



Preliminary Ecological Appraisal

of

Land at Manor House

Church Street

Burbage

Leicestershire

for

Mr S & Miss C Bennett

(07/02/2023)

Rev A (12/12/2025)

2023-01(02)

PROTECTED SPECIES

This report contains sensitive information relating to protected species. The information contained herein should not be disseminated without the prior advice of Ecolocation.

Survey date: Thursday 19th January 2023

Report Version	Date	Author:	Quality check by:	Approved by:
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This report has been prepared in accordance with the CIEEM Guidelines for Ecological Report Writing Second Edition (2017) and is compliant with the CIEEM Code of Professional Conduct.

Summary

- A Preliminary Ecological Appraisal (PEA) was carried out at a site off Manor House, Church Street, Burbage, Hinckley, Leicestershire, LE10 2DB by a suitably qualified ecologist on 19th January 2023. The survey was undertaken in order to inform a planning application (reference: 22/01176/OUT) which has a strong potential for low impact, low rise, high contrast dwelling without conflicting with listed buildings.
- A subsequent baseline habitat survey was carried out at the site by a suitably qualified ecologist on 31st July 2025 with results showing a lack of any changes to habitats on site.
- The Site was an area of land consisting predominately of amenity grassland behind a listed building known as Burbage Hall. The area included scattered trees, hedgerows and a pond. The pond was considered to have a good suitability for great crested newts based on the HSI suitability score but due to a negative great crested newt eDNA test result (2021) and the lack of connectivity to a watercourse or any linkage to other ponds within 250m this significantly reduces the likelihood of great crested newts being present within the pond. Furthering this the pond was encapsulated by woodland and scrub, with hardstanding in the west. The scattered trees were within the centre of the amenity grassland with the woodland strip to the west towards Manor House. Outside the survey area, trees and a building were identified as having low/moderate bat roosting potential, which increases the likelihood of foraging/commuting bats within the red line boundary of the Site.
- The Site visit identified no evidence of mammals in the form of animal runs or droppings. The Site habitats were considered suboptimal for some commuting and/or foraging mammal species such as badgers and hedgehogs. However, there is a moderate/high potential for foraging/commuting bat species that could utilise the suitable trees on Site.
- The scattered trees on Site have minimal potential to support nesting birds whilst the Site's linear features provide good commuting corridors for bats and birds, including a mature tree with a large hollow entrance that has potential for owl nesting which is particularly relevant due to Barn Owls being identified in the data search within 1km radius of the Site. However, no signs of protected species were identified within the survey boundary. The Site's potential to support reptiles was considered to be low despite the availability of water bodies in the form of the pond and refugia, due to lack of suitable foraging habitat within the site and wider landscape as well as minimal evidence within the data search.
- All the habitats on Site were considered to have negligible to low ecological value that are likely to be commonplace within the locality, with the pond and the woodland strip being of the highest ecological value with potential to support protected species. The proposed plans do not cause the destruction or damage these areas and therefore there is no significant anticipated biodiversity loss from the development of the Site. The mature trees identified as having low/medium bat potential and the large tree with potential for owl nesting will be avoided according to the proposed sketch plans. These should be retained as they are outside the red line boundary and, importantly, protected during works. There will likely be some minimal impacts to these trees through increased noise and light disturbance; and some risk to wildlife commuting through the Site. Therefore, recommendations such as nesting bird checks, as well as the removal of certain features such as paving slabs, log and brash piles have been made to safeguard wildlife during any construction on Site.

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1 Introduction

1.1 Instruction

Ecolocation was commissioned by Mr S and Miss C Bennett to undertake a Preliminary Ecological Appraisal (PEA) of an area of land adjacent to Manor House, Church Street, Burbage, Hinckley, Leicestershire LE10 2DB (hereafter referred to as the 'Site'). It was understood that the Site was subject to a planning application (reference: 22/01176/OUT) for erection of a residential dwelling with access from Aston Lane. [A subsequent baseline habitat survey was undertaken to inform a Biodiversity Net Gain \(BNG\) report.](#)

1.1.1 Site location

The Site (grid reference: SP 44419 92715) was located in Burbage between the town of Hinckley and the village of Aston Flamville in Leicestershire, some 5km south-west of Earl Shilton.

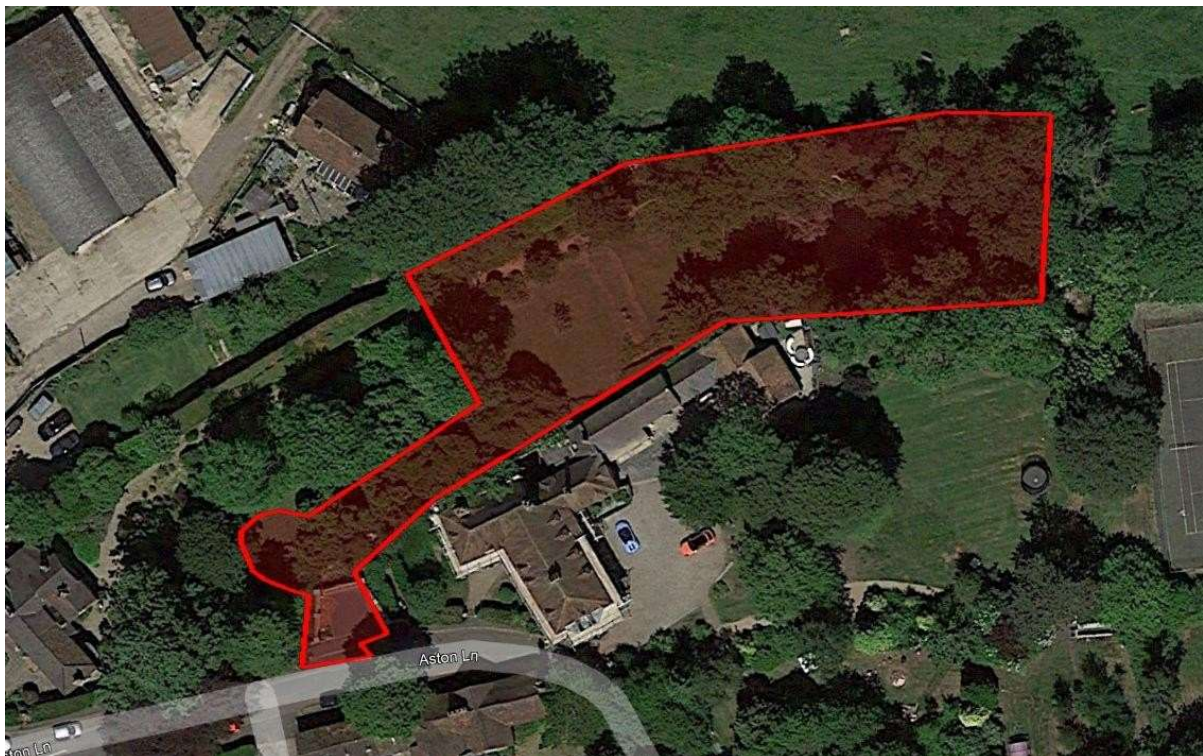


Figure 1: Survey boundary

1.1.2 Proposed Plans

Proposed dwelling, constraints and opportunities plan (undated reference number 4636/00), nest design and developments plan for the proposed dwelling (ref: 4636/01) and proposed plans 4636/02 Dwelling r/o Manor House, off Aston Lane, Burbage, Leicestershire was used in the production of this report (see Appendix 1).

1.2 Survey Purpose

The purpose of the survey was to:

- identify and provide a description of the habitats present on the Site;
- identify the potential for the presence of protected & priority habitats & species on the Site;
- determine the need for further ecological surveys;
- identify any ecological constraints or opportunities on the Site;
- identify likely mitigation measures for developing the Site; and
- identify potential ecological enhancements on the Site.

This report aims to provide general advice on ecological constraints identified with any development of the Site and includes recommendations for further survey.

1.3 Legislation & Planning Policies

A number of UK and European policies and legislation deal with the conservation of biodiversity. This section briefly outlines the legal and policy protection afforded to species and habitats scoped into this survey and described within the report.

1.3.1 Protected habitats & species

The Wildlife and Countryside Act 1981 (as amended by the Countryside Rights of Way Act 2000) Section 9 protects, great crested newt (*Triturus cristatus*), and all UK species of bat and their resting places from disturbance, damage, and destruction. The Conservation of Habitats and Species Regulations 2017 (as amended) additionally great crested newt, white clawed crayfish, and all UK species of bat as European Protected Species, and additionally prohibits killing or injury of individuals, as well as protecting their resting places from disturbance and destruction.

