Preliminary Roost Assessment

15 Groby Road

Survey Date: 13th November 2025

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Introduction

1.1. Report Rationale

This report was commissioned by Edward Caruana with the intention of assessing the likelihood of bird/bat species present within 15 Groby Road, Ratby, Leicester, LE6 0LJ (grid ref: **SK 51411 06253**). To complete this task, Eco 360 carried out a desktop study and a field survey. The survey was undertaken by licensed bat ecologist/s and members of the Chartered Institute of Ecology & Environmental Management (CIEEM). The field survey and report have been completed by Mr Daniel Howgego, Ecologist, Bat Survey License (2024-11950-CL17-BAT).

1.2. Site Description

The site is a large two-story house with a single-story storage structure, detached garage, and surrounding amenity garden space. It is located within the village of Ratby, in the Hinkley and Bosworth district of Leicestershire. The habitats on site consist of developed land, scattered mature trees, and vegetated garden. Surrounding the site are habitats valuable to foraging and commuting populations of fauna, including ecologically valuable lines of trees, water bodies, open fields and other vegetated gardens.

Fig.1. Map showing immediate surroundings of site of interest.

Fig.2. Showing site within larger landscape and environment.

1.3. Description of Proposed works

The current plans are for a single storey side and link extension, loft conversion with increased roof height, conversion of existing coach house to annexe, erection of timber framed car port, new entrance gates and associated works.

1.4. Purpose of Survey

The purpose of this survey was to assess the building for any evidence of bird/bat presence. If so, how the birds/bats were interacting with the surrounding area and building. The survey was carried out under the Bat Conservation Guidelines (4th edition).
This survey effort considered the potential for all bat and bird species (including barn owls) onsite:

To establish the possibility of bat roosts and bird nests being present at the proposed development site.

To assess any roost/nest status (i.e. what type and numbers of individuals).

To assess suitable food, resources and habitat requirements on site and in the local landscape.

The proposed works at the site will be evaluated using the gathered information and current knowledge in order to determine if further survey efforts are necessary, assess the potential impacts of the proposed scheme, and determine if a Natural England Development Licence is required for the protection of any protected species on site. This is done in order to maintain a favourable conservation status for these species.

Legislation

2.1 Legislation

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended).

In addition to this, some species have additional protection by being listed on the UK Biodiversity Action Plan (UKBAP).

The legislation afforded to bats makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which protects birds, nests, eggs and nestlings from harm. In addition to this, some rarer species, such as barn owls are afforded extra protection.

2.2 National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

Survey Methodology

3.1. Desktop survey

The desktop survey collaborated data for sources such as Google Maps, Google Earth, NBN Atlas and ordnancesurvey. A search of other relevant nature conservation information was made through the use of the Multi-Agency Geographic Information for the Countryside (MAGIC) database.

3.2. Field Survey

3.2.1. Initial Site Survey

This is done by assessing the site by visually inspecting all building/s/structures and any trees/vegetation to be impacted by the proposed works. This is done to assess the resource availability for protected species on site and in the immediate area. Particular reference is made to:

- The presence or absence of bats and birds' onsite.
- Any evidence of potential bat roosts and birds' nests onsite.
- Whether any additional survey effort will be required.

During the initial survey, an internal and external inspection of the building(s) is undertaken to look for signs of bat activity. This is done in accordance with BCT guidelines for the assessment of building(s) and built structures.

3.2.2. External Site Inspection

This survey method is used to locate potential ingress and egress points around the structures that both bats and birds could use to gain access into the building. It also aims to identify any areas where cracks and crevices are present to be used as roosting/nesting features. This visual inspection is carried out in full daylight using binoculars, torches and ladders.

This will allow for the determination of the following information:

The type of building(s) surveyed.
The approximate age of building(s) surveyed.
The construction type and materials used.
The presence of potential roost features (e.g. missing roof tiles, raised ridge tiles, air vents, cracks and crevices within the mortar).
The presence of suitable ingress and egress points (e.g. missing windows and doors, missing mortar, lifted tiles).
The location of any anecdotal evidence for the presence of protected species (e.g. nests, droppings or food remains).

