryside
web <http://magic.defra.gov.uk> Mitchell-Jones, A.J. 2004 Bat mitigation guidelines.

English Nature, Peterborough. Mitchell-Jones, A.J. and McLeish, A.P. 1999 (revised
2004).

The Bat Workers Manual. Joint Nature Conservation Committee, Peterborough.
Stone, E.L. 2013. Bats and Lighting: Overview of Current Evidence and Mitigation
Guidance.

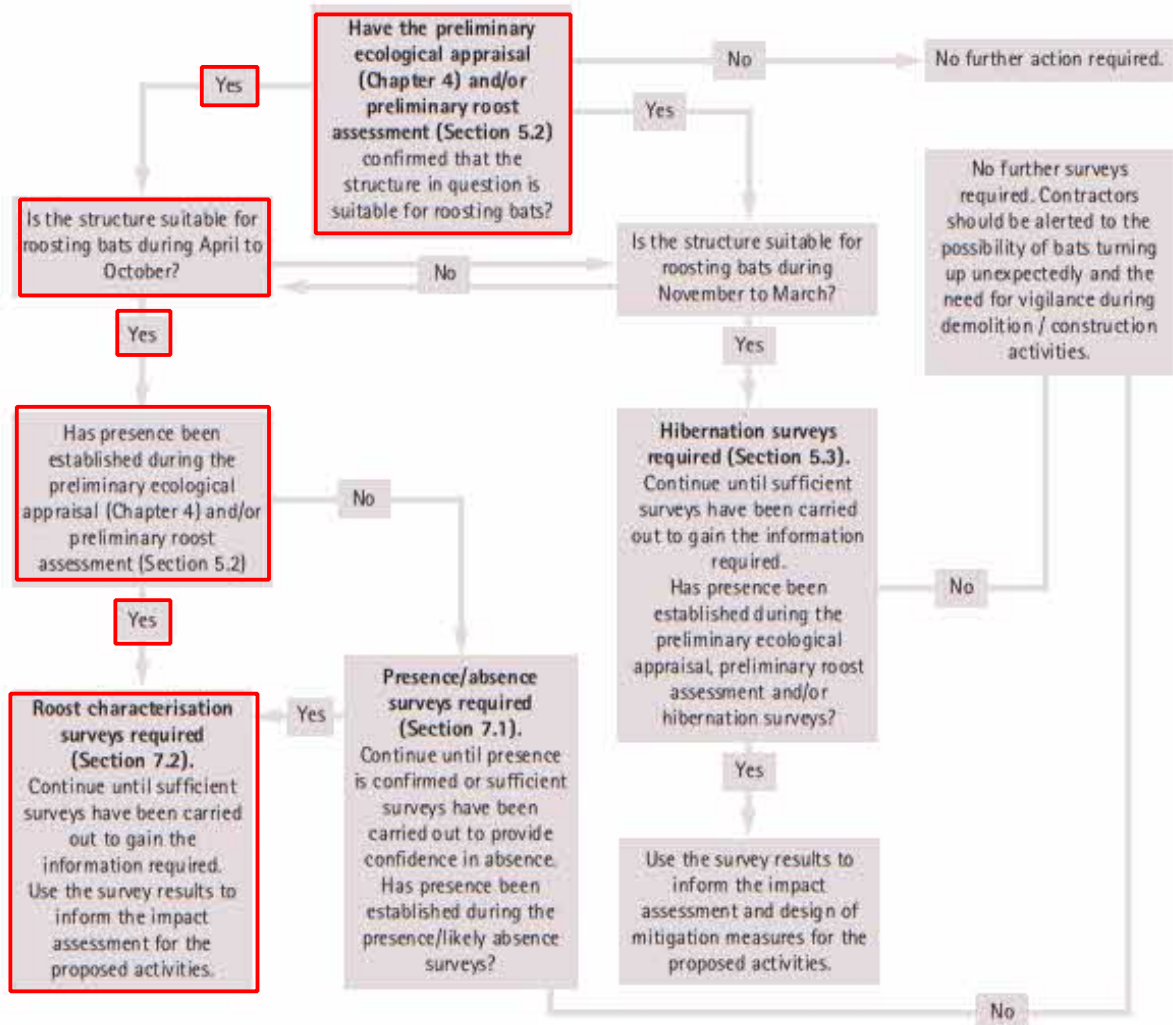
Appendix 1: Location plan



Appendix 2: Below flow chart taken from the Bat Conservation Trust, Good Practice Guidelines used when assessing the suitability of a structure and any additional survey requirements.

Bat Conservation Trust

Figure 5.1 Flow chart illustrating the process used to establish which types of surveys are necessary for roosts in structures.



Appendix 3: Description of the categories used to assess a building or tree's bat roost potential and the survey effort required to determine the likely presence or absence of bats

Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further surveys required.
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 conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation) A tree of sufficient size and age to contain features but with none seen from the ground or features seen	One dusk emergence or pre-dawn re-entry surveys between May and August.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only i.e. irrespective of species conservation status, which is established after presence is confirmed).	Two surveys, comprising one dusk emergence and a separate pre-dawn re-entry surveys between May and September with at least one between May and August.
High	A structure or tree 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.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey
Confirmed	Bats or evidence of bats found.	Surveys would be required to establish the status of the roost. Generally, three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey).

Appendix 4: Emergence Survey Location Points

Below site view to show suitable surveyor location points during each emergence survey to maintain visibility of the property.

In line with best practice survey guidelines, a total of three surveyors will be required to visually cover all elevations of the structure during each emergence survey.

