Preliminary Roost Assessment

Of Pippin Cottage, Leicester Lane, Desford, LE9 9JJ

January 2026

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Summary

- A preliminary roost assessment for bats was conducted at Pippin cottage, Leicester Lane, Desford LE9 9JJ on 13/01/2026 by Matthew Kirby.
- The proposed development was for the demolition of the existing building and the creation of one new residential dwellings.
- One building was present on site. An external and internal inspection of the building was undertaken.
- The surrounding landscape had good commuting routes, and foraging habitat. Zero previous roosts were identified within a 1km radius.
- The internal roof space had no clear signs of use by bats or any potential access methods from the exterior.
- Two moderate and two low potential features were identified on the exterior of the building.
- The overall potential of the buildings was deemed to be **moderate**.
- Likely absence of bats **has not** been established.
- A minimum of two presence/likely absence surveys are required between May and September. The surveys should be spaced at least three weeks apart.
- The results from the presence/likely absence surveys will inform any further requirements.
- Bats are highly mobile, and should a bat be discovered during construction then works should cease and an ecologist should be contacted to advise on how to proceed.
- The information within this report is valid for 12 months from the date of the initial survey.

Contents

1. Introduction

1.1. Commissioning brief and site location

Oak Ecology was commissioned by Jim Slavin to undertake a preliminary roost assessment (PRA) of a residential dwelling at Pippin Cottage, Leicester Lane, Desford, LE9 9JJ (here after referred to as the site).

1.2. Site description and proposed development

The site, centred at SK 49698 02542, consisted of a single-storey detached dwelling and associated landscaping. The surrounding landscape was primarily rural in all directions. Large expanses of arable fields, grasslands, and small wooded areas were identified. The proposed application is for the demolition of the existing building and creation of one new dwelling.

Figure 1: Red line boundary.

Figure 2: 1km radius buffer zone.

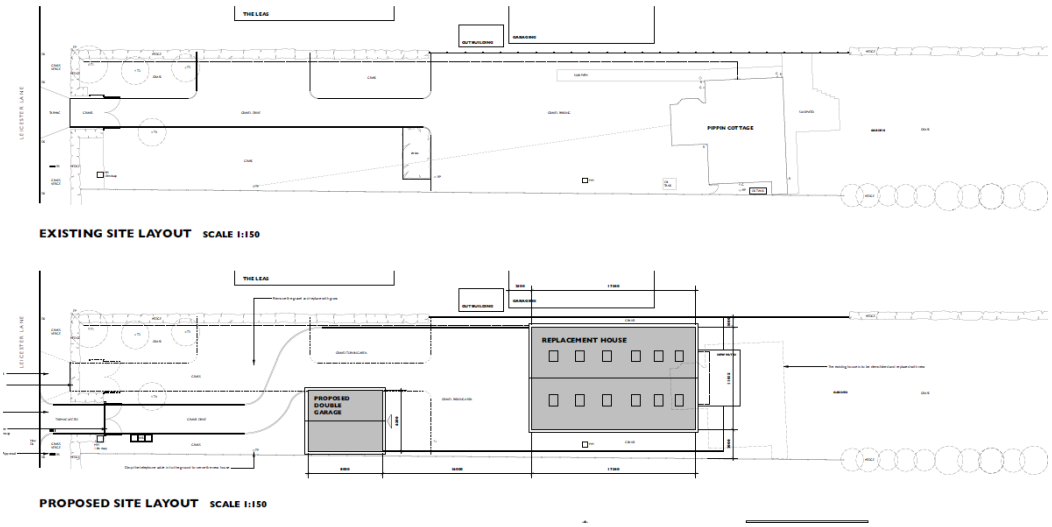

Figure 3: Proposed plans.