Common reptiles (grass snake *Natrix natrix*, adder *Vipera berus*, common lizard *Zootoca vivipara*, and slow worm *Anguis fragilis*) are listed under Schedule 5 of the Wildlife and Countryside Act (as amended) and are protected from killing and injury.

The Wildlife and Countryside Act 181 (as amended) provides protection to all species of wild bird and their nests. Under Section 1 it is an offence to intentionally or recklessly take, damage, destroy, or otherwise interfere with nests or eggs, or to obstruct or prevent any wild bird from using its nest.

Under the Protection of Badgers Act 1992 it is an offence to disturb, kill, injure, or take a badger (*Meles meles*) or to disturb, damage, obstruct access to, allow a dog to access or destroy a sett.

1.3.2 Priority habitats & species

The NERC Act 2006 places a duty on public authorities to conserve biodiversity. Additionally, this Act states that a list of priority species and actions must be drawn up and published, to contain species and habitats of principal importance for the purpose of conserving biodiversity. These lists of Priority Species and Priority Habitats, which encompass the previous UK Biodiversity Action Plan (BAP) habitats and species, are those identified as being the most threatened and requiring conservation action. Priority habitats and species were chosen based on international importance, rapid decline, and high risk. The list contains over 1000 habitats and species in total.

1.3.3 Invasive species

Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) contains introduced species which have been identified as having a severe economic and ecological impact through their introduction. It is an offence to release or allow to escape into the wild any species which is listed under Part I or Part II of Schedule 9, or any species which is not native.

1.3.4 Planning policies

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

The National Planning Policy Framework (NPPF) section 15 outlines how applications need to conserve and enhance the natural environment. Paragraphs 174 to 182 state that sites with biodiversity value should be protected and enhanced, minimising impacts on biodiversity and establishing ecological connectivity. Furthermore, the protection of priority sites and species through developments is outlined and states where significant harm is unavoidable through alternatives or mitigation, planning permission should be refused. Finally, this section concludes that developments with aims to conserve or enhance biodiversity should be supported and any improvement around developments should be encouraged to achieve net gains for biodiversity.

The Hinckley and Bosworth Borough Council Local Development Framework Core Strategy 2006-2026 (adopted 2009) includes a number of objectives relating to the environment and biodiversity and notes the need to protect and enhance sites, habitats and species referred to in the Leicester, Leicestershire and Rutland Biodiversity Action Plan (BAP). This policy states that proposals to the council should demonstrate how they conserve and enhance features of nature conservation and geological value. Major developments in particular must include measures to deliver biodiversity net gains and that site features should be maintained, the removal or damage of which shall only be accepted if there is no net loss, or the ecological network can be secured. The local plan specifies ecological surveys (extended phase 1 habitat surveys) and biodiversity assessments of proposed Sites to establish the potential impact upon biodiversity, protected species and habitats of particular value prior to any development, in order to avoid harm to wildlife and promote enhancements.

2 Methodology

2.1 Desk Study

Prior to the site visit a desk-top data gathering exercise was undertaken. The MAGIC website was accessed to search for statutory designated sites within a 1km radius of the Site. The Leicestershire and Rutland Environmental Records Centre (LERC) was contacted for information on non-statutory designated sites and protected and priority species records within a 1km radius of the Site.

2.2 Extended Phase 1 Habitat Survey

The Site was visited by suitably qualified ecologist, Matthew Kirby (Senior Ecologist), on Thursday 19th of January 2023. The survey took approximately 1 hour and 30 minutes, and weather conditions at the time of survey were recorded.

2.2.1 Phase 1 Habitats

The walkover survey of the Site was carried out based primarily on the standard methodology for Phase 1 Habitat Assessment (JNCC, 1993). The survey covered all accessible areas of the Site including the boundaries. Habitats were identified, described, and mapped and a list of plant species was made, with relative abundances recorded using the DAFOR scale (see Appendix 2). Incidental sightings of fauna were recorded and included within the species list for the Site (Appendix 2).

2.2.2 Protected & Priority Species

The survey additionally included an assessment of the potential for protected and priority species to be present on the Site:

Badger – the Site was searched for areas that might be used for foraging and sett building. Incidental foraging signs, tree scratching, paths, latrines, and setts were recorded if found (Harris *et al.*, 1989). The Site itself and land immediately adjacent to the Site and visible from the Site boundaries were included within the survey.

Bats – the Site was searched for suitable trees and natural features for roosting and an assessment was made of potential foraging value. All trees found were assessed from the ground to determine the suitability for roosting bats (BCT, 2016).

Notable mammals – the Site was searched for evidence and suitable habitat for BAP/Priority Species mammals (Cresswell *et al.*, 2012).

Nesting birds – the Site was searched for areas of habitat/structures that could be used for constructing a nest or for foraging and any evidence of current or historic nesting.

Amphibians – any water bodies within the Site and a 250m radius of the Site were scored for their suitability for use by breeding great crested newts using the Habitat Suitability Index (ARG UK, 2010). Terrestrial habitat on the Site was assessed for suitability to support amphibians.

Reptiles – the Site was searched for areas that could be used for insolation, shelter, foraging and breeding (Froglife, 1999).

Invertebrates – the Site was searched for areas of habitat that may be used for shelter, and include food plants and species suitable for egg-laying.

Invasive species – the Site was searched for evidence of species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

All other protected and notable species were scoped out of the survey work due to an absence of records and lack of suitable habitat within the surrounding area.

2.3 Limitations

The survey was undertaken at a suboptimal time of year for botanical identification. However, it was considered that enough plants were identified during the survey to provide an accurate classification of the broad habitat types present.

3 Results

3.1 Desk Study

3.1.1 Designated Sites

The Site had no statutory or non-statutory designation for nature conservation within or directly adjacent to its boundary.

The Site falls into Site of Special Scientific Interest (SSSI) impact risk zones, which are used to assess planning applications for likely impacts on SSSIs/Special Areas of Conservation (SACs)/Special Protection Areas (SPAs) & Ramsar sites (England). A Local Nature Reserve (LNR), Burbage Common and Woods, is located approximately 1.4 km from the Site. The LNR is comprised of woodland and grassland with a large amount of scrubland habitat. The grassland within the LNR is classified as common and unimproved grassland with the woodland containing oak (*Quercus robur*), ash (*Fraxinus excelsior*) and maple being recorded as a semi-natural ancient woodland. Furthering this, Burbage Wood and Aston Firs has soil derived from underlying glacial boulder clay with a semi natural woodland dominated by ash and oak with the ground flora comprised mostly of honeysuckle (*Lonicera periclymenum*) and bramble (*Rubus fruticosus*).

The following non-statutory sites for nature conversation with their distance from the Site are listed below:

- Burbage, Aston Lane green lane hedge (north) (Local Wildlife Site (LWS)) – 57m
- Boundary Beech tree (LWS) – 74m
- Aston Lane Ash trees (LWS) – 81m
- Grassland E of Sherborne Road (LWS) – 300m
- Lash Hill path Willow tree (LWS) – 467m
- Burbage, Lychgate Lane (south) hedge (LWS) – 469m
- Burbage, land east of Lutterworth Road (LWS) – 520m
- Trees of Aston Flamville Road (LWS) – 522m
- Lychgate Lane hedgerow (LWS) – 537m
- Lash Hill path Ash tree (LWS) – 590m
- Workhouse Lane hedgerow 2 (LWS) - 685m
- Burbage, hedgerow (LWS) – 748m
- Cemetery hedgerow (LWS) – 811m
- Pond in an improved grassland (Historic) – 865m
- Sapcote Road hedgerow (LWS) – 867m
- Woodgate path grassland (LWS) – 905m
- Trees at The Coppice, Burbage (LWS) – 927m
- Burbage Workhouse Lane veteran Ash and Field Maple (LWS) – 928m
- Burbage Wood hedgerow (LWS) – 940m
- Aston Lane hedgerow (LWS) – 964m
- Long field hedgerow (LWS) – 969m
- Land at The Coppice/ Woodgate, Burbage (LWS) – 982m

The Site falls within a Nitrate Vulnerable Zone (NVZ) which comprise areas designated as being at risk from agricultural nitrate pollution in accordance with the Nitrate Pollution Prevention Regulations 2015.

