

Prairie Barn, West Lane, Pirton, Hitchin, SG5 3QP

Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment

April 2026



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1 Introduction

- 1.1 Plumb Associates Ltd was commissioned by Mr Tim Burton to undertake a preliminary ecological appraisal and a preliminary bat roost assessment of an open-fronted cart lodge at Prairie Barn, Pirton in support of a planning permission for a change of use to residential (domestic garage).
- 1.2 The purpose of this report is to ensure that the proposed scheme does not adversely affect any habitats, plants or animals that are legally protected. The report considers:-
- The potential of the site and its environs to support important habitats, protected species or other notable species of wildlife;
 - The conservation value of habitats and species both on the site and its environs;
 - The likely ecological effects of the development;
 - Mitigation measures to be taken to avoid or minimise these effects and identify opportunities to provide enhancement measures to achieve biodiversity net gain.

Methodology

- 1.4 The assessment was carried out in accordance with the Chartered Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (CIEEM 2017).
- 1.5 A desk study was undertaken which included reviewing Magic Maps (the results are summarised in Appendices 1 & 2), the North Herts Council planning webpages and the Pirton Neighbourhood Development Plan 2011 - 2031.
- 1.6 A site survey was undertaken on 27th March 2026 by Steve Plumb MCIEEM CEnv CMLI, an ecologist with 40 years of professional experience. The purpose of the PEA survey was to establish the ecological value of the existing habitats on and adjacent to the site and to assess the site's suitability to support protected species and Species of Principal Conservation Interest.
- 1.7 The habitat features are recorded in accordance with the UK Habitat Classification Version 2.0 User's Manual (Butcher et al 2023).
- 1.8 The results of the survey have also been used to inform consideration regarding the requirements for Biodiversity Net Gain for the scheme.
- 1.9 The application site comprises a building and therefore a Preliminary Bat Roost Assessment (PRA) was undertaken at the same time as the PEA. The PRA was undertaken in accordance with good practice guidance set out in Bat Conservation Trust's *Bat Surveys for Professional Ecologists – Good Practice Guidelines 4th Edition*

(Collins, J. (Ed) 2023) to assess the potential of the building to support roosting bats. The interior as well as the exterior of the building was surveyed. More detail of the methodology is set out in Section 5 below.

Limitations

- 1.10 The survey was carried out in dry weather conditions and there was access to the whole site including the interior of the building. It is considered that there were no significant limitations to the survey.

2 Summary of relevant wildlife legislation

Wildlife and Countryside Act 1981 (as amended)

- 2.1 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive). Under this legislation it is an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 of the Act or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 of the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 of the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection;
- Pick or uproot any wild plant listed under Schedule 8 of the Act.
- Carry out any works or management that might damage or destroy the 'interest' for which a Site of Scientific Interest has been designated.

The Conservation of Habitats and Species Regulations 2017

- 2.2 These regulations transpose Council Directive 92/43/EEC into English law, making it an offence to deliberately capture, kill or disturb wild animals listed under Schedule 2 of the Regulations. It is an offence to damage or destroy a breeding site or resting place of such an animal, even if the animal is not present at the time. These Regulations were consolidated into the Conservation of habitats and Species (Amendment) (EU exit) Regulations 2019) and the Wildlife and Countryside Act 1981(as amended).

Natural Communities & Rural Communities (NERC) Act 2006

- 2.3 The NERC Act places a duty on public bodies to have due regard for biodiversity and nature conservation during the course of their operations.
- 2.4 Section 41 requires the Secretary of State to publish lists of habitats and species that are of principal importance for the conservation of biodiversity in England. Species and habitats on this list are material considerations in planning.

The Protection of Badgers Act 1992

- 2.5 The Protection of Badgers Act 1992 makes it is an offence to kill, injure, take, possess or cruelly mistreat a badger or to interfere with, or obstruct access to a sett.

Biodiversity Net Gain

- 2.6 In England, biodiversity net gain is required under a statutory framework introduced by [Schedule 7A of the Town and Country Planning Act 1990 \(inserted by the Environment Act 2021\)](#). This statutory framework is referred to as 'biodiversity net gain' in Planning Practice Guidance to distinguish it from other or more general biodiversity gains.
- 2.7 Under the statutory framework for biodiversity net gain, [subject to some exceptions](#), every grant of planning permission is deemed to have been granted subject to the condition that the biodiversity gain objective is met ("the biodiversity gain condition"). This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the onsite habitat. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits.