1.3. Scope of the survey

The purpose of this survey was to:

- Identify the suitability of the structures to support roosting bats.
- Identify likely presence/absence of bat roosts at the site.
- Determine the need for any further bat surveys to inform mitigation scheme or a bat mitigation licence.
- If bat roosts are present, determine species, access and egress points, roost type, and size.
- Assess the impact of the proposed works on bats.
- Provide a bat mitigation strategy to maintain the favourable conservation status of the bat species in question, and
- Determine the need for a bat mitigation licence from Natural England.

1.4. Legislation and planning policy

A number of UK and European legislation and policies deal with the conservation of biodiversity. This section briefly outlines the legal and policy protection afforded to bats and their habitats.

Bats and their roost sites are protected under UK and European legislation including the Wildlife and Countryside Act 1981 (as amended), Countryside Rights of Way Act 2000, the Conservation of Habitats and Species Regulations 2010 and the Habitats Directive. The legislation makes it an offence for any person to:

- Deliberately capture, injure, or kill a bat.
- Intentionally or recklessly disturb bats, where that disturbance may affect the ability of those bats to survive, breed, rear or nurture their young, or is likely to significantly affect the local distribution or abundance of any bat species, whether in a roost or not.
- Damage or destroy a place of shelter (roost) of a bat, be that a resting or breeding place.
- Possess a bat, whole or in part, alive or dead.
- Intentionally or recklessly obstruct access to a roost
- Sell or offer for sale or exchange whole or parts of bats, alive or dead.

The ODPM Circular 06/05 makes the presence of a protected species a material consideration within the planning process. It states that it is essential for the presence of protected species and the extent they may be affected by proposed development be established through appropriate surveys before the planning permission is granted and encourages the use of planning conditions to secure the long-term protection of the species.

The National Planning Policy Framework (NPPF) section 15 outlines how applications need to conserve and enhance the natural environment. Paragraphs 174 to 177 state that sites with biodiversity value should be protected and enhanced, minimising impacts on biodiversity and establishing ecological connectivity. Furthermore, the protection of priority sites and species through developments is outlined and states where significant harm is unavoidable through alternatives or mitigation, planning permission should be refused. Finally, this section concludes that developments with aims to conserve or enhance biodiversity should be supported and any improvement around developments should be encouraged to achieve net gains for biodiversity.

2. Methodology

2.1. Surveyors and equipment

The site was attended on the 13th January 2026 by Matthew Kirby, a senior ecologist with 10 years' experience (Bat licence number: 2020-49774-CLS-CLS).

The daytime inspection was conducted in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (Collins, 2023). The survey comprised two parts: an evaluation of suitability for roosting and a search for evidence of bats. The inspection was aided by a one million candlepower torch. Extendable ladders, binoculars, and endoscope were available for detailed inspections of accessible areas.

2.2. Survey

The survey took approximately 1 hour and consisted of an external and internal assessment of the building. The building was systematically checked for evidence of the following:

- Live or dead bats,
- Droppings,
- Staining from bat urine,
- Feeding remains such as moth wings,
- An absence of cobwebs on suitable flight lines.

The building was then subject to an evaluation of its roosting suitability for bats, the likely species, type of roost and the number of bats the building could support. Factors that were considered included:

- Connectivity to the surrounding habitat – flight lines and good foraging habitat,
- Internal light levels and temperature,
- Weather-proof properties,
- Building construction,
- Potential access into the building e.g., cavities in brickwork, missing/loose tiles, gaps under flashing etc.
- Potential Roosting Features (PRFs) within the roof void e.g., roof timbers, ridge etc.

After consideration of all the factors the building was assessed as having negligible, low, moderate, high suitability to support roosting bats, in accordance with the BCT guidelines.

Table 1:Categorisation of the suitability of structures for roosting bats. (Collins, 2023).