3.1.2 *Habitat Connectivity*

The Site was situated at the periphery of the urban setting of Burbage in Hinckley, Leicestershire. Burbage acts as a significant, physical barrier to wider movement and dispersal of some fauna due to the infrastructure present, and lack of mature hedgerows which reduce foraging, sheltering, and commuting/dispersal opportunities for wild- life; however, the residential gardens and trees present can act as suitable habitat and connectivity for some animals such as birds, bats and hedgehogs.

The Site was located on a border between rural land use and a built-up residential area. To the west was a residential area and many landholdings contained mature trees that were well connected, in addition to a playing field, 300m north-west. To the east of the site was an expanse of arable field with some mature and well-connected hedgerows that had gaps in parts. Approximately 42m west of the Site, was a busy road (Church Street/B578). The noise and light disruption from vehicles along this main road could deter some bat species (except possibly for light-tolerant pipistrelle bats and high-flying noctule bats), as well as small and less mobile species from commuting between the Site and the wider landscape.

The hedgerows on Site were found to connect to a mature, well-structured hedgerow towards the east, providing a suitable commuting corridor for a range of species moving throughout the local habitats such as reptiles, amphibians, birds, bats and terrestrial mammals. However, it was noted that majority of the land to the east was pasture and arable fields which appeared to lack further connections, reducing the connectivity in this direction. Larger, more mobile species, such as badger, may still cross large expanses of fields without hedgerow cover; however most other species, including bats, often avoid commuting across open expanses. To the west of the site was a residential built-up area and the likelihood was that any species using the Site or moving through the local landscape would disperse to the east or north towards more suitable habitats.

There was a strip of linear deciduous trees and hedgerow stretching for some 600m eastward which connect to the Site directly adjacent to the red line boundary on the east. Deciduous woodland is a particularly valuable habitat, often supporting a diverse and complex understorey, providing hibernation, sheltering, and foraging opportunities for several species and is likely to increase the density of populations within the locality of the Site. No large pockets of woodland were located in the 1km radius, however, Burbage Common and Woods (LNR) is approximately 1.4 km north from the Site which would be an optimal location for many species. Whilst it was noted many species may use this woodland, many of the surrounding hedgerows were fully mature and had significant gaps, and the immediate surrounding landscape comprised residential housing and infrastructure and more of a barrier the B578 road separates the Site and the LNR; therefore, limiting dispersal opportunities and deterring species from utilising the Site.

Three waterbodies including ponds approximately 920m south of the Site, another approximately 850m north and a pond 260m south west. As well as a small stream off of the River Soar some 600m northeast were identified in the surrounding landscape. A small watercourse such as a stream off a larger watercourse such as the River Soar has the potential to support aquatic species such as grass snakes, otters, water vole and crayfish. It is also likely to support a variety of specialist flora and invertebrates, subsequently attracting a greater diversity of other species. There is potential that any fauna utilising the Site would use these waterbodies as foraging grounds as there is a pond within the site, which is discussed later on in the report, that can be connected via hedgerows to the stream in the north. However, since they are not immediately accessible to the Site, it is less likely for species to make this venture, but it cannot be ruled out at this stage. Furthermore, newts require a network of ponds in order to persist in a given area. Since no other ponds were noted within a 500m radius, except a pond known as 'Horsepool' some 260m southwest of the Site on the other side of the main road, Church street which acts as a barrier to dispersal. There are two ponds within the wider 1km radius of the Site, one approximate 850m north and another 980m south of the Site. The lack of connectivity this decreases the likelihood of newts being present within the Site boundary. The pond on Site was not directly connected by streams and other water courses, decreasing the ability of amphibians, reptiles and mammals that may be utilising isolated ponds to move through the landscape and the Site.

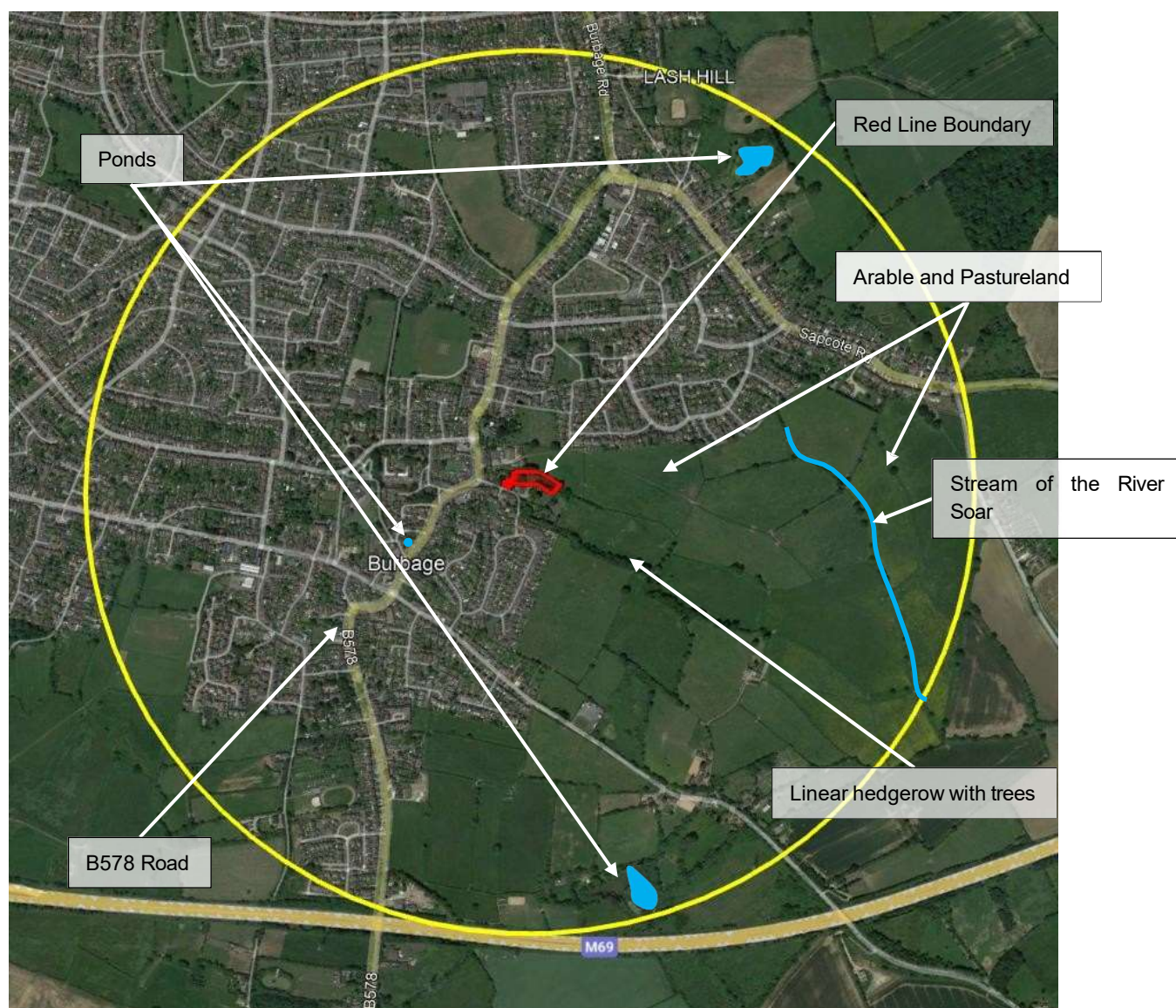


Figure 2: Habitat connectivity features within a 1km radius of the Site

3.2 Protected Species Records

3.2.1 Badger

***** All badger information should be kept confidential and remain out of the public domain*****

The data search returned two records for badger setts with the most recent in 2020 being 935m north of the Site.

3.2.2 Bats

The data search returned a total of 36 bat records within a 1km radius of the Site. This including four Bat (*Chiroptera*) the most recent being in 2020 approximately 700m southwest. Four records of the Brown Long-eared Bat (*Plecotus auritus*) the most recent being in 2020 approximately 1.0km northeast. There were five records of Common Pipistrelle (*Pipistrellus pipistrellus*) with the most recent being in 2020 approximately 1.0km north-east. Four records of Myotis Bat species (*Myotis*) the most recent being in 2020 approximately 1.0km northeast and the closest in 2019 some 0.4km southwest. Seven records of Noctule Bat (*Nyctalus noctula*) the most recent being in 2020

approximately 1.0km northeast and the closest in 2019 some 0.4km southwest. Two records of *Nyctalus* Bat species (*Nyctalus*) the most recent being in 2020 approximately 650m northeast. Two records of Pipistrelle Bat species (*Pipistrellus*) the most recent in 2013 some 750m southwest. Four records of Soprano Pipistrelle (*Pipistrellus pygmaeus*) the most recent in 2020 being some 650m northeast.