3.2.3. Internal Site Inspection

This survey method aims to locate and examine areas which potentially provide suitable environmental conditions for bats. This visual inspection was undertaken by using binoculars, endoscope, torches, ladders and bat detectors to inspect internal features of the building(s).

This will allow for the determination of the following information:

The presence of warm areas, dark areas, joints, crevices, beams and cavities that could be used for roosting and nesting purposes by bats and birds.
To locate possible bat roost and bird nest sites.
To listen for social calling bats.
To locate any evidence of bat and bird presence through the identification of live or dead specimens, grease marks, droppings, food remnants, urine stains and/or the characteristic smell of bats.

3.2.4. Building/Vegetation Classification

A building/vegetation classification will be assigned to each surveyed feature that is proposed to be impacted by the scheme of works. This classification is based on the features potential to support roosting bats. The rating is also influenced by the location of the structure(s) in the local landscape, along with the number of suitable alternative roosting features, the type of features present in the landscape and the surveyor's experience. For example:

A structure that has a high level of anthropogenic disturbance with limited opportunities for access by bats, that is also situated within an urbanised area with few or no mature trees, parkland, woodland or wetland would generally equate to having negligible/low potential.

Conversely, an older structure (e.g. pre 20th century or early 20th century) with multiple features suitable for use by bats that is close to optimal foraging habitat would equate to having high potential.

The amount of additional survey effort required for each feature will depend on its rating:

Negligible – No further survey effort is required

Low – One further activity survey is required (structures only).

Moderate – Two further activity surveys are required.

High – Three further activity surveys are required.

3.2.5. Roost Categories

Any structures with evidence of bats will be further evaluated to assess which of the following roost categories may be present onsite:

Day Roost:

A place where individual bats or small groups of males, rest or shelter during the daytime. These bats are rarely found at night at these sites.

Feeding Roost:

A place where individual bats rest or feed during the night, but are rarely present in the day.

Hibernation Roost:

A place where bats may be found either individually or together during the winter months. These roosts often have a constant cool temperature and high humidity.

Maternity Roost:

A place where female bats give birth and raise their young to independence.

Mating Roost:

A place where mating/copulation takes place between male and female bats. These can continue through the winter months.

Night Roost:

A place where bats rest and/or shelter during the night, but will rarely be found here during the day. These can be used colonially or individually by the bats.

Satellite Roost:

These are alternative roosting sites that are found within close proximity to the main nursery colony within the maternity roost. These are used throughout the breeding season by individual or small groups of female bats.

Swarming Site:
A place where large numbers of bats come together during the latter summer months through until Autumn. These sites are classed as being important mating areas.
Transitional/Occasional Roost:
A place that is used by individuals or small groups of bats for a small period of time. These are used by the bats prior to hibernation and/or shortly after hibernation.

3.2.6. Bat Detector Survey

If required, the object for this survey method is to detect any bats leaving or returning to their roost sites within the surveyed features. This is achieved by undertaking dusk and dawn activity surveys under the following protocol:
Commencing the survey 15 minutes before sunset (dusk survey) and 2 hours before sunrise (dawn survey).
Listening for any social calls at potential roost sites using bat detectors.
Standing at different survey points around the building(s) and/or vegetation using bat detectors to hear the bat echolocation.
The survey will attempt to witness the first bats emerging (dusk) and the bats returning (dawn) to their roosts.
Standing at different transect points at foraging/commuting areas around the site.
Carrying out this survey methodology for up to two hours after sunset (dusk) and up to 15 minutes after sunrise (dawn). This will cover the emergence and re-entry of the bats at the potential roost site, for some bat species.

In order to comply with the required legislation, the results from the surveys will be collated to establish whether a European Protected Species (EPS) development licence will be required. If required, project appropriate species-specific compensation and mitigation measures will be devised to ensure the species remains at a favourable conservation status at the impacted site.

