



Preliminary Ecological Appraisal
Land at Shilton Road
Barwell
Leicestershire
NGR SP45371 97076

Survey by
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Non-Technical Summary

The site surveyed comprises two parcels of residential garden located at 167 and 169 Shilton Road near the junction with Leicester Road, Barwell, Leicestershire, centred at NGR SP45371 97076. The defined site area comprises two residential garden areas situated close to the edge of the village of Barwell with a small parcel of open grassland presumably used for agricultural purposes in the past. There is housing to the north, east and west. To the south and south west is open agricultural land.

A review of the available data confirms that the site is not a Statutory or Non-Statutory site of ecological significance. There appear to be no Statutory sites within a 1km radius based on the records obtained. Burbage Common and Woods LNR 2.5km to the south and Burbage Wood and Aston Firs SSSI 3km to the south. There are a number of LWS and potential LWS sites within 1km, the nearest being a hedgerow 225m from the survey area.

The survey has identified the following habitats within the site area:

- Developed Land, Sealed Surface (Buildings and Concrete Hardstanding)
- Artificial Unvegetated Unsealed Surface (Porous driveway and Hardstanding)
- Former residential garden (Modified Grass and Introduced Shrub)
- Vegetated Garden (small areas of planted borders)
- Neutral Grass (area of grassland south of the gardens)
- Bramble Scrub
- Individual Rural Trees
- Road Verge
- Water Feature
- Native Species Hedgerow

An assessment of the survey area has identified the following potential for protected species to be present:

Species	Suitable habitat on site / evidence of presence	Likelihood of presence on site	Further Survey / Mitigation recommended
Nesting Birds	Ground nesting within the site interior unlikely due to the presence of predatory cats. Good tree canopy cover and tall vegetation present to provide nesting opportunities. No evidence of nesting associated with the buildings on site.	High likelihood of nesting within the boundary trees and dense hedgerow / bramble scrub vegetation in the future.	Measures to avoid disturbance to any nests or nesting activity will need to be considered prior to any vegetation clearance
Reptiles	Grassland and bramble areas in the southern end of the survey area are optimal habitat for reptiles such as grass snake although rather isolated from other optimal areas.	Low - some individual Grass Snake may be foraging within the grassland and bramble covered areas.	Vegetation in the southern part of the site should be cleared only after an inspection by an ecologist and vegetation removal should be supervised as a precaution.
Amphibians	Habitat within the majority of the site interior is sub-optimal for amphibians but foraging within the garden areas where there is suitable cover cannot be ruled out.	Amphibians are unlikely to be present in any significant numbers due to the absence of water features.	No further surveys of specific mitigation measures are recommended.
Bats	No roosting identified associated with the buildings. Five trees with low roost potential identified within the survey area. Foraging by local bat populations	Roosting within two of the buildings cannot be ruled out in the future although no bats were identified roosting during the surveys carried out.	Further inspection of the buildings is recommended prior to any demolition work. Five trees have been identified with low roost potential that require inspection and surveys

	confirmed by activity surveys.	Significant foraging by Common Pipistrelle confirmed within the enclosed garden areas where there are mature trees.	before these can be safely removed.
Badger and other mammals	No field signs of badger or water vole were found in any part of the site area assessed but the grassland and bramble areas in the south of the site will be good habitat for foraging badger.	Some occasional foraging by badger across the southern part of the site area cannot be discounted in the future.	The area should be reinspected by an ecologist before any vegetation clearance is started as a precaution.

Constraints:

The following ecological constraints have been identified during the survey:

- There are some large mature trees present within the survey area that could support nesting birds and possibly roosting bats in the future. Measures to avoid disturbance of roosting bats and nesting birds will be required.
- There is potential for two of the building to support roosting bats in the future although no evidence of roosting was identified during the emergence survey completed in 2024. A further inspection of building B2 and B4 by a suitably licensed person is recommended before any demolition works that may be approved are started as a precaution.
- Five trees have been identified within the survey area that have some features that may be of interest to roosting bats. If these trees are proposed for removal a precautionary inspection and emergence survey is recommended ahead of any approved works to comply with the survey guidelines.
- The dense bramble and tall grassland within the southern part of the site may be used by individual reptiles such as grass snake. It is recommended that if approval is given to clear any of this vegetation a precautionary inspection should be completed by an ecologist and the initial clearance work supervised.
- There is potential for hedgehogs and foraging badger to be present within the site, particularly around the site boundaries. A precautionary inspection by an ecologist is recommended ahead of any vegetation clearance.

Appraisal and Recommendations

There are no Statutory or Non-Statutory sites nearby that are sufficiently close to be directly or indirectly impacted by the proposed development of this land.

The survey area comprises residential houses and outbuildings, garden areas associated with these within which there are a number of large mature trees, and an area of neutral grassland with bramble scrub around the marginal areas.

The development of this site for residential housing will require the removal of a substantial number of the existing trees and the loss of an area of neutral agricultural grassland. No evidence of any significant locally rare plants or plant communities within or around the site area surveyed was identified during the survey but the loss of tree canopy cover, neutral grassland and bramble scrub will require compensatory habitat provision of the same or greater value.

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Specific details of the proposed development which include landscaping proposals and land management details have not been provided. However, an initial Biodiversity Metric Calculation has been completed with some assumptions being made to provide an assessment of baseline and subsequent post-development biodiversity values. The assessment of the development proposed for this site to achieve outline planning approval, based on the assumptions made in Appendix 3, results in net loss in calculated biodiversity units across this site area from 6.8 units to 6.41 units which is a loss of 0.39 units (5.68%). These comprise 0.82 medium units, 0.70 low diversity units and 0.26 very low diversity units. In order for the deficit in habitat units to be replaced and a 10% overall gain achieved to achieve 7.48 units overall, a total of 1.07 compensatory units will need to be obtained. As there is limited space within the site area for further biodiversity enhancement, it is likely an off-site compensatory payment will be required.

In addition there is a small loss 0.12 hedgerow units calculated from a baseline of 1.4 units to 1.28 units (-8.57%) which arises from the removal of a short section of hedge to provide an access point. In order for the deficit in hedgerow units to be replaced and a 10% overall gain achieved 0.26 compensatory units will need to be obtained.

Further details will be required to identify how the loss of biodiversity arising from the proposed development will be reduced, mitigated and / or compensated.

The inspection completed in July 2024 and subsequent stage 2 bat emergence surveys of July and August 2024 did not identify any physical evidence or field signs of protected species within the survey area. However, it is clear that the trees enclosing the two garden areas provide a habitat for foraging Pipistrelle bats which seem to favour this location. The bats appear very quickly after sunset and must be roosting nearby but there is no evidence that any of the building or trees within the survey area are being used for roosting purposes.

After inspection of the site, assessment of its landscape context and a review of the biological records for this area, the following precautionary measures are required:

Birds: There is potential for nesting birds to use the tree canopy cover and dense hedgerow/scrub vegetation for nesting in the future. If any approved vegetation removal needs to be carried out, this should be completed outside of the nesting season or be preceded by an inspection by an Ecologist to ensure no nesting birds are present or determine what mitigation measures to protect nesting birds are required.

Reptiles: There is potential for a small number of individual reptiles to be present within the grassland and bramble scrub areas. Where the removal of such vegetation has been approved as part of any development an inspection will be required to search for reptiles and this work should be supervised by an Ecologist as a precaution.

Bats: If the proposed development is approved, it is recommended that buildings B2 and B4 should be reinspected by a suitably licensed person ahead of works commencing as a precaution. There are also five trees identified within the survey area that will require further inspection and surveys for roosting bats if the proposal impact these in any way.

The design of any external lighting associated with the new housing should ensure that there is minimal increase in artificial lighting which could impact bat foraging around this area. Dark commuting and foraging routes should be provided along the site boundaries.

Badger and Hedgehog: As a precaution the survey area should be searched by a suitably experienced ecologist ahead of any approved works starting to ensure these species are not present in the areas to be disturbed.

General Recommendations: It is recommended that as part of landscaping works the following biodiversity enhancements should be incorporated

- At least four integral bat roost tubes should be incorporated into the new development in suitable positions identified by an ecologist.
- At least eight nest bricks/ tubes should be incorporated into the new development in suitable positions identified by an ecologist.
- Hedgehog and reptile refugia should be constructed in suitable locations close to the boundaries of the development area and gardens should have hedgehog access points installed in to the boundary fencing.
- A habitat creation scheme should be prepared to enhance the biodiversity and wildlife potential of the grassland and balancing pond area.

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Part 1: Site Details

1. Introduction

1.1 Site Description and Location

The site surveyed comprises two parcels of residential garden located at 167 and 169 Shilton Road near the junction with Leicester Road, Barwell, Leicestershire, centred at NGR SP45371 97076. The location of the site is shown on the plan within **Figure 1** and an aerial photograph has been provided within **Figure 2** to place the site in context.