3.2.3 Hazel dormouse

The data search returned no records of hazel dormouse.

3.2.4 Otter

The data search returned no records of otters.

3.2.5 Water vole

The data search returned no records of water voles.

3.2.6 Notable mammals

The data search returned twelve records of hedgehog (*Erinaceus europaeus*) the closest being located some 120m south of the site in 2021 and Seven Chinese muntjac (*Muntiacus reevesi*) the most recent in 2020 approximately 800m north of the Site.

3.2.7 Birds

The data search returned 32 records of notable bird species within a 1km radius of the Site, including Skylark (*Alauda arvensis*), House martin (*Delichon urbicum*), Swallow (*Hirundo rustica*), Swift (*Apus apus*), Hawfinch (*Coccothraustes*), Reed bunting (*Emberiza schoeniclus*), Marsh tit (*Poecile palustris*), Turtle dove (*Streptopelia turtur*), Song thrush (*Turdus philomelos*), Ring Ouzel (*Turdus torquatus*), Starling (*Syrnium vulgaris*), House sparrow (*Passer domesticus*), Yellow hammer (*Emberiza citrinella*), Linnet (*Linaria cannabina*), Dunnock (*Prunella modularis*), Bullfinch (*Pyrrhula pyrrhula*), Wren (*Troglodytes troglodytes*), Canada Goose (*Branta canadensis*), Tree sparrow (*Passer montanus*), Cuckoo (*Cuculus canorus*), Lesser redpoll (*Acanthis cabaret*), Spotted Flycatcher (*Muscicapa striata*), Kingfisher (*Alcedo atthis*), Cetti's Warbler (*Cettia cetti*), Peregrine (*Falco peregrinus*), Hobby (*Falco subbuteo*), Brambling (*Fringilla montifringilla*), Red Kite (*Milvus milvus*), Redwing (*Turdus iliacus*), Fieldfare (*Turdus pilaris*), Barn Owl (*Tyto alba*), Greylag Goose (*Anser anser*), Hen Harrier (*Circus cyaneus*).

3.2.8 Amphibians

The data search returned 16 amphibian species records within a 1km radius of the Site. These included: One great-crested newt (*Triturus cristatus*) recorded between 2016 with the closest record being 0.93km from the Site. 11 records of common frog (*Rana temporaria*) most recently in 2020 and two common toad (*Bufo bufo*) all recorded between 2015 at the closest distance of 0.56km from the Site. One record of the smooth newt (*Lissotriton vulgaris*) approximately 730m south of the Site in 2013.

3.2.9 Reptiles

The data search returned three records of grass snake (*Natrix Helvetica*) the closest and most recent record being 830m north of the Site, in 2015.

3.2.10 White clawed crayfish

The data search returned no records of white clawed crayfish in a 1km radius.

3.2.11 Invertebrates

The data search returned 9 records of invertebrate species found within a 1km radius of the Site, including Harlequin Ladybird (*Harmonia axyridis*), Wall (*Lasiommata megera*), Grey Dagger (*Acrionicta psi*), Small Square-spot (*Diarsia rubi*), Figure of Eight (*Diloba caeruleocephala*), Rosy Rustic (*Hydraecia micacea*), Shoulder-striped Wainscot (*Leucania comma*), Blood-vein (*Timandra comae*), Deep-brown Dart (*Aporophyla lutulenta*).

3.2.12 Invasive Species

The data search returned two records of invasive species within a 1km radius of the Site including Curly waterweed (*Lagarosiphon major*) at a distance of 950m north of the Site and Himalayan balsam (*Impatiens glandulifera*) at 140m west of the Site.

3.3 Extended Phase 1 Habitat Survey

3.3.1 Weather

The weather conditions during the Site visit on Thursday 19th January 2023 were as shown in Table 1.

Table 1: Weather conditions during the site visit.

Parameter	Recorded Figure
Temperature	2°C
Cloud cover	20%
Precipitation	0
Wind speed (Beaufort scale)	0: Calm and still

The weather conditions during the site visit on Thursday 31st July 2025 were as shown in Table 2.

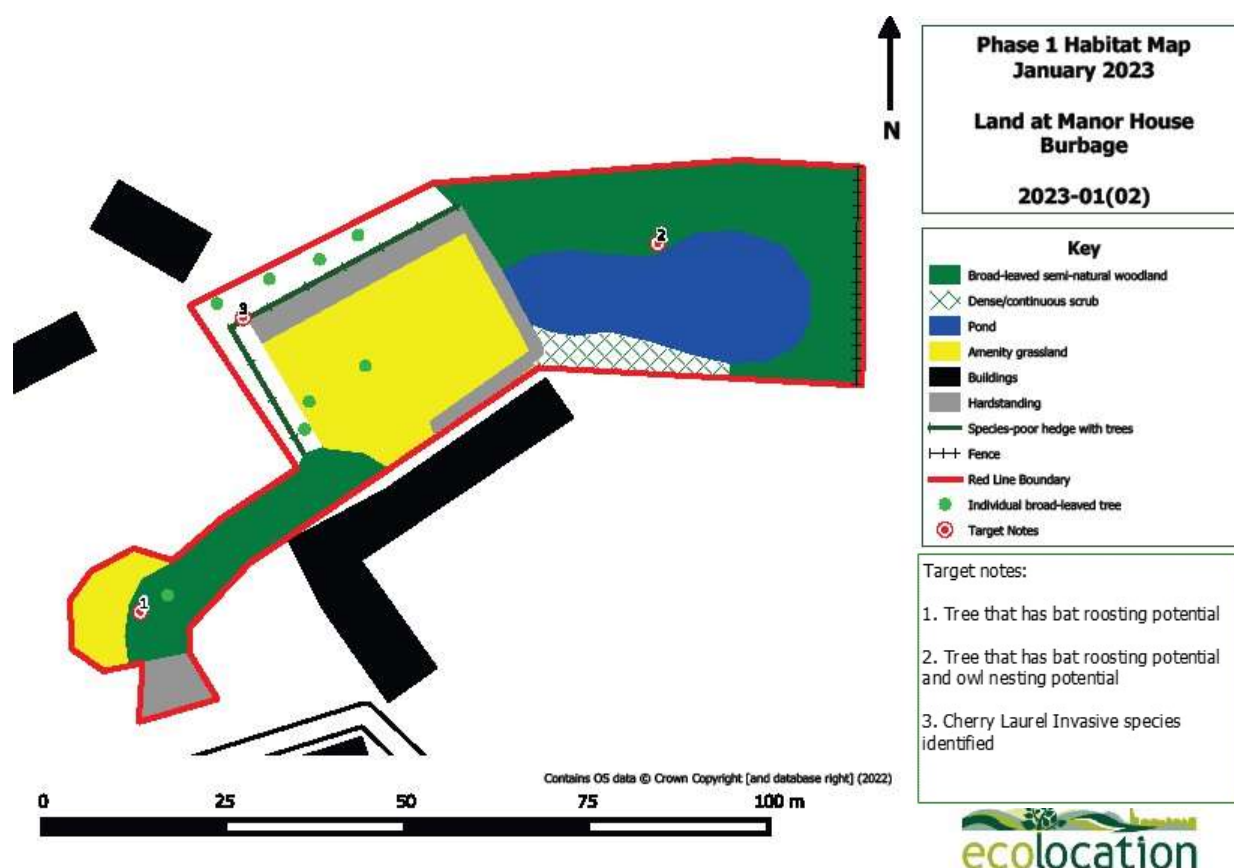
Table 2: Weather conditions during site visit.

Parameter	Recorded Figure
Temperature	20°C
Cloud cover	25%
Precipitation	0
Wind speed (Beaufort scale)	3: Gentle breeze

3.4 Habitats

The Site comprised the garden area of a private residential dwelling. Habitat comprised of a large pond to the east, which was surrounded by woodland and scrub; amenity grassland, hedgerow, hardstanding and scattered trees in the centre of the Site; and a strip of woodland and parcels of hardstanding and amenity grassland to the west of the Site, beyond which was Manor House. Buildings associated with Burbage Hall adjoined the Site to the south. No buildings were present within the Site boundary.