Results

4.1. Desktop survey

4.1.1. Bats

The desktop survey from NBN revealed that there had been 227 incidence records spanning 5 different species of bat within a 2km radius of the proposed sight, three of which are classified as Uk bat priority species in England:

Common pipistrelle (*Pipistrelle pipistrellus)* - 174 records
Brown Long-eared (*Plecotus auritus)* - 28 records, UKBAP
Soprano pipistrelle (*Pipistrellus pygmaeus)* - 21 records, UKBAP
Noctule (*Nyctalus noctula)* - 3 records, UKBAP
Leisler's (*Nyctalus leisleri)* - 1 record

4.1.2. Birds

There were 122 different species recorded from NBN of bird species sightings within a 2km radius of the sight. The most notable are as follows:
Coal tit (*Periparus ater)*
Greenfinch (*Chloris chloris)*
Chaffinch (*Fringilla coelebs)*
Starling (*Sturnus vulgaris)*
Goldfinch (*Carduelis carduelis)*
Kestrel (*Falco tinnunculus)*

4.1.3. Designated Sites

The site is in between Groby Pool and Woods (SSSI), Botcheston Bog (SSSI), and Kirby Frith (LNR). Although within their ZOI, Natural England do not need to be consulted further for this development. The proposed works on this site are going to stay within the site boundary. Therefore, there will be no effect on any statutory/ non-statutory nature conservation designations beyond the site boundaries.

4.2. Field Survey

4.2.1. Site Survey

Eco 360 had not been made aware of any previous site surveys. A site survey was conducted by Eco 360 on the 13th November 2025.

4.2.2. Roost survey

There was one wooden bat box upon one of the trees on site, however, this was old and broken. During the survey, bat or bird roosts/nests using the appropriate measures and equipment could not be confirmed. However, there was a bat dropping found on the North wall of the detached garage, below a PRF-M.

4.2.3. Building Survey

Undergoing the internal site inspection of the two-story main building, no roofing membrane was present, however, roofing cement covered the interior of roofing, with no evident entrance points to the main loft cavity. Whilst the conditions inside were stable and considered viable, no evidence of previous bat presence (e.g. bats, droppings) was seen. No roofing membrane was present within the North section of the first story storage structure of the building.

During the exterior site inspection of the main building, a lot of different exposed areas of the building were noted. On one area of damaged and loose tiles on the roof of the building would allow access to the interior, there could be no internal inspection (the dropped second story roofing located on the West elevation of the Northern length of the house structure). Also, many PRF's were seen on/ under different ridge tiling elevations, which show potential for roosting from dislodged/ rasied tiling (these areas couldn't be seen from interior inspection).

The garage/ storage outbuilding roofing interior was wooden boarded, which would provide roosting potential underneath the exterior tiling. A PRF-M was located at the North gable end apex, and a PRF of a similar nature found to the North West, where rendering cement had fallen away. One dropping was found underneath the apex PRF, stuck to the wall structure. Another PRF of cracked tiling was located towards the North-West elevation. The feature map below outlines the location of these potential roosting features.