Potential	Description
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. 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 and not a classic cool/ stable hibernation site but could be used by individual hibernating bats).
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 unlikely for a roost of high conservation status (with respect to roost type only – the categorisation in this table are made irrespective of species conservation status, which is established after presence is confirmed).
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. These structures have the potential to support high conservation status roosts e.g. maternity or classic cool/ stable hibernation site.
Confirmed	Bats or evidence has been recorded during the surveys.
Access Points	Features on a building that provide bats access into a building, but are unlikely to roost directly in.

2.3. Limitations

No limitations.

3. Results

3.1. Weather Conditions

Table 2: Weather conditions at the site on 13/01/2026.

Parameter	Result
Temperature	**9 °C**
Precipitation	**1 – Light rain**
Wind speed	**0B – Calm**
Cloud cover	**100%**

3.2. Data Search

A 1km search radius was conducted using Magic (2026), to identify any previous confirmed roosts in the area. The search returned zero European Protected Species Mitigation (EPSM) licences for bats. A data search of NBN Atlas (2026) covering a 5km radius and extending back 30 years identified 15 records of bat care records, roost counts, and human observations. None of the identified records appeared within a 1km search radius of the site.

3.2.1. Statutory Designated sites.

There were no statutory designated sites identified within a 1 km radius of the site.

3.2.2. Important habitats

One Priority Habitats Inventory (PHI) areas, and National Forestry Inventory (NFI) woodlands were all identified within a 1km search radius. The PHI search identified two areas of Deciduous woodland, The NFI identified three areas of broadleaved woodland and one area of young trees. None of the habitats identified were in in close proximity to the site.

3.2.3. Connectivity and foraging

There were a number of features within the site boundary that would aid commuting and foraging bats, however, the wider landscape had more favourable opportunities for bats. Green spaces such as arable fields, woodlands and hedgerows, were present within 1km of the site. These features provide good habitats for commuting and foraging. There was low light disturbance and minimal major barriers that would hinder the free movements of bats. The surrounding landscape was considered to have an overall moderate potential to support bats.

3.3.Survey results

3.3.1. Site Description

The site was situated in a rural environment with the majority of the surrounding landscape being arable fields. Hedgerows demarcated field boundaries and provide good commuting flight paths throughout the landscape. There was minimal light pollution when compared against an urban setting and minimal barriers that would hinder the movement of bats.

Building 1 – Main house

The building was a single-storey residential dwelling with combination of gable and flat roofs. The front of the property had an unsealed driveway and lawn. The rear of the property had a large garden with limited foraging potential. Exterior lighting on the building and light spill from neighbouring properties was assessed as being minimal.

3.3.2. External inspection

One building was present on site with a footprint of approximately 120 m^2. The exterior of building 1 was constructed from brick, rendering, cladding, roofing felt, and a roof tiles. The exterior condition of the building was fair; no major structural damages were identified. Tiles and fixings were not all flush but not open enough to allow any obvious access into the building.

Wooden cladding (B1.1) on the south aspect of the building had become raised providing shelter along the entire length. The cladding created a crevice type of cavity, similar to loose bark. The cladding was affixed to the exterior of the building and would not provide any access into the building.

The gable end verge(B1.2) did not have any edge covering or mortar, which provided access under the tiling. This would create a cavity between the tiles and the roofing membrane along the entire length of the battens. The tiles were thin slate which would be less likely to provide a stable environment all year-round.

The edge of the fascia board (B1.3) on the south aspect had lifted away the brickwork and extended up the board to the edge of the flat roof. It could not be determined if there was any access from this feature into a wall cavity.

A missing brick (B1.4) with exposed wiring was identified on the east aspect. The entrance was cluttered with wires, however there were bird droppings were present on the bricks. The hole allowed access into the wall cavity, therefore making it implausible to fully inspect without performing a destructive search. Depending on the level of insulation, this feature has the potential to provide a stable internal environment.