Please see the Phase 1 Habitat Map below:



3.4.1 Standing water

A pond was recorded in the east of the site. A Habitat Suitability Index (HSI) assessment was undertaken (see section 3.5.8 below), which determined that the pond had moderate water quality, 80% shade and the potential for fish to be present. Vegetation surrounding the pond comprised a dense treeline to the north and east, and a more sparse treeline to the south with a more developed scrub layer. The pond adjoined to amenity grassland to the west. The pond on Site is considered to be of local value.



Photograph 1: Pond on Site (east facing)

3.4.2 *Amenity grassland*

The centre of the Site was dominated by an area of amenity grassland, which was maintained at a short sward. A further smaller parcel of amenity grassland was recorded to the west of the site. Due to the highly managed nature of this habitat, the amenity grassland is considered to be of ecological value at the site level only.



Photograph 2: Amenity grassland in the centre of the Site.

3.4.3 *Broadleaved and coniferous woodland*

Parcels of broadleaved woodland and mature treelines were recorded in the east and west of the site. Two trees located to the north of the pond were identified as having potential to support roosting bats, possibly barn owls and other tree cavity nesting bird species, due to the presence of suitable crevices and cavities. A further wooded area (predominantly comprising conifer species) was present to the west of the Site, along the route of the proposed driveway. In this section of the Site, only one tree (adjacent to the red line boundary but outside of the proposed development site), was identified as having a feature to support bats. Areas of woodland on site are considered to be of site to local value.



Photograph 3: Woodland to the north of the pond.



Photograph 4: Woodland to the west of the Site.

3.4.4 Hedgerow & scattered trees

A laurel hedgerow extends around the north and west of the central section of the Site. There are a number of individual trees within the central section of the site also. Trees were assessed for potential bat roosting features, including four beech trees at the northern boundary; no significant features were identified. Hedging on site is considered to be of negligible intrinsic value; however, will have some ecological value as a supporting role for other species. Scattered trees on site are considered to be of Site to local value. [A single tree \(photograph 7\) is proposed to be removed through works involved. This tree was an over mature, Cat C tree without bat or owl potential \(see arb report\).](#)



Photograph 5: Laurel (Laurus) hedging.



Photograph 6: Scattered trees.



Photograph 7: the same tree as in photograph 6, taken during subsequent site visit of 31st July 2025.

3.4.5 Scrub

An area of scrub was identified to the south of the pond, which is considered to be of site value.



Photograph 8: View across to the scrub and tree vegetation bordering the pond to the south.

3.4.6 Hardstanding & buildings

The adjacent buildings to the south of the central section, had some loose tiles, air bricks and missing bricks that could support roosting bats. Although not within the site boundary itself. The buildings are of negligible intrinsic value, however, may have some value in supporting notable species of fauna, which will be discussed in the following sections.

A path extends through the property from the west to the east, this is mostly gravel with some areas having paving slabs. The hard standing surface cover is considered to be of negligible ecological value.



Photograph 9: Adjacent buildings.

3.4.7 Other – boundary – fence & wall

A blockwork wall demarcates the property to the north of the pond and a fence line demarcates the property boundary to the east of the pond. Boundary features are considered to be of negligible intrinsic value.



Photograph 10: Boundary wall.

3.5 Protected & Priority Species

3.5.1 Badger

***** All badger information should be kept confidential and remain out of the public domain*****

There was no evidence of badgers recorded at the Site in the form of latrines, foraging signs or setts. However, habitat is present on site that would be suitable for supporting badger. It is likely that if any setts were present within 30m of the site, then evidence of badgers would have been identified during the site visit.

There was no evidence of badgers recorded during the subsequent site visit in the form of latrines, foraging signs or setts.

3.5.2 Bats

Two trees located around the perimeter of the pond were identified as having potential to support roosting bats. One of the trees exhibited substantial decay within one of its limbs and trunk and is considered to have moderate bat potential, whilst the other tree featured a trunk cavity partially covered with ivy. It was unclear if this feature extended up the trunk due to the ivy obscuring it. This tree would be deemed low roosting potential at most due to the ivy blocking it.



Photograph 11: Tree with bat roost potential to the north of the pond.

In the west of the site, a tree was identified to exhibit a significant callous roll on a low limb which is considered to have potential to support roosting bats. This tree is outside of the redline boundary of the proposed residential development.



Photograph 12: Tree with bat roost potential in the west of the site (outside of the redline boundary).

The adjacent buildings adjacent to the south of the amenity grassland were considered to have moderate to high potential to support roosting bats, exhibiting lifted tiles, and missing bricks and air bricks.



Photograph 13: Roof and wall of adjacent building exhibiting potential roost features.

The linear nature of the woodland and boundary vegetation on site provides commuting corridors for bats to move through the wider landscape. Therefore, it can be assumed that there is high potential for bats to be present using the biological, linear features on site.

No further roosting features were found during the site visit of 31st July 2025.

3.5.3 Hazel dormouse

The data search returned no records of hazel dormouse and no evidence was identified on Site. The potential for Hazel dormouse to be present on site is considered to be low given the absence of notable woodland and hedgerows in the wider area and the absence of optimal species composition and habitat on site. However, their presence cannot be entirely ruled out.

No evidence of hazel dormouse was found during the subsequent survey of 31st July 2025.

3.5.4 Notable mammals

No evidence of notable mammals was identified during the survey. However, the longer boundary vegetation, woodland, scrub, and wood piles identified within the survey boundary, could offer suitable hibernation and shelter opportunities for many small mammal species such as wood mouse (*Apodemus sylvaticus*) and hedgehog (*Erinaceus europaeus*).

No evidence of notable mammals was found during the subsequent survey of 31st July 2025.

3.5.5 Birds

The boundary hedge and trees, and scrub habitat within the Site boundary offer potential nesting and foraging habitat for birds and commuting routes to the surrounding landscape. No nests were identified during the survey.

The buildings adjacent to the Site offered limited potential for nesting birds and no evidence of nesting birds was found during the PEA survey.

A tree adjacent to the north of the pond which also had bat roost potential, was considered to have potential to support breeding barn owl and other cavity nesting bird species by virtue of a large trunk cavity.

No other additional nesting features were found during the survey of 31st July 2025.



Photograph 14: Potential nesting site for barn owl in trunk cavity of tree to the north of the pond.

3.5.6 Amphibians

A pond was identified to the east of the site. Three ponds were noted within a 1km radius of the Site.

The pond on site was subject to a Habitat Suitability Index (HSI) assessment.

The Habitat Suitability Index (HSI) for great crested newts was developed by Oldham *et al.* in 2000 as a measure of habitat suitability in order to estimate presence/absence. A waterbody is assessed based on a geometric mean of ten features, each given a score relating to the current condition of the ponds characteristics and surroundings. Where the overall result is closer to 0 this indicates a more unsuitable habitat and a score closer to 1 represents more optimal habitats.

HSI can be useful in:

- Evaluating the general suitability of a sample of ponds for Great Crested Newt
- Comparing general suitability of ponds across different areas
- Evaluating the suitability of receptor ponds in a proposed mitigation scheme

HSI is limited by being insufficiently precise to allow one to draw conclusions that a pond with a high score will support Great Crested Newts or that a pond with a low score will not do so. The results do not allow conclusions on newt populations to be reached. Therefore, a HSI assessment is not a substitute for further great crested newt surveys.

Table 3: HSI calculation for pond on site

Pond		
Factor	Result	Suitability Index
SI 1- Location	A (optimal)	1
SI 2- Pond area	~600m ²	1
SI 3-Pond drying	Never	0.9
SI 4-Water quality	Moderate	0.67
SI 5-Shade	80%	0.6
SI 6-Fowl	Minor	0.67
SI 7-Fish	Possible	0.67
SI 8-Ponds	1	0.65
SI 9-Terrestrial	Good	1
SI 10-Macrophytes	30%	0.6
$SI1 \times SI2 \times SI3 \times SI4 \times SI5 \times SI6 \times SI7 \times SI8 \times SI9 \times SI10$ $(1 \times 1 \times 0.9 \times 0.67 \times 0.6 \times 0.67 \times 0.67 \times 0.65 \times 1 \times 0.6)^{1/10} = 0.76$ equates to “ good ” habitat suitability for great crested newts		

The habitats around the Site offer potential shelter and commuting routes for amphibians. The woodland and scrub habitat are likely to support invertebrates and in turn provide a foraging source for amphibians. Overall, the habitats on the Site were considered to offer suitable habitat for great crested newts. However, whilst the presence of great crested newts cannot be entirely ruled out at this stage, the potential for their presence is considered to be much reduced by the absence of other ponds within 250m of the site (as per the desk study findings) which decreases the likelihood of newts being present within the Site boundary. The pond on Site was not directly connected by streams and other water courses, further decreasing the likelihood of great crested newts to be on site.