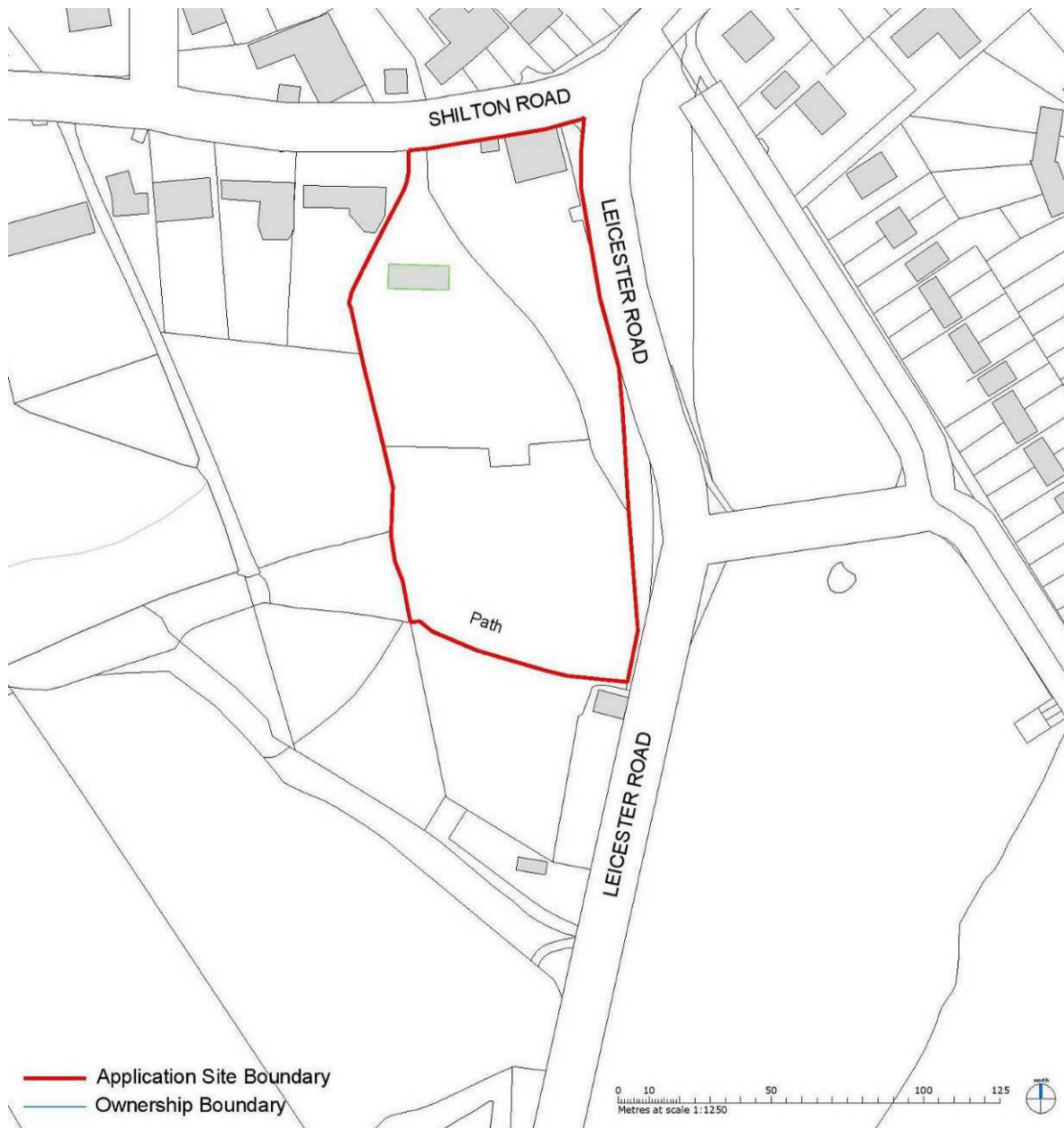


Figure 1: Site location.

Copyright Ordnance Survey Mapping 2024

The Client has requested an ecological survey of the land to determine whether there is anything of ecological value or any evidence of protected species present. An inspection of the site was completed on 04th July 2024 and details of the survey are provided in the table below. A photographic record of key areas is included alongside target notes within the report and a list of plant species identified in the site during the survey is included within **Appendix 1**.

Date	Time	Location	Weather
04 July 2024	11.30 – 12.30	Land at Shilton Road Barwell Leicestershire LE9 8BQ	Clear with occasional cloud. Wind 12mph from the west. Temperature 12°C rising to 14°C humidity 67% at 1009hPa.
Accessibility	All areas of the site accessible to search for evidence of protected species.		

The defined site area comprises two residential garden areas situated close to the edge of the village of Barwell with a small parcel of open grassland presumably used for agricultural purposes in the past. There is housing to the north, east and west. To the south and south west is open agricultural land. A contextual aerial photograph has been provided below.

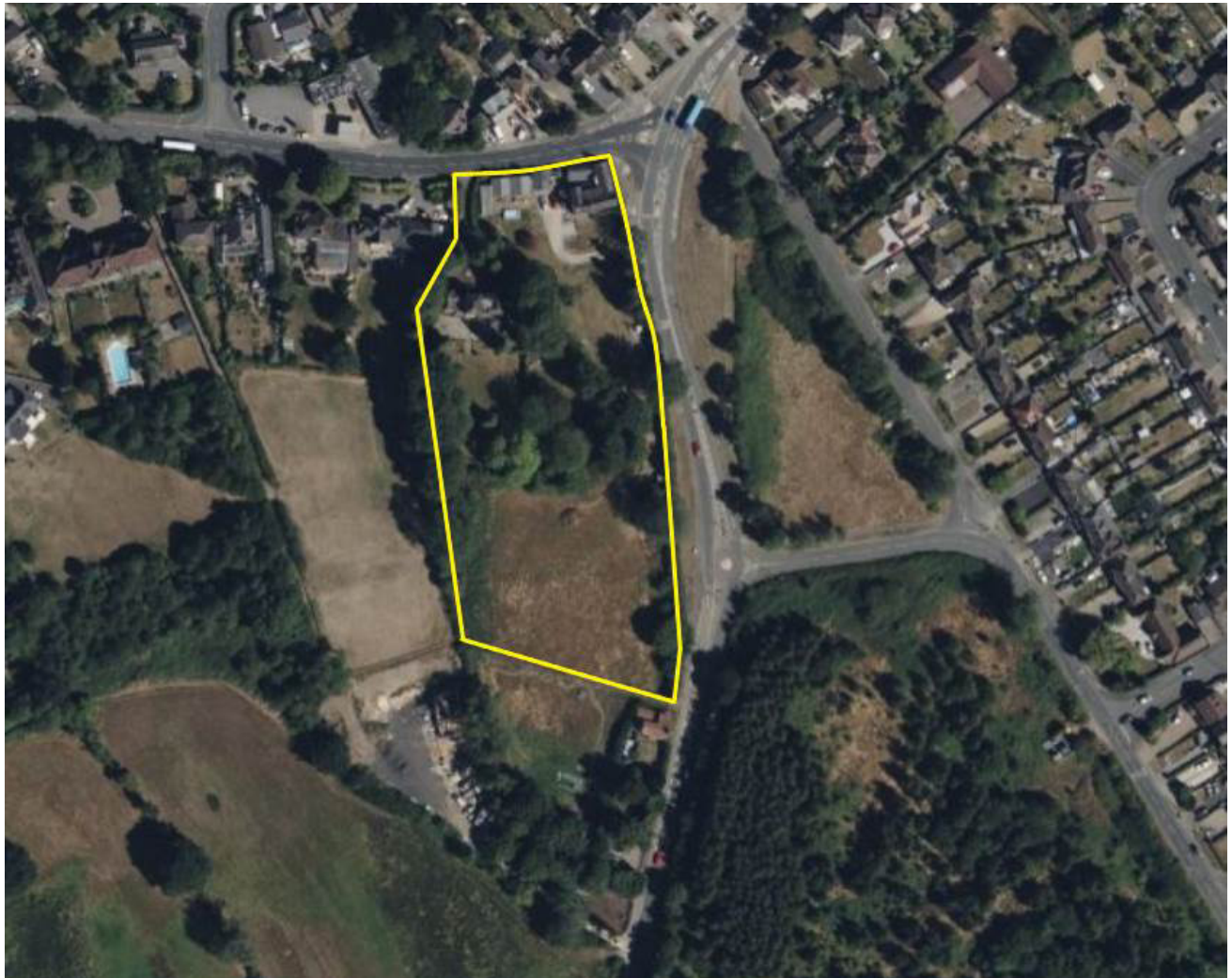


Figure 2: Site Contextual Aerial Photograph

Image Copyright Microsoft Mapping 2024

1.2 Objective of the Report

This report is an Ecological Appraisal of the area identified in yellow within the aerial photograph above. The objective of the ecological appraisal is to identify the habitat(s) present on, and surrounding, the site area being assessed. Development of the site for the purpose of constructing new residential housing within the land will require planning approval and this report has been prepared to provide information as part of any future planning application process. To this end the report is required to comply with the recommendations and principles set out in the National Planning Policy Framework 2024 as amended (NPPF). The report contains Biological Records and has been prepared to meet the standard required by BS42020 (British Standard for Biodiversity and Development).

Chapter 11 of the National Planning Policy Framework (NPPF) describes the Government's national policies on promoting 'an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment.' NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' (2014) and ODPM Circular 06/2005.

The National Planning Policy Framework 2024 sets out the Government's objectives for planning in regard to the protection of habitats and biodiversity. The planning objectives in relation to biodiversity and the natural environment are stated within NPPF 2024 and are as follows:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).*
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.*
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate.*
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*
- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

Planning policy context requires that Planning policies and decisions should be based on up-to-date information about the natural environment and other characteristics of the area including an assessment of existing and potential components of ecological networks (NPPF paragraph 43).

The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2013 which involves the following stepwise process:

- **Avoidance** – avoiding adverse effects through good design,
- **Mitigation** – where it is unavoidable, mitigation measures should be employed to minimise adverse effects,
- **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm,
- **Enhancement** – planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.

The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development (BS 42020:2013, section 5.5).

This ecological appraisal provides information on the existing ecological and biodiversity value of the land on the site and also reports any evidence of protected species or significant habitats present. It has been provided to provide information to the Planning Authority in order to help meet the requirements of the NPPF and enable the Authority to assess the site area in accordance with the Code of Practice within BS42020 and guidelines issued by CIEEM in 2012. The report also identifies any habitats or species present that require more detailed surveys prior to any improvements being undertaken.

Part 2: Survey Methodology and Results

2. Appraisal Methodology

2.1 Baseline Study

Within NPPF it states that there are three dimensions to sustainable development: “economic, social and environmental.” The environmental role includes “contributing to protecting and enhancing our natural, built and historic environment” and, as part of this, helping to improve biodiversity.

Within NPPF 2024 the principles by which the protection and enhancement of biodiversity and geodiversity within the context of proposed development are described. These principles state that any development proposal should:

- a) **Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks**, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and steppingstones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*
- b) **promote the conservation, restoration and enhancement** of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for **securing measurable net gains for biodiversity**.*

When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest.*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

The biodiversity of a site area and the potential presence of protected species are factors relevant to all developments irrespective of the size scale and will apply to any development on the site being assessed. Available information on the baseline ecology of the site and the presence of protected species within the locality has been obtained from the local biological records centre and reviewed and the records obtained are provided within **Appendix 2**.