3.3.3. Internal inspection

The loft space was approximately 1m tall at the apex and covered the length of building with ridged roofs. There was a roofing membrane and insulation but not boarded, making it unsafe/impractical to fully access all areas. No obvious damages were observed that would indicate access from the exterior for bats. However, there was a significant amount of mouse droppings throughout the loft, which was periodically checked to see if bat droppings were hidden amongst them. There was major cobwebbing and a thick layer of dust throughout the loft space indicating no recent bats flying inside. No significant damages or access points were identified. Overall, there was no evidence to suggest that bats have or could enter the internal space of the building.

Table 3: PRF Summary.

Feature ID	Type	Height/bearing	Notes	Potential
B1.1	Cladding	2.5-4m S	Wooden cladding that had lifted away providing a crevice. 5cm by 150cm opening.	Moderate
B1.2	Tiles	2-3m S	Gable edge of tiles with a small gap along the entire length of the gable end. 2cm by 400cm opening.	Low
B1.3	Fascia board	2.5m S	Loose boards with cavity extending up.	Low
B1.4	Wall cavity	2m E	Missing brick with exposed wire, providing access into the wall cavity, the full extent is unknown. Bird droppings identified on entrance. Partially cluttered but still feasible for bats.	Moderate

3.3.4. Overall potential

The surrounding area had moderate potential to support bats, with good foraging habitats in the wider landscape. Connectivity to the wider landscape to more suitable habitats was good.

There was no evidence to indicate bats had been roosting within the loft space however, the exterior of the building did have PRF's that bats could utilise. The features identified did not fully meet the criteria to be considered high potential (such as a maternity or hibernation roost). Two low, and two moderate roost features were identified during the survey. Given the presence of one or more suitable roosting features, and the potential within the surrounding habitat, the likelihood of bats using the buildings has been confidently assessed as **moderate** (BCT, 2023).

Figure 4: Wider landscape map.