3.5.7 eDNA Sample - 2021

A survey for great crested newts was carried out in June 2021 by Ecolocation which involved collecting twenty water samples from around the pond. 50% of the perimeter was accessible for surveying. No great crested newts, efts or eggs were observed during the survey in 2021. Below is the negative result summary extracted from the 2021 letter report (see Appendix 3 for full statement).

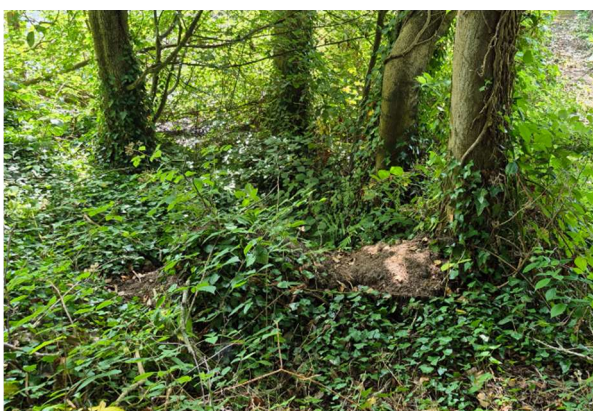
3.5.8 Reptiles

The pond, scrub, woodland, boundary habitat and wood piles identified within the survey boundary, offer suitable shelter to support foraging and commuting reptiles. The site has good habitat connectivity to potential reptile habitat within the wider area with south facing banks for insolation.



Photograph 15: Log pile offering suitable reptile habitat.

During the subsequent survey of 31st July 2025, two grass heaps were found on site, providing potential sheltering opportunities for reptiles.



Photographs 16 & 17: grass heaps on site

3.5.9 Invertebrates

The woodland and scrub habitat on Site, in addition to log piles and other parcels of habitat that were less rigorously maintained around the site comprise suitable habitat capable of supporting a notable assemblage of invertebrate species.

3.5.10 Invasive Species

Cherry laurel is considered to be an invasive species due to its ability to shade out native plants and degrade habitats. Laurel hedging was identified as a boundary feature on site. No other invasive species were identified during the survey.

Cherry laurel was also identified during the site visit of 31st July 2025.

4 Evaluation

4.1 Designated Sites

The proposed works, as a 'minor' planning application comprising the construction of one dwelling, are considered to be small in scale and low in impact. Due to this, and the distance between the site and the designated sites within the wider area, construction phase impacts such as dust, lighting, physical damage, vibration and noise are considered unlikely to affect these sites.

The proposals for the site will result in an increased intensity of use, however, on this scale, this increase is considered unlikely to result in significant increased recreational pressure on designated sites.

4.2 Habitats

The amenity grassland within the Site is considered to be of low intrinsic value, being comprised of common species of low botanical and structural diversity; however, the pond, woodland and scrub habitats are of intrinsic value providing potential habitat to species such as nesting birds and are likely to be of secondary value to species of fauna. The continuous hedgerow and trees around boundaries have an intrinsic value ecologically and should be retained as part of any future redevelopment proposals and protected from physical damage during the construction phase, as should the pond. The linear vegetated features on site are likely to be of value to bats for dispersal purposes into the surrounding area and provide a refuge for species such as reptiles, amphibians and breeding birds.

4.3 Protected & Priority Species

4.3.1 Badger

***** All badger information should be kept confidential and remain out of the public domain*****

No evidence of badger setts has been identified as part of surveys to date; therefore, no further surveys or mitigation is recommended. If signs of digging by large animals are identified on the Site prior to development, an ecologist should be contacted for advice.

No evidence of badger in the form of foraging, droppings or setts was found during the subsequent survey of 31st July 2025. Therefore, no further surveys or mitigation is recommended. If signs of digging by large animals are identified on the Site prior to development, an ecologist should be contacted for advice.

Likelihood of foraging/commuting badger: LOW

4.3.2 Bats

Potential roost features were identified in the form of three trees within/adjacent to the Site boundaries. However, these trees are to be retained as part of the development proposals and are of a sufficient distance from the proposed dwelling as to not be significantly affected during the construction phase; they also exist in an historic location with numerous, likely more attractive, other roosting options nearby in buildings thus limiting the probability of their use as is often the case. There is considered to be potential for boundary vegetation to be used by bats for commuting and foraging purposes. It will therefore be necessary to consider bats as part of what is a low-rise redevelopment proposal by retaining (and supplementing) boundary vegetation and implementing a sensitive lighting scheme across the site (see section 5).

The loss of the tree in photograph 7 due to the planned development should have little impact on any bats that may be using the site for foraging, commuting or sheltering purposes. The tree is over mature and of poor quality with no bat potential. Otherwise, all trees are greater than 10m from, what is tantamount to a single-storey,

development with a flat roof and, as such, no adverse impact on bats is anticipated. The only likely impact ensuing from the development is lighting which would be controlled by BCT/ILP note 08/2023.

Likelihood of roosting bats: LOW

Likelihood of bat foraging/commuting: HIGH

4.3.3 *Hazel dormouse*

Whilst considered to be a low likelihood, the presence of dormice cannot be entirely ruled out. Boundary vegetation should be retained and protected during the proposed works and as with bats, it will therefore be necessary to consider dormice as part of what is a low-rise the redevelopment proposals by retaining (and supplementing) boundary vegetation and implementing a sensitive lighting scheme across the site (see section 5).

Likelihood of hazel dormouse presence: LOW

4.3.4 *Notable mammals*

There is the potential for hedgehog to be present, primarily in boundary vegetation, woodland, and scrub. These habitats should be retained and any areas of long grass/ruderal/scrub vegetation that needs to be removed as part of the proposed works should be subject to precautionary mitigation.

Likelihood of notable mammal presence: MODERATE

4.3.5 *Birds*

Within the perimeter of the Site, habitat offers potential nesting and foraging habitat for birds and commuting routes to the surrounding landscape. No nests were identified during the survey. A tree adjacent to the north of the pond which also had bat roost potential, was considered to have potential to support breeding barn owl and other cavity nesting bird species by virtue of a large trunk cavity and with the data search finding Barn Owl within the 1km radius, this makes the likelihood of nesting birds present to be moderate.

The loss of the tree in photograph 7 due to the planned development should have little impact on any birds that may be using the site for foraging or nesting purposes. The tree is over mature and of poor quality with no owl potential.

Likelihood of nesting bird presence: MODERATE

4.3.6 *Amphibians*

The data search returned 16 amphibian species records within a 1km radius of the Site. These included: One great-crested newt (*Triturus cristatus*) recorded between 2016 with the closest record being 0.93km from the Site. As well as smooth newts, common toad and frogs within the 1km radius. In the surrounding landscape a pond was identified to the north, south and southwest of the site. No other ponds were noted within a 1km radius of the Site. The pond on Site was classified as “good” using the HSI pond classification calculation, however evidence from the 2021 eDNA test for great crested newt identified no evidence of great crested newt DNA within the pond samples (see appendix 3 for summary extract).

The site was subject to pond water mitochondrial DNA sample testing in July 2021 which proved negative for the presence of great crested newt. The landscape within 250m of the pond has remained unchanged since, with no known loss or creation of waterbodies within that range. The closest pre-existing record was 0.93km from the site and all ponds within 1km were separated by significant features, such as highways and urban areas. It is therefore reasonable and proportionate to conclude that the establishment of GCN will not have occurred at the onsite pond in the interim.

Likelihood of amphibian presence: LOW

Likelihood of great crested newt presence: NEGLIGIBLE

4.3.7 Reptiles

The site has good habitat connectivity to potential reptile habitat within the wider area. No evidence of reptiles was found on Site, with the data search returning two records of grass snake within 1km of the Site.

Whilst two grass heaps were found on site, no evidence of reptiles was found during the subsequent survey of 31st July 2025.