These data sources have been reviewed and the character and nature conservation value of habitats and species assessed. The aims of this appraisal of information are:

- To characterize all the existing available information regarding habitats and species that may be present at the site and provide up to date information about the environmental characteristics of the site area.
- To identify any habitats potentially present of nature conservation value in terms of local, regional and national context and within the context of local, regional and national policy; and,
- To identify any areas of ecological interest in order to either a) make recommendations to minimize the potential impact of any site works, or b) identify the need for a further survey work.

Following the appraisal of the available information, a site inspection has taken place to obtain specific site data at the site.

2.2 Habitat Assessment Methodology

The site was initially inspected on 04th July 2024 with stage 2 protected species surveys being completed on 18th July 2024 and 16th August 2024. The initial inspection used the extended Phase 1 Habitat Assessment methodology as adopted by Natural England (Joint Nature Conservation Committee 1993) and in accordance with the Guidelines for Preliminary Ecological Appraisal (2012) issued by the Institute of Ecology and Environmental Management (IEEM) and BS42020 (British Standard for Biodiversity and Development).

The survey required a systematic walkover of the site to classify the habitat types present and was completed using standard Phase 1 Habitat Survey methodology whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal to record details on the actual or potential presence of any notable or protected species or habitats.

Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified summarised within **Appendix 1**. A habitat base map and target notes have been prepared and included as **Figure 3** within section 3 of this report.

2.3 Protected Species Assessment Methodology

A methodical inspection was carried out to look for any evidence of protected species using the site and to identify any habitats with potential to provide significant shelter or foraging

opportunities for these. The survey was carried out by Christopher Barker, an experienced ecological consultant and Chartered Environmentalist holding Class Licenses issued by Natural England.

The Conservation of Habitats and Species Regulations 2017 consolidates the various amendments that have been made to the Regulations. The original (1994) Regulations transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.

“European protected species” are those which are present on Schedule 2 of the Conservation of Habitats and Species Regulations. They are subject to the provisions of Regulation 41 of those Regulations. All European Protected Species are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to:

- a. Intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- b. Possess or control any live or dead specimens or any part of, or anything derived from these species
- c. deliberately disturb wild animals of any such species
- d. deliberately take or destroy the eggs of such an animal, or
- e. intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- a. to impair their ability—
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii. in the case of animals of a hibernating or migratory species, to hibernate or migrate; or,
- b. to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogation) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works. In accordance with the requirements of the Regulations a licence can only be issued where the following requirements are satisfied:

- i) The proposal is necessary ‘to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment’
- ii) ‘There is no satisfactory alternative’
- iii) The proposals ‘will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Specific attention was also paid to the potential presence of any protected, rare or notable species, and specific consideration was given to bats, birds, badgers, amphibians and reptiles as described below.

Breeding Birds: All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild

bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The inspection of the site included a search of hedgerows, ground vegetation and tree canopies looking for evidence of active or former nests.

Bats: All species of Bat within the UK are protected under the Conservation of Habitat and Species Regulations that amended and incorporated the Wildlife and Countryside Act 1981. These regulations make it an offence to:

- Intentionally kill, injure or take a bat [WCA section 9(1)]
- Possess or control any live or dead specimen or anything derived from a bat [WCA section 9(2)]
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat [WCA section 9(4)(a)]
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose [WCA section 9(4)(a)]

Any building or significant trees present within the survey area have been assessed for their suitability to support roosting bats based on the presence of features such as holes, crevices, cracks, splits or loose bark.

Potential bat roost locations in relation to buildings are described within this report (taken from Table 4.1 of the updated Bat Survey Guidelines 2023) as:

None	No habitat features on site are likely to be used by any bats at any time of year (i.e. a complete absence of crevices / suitable shelter at all ground /underground levels).
Negligible	No obvious habitat feature 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 at times.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of year. 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 used 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 to support a roost of high conservation status (i.e. such as maternity or hibernation irrespective of species conservation status).
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 space, shelter, protection, appropriate conditions and/or suitable surrounding habitat. These structures have potential to support high conservation value roosts (i.e. maternity or classic cool / stable hibernation site)

Tree assessments were undertaken from ground level, with the aid of a torch and binoculars where required. During the survey features considered to provide suitable roost sites for bats such as the following were sought:

- Trunk / branch cavities – significant holes in the trunk caused by rot or injury.
- Trunk / branch split – split / fissure in trunk caused by rot or injury.

- Branch socket cavity – Where a fallen branch has resulted in the formation of an access point into a cavity.
- Woodpecker hole – created by nesting birds suitable for use by roosting bats.
- Lifted bark – bark which has rotted / lifted to form suitable access point/roost site for bats.
- Trunk hollows – decay in heartwood leading to internal cavity in trunk.
- Ivy cover – dense / mature ivy cover where the woody stems could create small cavities / crevices.

Common Reptiles: All species of British reptile are protected by the Wildlife and Countryside Act 1981 (as amended). The common species (adder, grass snake, slow worm and common lizard) are only protected against intentional killing and injuring (but not taking).

The survey included a search of all areas where suitable habitat for reptiles to shelter under or bask may be present, lifting logs and other suitable features to search underneath. The surveyor also maintained a careful watch whilst moving across the site to look for signs of reptiles moving to cover.

Great crested newts are afforded legal protection under European and UK law under the auspices of The Conservation (Natural Habitats &c.) (Amendment) Regulations which came into force on 21 August 2007, superseding the Habitat Regulations 1994. The 2007 amendments have increased the protection afforded to European Protected Species.

The law provides protection to adults, juveniles, efts (immature GCN) and eggs and it is an offence to intentionally or recklessly or as an incidental result of actions:

- Intentionally or deliberately capture, kill, or injure Great Crested Newts
- Intentionally or recklessly damage, destroy or obstruct access to any place used for shelter or protection (including resting or breeding places) whether occupied or not
- Deliberately, intentionally or recklessly disturb Great Crested Newts when in a place of shelter
- Possess a Great Crested Newt, or any part of it, unless acquired lawfully
- Sell, barter, exchange or transport or offer for sale Great Crested Newts or any part of them.

The survey included a search of any ponds and wetland areas within the site or immediate surrounding area nearby (where these features were accessible) and an assessment of ponds in the local area using Ordnance Survey Maps and aerial photographs to consider the potential for these species to access the site area.

Badger: Badgers are protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger sett is defined in the legislation as “*a structure or place, which displays signs indicating current use by a badger*”.

The survey searching for evidence of badger activity comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The following information was recorded:

- Number and location of well used / active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.

- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.
- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the
- entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

The second element of the survey involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

Invasive Species: Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

A range of invasive non-native plant species are listed in Schedule 9 (Part 2) of the Wildlife and Countryside Act 1981, which makes it an offence to plant or cause these introduced invasive plants to grow in the wild, effectively making it illegal to spread the plants during development operations.

2.4 Consultations

The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2016). In evaluating ecological features. The *Geographic Frame of Reference* is a key factor taken into account when assessing the potential ecological value of a site being surveyed. The value of an ecological feature or resource is determined within a defined geographical context using the following frame of reference:

- International.
- National.
- Regional.
- County (or Metropolitan).
- District (or Unitary Authority, City or Borough).
- Local (or Parish).
- Site level only.

Within this frame of reference, certain sites may carry a statutory ecological designation, e.g. Special Area of Conservation (SAC) for internationally important sites or Site of Special Scientific Interest (SSSI) for sites of national importance. Sites of more localised nature conservation importance do not receive statutory protection but may be designated by Local Planning Authorities or other bodies, e.g. Wildlife Trusts. Such non-statutory designations or 'Local Sites' include Local Wildlife Sites (LWSs) and Sites of Nature Conservation Interest (SNCIs), for example.

A review of the available data confirms that the site is not a Statutory or Non-Statutory site of ecological significance. There appear to be no Statutory sites within a 1km radius based on the records obtained. Burbage Common and Woods LNR 2.5km to the south and Burbage Wood and Aston Firs SSSI 3km to the south. There are a number of LWS and potential LWS sites within 1km and nearest and most significant of these are summarised within the table below.

Site Name and Reference	Designation	Distance	Description
Barwell, hedgerow 90659	LWS	225	Hedgerow
Thurlaston Brook hedgerow 90668	LWS	981	Hedgerow
Roadside Standards 91007	LWS	976	Mature trees: Horse Chestnut and Poplar
Barwell, grassland south-east of Leicester Road 11050	LWS	761	Two fields, both containing at least 10 LWS indicator species
Barwell, Ash trees east of The Common 91593	LWS	362	5 Ash trees all with a girth of 3m+
Barwell, grassland and hedgerows east of The Common 91594	LWS	359	2 species-rich grasslands plus 10 spp-rich hedges (8 spp or more - 2021 survey), 5 'Important' under The Hedgerow Regulations (2017). One veteran oak along W boundary.
Barwell, grassland east of The Common (2) 92124	LWS	622	Species-rich grassland and two species rich hedges (NE and SE boundaries)
Earl Shilton, Wentworth Avenue Oak 92133	LWS	718	Mature Oak with a girth of 3.85m

A review of the data for protected species has identified a small number of significant records relating to the immediate vicinity of the site which are summarised within the table below.