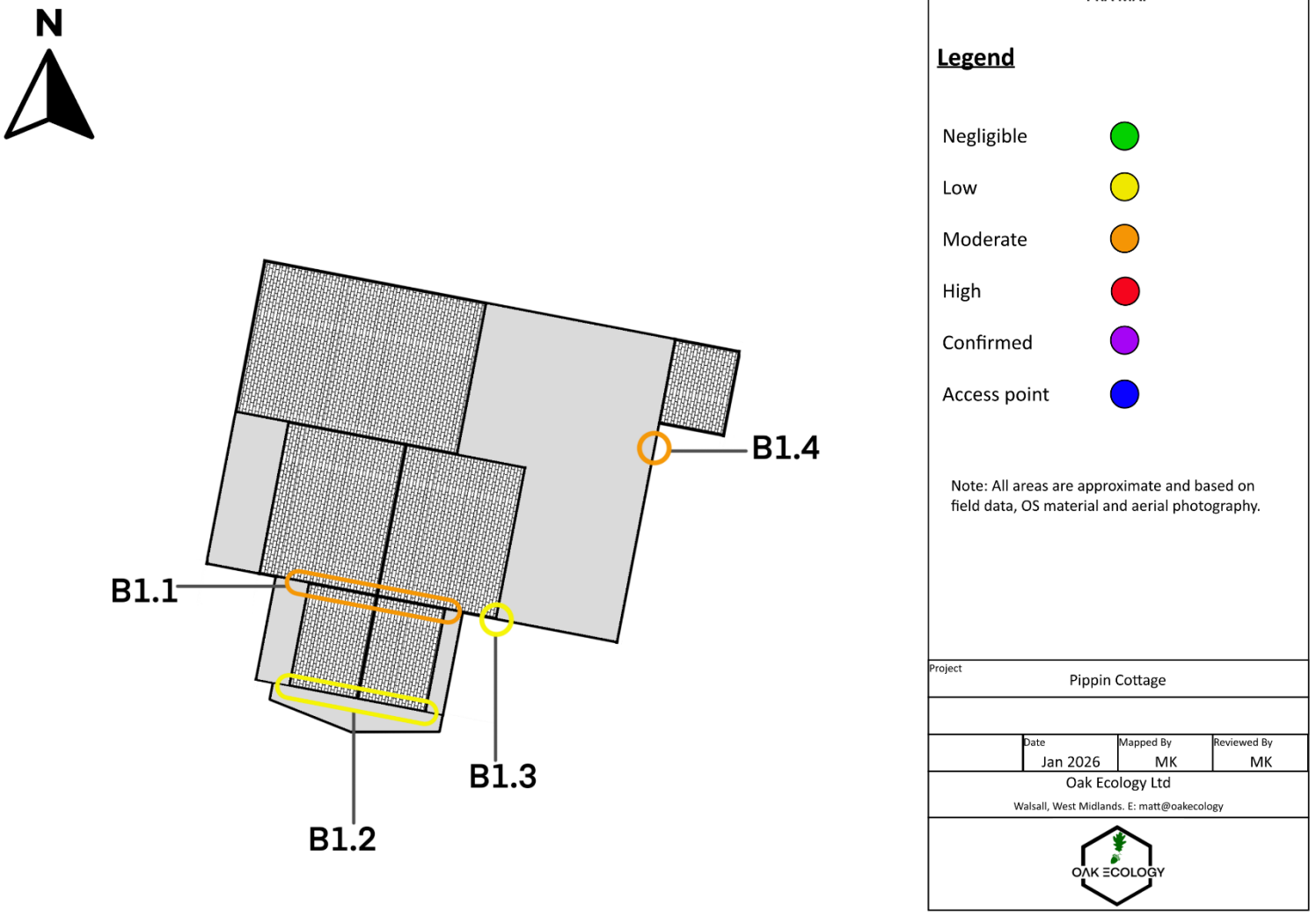

Figure 5: PRA map.

3.3.5. Photos

Figure 6: Feature B1.1.

Figure 7: Feature B1.1 close up.

Figure 8: Feature B1.2.

Figure 9: Feature B1.3.

Figure 10: Feature B1.3 close up.

Figure 11: Feature B1.4.

Figure 12: Feature B1.4 close up.

Figure 13: Internal view of loft.

Figure 14: Internal view, showing ridge beam.

Figure 15: Mouse droppings identified within loft.

4. Discussion and conclusion

4.1. Interpretation of results

Although no evidence of bats was found within the loft, the exterior of the building has four PRF's which have the potential to support bats. At the time of the survey these PRF's could not be fully inspected due to their construction, therefore the absence of bats could not be ruled out. Features B1.1 and B1.4 were noteworthy due to their potential. In particular B1.4 extended into the wall cavity which in theory has the potential to support a significant number of bats, however it was hindered by the cluttered access point. The proposed development would result in the complete loss the roosting features.

The immediate surrounding area had moderate potential to support bats, with zero previously confirmed roost identified within a 1km radius. The lack of roost records is not direct evidence that bats are not roosting in the immediate. The rural habitats are likely to hold more value in commuting, foraging, and roosting features for local bat populations. The proposed development would have no impacts on these habitats.

The building had an overall potential of **moderate**. Likely absence of bats within the building **has not** been adequately established and under good practice guidelines, further surveys are required.

Bats are a highly mobile species and therefore it cannot be guaranteed that bats will not inhabit any newly developed features in the future.

5. Recommendations

5.1. Further surveys

A minimum of two dusk presence/likely absence surveys are required to gather further information. This will be used to inform any impact assessments, mitigation, enhancements, and monitoring.

Surveyors would observe the PRF's using Night Vision Aids (NVA) and recording bat detectors to identify any roosting bats within the building.

A moderate potential building will require two surveys between May and September, with at least one of those between May and August. The survey visits should be at least three weeks apart, preferably more. Adverse weather conditions negatively impact bat activity levels therefore surveys should not be conducted under these conditions. Further details on presence/likely absence surveys can be found within the Bat Survey Guidelines, chapter 7 (2023).