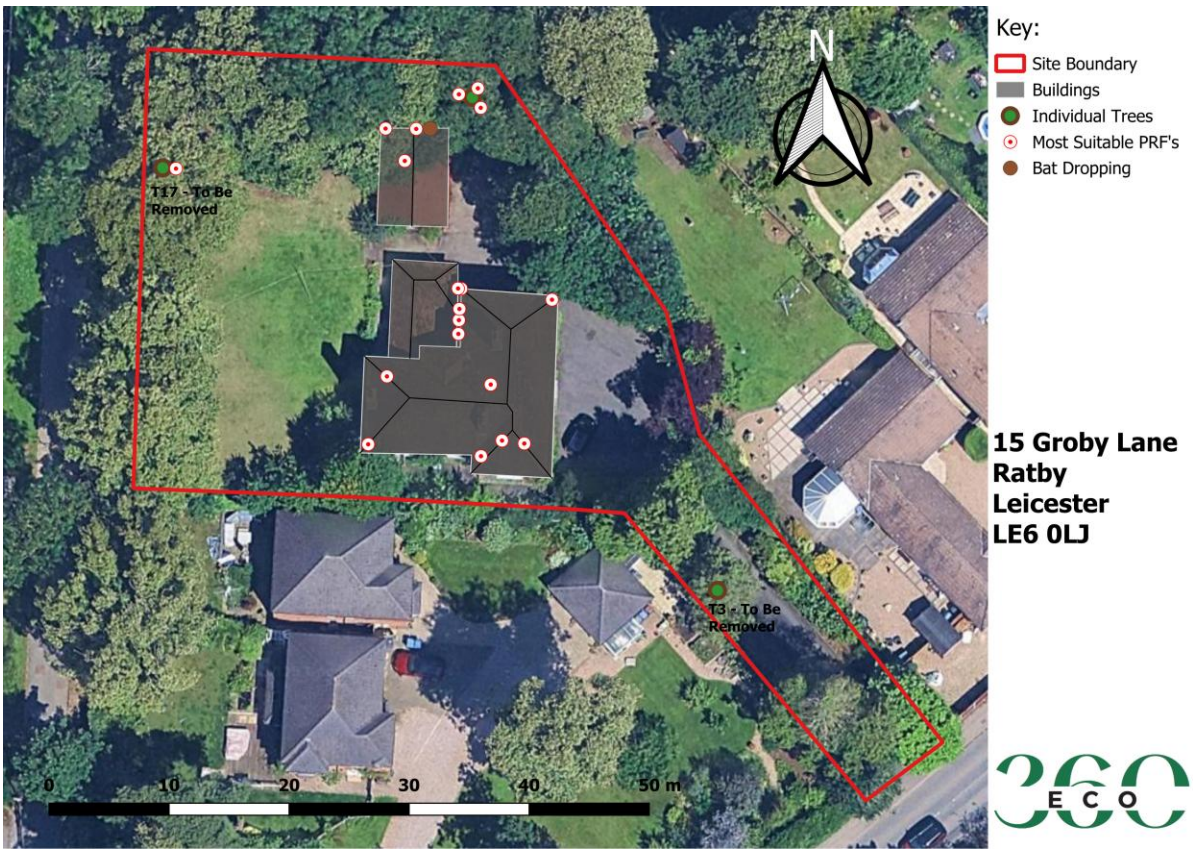

Fig.3. Feature map

4.2.4. DNA Results

No DNA test was conducted on the dropping found.

4.2.5. Emergence Survey

No emergence surveys were undertaken on the structure as Eco 360 were only commissioned to undertake a preliminary assessment of the site.

Impact Assessment

5.1. Survey Limitations

There were no survey limitations of the site.

5.2. Potential Impacts of Re-development

5.2.1. Designated Sites

As the works will not exceed the site boundaries, there would be no impact of re-development on designated sites in the surrounding area.

5.2.2. Bat roosts

There was no evidence of bat presence in the main site building, however, there were areas of PRF's where absence couldn't be proven, for example of ridge tiling and interior space of the dropped second floor tiling. These features were not considered to be of potential for a roost of high conservation status (e.g. maternity roost). Given the surrounding habitat, the confirmed presence near the garage, and the proportionality of the works (all elevations of tiling/ loft space developed) there would be a moderate potential impact on bat roosting in the proposed main building.

The garage would hold high potential due to the dropping found below a PRF-M and habitat surrounding.

Of the trees on site, T09 (to be retained) showed three knot hole PRF's and T17 (to be felled) showed potential of roosting through butt rot.

5.2.3. Bird nests

There was no evidence of bird presence of the buildings or the trees on site. One of the trees had a wooden bird box upon it, however, this was old and broken.

5.2.4. Foraging and Commuting Habitat

The on site habitat surrounding the building offers good foraging and commuting habitat with grassland, site entrance treelines and scattered trees. Surrounding the site, there is open fields and areas with water bodies connected by ecologically valuable tree lines offering connected habitat, with the site also set in between two SSSI's and one LNR. There would be a moderate impact on the surrounding/immediate foraging and commuting habitat in the area.