Scientific Name	Common Name	Latest Record	Number of Records
<i>Bufo bufo</i>	Common Toad	2010	1
<i>Lissotriton vulgaris</i>	Smooth Newt	2023	1
<i>Rana temporaria</i>	Common Frog	2019	1
<i>Alcedo atthis</i>	Kingfisher	2003	1
<i>Anser anser</i>	Greylag Goose	2020	2
<i>Charadrius dubius</i>	Little Ringed Plover	2022	2
<i>Falco peregrinus</i>	Peregrine	2021	3
<i>Falco subbuteo</i>	Hobby	2021	5
<i>Fringilla montifringilla</i>	Brambling	2021	1
<i>Melanitta nigra</i>	Common Scoter	2022	4
<i>Milvus milvus</i>	Red Kite	2022	9
<i>Numenius phaeopus</i>	Whimbrel	2022	5
<i>Tringa nebularia</i>	Greenshank	2021	1
<i>Tringa ochropus</i>	Green Sandpiper	2021	2
<i>Turdus iliacus</i>	Redwing	2022	27
<i>Turdus pilaris</i>	Fieldfare	2022	19
<i>Tyto alba</i>	Barn Owl	2023	14
<i>Hyacinthoides non-scripta</i>	Bluebell	2021	4
<i>Natrix helvetica</i>	Grass Snake	2010	2
<i>Arvicola amphibius</i>	Water Vole	2001	1
Chiroptera	Bat	2013	4
<i>Lutra lutra</i>	Otter	2022	1
<i>Meles meles</i>	Badger	2021	17
<i>Myotis</i>	Myotis Bat species	2019	5
<i>Nyctalus</i>	Nyctalus Bat species	2017	2
<i>Nyctalus leisleri</i>	Leisler's Bat	2023	5
<i>Nyctalus noctula</i>	Noctule	2023	10
<i>Pipistrellus</i>	Pipistrelle Bat species	2017	5
<i>Pipistrellus nathusii</i>	Nathusius's Pipistrelle	2023	4
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	2023	21
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	2023	7
<i>Plecotus</i>	Long-eared Bat species	2017	2
<i>Plecotus auritus</i>	Brown Long-eared Bat	2023	9

There are no records of **Great Crested Newt (GCN)** within 1km of the site. The nearest record for amphibians is Smooth Newt associated with a small pond within land 170m to the west. The survey area contains one ornamental pond which is a round, vertically sided concrete lined structure inaccessible to amphibians. There are no other any ponds or wetlands identified on the plans. The likelihood of a significant population of amphibians being present is low.

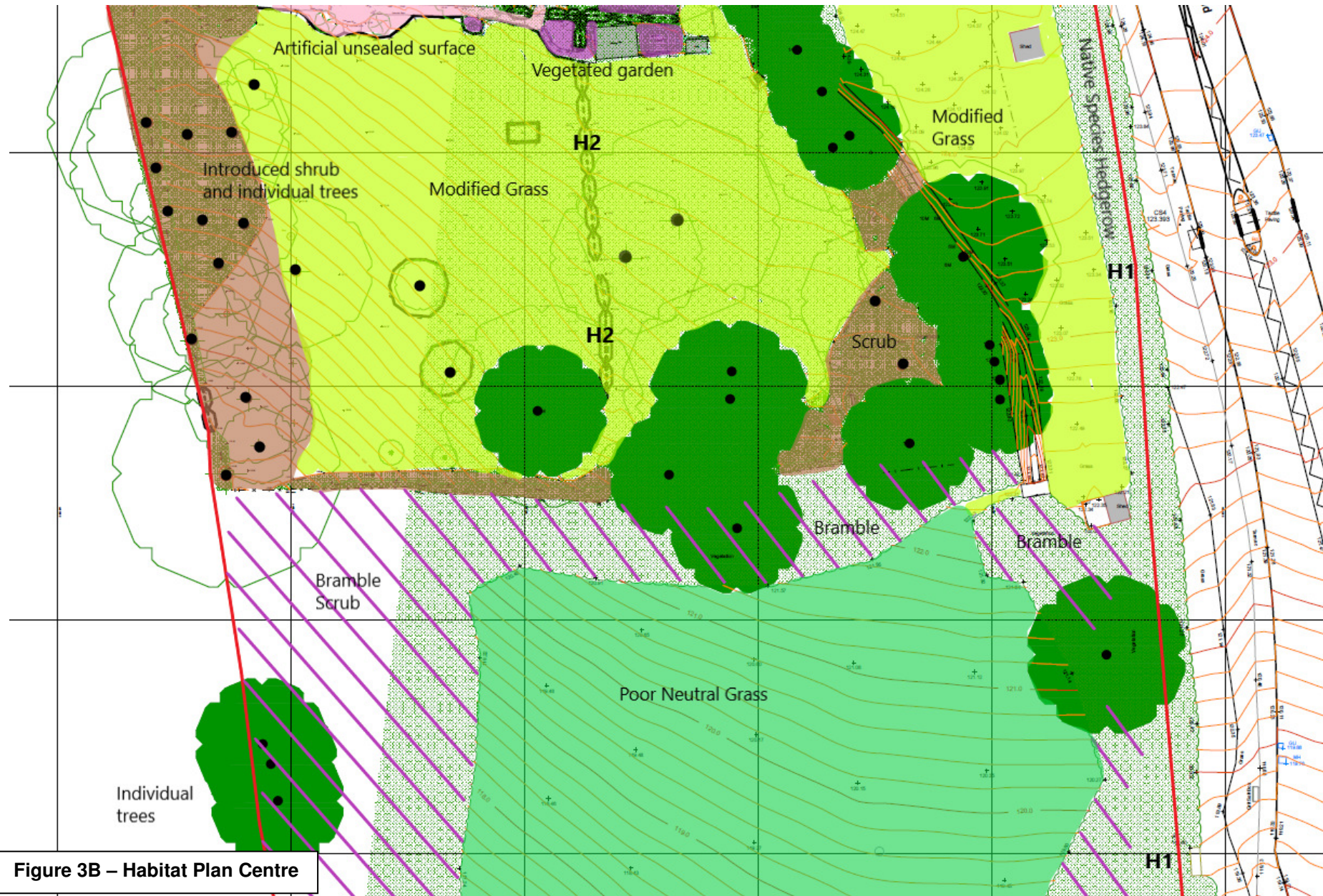
There are records of Grass Snake within 1km but not associated with this particular location and in open agricultural land over 500m distance. The site does have habitat that might support reptiles, in particular the bramble scrub and neutral grassland area but the likelihood of a significant population of reptiles being present is likely to be low.

The majority of the site area surveyed is open grassland but there are areas of significant tree canopy over and hedgerow which could support nesting birds. In addition, there are building structures which may offer potential nesting locations to certain species. There is a reasonable likelihood that nesting birds will be using the site during the nesting season although ground nesting species will be impacted by predatory cats in this location.

There are records of roosting and foraging **bats** in this area with two species of Pipistrelle and Brown Long-eared bats recorded. The nearest roost is a Pipistrelle roost associated with a school 230m to the north of the survey area. There is good tree canopy cover across the survey area and there are buildings and mature trees present which may offer potential roosting locations. The potential for roosting bats to be present based on the desktop assessment is quite high.

There are records of **badger** activity in this area with a subsidiary sett identified 348m to the west and another small sett 300m to the south west. It is possible this species may access the open grassland and garden areas for foraging purposes so the potential for badger to be present cannot be ruled out.







3. Survey Findings

3.1 Habitat Classifications and Target Notes

The survey has identified the following habitats within the proposed development:

- Developed Land, Sealed Surface (Buildings and Concrete Hardstanding)
- Artificial Unvegetated Unsealed Surface (Porous driveway and Hardstanding)
- Former residential garden (Modified Grass and Introduced Shrub)
- Vegetated Garden (small areas of planted borders)
- Neutral Grass (area of grassland south of the gardens)
- Bramble Scrub
- Individual Rural Trees
- Road Verge
- Water Feature
- Native Species Hedgerow

Target Note: Developed Land Sealed Surface

There are two residential houses and outbuildings within the survey area with areas of concrete hardstanding. The buildings are described in the table below with photographs of the exterior and interior provided.

	Description	Potential for protected species
B1	Two storey detached residential house. Rendered and painted white to the exterior. Pitched slate roof structures in good condition with no broken or missing slates. Roof edges appear effectively sealed. Ridge tiles in place and tightly fitting. White uPVC windows tightly fitting throughout. Enclosed loft areas accessible for inspection. No natural light noted entering the loft spaces.	No evidence of any nesting bird activity on the exterior or within the interior. No field signs of roosting bats found within the interior of the building or on the exterior. No significant features identified of potential interest to roosting bats. Negligible roost potential
B2	Two / three storey detached residential house. Rendered and painted pale cream to the exterior. Pitched tied roof structures in good condition with no broken or missing slates but the roof edges do not appear to be sealed and there are overhanging roof eaves. Ridge tiles in place and tightly fitting but there are some minor gaps particularly on the south western side. Timber windows tightly fitting throughout. Balcony on south west side of house collapsing. Enclosed loft areas accessible for inspection but one small loft area on the eastern end of the building fully enclosed and inaccessible.	No evidence of any nesting bird activity on the exterior or within the interior. No field signs of roosting bats found within the interior of the building or on the exterior. Some features identified of potential interest to roosting bats. Moderate roost potential Further emergence surveys recommended
Outbuilding B3	Timber framed and clad outbuilding with a shallow pitched felted roof. Timber cladding is tightly fitting with no gaps or holes. Doors on the south side tightly fitting. White uPVC windows tightly fitting. Roof in good condition with roof edges sealed. No enclosed loft space with internal roof exposed.	No evidence of any nesting bird activity on the exterior or within the interior. No field signs of roosting bats found within the interior of the building or on the exterior. No significant features identified of potential interest to roosting bats. Negligible roost potential
Outbuilding B4/B5	Two timber framed linked outbuilding. Timber wall cladding to the exterior is tightly fitting. Horizontal timber cladding to the gable apex on the south side warped with potential access for bats and birds. Windows tightly fitting. Interior has an	No evidence of any nesting bird activity on the exterior or within the interior. No field signs of roosting bats found within the interior of the

	enclosed loft space which could not be accessed for inspection. Roof edges appear sealed and the pitched roof is covered with bituminous felt tiles.	building or on the exterior. Some features identified of potential interest to roosting bats – specifically warped external timber cladding and an enclosed loft area that may be accessible to bats although no access points were identified. Low roost potential Further emergence survey recommended
Outbuilding B6	Timber framed and clad outbuilding with a shallow pitched felted roof. Timber cladding is tightly fitting with no gaps or holes. White uPVC French doors on the eastern side tightly fitting. Roof in good condition with roof edges sealed. No enclosed loft space with internal roof exposed.	No evidence of any nesting bird activity on the exterior or within the interior. No field signs of roosting bats found within the interior of the building or on the exterior. No significant features identified of potential interest to roosting bats. Negligible roost potential



South side of B1



North side of B1



Loft interiors of B1



Loft interiors of B1



South face of B2



South face of B2



Loft interiors B2



Loft interiors B2



Outbuilding B3



Outbuilding B3



Outbuilding B4/B5



Interior of B4/B5



Outbuilding B6

Target Note: Artificial Unvegetated Unsealed Surface

There are areas of porous hardstanding and driveway present with negligible vegetation (<10% cover) along the driveways and patio areas close to the buildings.