To cover all PRF's of the building it is propped that a minimum of two surveyors and standalone NVA with detector be used. Although no PRF's were identified on the north aspect, an optional NVA could be utilised to cover bat activity and any PRF's that may have not been visible from the ground level.

Should bats be discovered roosting within the building, this would trigger a roost characterisation survey, and one additional survey would be required. The results from the three surveys would then be used to apply for a licence with Natural England.

The information within this report is valid for 12 months from the date of the initial survey.

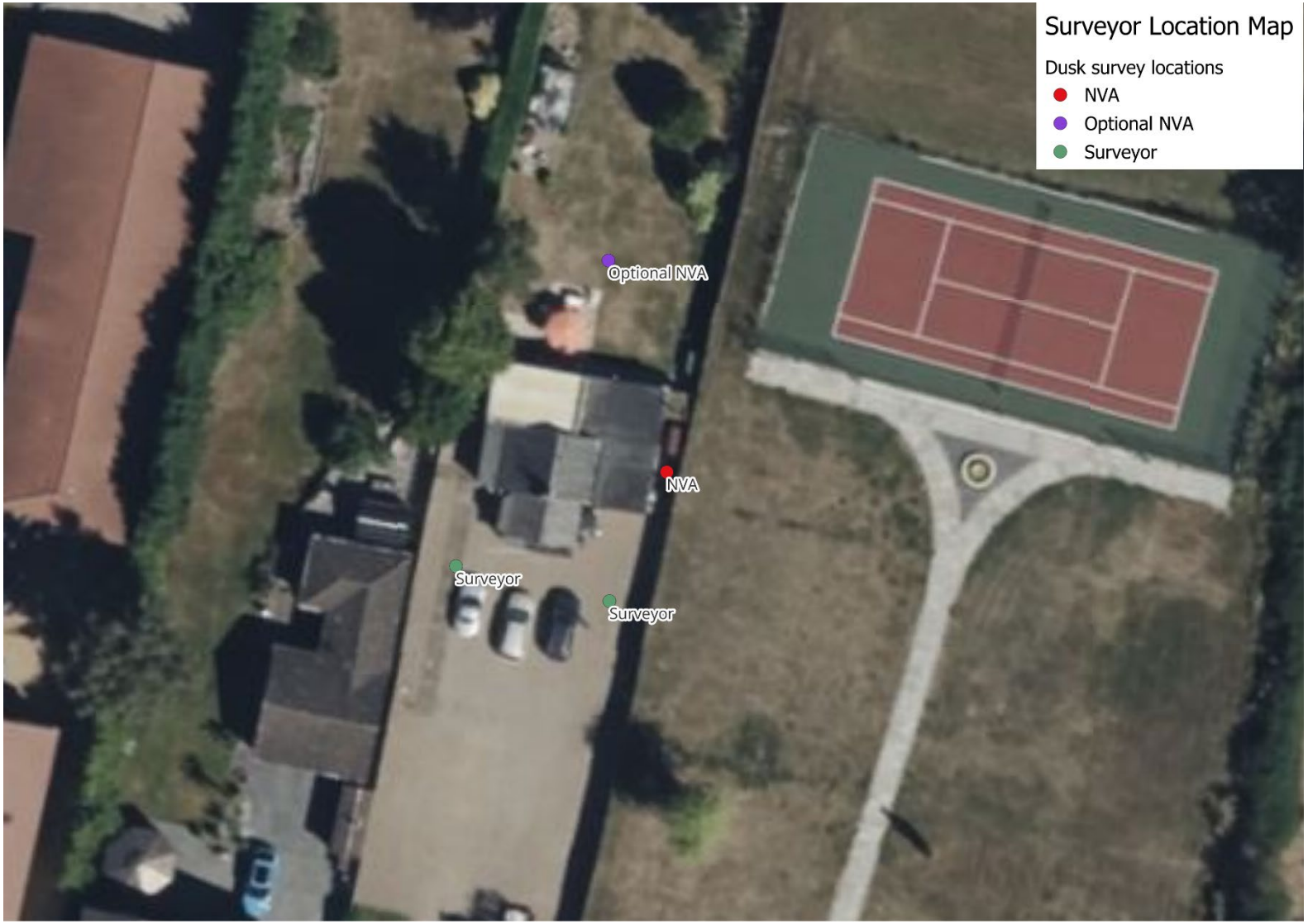

Figure 16: Potential surveyor locations for presence/likely absence surveys.

5.2. Mitigation hierarchy

The mitigation hierarchy should be used to limit the negative impacts to biodiversity. The steps below are recommendations of the best practice guidelines. They are optional, unless stated as a condition from the Local Planning Authority or as a requirement of a licence. The Local Planning Authority may also request additional reports such as Precautionary Working Method Statements (PWMS), lighting plans, or monitoring plans.

The mitigation hierarchy is split into four sections: avoidance, mitigation (minimise), compensation, and enhancement.

5.2.1. Avoidance

The proposed development would result in the complete loss of the PRF's and is not avoidable.

5.2.2. Mitigation (minimise)

The project should take steps to reduce any adverse impacts to bats.

The development can proceed once likely absence has been established or a licence has been granted.

Demolition works to non-hibernation potential buildings are less likely to disturb bats if undertaken in the winter months. If it is not possible to conduct the demolition in winter, then destructive searches would be required during the bats active season. Especially for features that cannot be confidently fully inspected with any endoscope. A destructive search would need to be supervised by a suitable qualified and licenced ecologist.

During demolition and construction any newly created openings should be covered to prevent any inhabitation from bats overnight.