Image 1 – The survey area in context

3 Site description and existing habitat features

- 3.1 The site is located to the north of the main village settlement boundary. The site is within an agricultural landscape dominated by arable farmland and pasture. There are small groups of trees and hedges to the west of site; however most of the surrounding fields have few significant hedges or trees. Image 1 shows the site (outlined in red) in context.
- 3.2 The application site contains Prairie Barn, a former agricultural building which has been converted to a residential dwelling. An open-fronted cart lodge is situated to the west. There is an asphalt drive extending to the front of the cart lodge with a larger agricultural grain store to the south. There are two areas of modified grassland within the application boundary that form the garden and landscape areas serving the residential dwelling.
- 3.3 The building is described in more detail in Section 5.

4.0 Protected species assessment

The site and adjacent areas were assessed for their suitability to support protected species.

Badgers

- 4.1 Badgers (*Meles meles*) are afforded protection under The Protection of Badgers Act 1992, under which it is an offence to kill, injure, take, possess or cruelly mistreat a badger or to interfere with, or obstruct access to a sett.
- 4.2 The cart lodge is within the former farmyard. There are grassland and trees to the north and west but most of these are outside the application area. The proposed change of use of the cart lodge would have no effect on these vegetated areas. No construction works are required and the proposal has no potential to impact any badgers that could be within the surrounding area. No further surveys are required.

Reptiles

- 4.3 Protection is afforded to the Slow-worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*) Adder (*Vipera berus*) and Grass Snake (*Natrix natrix*) under Section 9 (1) and 9 (5) of the Wildlife & Countryside Act 1981 (as amended).
- 4.4 The majority of the site comprises developed land and sealed surfaces. The small areas of modified grassland is maintained as lawn and is regularly cut. It has no potential to support reptiles and no vegetation would be affected by the proposal. No further surveys are required.

Birds

- 4.5 All wild species of breeding birds and their nests are protected under Part 1 of the Wildlife and Countryside Act 1981, as amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000. The species listed on Schedule 1 of the Wildlife and Countryside Act are given additional protection.
- 4.6 No evidence was recorded of birds having used the building for nesting.
- 4.7 It is recommended that prior to works commencing that the cart lodge is surveyed to confirm there are no breeding birds present.

Great Crested Newts

- 4.8 Great Crested Newts (*Triturus cristatus*) are afforded legal protection on a European and national basis, under the Conservation of Species and Habitat Regulations 2010 and the Wildlife and Countryside Act 1981(as amended). These Regulations were consolidated into the Conservation of habitats and Species (Amendment) (EU exit)

Regulations 2019). In addition to it being an offence to kill or injure an animal it is a criminal offence to disturb or obstruct their breeding or resting places.

- 4.9 The site contains no waterbodies and no suitable terrestrial habitat features. No vegetation would be affected by the proposal.
- 4.10 The application site is not suitable for supporting great crested newts. No further surveys are required.

Other protected species

- 4.11 The site does not contain habitat suitable to support Otter, Water Vole, Dormouse or White-clawed Crayfish. No legally protected plant species were recorded.

Invasive species

- 4.12 No invasive species were recorded on site.

5 Preliminary Bat Roost Assessment

- 5.1 All bat species are afforded legal protection on a European and national basis, under the Conservation of Species and Habitat Regulations 2010 and the Wildlife and Countryside Act 1981(as amended). These Regulations were consolidated into the Conservation of habitats and Species (Amendment) (EU exit) Regulations 2019). In addition to it being an offence to kill or injure an animal it is a criminal offence to disturb or obstruct a bat roost.