Recommendations

6.1. Bats

Following the Bat Conservation Trust professional guidelines, due to the potential impact on individual crevice dwelling bat roosting, and confirmed presence on site (bat dropping), two further emergence surveys are to be conducted on the main building. These should be done within the optimal bat activity season (March-September inclusive) with one being conducted within March-August.

The garage was deemed to have high potential, and should have three further emergence surveys. Two of these would have to done during May- August.
It is recommended, prior to the felling of T17, that a suitably qualified ecologist undergo a further interior inspection of the butt rot using endoscopes to ensure bat absence further up the trunk cavity.
Avoidance of any direct light spill during the development and from the re-developed site on to the immediate scattered and lines of trees. Post-development compensatory measures should be considered, for example incorporation of two new eco bat boxes.

6.2. Birds

Should any felling of the trees take place within the active bird nesting season (March-September, species dependant), a qualified ecologist must undergo a bird nesting check within the trees at most 24 hours prior to felling. It could be recommended, as a precautionary measure, to avoid any direct light spill from the development/ re-developed site on to the immediate surrounding tree and shrub habitat.
Two new bird boxes should be incorporated into the plans post development, on the dwelling or surrounding tree/scrub habitat, to maintain and compensate for the potential existing tree habitat taken out from the development.

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Appendices

Appendix A: Site Plans

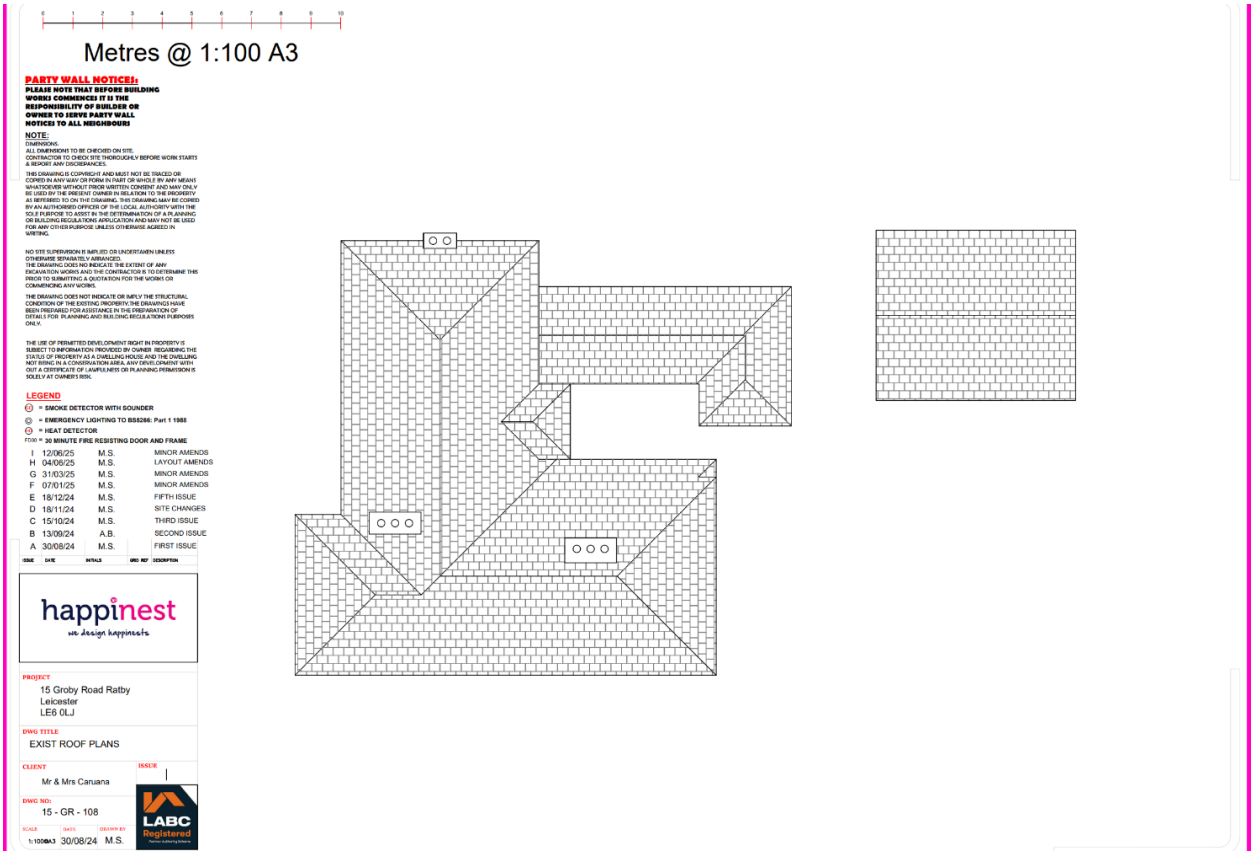

Fig.4. Existing site plan.

Fig.5. Existing Elevations.

Fig.6. Ground level plans.

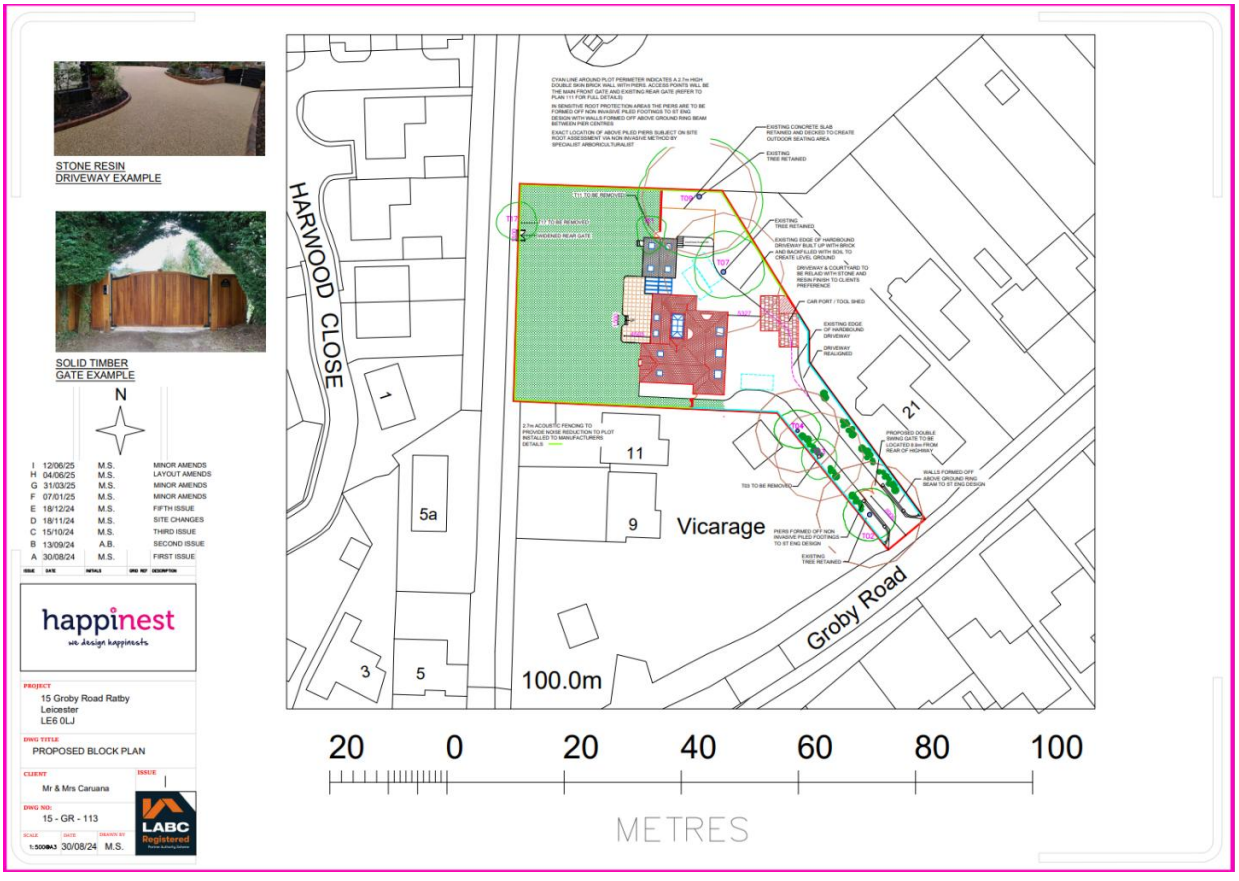

Fig.7. Site location and proposed site plan.