Should bats be discovered during any point of the demolition or construction then all works should cease, and a qualified and experienced ecologist should be contacted to advise on how to proceed.

Light pollution has a negative effect on foraging bats. During and post construction, light disturbance should be avoided if possible. Further information can be found in Bats and Artificial Lighting At Night (2023).

5.2.3. Compensation

As the development will result in the loss of PRF's bat boxes should be installed on the new building. Two moderate and two low potential features would be lost; therefore a minimum of two bat boxes should be installed for compensation.

The boxes could be placed on the exterior or integrated into the construction of the building. The boxes should be positioned a minimum 3m off the ground, facing south/southwest and with clear flight paths. Light disturbance to these boxes should be minimised. These boxes may be subject to occasional inspections from licenced ecologists as part of monitoring.

5.2.4. Enhancements

Measures can be undertaken as a way to enhance the overall biodiversity and bat populations. The abundance of invertebrates can be increased through good landscaping practices, such as allowing some grassy areas to grow taller, installing a water feature, and native planting schemes. This will provide better foraging opportunities for bats.

Installing linear features such as hedgerows that connect to the wider landscape provide flight paths bats can use to navigate the environment.

6. References

BSI,2013. Biodiversity- Code of Practice for Planning and Development. BS 42020:2013.

CIEEM, 2017. Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester, [2nd edition].

CIEEM, 2018. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn). The Bat Conservation Trust, London. ISBN – 13 978-1-872745-96-1.

Conservation of Habitats and Species Regulations, HMSO (2010, as amended).

Government Circular 2005: Biodiversity and geological conservation: Statutory obligations and their impacts in the planning system. The Stationary Office Ltd, ISBN 0 11 7539511.

Mitchell-Jones, A. J. (2004) Bat Mitigation Guidelines, 1st edition, English Nature, ISBN 1 857167813.

Mitchell-Jones, A.J, & McLeish, A.P. Ed., (2004), 3rd Edition Bat Workers' Manual, 178 pages b/w photos, softback, ISBN 1 86107 558 8.

National Planning Policy Framework, February 2019.