Likelihood of reptile presence: LOW

4.3.8 Invertebrates

The data search returned 9 records of invertebrate species found within a 1km radius of the Site, including Harlequin Ladybird (*Harmonia axyridis*), Grey Dagger (*Acrionicta psi*), and Figure of Eight (*Diloba caeruleocephala*). There were no incidental invertebrate sightings recorded during the site visit. Since the site had low botanical diversity and the habitats present were thought to be sub-optimal, it is thought the Site is unlikely to support significant populations of rare, notable, or common invertebrate species. Therefore, the proposed development is not considered to significantly affect the conservation status of any invertebrate species, and no further survey work is recommended. Habitat creation or soft landscaping as part of redevelopment works could provide an opportunity to replace the current habitat with that of higher biodiversity value for invertebrates which could lead to beneficial impacts (see section 5).

Likelihood of notable invertebrate presence: LOW

4.3.9 Invasive Species

The data search returned two records of invasive species within a 1km radius of the Site including Curly waterweed (*Lagarosiphon major*) at a distance of 950m north of the Site and Himalayan balsam (*Impatiens glauca*) at 140m west of the Site. Cherry laurel hedging was identified as a boundary feature on site and is considered an invasive species. No other invasive species were identified during the survey. Therefore, no specific further survey work regarding invasive species is recommended, however hedges provide an important habitat and thus recommendations have been advised (see section 5).

Cherry laurel was still apparent during the site visit of 31st July 2025. No other invasive species were identified.

Likelihood of invasive species presence: HIGH

5 Obligations and Recommendations

5.1 Further surveys

- Further survey work for bats should be undertaken in accordance with BCT, 2016 if any of the trees identified as having bat potential are to be removed or cannot be suitably buffered from development. If any of these trees are to be removed, either a bat activity survey should be undertaken between May and August inclusive, and the result of this survey should be used to inform any subsequent mitigation required for the proposed development of the Site; or a licenced ecologist should conduct a roost inspection on the trees identified as having bat potential prior to the commencement of works to confirm the presence/likely absence of roosting bats. This will help determine the presence/likely absence of any bat roosts, roost type, species and population of bats and access points. In turn, this will be used to inform a detailed bat mitigation scheme for the Site if necessary. Thereafter, a full assessment of the ecological impacts of the proposed development can be made.
- With the exception of the surveys identified above, the need for further survey work has not been identified. Should evidence of any other protected species be discovered during works, works should temporarily be put on hold whilst Ecolocation or the local office of Natural England are contacted for advice on the best way to proceed.

5.2 Recommendations

The National Planning Policy Framework paragraph 179 states that "To protect and enhance biodiversity and geodiversity, planning policies should: ...promote the conservation, restoration, and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations". In order to ensure no net loss of biodiversity in accordance with NPPF & Circular 06/2005, and that precautionary measures are in place, recommendations are made below:

5.2.1 Mitigation

- No lighting should be directed towards the boundaries of the Site, particularly to the west where the woodland is present. This will minimise disturbance and maintain dark corridors for potential use by commuting and foraging bats. Where lighting is essential, such as emergency or security lighting, this should only be active when necessary and cowed to preclude extensive and upward light spillage as set out in the guidelines by the Bat Conservation Trust (BCT) and Institution of Lighting Professionals (BCT and ILP, 2018).
- The mature trees, particularly those highlighted as category A and B on the proposed plans (see Appendix 1) and those identified as having bat potential, should be retained where practicable and protected during works in accordance with BS5837:2012 'Trees in relation to construction' for the purposes of ensuring that potential bird nesting habitat and sheltering habitat for other notable species, as well as potentially valuable connective corridors through the landscape, are maintained.
- Any excavations which will not be left in a tidy backfilled state overnight must be left trimmed, and with a rough-surfaced, 200mm wide board of untreated timber present, set at max. 45° angle from base to top to enable any animals falling-in to escape. In addition to this, any pipes over 120mm in diameter should be capped off at night to prevent animals entering.
- Should non-protected animals such as hedgehog, frog, smooth newt or toad be found during works these should be moved carefully by gloved hand to suitably sheltered area to be left undisturbed by works.
- Any hedge removal should be timed to avoid the bird breeding season, which runs from March to September (inclusive). This is to avoid adverse impacts to any nests present. If it is necessary to carry out- works during the breeding season, then a nesting bird inspection must be carried out by a suitably qualified ecologist prior to works going ahead to ensure that no active nests will be affected. If active nests are found, works would have to be delayed until all chicks have fledged and permanently left the

nest. This is to include the tree with owl nesting potential north of the pond. If works are to proceed during the bird nesting season, noting that barn owls nest all year round, alternative provision for the birds, a minimum of 30 days before works are due to commence, in the hope that they will nest there instead. With the possibility of Barn Owls present on Site a precautionary approach is recommended, assuming nesting birds are present and avoid doing anything that may be classed as disturbance.

- Should evidence of protected species, such as nesting birds, great crested newts or reptiles, be discovered during works, works should temporarily stop while Ecolocation or the local office of Natural England are contacted for advice on the best way to proceed.

5.2.2 Opportunities

- Consideration could be given to creating **log piles** within areas of open green space, SUDS features or along hedgerows to provide suitable habitat for invertebrates and shelter for amphibians, reptiles and small mammals. These should be sited in shady places and the lowest logs should be buried a few centimetres into the soil to keep them damp.
- **Hedgehogs** are a UKBAP Priority Species and have suffered a significant decline in numbers in recent years. With the loss of hedgerow habitat, hedgehogs increasingly rely on gardens and parks. Hedgehogs roam between 1-2km each night during their active season. It is therefore critical that they can access a wide range of gardens. In order to preserve the opportunities for hedgehogs to move freely through any proposed development and take advantage of foraging, it is recommended that if any fences are used within the survey boundary, a hole around 15cm in diameter is left at any point. The access hole can be achieved by digging a hole underneath a fence, leaving a brick or two out of the base of a wall, or cutting a small hole in the base of the fence. Hedgehog fence plates could also be used to ensure these gaps are clearly visible and to prevent them from being blocked.



Eco Hedgehog Hole Fence Plate

- **Nest boxes** for swallows or house sparrow (birds of conservation concern recorded nearby), such as those illustrated below, could be provided on Site to maintain, and enhance the existing breeding possibilities. Such nesting facilities should be sited away from roads, erected on any suitable proposed buildings and facing away from prevailing wind and rain.



RSPB house sparrow terrace



RSPB swallow nest cup

- A small number of **bat boxes**, such as the Schwegler 1FF, for species such as pipistrelle could be erected on retained or new trees or buildings, in order to provide additional opportunities for roosting bats. Boxes should be placed in a south-facing direction between 4 and 5m high. Ecolocation would be happy to offer further advice on this if necessary.



Schwegler 1FF bat box

5.3 Biodiversity Enhancements

The National Planning Policy Framework paragraph 180d states that "...opportunities to improve biodiversity in and around developments should be integrated as part of their design...". Therefore, additional recommendations for biodiversity enhancements across the Site are provided below:

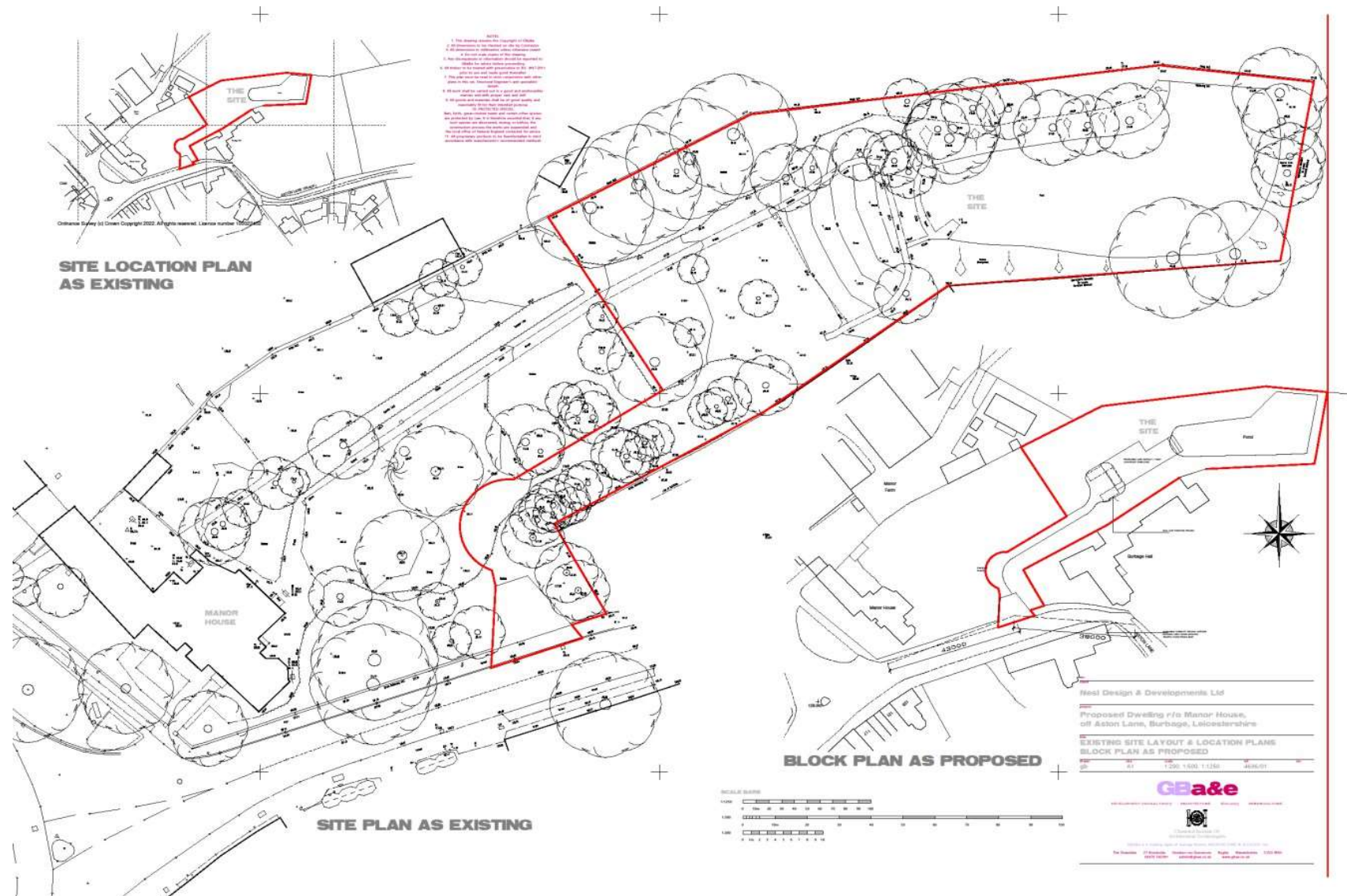
- Any new landscaping proposed should make use of **native species**, preferably of local provenance, which are of higher value to local wildlife. The planting of native species which are appropriate to the landscape character may improve local species diversity as well as increase the potential for use of the Site by wildlife. In particular, new planting along the eastern boundary of the Site, such as a new species-rich hedgerow, would improve the connectivity on this side of the Site, increasing the value to local wildlife.
- Any **waterbodies/SUDS** proposed on Site could provide some ecological gains if designed with biodiversity in mind. Areas which will hold water for longer lengths of time could be designed as wildlife ponds. New ponds could be planted with native aquatic and marginal plants and excavated in such a way as to allow ease of access by faunal species such as small mammals, amphibians, reptiles, and invertebrates.

6 References

- ARG UK, 2010. ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. Amphibians and Reptile Groups of the United Kingdom.
- BCT, 2012. Landscape and Urban Design for Bats and Biodiversity. London: Bat Conservation Trust.
- BCT and ILP, 2018. Bats and Artificial Lighting in the UK – Bats and the Built Environment Series. London: Bat Conservation Trust and Institute of Lighting Professionals.
- Birds of Conservation Concern 5, (Various, 2021).
- BSI, 2012. Trees in Relation to Construction. BS 5837:2012.
- BSI, 2013. Biodiversity- Code of Practice for Planning and Development. BS 42020:2013.
- CIEEM, 2017. Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester, [2nd edition].
- Circular 06/2005 Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System
- Cresswell, W.J., Birks, J., Dean, M., Pacheco, M., Trehella, W.J., Wells, D., and Wray, S., 2012. *UK BAP Mammals: Interim Guidelines for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton.
- Ecolocation eDNA letter report 22nd July 2021 – Negative eDNA sample for great crested newts. Harris, S., Cresswell, P., and Jefferies, D., 1989. Surveying Badgers. Mammal Society.
- Institute of Environmental Assessment, 1995. Guidelines for Baseline Ecological Assessment. London: E & FN Spon.
- JNCC, 1993. Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Peterborough: Joint Nature Conservation Committee.
- JNCC, 2004. Bat Workers Manual. 3rd edition. Leicestershire and Rutland Environmental Record Centre MAGIC, 2022.
- Available from: <http://www.magic.gov.uk/>. National Planning Policy Framework, July 2021.
- Online Atlas of British and Irish Flora. Available from: <https://www.brc.ac.uk/plantatlas/>.
- Rose, F., 2006. The Wildflower Key – How to identify wild flowers trees and shrubs in Britain and Ireland. 2nd edition. London: Warne.
- RSPB. Available from: www.rspb.org.uk.
- Stace, C., 1997. New flora of the British Isles. Cambridge: Cambridge University Press. The Conservation of Habitats and Species Regulations, 2017 (as amended).
- UK BAP Priority Species and Habitats, available at: <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/prioritylist.aspx>.
- Wildlife & Countryside Act, 1981. HMSO (as amended).

Appendix 1 – Proposed Plans 4636/00







Appendix 2 - Species List 01/02/2023

Common Name	Scientific Name	Abundance
DAFOR: D – dominant; A – abundant; F – frequent; O – occasional; R – rare locally		
Trees/Shrubs		
European hornbeam	<i>Carpinus betulus</i>	R
Yew	<i>Taxus baccata</i>	O
Hazel	<i>Corylus</i>	O
European beech	<i>Fagus sylvatica</i>	F
Robinia	<i>Robinia pseudoacacia</i>	O
Common holly	<i>Ilex aquifolium</i>	A
Damson	<i>Prunus domestica</i>	O
Conifer	<i>Coniferae</i>	F
Common Ash	<i>Fraxinus excelsior</i>	A
Elm	<i>ulmus</i>	O
Apple	<i>Malus</i>	O
Tulip	<i>Liriodendron tulipifera</i>	R
Horse Chestnut	<i>Aesculus hippocastanum</i>	O
Oak	<i>Quercus</i>	O
Cotoneaster	<i>Cotoneaster</i>	R
Lime	<i>Tilia</i>	O
Herbs		
Common ivy	<i>Hedera helix</i>	F
Daffodil	<i>Narcissus</i>	O
Bramble	<i>Rubus fruticosus</i>	R
Common nettle	<i>Urtica dioica</i>	O
Clover spp	<i>Trifolium spp</i>	O
Grasses, sedges, and rushes		
Perennial rye grass	<i>Lolium perenne</i>	A
Red Fescue	<i>Festuca rubra</i>	A

Appendix 3 – eDNA summary extract

Ecolocation eDNA letter report 22nd July 2021 – Negative eDNA sample for great crested newts.

'The water samples tested by SureScreen Ltd laboratory returned a negative result for presence of great crested newts. This strongly suggested that great crested newts were not using the standing water within the site during the 2021 breeding season. It was therefore considered unlikely that great crested newts would use the terrestrial habitats on site and no impact to this species was expected through Site alterations. It was considered possible that other common amphibian species such as common toad, common frog and smooth newt may use the pond on the Site and these species may therefore occasionally be found on Site. The full results from the laboratory test are enclosed with this letter. Summary The initial survey of the site during June 2021 found that the site consisted of amenity grassland, introduced shrubs, scrubland, and scattered trees. These habitats offered suitable terrestrial cover and foraging opportunities for amphibians, including great crested newts. The Habitat Suitability Index assessment carried out found that the pond on site had 'Good' suitability to support great crested newts. As a result, further surveys for great crested newts were recommended and undertaken using the environmental DNA test methodology. The laboratory testing of twenty water samples taken from the pond during the great crested newt breeding season revealed no great crested newt DNA. It was therefore concluded that great crested newts were very unlikely to be present on Site and this species would not be affected by any alterations to the Site. No further survey work for this species was recommended. The results of this survey can be considered valid for a period of up to two years, after which an updated survey may be recommended.'

Appendix 4 – Manor House Burbage Arb TIP2