Appendix B: Eco Data Maps

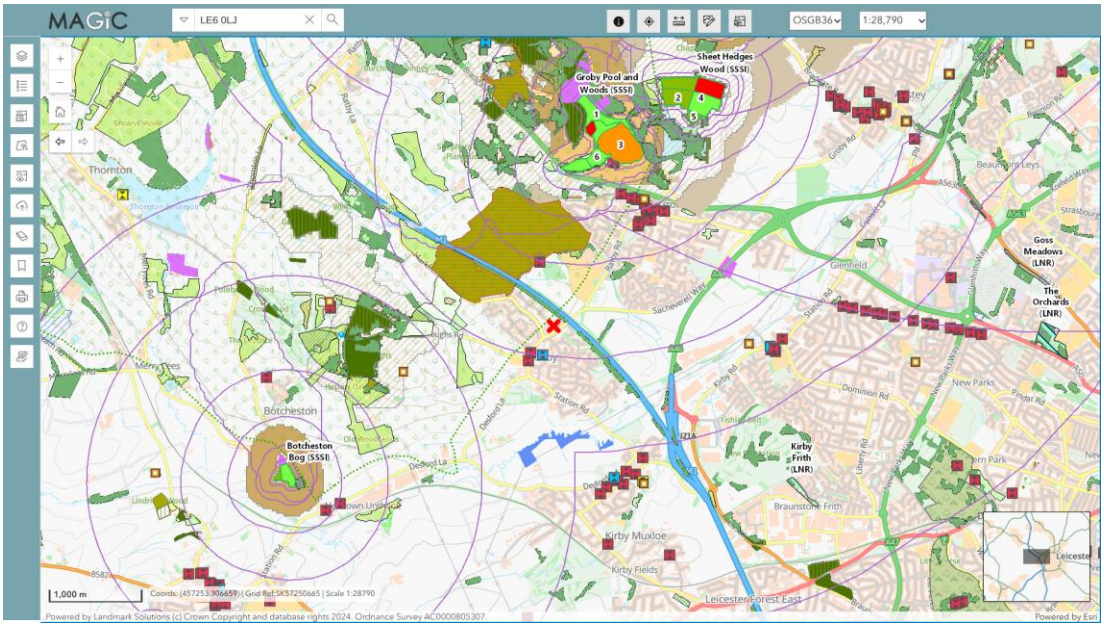

Fig.8. M.A.G.I.C. map of surrounding habitat from the site (red cross at centre).

Appendix C: Artificial Light and Bats

Artificial lighting is known to affect bat's roosting and foraging behaviour, with lighting resulting in a range of impacts that includes roost desertion (BCT, 2009), delayed emergence of roosting bats (Downs et al., 2003), increased activity of some bat species and decreased activity by others (Stone et al., 2012).

An experimental approach using LED units, demonstrated that relatively fast-flying bat species, including the common pipistrelle, showed no significant impacts as a result of new artificial lighting, even when lighting was set at relatively high levels close to 50 lux. In contrast, slow flying bats such as the myotis bats (Myotis spp.) showed sharp reductions in presence, even at low light levels of 3.6 lux (Stone et al., 2012).

Current recommendations for all bat species specifies that no bat roost should be directly illuminated.

Due to the impacts of lighting, mitigation and sensitive lighting design schemes are required for projects where bats are present. These should include bat friendly lighting plans that should aim to avoid lighting wherever possible. If this is not possible, then the minimisation of any lighting impacts is required by adopting the following measures:

To introduce lighting curfews or use of PIR sensors.