Target Note: Modified Grassland (Former lawn areas)

The former lawn areas are dominated by Perennial Ryegrass cultivars *Lolium perenne* supporting a dense sward. The western lawn area is still mown short but the lawn areas on the eastern property have gone to seed. There are other grass species present including Fescue *Festuca spp* and Yorkshire Fog *Holcus lanatus* and a limited range of common lawn weed species such as Daisy *Bellis perennis*, Pearlwort *Sagina procumbens*, Dandelion *Taraxacum officinale*, Plantain *Plantago lanceolata*, Medic *Medicago lupulina* and Buttercup *Ranunculus repens*.



Former lawn area (east garden)



Lawn area (west garden)

Target Note: Introduced Shrub

Within the gardens there are introduced shrubs and perennials planted in borders along the lawn edges and patio area. Species present include *Phormium tenax*, *Mahonia aquifolium*, *Choisya ternate*, *Buddleia davidii*, *Rosmarinus officinalis*, Cherry Laurel *Prunus laurocerasus*, Privet *Legustrum vulgare*, *Weigela* sp, *Viburnum tinus*, *Hebe* spp, *Iris* spp and other common amenity plant species.

**Target Note: Neutral Grassland**

The southern end of the survey area comprises a parcel of gently sloping neutral grassland that has gone to seed. The sward appears dense and even but the marginal areas are becoming colonised by juvenile bramble *Rubus fruticosus* and other common ruderals and ephemerals are starting to appear.

The dense sward is dominated by Perennial Ryegrass *Lolium perenne* with other grass species present including Yorkshire Fog *Holcus lanatus*, Timothy *Phleum pratense* and Cocksfoot *Dactylis glomerata*. Within the sward there are occasional areas of Buttercup *Ranunculus repens*, Creeping Thistle *Cirsium arvense*, Herb Bennet *Geum urbanum* and infrequent Dock *Rumex obtusifolius* and Cow Parsley *Anthriscus sylvestris*.

No rare or unusual plants or plant communities were identified and the grassland appears to have been previously cropped for forage purposes in the past.



Neutral grassland



Neutral grassland

Target Note: Bramble Scrub

Small areas where bramble thicket *Rubus fruticosus* dominate have been identified associated predominantly with the margins of the neutral grassland area.



Target Note: Water Feature

Within the driveway of the western property is a small ornamental pond feature. This is round and constructed from brick, lined with a fountain in the centre. It is assessed as being an ornamental pond feature.

Target Note: Road Verge

On the eastern boundary of the survey area is a small area of road verge occupied by species poor neutral grassland.

Target Note: Individual Trees

Within the gardens there is a large number of individual trees. There are 21 small trees, 17 medium trees, 11 large trees and 1 very large tree identified within the BS5837 Tree Survey report prepared for this site.

Species present include Maple *Acer palmatum*, Holly *Ilex aquifolium*, Leylandii *XCupressocyparis leylandii*, Sycamore *Acer pseudoplatanus*, Cherry *Prunus avium*, Birch *Betula pendula*, Lime *Tilia europaea*, Ash *Fraxinus excelsior*, Norway Maple *Acer platanoides*, Black Poplar *Populus nigra*, Hawthorn *Crataegus monogyna*, Walnut *Juglans nigra*, Indian Bean Tree *Catalpa bignoidies*, Whitebeam *Sorbus aria*, Damson *Pruus domestica*, Apple *Malus cul* and Yew *Taxus baccata*.





Target Note: Native Species Hedgerow

There are two hedgerows within the survey area. The largest and most significant is a native species hedge running along the majority of the eastern boundary of the survey area. There is another ornamental hedge running through the centre of the site dividing two garden areas.

Hedgerow Regulations

A measure of statutory protection is afforded to hedgerows under the Hedgerow Regulations 1997, where any ecological or archaeological features are defined as being 'important'. The Removal of important hedgerows requires consent from the local planning authority, except in certain prescribed circumstances. The importance of hedgerows can be assessed according to the criteria identified in Part II Schedule I of the Hedgerow Regulations 1997. A hedgerow is identified as being 'Ecologically Important' if it has existed for 30 years or more and satisfies at least one of the criteria listed below.

- *Criteria 6:* Contain certain categories of species of birds, animals or plants listed in the Wildlife and Countryside Act 1981 or the British Red Data Books
- *Criteria 7:* The hedgerows include:
 - a) At least 7 schedule III woody species, on average in a 30m length;
 - b) At least 6 schedule III woody species, on average in a 30m length and has at least 3 associated features;
 - c) At least 6 schedule III woody species, on average in a 30m length, including a black poplar tree, or large-leaved lime, or small-leaved lime or wild service tree;
 - d) At least 5 schedule III woody species, on average in a 30m length and has at least 4 associated features.

The associated features are:

- i. a bank or wall which supports the hedgerow along at least one half of its length;
 - ii. gaps which do not exceed 10% of the length of the hedgerow;
 - iii. on average, at least one tree per 50 metres;
 - iv. at least 3 schedule 2 woodland species within one metre, in any direction, of the outermost edges of the hedgerow;
 - v. a ditch along at least one half of the length of the hedgerow;
 - vi. connections with other hedgerows, woods or ponds scoring 4 points or more (where a connection to another hedgerow scores 1 and a connection to a broad-leaved wood or pond scores 2); or
 - vii. a parallel hedgerow within 15 metres of the hedgerow.
- *Criteria 8:* Run alongside a bridleway, footpath, road used as a public path, or a byway open to all traffic and includes at least 4 woody species, on average, in a 30m length and has at least 2 associated features as listed above.

In accordance with these regulations, regular 30m sections of the hedgerow at the site were sampled i.e. woody species were recorded for 30m out of every 100m in order to sample the hedgerow in a systematic way. The average number of species for each hedgerow was derived by totaling the number of species recorded and dividing by the number of sections. This gives an average to compare with the Hedgerow Regulations Criteria. Only when the average number of species is 5 or more are associated features taken into account. An average of 5 woody species and 4 associated features are needed for a hedgerow to be defined as important hedgerow in accordance with the regulations. The exception to this is when a hedgerow runs alongside a footpath or bridleway. In this case only 4 woody species and 2 associated features are needed.

Each hedgerow is given a grade using HEGS with the suffixes '+' and '-', representing the upper and lower limits of each grade respectively. These grades represent a continuum on a scale from 1+ (the highest score and denoting hedges of the greatest nature conservation priority) to 4- (representing the lowest score and hedges of the least nature conservation priority) as follows:

- Grade 1 – High to very high value
- Grade 2 – Moderately high to high value
- Grade 3 – Moderate value
- Grade 4 – Low value

Hedgerows graded 1 or 2 are considered to be a priority for nature conservation.

The hedgerows were also assessed against the wildlife and landscape criteria contained within Statutory Instrument No: 1160 – The Hedgerow Regulations 19973 to determine whether they qualified as 'Important Hedgerows' under the Regulations. This was achieved using a methodology in accordance with the Regulations.

Hedge	Height	Width	Management	Woody Species	Ground Flora	HEGS Cat.
H1	3-4m	2-3m	Previously trimmed. Some trees are present at the northern end. Drainage ditch on the eastern side close to the road.	Hawthorn Blackthorn Dog Rose Elder	Limited – mostly nettle and some juvenile bramble	3
H2	2m	1.5m	Trimmed but not recently topped. No trees or ditches.	Privet	Negligible	4



H1 Native species hedge



H2 ornamental hedge

3.2 Evidence of Protected Species

During the inspection of the site notes were made on the suitability of habitats for protected species and any sightings or signs of protected species were recorded:

- The suitability of habitats for badger (*Meles meles*) was recorded and any evidence of badgers including setts, dung pits, badger paths, hairs, bedding, footprints and scratching trees was noted.
- Features suitable for roosting bats were noted on the buildings and trees, such as cavities, loose tiles, hollows (e.g. old woodpecker holes), cracks and cavities within trunks and branches, crevices behind loose bark and ivy growth on trunks.
- The suitability of habitats was assessed for reptiles such as Grass snake (*Natrix natrix*) and amphibians (including great crested newts - *Triturus cristatus*).
- The suitability of site was assessed for nesting birds.

Surveying in July is an optimal time for many protected species. An experienced surveyor can make reliable judgements about the quality and composition of habitats and their potential suitability for protected species. Only an initial assessment of the site was made and no stage 2 surveys were carried out. As such, a lack of evidence of a protected species does not necessarily indicate an absence of these species. The table below provides a summary of the potential for protected species to be present within the site.

Species	Connectivity	Suitable habitat on site / evidence of presence	Likelihood of presence on site
Nesting Birds	Good via nearby agricultural land.	Ground nesting within the site interior unlikely due to the presence of predatory cats. Good tree canopy cover and tall vegetation present to provide nesting opportunities. No evidence of nesting associated with the buildings on site.	High likelihood of nesting within the boundary trees and dense hedgerow / bramble scrub vegetation in the future.
Reptiles	Limited by the surrounding landscape but possible for species such as Grass Snake identified within 1km.	Grassland and bramble areas in the southern end of the survey area are optimal habitat for reptiles such as grass snake although rather isolated from other optimal areas.	Low - some individual Grass Snake may be foraging within the grassland and bramble covered areas.
Amphibians	Limited by the surrounding landscape. Some common amphibian species may be present within the gardens where there is dense vegetation cover.	Habitat within the majority of the site interior is sub-optimal for amphibians but foraging within the garden areas where there is suitable cover cannot be ruled out.	Amphibians are unlikely to be present in any significant numbers due to the absence of water features.
Bats	Reasonable due to the presence of dense tree canopy cover and the position of the site on the edge of the village.	No roosting identified associated with the buildings. Five trees with low roost potential identified within the survey area. Foraging by local bat populations confirmed by activity surveys.	Roosting within two of the buildings cannot be ruled out in the future although no bats were identified roosting during the surveys carried out. Significant foraging by Common Pipistrelle confirmed within the enclosed garden areas where there are mature trees.

Badger and larger mammals	There are records of badger in the area and the field and garden will be accessible from the south.	No field signs of badger or water vole were found in any part of the site area assessed but the grassland and bramble areas in the south of the site will be good habitat for foraging badger.	Some occasional foraging by badger across the southern part of the site area cannot be discounted in the future.
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Birds: The local area supports a range of bird species which includes some Scheduled species. The open ground within the survey area is unlikely to be suitable for ground nesting as it is within range of predatory cats. The buildings on the site were inspected and there is no evidence of any nesting activity associated with these.

The dense tree canopy cover within the survey area is partly choked by dense ivy growth and these could support nesting birds in the future. ***Measures to avoid disturbance to any nests or nesting activity will need to be considered within any development.*** If any work is proposed to these trees or any need to be removed or cleared of ivy growth, this work should take place outside of the nesting season or be preceded by an inspection carried out by a suitably qualified and experienced ecologist.

Reptiles: The walkover survey of the site area was completed on a grid pattern (as far as was possible) looking for evidence or indication of reptiles. No sightings or physical evidence of reptiles was seen during the inspection completed but areas of dense bramble and tall grass were identified which could support foraging reptiles such as Grass Snake if these have managed to access the survey area. ***Significant numbers of reptiles are considered highly unlikely but there may be individual reptiles such as Grass Snake present. If this vegetation is to be cleared or cut, this work should be supervised by an Ecologist as a precaution.***

Amphibians: The presence of significant numbers of amphibians in the area surveyed is considered unlikely and the inspection found no evidence of these species or optimal habitat to support them. Further surveys and specific mitigation measures for amphibians are not recommended.

Chiroptera: There are six buildings within the survey area. Building B2 is a large house which has features identified that place it in the ***moderate roost potential*** category although no evidence of bat activity was found externally or internally. This building requires two dusk emergence surveys and these should be completed during the optimum bat activity season. In addition, one outbuilding has been assessed as having ***low roost potential*** on the basis that there is a small area of warped horizontal timber cladding on the south gable apex and this building also appears to have a small enclosed loft space in the shallow pitched roof apex which could not be inspected. This also requires a single emergence survey to be completed during the optimum bat activity season.

The bat emergence surveys were instructed and completed during July and August 2024 and details of these surveys are provided in section 3.3 below and **Appendix 4**.

A number of trees were identified during the survey that presented features of potential interest to roosting bats although none were noted where there is evidence of bats being present. The location of these trees is shown within the ecological constraints plan. Table 1 below classifies the potential categories as accurately as possible. This table is based upon Tables 7.1 and 7.2 within the 2023 Bat Surveys- Good Practice Guidelines

Tree category	Survey / mitigation requirements	Trees within this category.
Category 1 Confirmed bat roost with field evidence such as live / dead bats, droppings, scratches, grease marks and / or urine staining.	Further assessment e.g. dusk / dawn surveys should be undertaken to provide information on the roost type, numbers and species of bat present. Avoid disturbance where possible. Felling or other works that would affect the roost would require an EPS licence with like for like roost replacement as a minimum. Works may also be subject to timing constraints.	None
Category 2a Trees that have a moderate / high potential to support bat roosts such as significant suitable cavities but no actual field evidence to confirm the presence of bats.	Further assessment e.g. dusk / dawn surveys should be undertaken to confirm the presence / absence of roosting bats. If no bats are found avoid disturbance if possible or resurvey immediately prior to felling. Use soft felling techniques and avoid direct disturbance of cavities during felling.	None
Category 2b Trees with a low potential to support bat roosts showing only minor features such as shallow cavities, peeling bark etc. with no actual field evidence to confirm the presence of bats	Surveys only likely to be required immediately prior to felling as a precaution e.g. dusk or dawn survey. If such trees are to be felled reasonable avoidance measures should be taken such as soft felling and removal of ivy cover by hand.	T9 Sycamore T10 Ash T32 Indian Bean T34 Sycamore T65 Ash
Category 3 Trees with negligible potential to support bat roosts.	No further survey work of assessment likely.	

Invertebrates: The area assessed does not appear to support a diverse range of flora. The potential for a significant assemblage of invertebrates to be present within the survey area is quite low at the present time and further invertebrate surveys are not recommended.

Mammals: During the inspection of the survey area a thorough search for evidence of badger was completed.

No significant established tracks or trails indicative of badger activity were found within the survey area and no sett entrances found. Further surveys for badger and otter are not recommended but a construction methodology to protect badgers from accidental harm is applied to any development work that may be approved within this site as a precautionary measure. The methodology should incorporate the following measures:

- The covering of excavations overnight to prevent animals falling in, or the provision of an escape ramp (e.g. secured scaffold boards) allowing animals to climb out.
- Secure storage of all materials, fuels, wire fencing etc, that may harm badgers and other animals.
- Restricting access by site personnel to any adjoining buffer zones of trees and scrub to the west of the development area.
- The eastern boundary hedge should be fenced with heras fencing on the side of the construction zone.
- Keeping works at night-time to a minimum will minimise disturbance to commuting and foraging badgers / otters near the site. Where works after dark are necessary, lighting should be as low as possible and directed away from boundary features such as hedgerows and trees.
- A toolbox talk from a suitably experienced ecologist to all site workers will be given prior to construction works detailing the procedures to be followed if a badger is found within the construction zone during works.

- If a badger is found within the construction zone during works, all works must stop and a suitably experienced ecologist be contacted immediately. Their advice should be followed precisely.

The potential presence of Hedgehog (*Erinaceus europaeus*) is considered quite likely as there are local records of this species being seen within the surrounding 1km area. Measures to protect hedgehogs should be taken and this should include an inspection of any vegetation by an ecologist ahead of clearance work being carried out. Any found should be moved to a temporary refugia located in a suitable position within hedgerow on the western boundary outside of the area of disturbance. Measures to protect badger will also be effective in protecting hedgehog.

3.3 Bat Emergence Surveys

The full details of the two emergence surveys completed are provided in the survey records within **Appendix 4** and this appendix also contain photographs and plans showing the bat activity identified. The time and conditions of the survey are summarised in the table below.

Date of Survey	Survey Time	Temperature and weather	Survey conditions
18 July 2024	21.00 – 23.15	22°C at 20.55 and clear, falling to 20°C during the survey period. Humidity 69% at 1019mb. Breeze 5mph from the south.	Full moon. Perfect surveying conditions suitable for bat foraging. Sunset 21.17.
16 August 2024	20.10 – 22.30	17°C at 20.10 and clear, falling to 16°C during the survey period. Humidity 67% at 1014mb. Breeze 4mph from the south west.	Excellent surveying conditions suitable for bat foraging. Sunset 20.29.

During the activity surveys carried out each surveyor was equipped with an Echometer detector and in addition night vision equipment was also used in support of the survey to watch key features on B2 after darkness had fallen (Nightfox Corsac 10 X HD binocular used by S1 and Sigweis 10 X magnification infra-red camera used by S2).

The survey rationale for the first dusk emergence survey was for five surveyors to cover the two buildings as follows:

Surveyor 1 – positioned to watch the south west side of B2 and monitor activity on the west side of the building and rear garden.

Surveyor 2 – positioned to watch the south east side of B2 and monitor activity on the east side of the building and rear garden.

Surveyor 3 – positioned to watch the entire north side of B2 during the July survey and north west side of the B2 during the August survey, monitor activity in the front garden area.

Surveyor S4 - positioned in the garden to watch the south face of B4 during the July survey where there is warped timber cladding and monitor activity in the rear garden. Position moved to cover the north eastern side of B2 during the August survey.

Surveyor S5 – positioned on the road to watch the north side of B4 during the July survey and monitor activity along the road frontage. Position not used during the August survey.

Plans showing the location of the individual surveyors are provided in Appendix 4

During the survey of 18 July 2024 a total of 475 bat passes were recorded within range of the five survey positions. Detectors confirmed presence of Common Pipistrelle (453 passes) and Noctule (22 passes) foraging around both building during the survey period. No other species were recorded or seen. No bats were seen to leave either of the buildings under observation during the course of the survey. A number of the bat passes were picked up in multiple location and there will be some double counting, particularly at positions S1 and S2.

During the survey of 16th August a total of 426 bat passes were recorded within range of the four survey positions watching building B2. Detectors confirmed presence of Common Pipistrelle (426 passes) foraging in the garden close to B2 with occasional passes by Nathusius Pipistrelle (1 pass), Soprano pipistrelle (1 pass), Noctule (7 passes) and 1 Alcaho bat. These additional species were recorded at position S1 indicating these bats probably passed to the west of the house. No bats were seen to leave building B2 under observation during the course of the survey. No activity by Plecotus species was picked up but one Myotis pass, one Nathusius pass and activity by Leisler's bats (2 passes) was picked up during this survey.

The table below summarises the number of passes by each species and the timing of the first arrival.

Species	Passes	Timing after sunset	Roosting
Common Pipistrelle	879	10 minutes	No
Soprano Pipistrelle	1	29 minutes	No
Nathusius Pipistrelle	1	11 minutes	No
Noctule	29	2 minutes	No
Leislars	2	40 minutes	No
Alcathoe	1	66 minutes	No
Total	146		

The survey confirmed there is activity by at least six species of bat in this area and that it is likely that there is a Common Pipistrelle roost somewhere nearby, perhaps to the west, based on the earliest flight times and the arrival of this species. However, no evidence of any roosting activity was found in either of the two buildings under surveillance. It is clear that the rear garden area is an attractive foraging area for local Common Pipistrelle and there was a concentration of foraging activity noted, particularly during the first emergence survey.