Lighting curfews can be an effective way of avoiding impacts on bats. These curfews may involve either turning off lighting or dimming light units at specific times of the night, dimming units at key times of the year, providing the luminaire allows for this option via a control unit. Lighting to be triggered by PIR sensors can be expected to be illuminated only when required and for a low proportion of time.

To consider no lighting solutions where possible.

Options such as white lining, good signage and LED cats eyes should be considered as preferable. Reflective fittings may help make use of headlights to provide any necessary illumination in some areas.

To use only high pressure sodium or warm white LED lamps where possible.

High pressure sodium and warm white LED lamps emit lower proportions of insect attracting UV light than mercury, metal halide lamps and white LED lighting. Generally, lamps should have a lower proportion of white or blue wavelengths, with a colour temperature <4200 kelvin recommended (BCT, 2014).

To minimise the spread of light.

The light spread should be kept at or near horizontal to ensure that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Baffles, hoods, louvres and shields should be used where necessary to reduce light spill.

To consider the height of the lighting column.

While downward facing bollard lighting is often preferable, it should be noted that a lower mounting height does not automatically reduce impacts to bats as bollard lighting can often be designed to provide up-lighting. Where bollard lighting is considered to be the most appropriate system, bollard spacing or unit density should be kept to a minimum and units should be fitted with the appropriate hoods/deflectors to reduce any up-lighting.

To avoid reflective surfaces below lights.

The polarisation of light by shiny surfaces attracts insects increasing bat activity (BCT, 2012). Consequently, surface materials around lighting require consideration.

Appendix D: Photographic Records

Img.1. Main building.

Img.2. Main building.

Img.3. Main building.

Img.4. 1 Story storage room.

Img.5. North elevation with dropped 2 story tile section PRF's.

Img.6. Dropped 2 story section.

Img.7. South ridges.

Img.8. West ridges.

Img.9. North-East ridge.

Img.10. New car port area.

Img.11. Out-garage West.

Img.12. Out-garage interior.

Img.13. Apex PRF-M.

Img.14. Bat dropping below apex PRF.

Img.15. T03 to be felled.

Img.16. T17 to be felled.

Img.17. Inside T17 butt rot.

Img.18. T09 retained knot hole.

Appendix E: DNA Analysis

There has been no DNA analysis to note on this report.

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Eco 360 agrees to supply ecological consulting services and advice of a preliminary or thorough nature as advised or commissioned. Upon commissioning Eco 360 to undertake the work, the client(s) grant access to the site upon the agreed date. If no site access is available upon this date, Eco 360 holds the right to charge the client(s) for lost staffing time and additional travel costs.

Eco 360 undertake all site surveys with reasonable skill, care and diligence, within the terms of the contract that has been agreed with the client and abiding by the Eco 360 Terms and Conditions. The actions of the surveyors on site, and during the production of the report, were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management.

The latest good practice guidelines put in place by Natural England or the relevant statutory conservation bodies have been followed by the surveyors on site. If those methodologies fail to identify a protected species during the survey efforts, no responsibility can be attributed to Eco 360. If any of these guidelines are adapted between the date(s) of the surveys being undertaken and the submission of this report, then Eco 360 takes no responsibility for this.

Should any equipment be damaged or lost on site at the fault of the client(s), then Eco 360 withholds the right to charge 100% above the current market value for that exact product or the nearest similar product.

The survey results purport the current status of the site and its potential for protected species utilisation at the time of surveying. It should not be viewed as a complete list of the possible flora and fauna species that could be using the site at different times of the year.

Eco 360 has been provided with full payment for this report and thus the product has been released to the client(s) for the purpose of their planning application. If any part of the report is lost or altered without the written permission of Eco 360, then the entire report becomes invalid. Due to the potential for continual change within the natural world, this

report is valid for 2 years only from the date of the last survey visit. If this report is submitted after the 2 year deadline, then a further updated inspection will be required to ascertain whether the site remains in the same condition as it was when initially inspected.

No reliance should be made on any such comments in relation to the structural integrity of the features located on the surveyed site. All information within the report is based solely on evidence that has been found on site during the service provided. No individual opinion or inference will be made other than that of the suitably qualified ecologist appointed to the project.