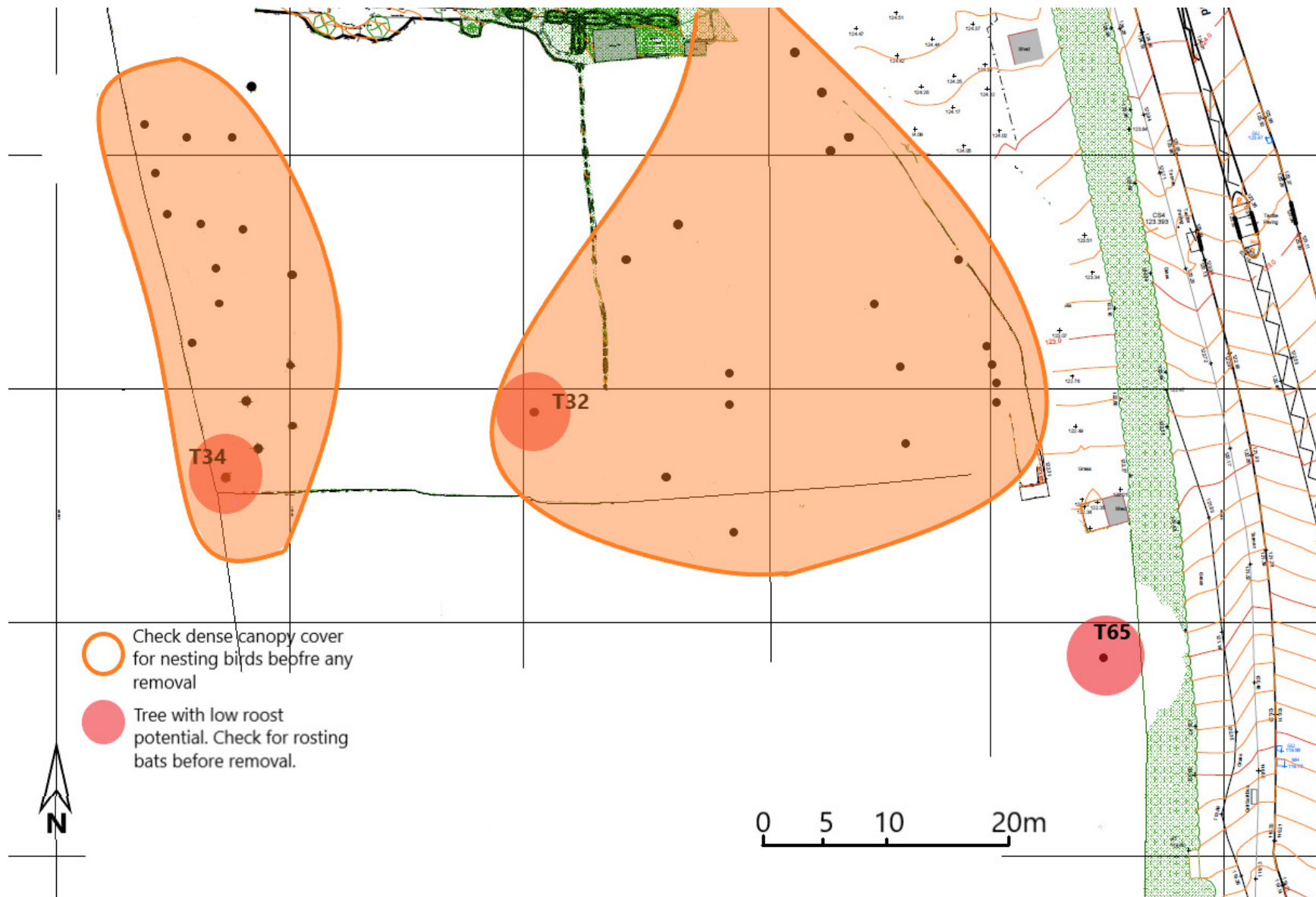


Figure 4 – Ecological Constraints Plans

3.4 Ecological Constraints

Constraints:

The following ecological constraints have been identified during the survey:

- There are some large mature trees present within the survey area that could support nesting birds and possibly roosting bats in the future. Measures to avoid disturbance of roosting bats and nesting birds will be required.
- There is potential for two of the building to support roosting bats in the future although no evidence of roosting was identified during the emergence survey completed in 2024. A further inspection of building B2 and B4 by a suitably licensed person is recommended before any demolition works that may be approved are started as a precaution.
- Five trees have been identified within the survey area that have some features that may be of interest to roosting bats. If these trees are proposed for removal a precautionary inspection and emergence survey is recommended ahead of any approved works to comply with the survey guidelines.
- The dense bramble and tall grassland within the southern part of the site may be used by individual reptiles such as grass snake. It is recommended that if approval is given to clear any of this vegetation a precautionary inspection should be completed by an ecologist and the initial clearance work supervised.
- There is potential for hedgehogs and foraging badger to be present within the site, particularly around the site boundaries. A precautionary inspection by an ecologist is recommended ahead of any vegetation clearance.

Part 3: Initial Ecological Appraisal

4. Impact of Proposed Site Development

Within the NPPF 2023, guidance on the provision or retention of biodiversity within any proposed areas for development and measures to ensure the safeguarding of protected species are provided. Development should seek to contribute a net gain in biodiversity with an emphasis on improving ecological networks and linkages where possible.

The NPPF para 170 stresses that planning policies and decisions should contribute to and enhance the natural and local environment by a variety of measures including minimising impacts on and providing net gains for biodiversity. This is reinforced by Planning Practice Guidance (PPG) which identifies that 'a key purpose of this duty is to embed consideration of biodiversity as an integral part of policy and decision making throughout the public sector, which should be seeking to make a significant contribution to the achievement of the commitments made by government in its 25 Year Environment Plan' (PPG natural environment Paragraph: 009 Reference ID: 8- 009-20190721).

The proposed location and footprint of the new residential house is shown within **Figure 5** below. This report is not intended to be a suitable alternative to an Ecological Impact Assessment (EclA) in accordance with the CIEEM Guidelines on Ecological Impact Assessment, 2016.



Figure 5 – Conceptual Development Plan

Based on the initial conceptual development plan provided it is understood that the proposals for the site are:

- a) Retained and renovate the building in the north eastern corner of the site
- b) Remove all other building structures
- c) Remove the internal tree canopy cover leaving trees along the eastern and western boundaries
- d) Retain the native species hedge along the eastern boundary
- e) Utilise the site interior for development but retaining part of the neutral grassland area to the south
- f) Construct a balancing pond and create grassland habitat in the southern part of the survey area

As noted within this report, the 'mitigation hierarchy' described in British Standard BS 42020:2013 should be applied in regard to biodiversity within sites being considered for development which is a stepwise process:

- **Avoidance** – avoiding adverse effects through good design.
- **Mitigation** – where it is unavoidable, mitigation measures should be employed to minimise adverse effects.
- **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm.
- **Enhancement** – planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.

The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development (BS 42020:2013, section 5.5).

The table below considers the features present on the site in the context of the hierarchy.

Feature	Ecological Significance	Hierarchy application	Impact of proposed development
Developed Land Sealed Surface	Negligible	None	The existing buildings will be removed. One is being retained and renovated.
Artificial unsealed unvegetated surface	Negligible	None	The proposed development will remove the majority of the existing driveways and hardstanding
Individual mature trees	High	Avoidance or compensation	The proposed development requires the removal of a large number of the trees within the garden interior. New trees will need to be planted in compensation. Trees along the eastern and western boundaries will have to be protected to be retained.
Modified Grass	Low	Mitigation	The proposed development will utilise the existing lawn areas for development and replacement garden area will be provided.
Neutral Grassland	Moderate	Avoidance and compensation	Some of the neutral grassland area will be retained and protected. Compensation will be provided in the form of a balancing pond, landscaped for habitat creation.
Introduced Shrub	Negligible	Mitigation	The proposed development will remove the existing planting and replacement planting must be provided.
Bramble Scrub	Moderate	Compensation	The proposed development will remove the bramble scrub and compensatory planting of suitable habitat will need to be provided.

4.1 Potential Impact on nearby Statutory and Non-statutory sites

There are no Statutory or Non-Statutory sites nearby that are sufficiently close to be impacted by the proposed development of this land.

4.2 Impact of the Proposals on Site Biodiversity

The level of biodiversity within the site being assessed must be a consideration in determining the impact on biodiversity that may arise from any development on the site. Within the NPPF 2024 it states that any development proposal should seek to “*contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change.....*”

Within the Guidance it specifically states that “*Planning.... decisions should contribute to and enhance the natural and local environment by.....protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils.....recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.*”

The survey area comprises residential houses and outbuildings, garden areas associated with these within which there are a number of large mature trees, and an area of neutral grassland with bramble scrub around the marginal areas.

The development of this site for residential housing will require the removal of a substantial number of the existing trees and the loss of an area of neutral agricultural grassland. No evidence of any significant locally rare plants or plant communities within or around the site area surveyed was identified during the survey but the loss of tree canopy cover, neutral grassland and bramble scrub will require compensatory habitat provision of the same or greater value.

Specific details of the proposed development which include landscaping proposals and land management details have not been provided. However, an initial Biodiversity Metric Calculation has been completed with some assumptions being made to provide an assessment of baseline and subsequent post-development biodiversity values. The assessment of the development proposed for this site to achieve outline planning approval, based on the assumptions made in Appendix 3 results in a net loss in calculated biodiversity units across this site area from 6.8 units to 6.41 units which is a loss of 0.39 units (5.68%). These comprise 0.82 medium units, 0.70 low diversity units and 0.26 very low diversity units. In order for the deficit in habitat units to be replaced and a 10% overall gain achieved to achieve 7.48 units overall, a total of 1.07 compensatory units will need to be obtained. As there is limited space within the site area for further biodiversity enhancement, it is likely an off-site compensatory payment will be required.

In addition there is a small loss 0.12 hedgerow units calculated from a baseline of 1.4 units to 1.28 units (-8.57%) which arises from the removal of a short section of hedge to provide an access point. In order for the deficit in hedgerow units to be replaced and a 10% overall gain achieved 0.26 compensatory units will need to be obtained. Further details will be required to identify how the loss of biodiversity arising from the proposed development will be reduced, mitigated and / or compensated.

4.3 Impact of the Proposals on Protected Species

The requirements of Part IV of ODPM / Defra Circular 06/2005 in regard to the protection of certain species are still applicable under NPPF. The presence of protected species at the

site must be taken into consideration. Under the requirements of the NPPF provision in relation to the presence of protected species on, or making use of, a site proposed for any development must be taken into account. The presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined or where the impact on protected species is considered to outweigh the benefit of development.

The inspection completed in July 2024 and subsequent stage 2 bat emergence surveys of July and August 2024 did not identify any physical evidence or field signs of protected species within the survey area. However, it is clear that the trees enclosing the two garden areas provide a habitat for foraging Pipistrelle bats which seem to favour this location. The bats appear very quickly after sunset and must be roosting nearby but there is no evidence that any of the building or trees within the survey area are being used for roosting purposes.

After inspection of the site, assessment of its landscape context and a review of the biological records for this area, the following precautionary measures are required:

Birds: There is potential for nesting birds to use the tree canopy cover and dense hedgerow/ scrub vegetation for nesting in the future. If any approved vegetation removal needs to be carried out, this should be completed outside of the nesting season or be preceded by an inspection by an Ecologist to ensure no nesting birds are present or determine what mitigation measures to protect nesting birds are required.

Reptiles: There is potential for a small number of individual reptiles to be present within the grassland and bramble scrub areas. Where the removal of such vegetation has been approved as part of any development an inspection will be required to search for reptiles and this work should be supervised by an Ecologist as a precaution.

Bats: If the proposed development is approved, it is recommended that buildings B2 and B4 should be reinspected by a suitably licensed person ahead of works commencing as a precaution. There are also five trees identified within the survey area that will require further inspection and surveys for roosting bats if the proposal impact these in any way.

The design of any external lighting associated with the new housing should ensure that there is minimal increase in artificial lighting which could impact bat foraging around this area. Dark commuting and foraging routes should be provided along the site boundaries.

Badger and Hedgehog: As a precaution the survey area should be searched by a suitably experienced ecologist ahead of any approved works starting to ensure these species are not present in the areas to be disturbed.

General Recommendations: It is recommended that as part of landscaping works the following biodiversity enhancements should be incorporated

- At least four integral bat roost tubes should be incorporated into the new development in suitable positions identified by an ecologist.
- At least eight nest bricks/ tubes should be incorporated into the new development in suitable positions identified by an ecologist.
- Hedgehog and reptile refugia should be constructed in suitable locations close to the boundaries of the development area and gardens should have hedgehog access points installed in to the boundary fencing.
- A habitat creation scheme should be prepared to enhance the biodiversity and wildlife potential of the grassland and balancing pond area.

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REFERENCES

- National Planning Policy Framework 2024*. Department for Communities and Local Government. HMSO
- British Standard 42020 – British Standard for Biodiversity: Code of Practice for planning and development*. British Standards Institute 2013.
- The Conservation (Natural Habitats &c.) Regulations 2017: Statutory Instrument 2017*. OPSI. HMSO.
- English Nature (2004). *Guidelines for Developers*. English Nature, Peterborough
- Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023). Collins - Bat Conservation Trust.
- Froglife. 1999. Reptile Survey. *An Introduction to Planning, Conduction and Interpreting Surveys for Snake and Lizard Conservation*. Froglife Advice Sheet 10. Froglife.
- Survey protocols for the British herpetofauna*. 2013. ARC, the Durrell Institute of Conservation Ecology (DICE) at University of Kent and University of Sussex.
- Gent, A.H. and Gibson, S.D., eds. 1998 *Herpetofauna Workers' Manual*. Peterborough, Joint Nature Conservation Committee.
- Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland (2018). Institute of Ecology and Environmental Management (CIEEM)
- Stace, C (2005) *Field Flora of the British Isles*. Cambridge University Press.
- Grasses: A guide to identification using vegetative character*. H Wallace, FIELD Studies Council. 2023.
- Wildflowers of Britain*. R Phillips. Pan Books. 1999.
- Cheffings, C.M. & Farrell, L. (Eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J., Taylor, I. 2005. *The Vascular Plant Red Data List for Great Britain. Species Status 7*: 1-116. Joint Nature Conservation Committee, Peterborough.
- Guidelines for Preliminary Ecological Appraisal, 2nd Edition (2017). Institute of Ecology and Environmental Management (CIEEM)
- Web references*
- MAGIC: Designated area data downloaded from URL <http://www.magic.gov.uk.html>
- National Biodiversity Network: Protected species data downloaded from URL <http://data.nbn.org/interactive/map>

Appendix 1 – Plant Species List

Tree and Shrub Species	Ground Flora and Perennial Species
Apple <i>Malus cul</i> Ash <i>Fraxinus excelsior</i> Birch <i>Betula pendula</i> Black Poplar <i>Populus nigra</i> Buddleia <i>davidii</i> Cherry <i>Prunus avium</i> Cherry Laurel <i>Prunus laurocerasus</i> Choisya <i>ternata</i> Damson <i>Pruus domestica</i> Hawthorn <i>Crataegus monogyna</i> Hebe <i>spp</i> , Holly <i>Ilex aquifolium</i> Indian Bean Tree <i>Catalpa bignoidies</i> Iris <i>spp</i> Leylandii <i>XCupressocyparis leylandii</i> Lime <i>Tilia europaea</i> Mahonia <i>aquifolium</i> , Maple <i>Acer palmatum</i> Norway Maple <i>Acer platanoides</i> Phormium <i>tenax</i> Privet <i>Legustrum vulgare</i> Rosmarinus <i>officinalis</i> Sycamore <i>Acer pseudoplatanus</i> Viburnum <i>tinus</i> Walnut <i>Juglans nigra</i> Weigela <i>sp</i> Whitebeam <i>Sorbus aria</i> Yew <i>Taxus baccata</i>	Bindweed <i>Calystegia sepium</i> Bramble <i>Rubus fruiticosa</i> Buttercup <i>Ranunculus repens</i> Chickweed <i>Stellaria media</i> Cleaver <i>Galium aparine</i> Cocksfoot <i>Dactylis glomerata</i> Cow Parsley <i>Anthriscus sylvestris</i> Creeping Buttercup <i>Ranunculus repens</i> Creeping Thistle <i>Cirsium arvense</i> Daisy <i>Bellis perennis</i> Dandelion <i>Taraxacum sp</i> Dove's-foot Crane's-bill <i>Geranium molle</i> Fescue <i>Festuca spp</i> Forget me Not <i>Myosotis arvensis</i> Groundsel <i>Senecio vulgaris</i> Herb Bennet <i>Geum urbanum</i> Lesser Celandine <i>Ranunculus ficaria</i> Lesser Willowherb <i>Epilobium hirsutum</i> Lords and Ladies <i>Arum maculatum</i> Medic <i>Medicago lupulina</i> Mugwort <i>Artemisia vulgaris</i> Nettle <i>Urtica dioica</i> Pearlwort <i>Sagina procumbens</i> Perennial Ryegrass <i>Lolium perenne</i> Plantain <i>Plantago lanceolata</i> Ragwort <i>Senecio jacobaea</i> St John's Wort <i>Geranium robertianum</i> Spear Thistle <i>Cirsium vulgare</i> Timothy <i>Phleum pratense</i> White Dead Nettle <i>Lamium album</i> Yorkshire Fog <i>Holcus lanatus</i>

This species list records the species seen during the site inspection and is not presented as a detailed botanical survey of the site.

Appendix 2 – Biological Records from Leicestershire and Rutland Biological Records Centre

Separate Appendix

Appendix 3 – Biodiversity Net Gain Assessment

Existing Habitat descriptions

Within the Habitat Survey the following habitats were identified within the area assessed:

- Total site area 1.220ha
- Developed Land, Sealed Surface (Buildings and Concrete Hardstanding) 0.131ha
- Artificial Unvegetated Unsealed Surface (Porous driveway and Hardstanding) 0.130ha
- Vegetated Garden (Lawn areas) 0.435ha
- Introduced Shrub 0.043ha
- Modified Grass (area of grassland south of the gardens) 0.348 of which 0.12ha is retained and enhanced
- Bramble Scrub 0.130ha
- Individual Rural Trees – 19 small / 30 medium / 14 large and 1 very large
- Water Feature 0.001
- Native Species Hedgerow – 170m native species 40m ornamental

Assessment of the site using the habitat survey plan has identified that the different habitat cover the calculated areas stated above within the site and these values have been used for assessment purposes.

Proposed development

Based on the conceptual development plan provided the following area measurements have been provided by the architect and used to help assess the habitats to be created after development of the land.

1. Total area 1.220ha
2. Developed Land Sealed Surface (new buildings) = 0.250ha
3. Artificial Unvegetated Unsealed Surface (drives and parking areas) = 0.125ha
4. Vegetated Garden = 0.40ha
5. Modified Grassland to create LEAP area = 0.011ha
6. Neutral grassland open habitat area = 0.234ha
7. SUDS (balancing pond) = 0.08ha
8. Individual Trees 81 small trees shown

Biodiversity Impact Calculation

The assumptions made within the biodiversity impact calculation are stated above based on the proposed layout shown within the development plan.

The assessment of the development proposed for this site to achieve outline planning approval, based on the assumptions made above results in a net loss in calculated biodiversity units across this site area from 6.8 units to 6.41 units which is a loss of 0.39 units (5.68%). These comprise 0.82 medium units, 0.70 low diversity units and 0.26 very low diversity units. In order for the deficit in habitat units to be replaced and a 10% overall gain achieved to achieve 7.48 units overall, a total of 1.07 compensatory units will need to be obtained. As there is limited space within the site area for further biodiversity enhancement, it is likely an off-site compensatory payment will be required.

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