Scope of the report

- 5.2 This report provides a description of all features suitable for roosting bats and evaluates those features in the context of the site and the surrounding environment. It records any evidence or signs recorded during the survey that establishes the presence of roosting bats. It details any potential constraints to the proposal if roosting bats are present or there are potential roosting features. Where appropriate, the requirements for additional surveys are identified and potential mitigation measures are recommended to ensure compliance with the relevant wildlife legislation.
- 5.3 The aim of the assessment is to determine the presence or evaluate the likelihood of the presence of roosting bats and understand how they could use the buildings. Bats are transient species; therefore the report cannot definitively ascertain the absence of bats but absence of bats prior to or at the time of the survey. As a result a precautionary method statement is included in this report.
- 5.4 The following steps have been taken:
- A desk study has been conducted, using MAGIC maps and Google Earth and records obtained for the project preliminary ecological appraisal.
 - A field survey has been undertaken, which included an external survey and internal inspection.
 - A summary of likely or potential roosting features has been recorded
 - Recommendations for further survey and assessment have been set out if necessary along with advice on licencing requirements and mitigation.
- 5.5 The assessment is informed by guidance set out in the Bat Conservation Trust's *Bat Surveys for Professional Ecologists – Good Practice Guidelines 4th Edition* (Collins, J. (Ed) 2023).

Methodology

Desk study methodology

- 5.6 Prior to undertaking the site survey, a desk-based study was undertaken of the area within 2km of the site. This included reviewing Magic Maps (the results are summarised in Appendices 1 & 2) and Google Earth aerial images.

Site survey methodology

- 5.7 All the features that would be impacted by the proposal were assessed for their suitability for roosting and commuting bats.
- 5.8 A systematic search was made of the exteriors of the building to identify any potential or actual bat access points or roosting places. Evidence of bats including urine splashes, fur-oil staining, scratch marks, droppings on walls, windows and roofs, staining at potential roost exit holes as well as living or dead animals was also sought.
- 5.9 A survey of the interior of the building was carried out to look for potential or actual bat access points or roosting places including evidence of use such as bats, living or dead, droppings, feeding remains, squeaking noises and urine splashes.
- 5.10 The trees within and adjacent to the site were surveyed from ground level to look for features including cracks, crevices, holes, loose bark and dense ivy, that could have potential for roosting bats.

Suitability assessment

- 5.11 All affected features identified during the survey were categorised according to the likelihood of bats being present, in line with the BCT best practice guidelines 4th Edition 2023. Table 1 below summarises the features that influence the likelihood of roosting bats being recorded. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of building that correlate with use by bats

Likelihood of bats being present	Feature of building and its context
Higher	Buildings/structures with features of particular significance for roosting bats e.g., mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g., broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g., river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).

Lower	A small number of possible roost sites/features, used sporadically by more widespread species. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.
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Limitations

- 5.12 This assessment provides a preliminary assessment of the likelihood of bats being present. This is based on the suitability of the habitats on site and the surrounding area, the ecology of bats and their known distribution. There was full access to the interior and exterior of the building. There were no specific limitations to the survey.

Results and evaluation

Desk study results

- 5.13 Three European Protected Species Licences for bats have been issued within 2km of the site. All were within 750m of the site. The closest was issued in 2010 for a roost comprising common pipistrelle and brown long-eared bats approximately 250m west of the site. A licence was issued in 2013 for a roost containing common and soprano pipistrelles, brown long-eared and Natterers approximately 650m southwest. The other was issued in 2010 for a common pipistrelle roost approximately 720m southeast of the site.

Priority Habitats

- 5.14 There are no priority habitats associated with the site.

Landscape

- 5.15 The site is located north of the main village settlement in a farmed landscape dominated by arable fields. There are hedges and tree lines to the west of the site but there is limited connectivity with good quality bat habitat.

Survey results

1

The cart lodge is currently open-fronted with sealed driveway to the front of the building.



2

There is short, species-poor modified grassland to the rear of the building. This will be unaffected by the proposal.



3

The cart lodge is adjacent to the converted barn which is now a residential dwelling. The access is fully surfaced. The small area of modified grassland would be unaffected by the proposal.



4

The side and rear walls of the cart lodge comprise unlined timber weatherboarding.



5

The building frame is constructed from concrete beams. The roof is unlined corrugated cement fibre sheets.



6 Early mature conifers in adjoining property.	
7 Trees and hedgerow adjacent to the property.	

Roost assessment conclusions

- 5.16 The site is located within intensively managed farmland with relatively few features suitable for roosting, commuting or foraging bats. The trees and hedgerow to the west of the cart lodge (Photos 6 & 7) are outside the application boundary and would be unaffected by the proposal. The trees closest to the site are in good condition and did not contain features suitable for roosting bats. It will be important however to ensure that there is no light spill over the boundary trees from any exterior lighting.
- 5.17 The cart lodge is open-fronted. The three walls are all modern timber weatherboarding in good repair. The weatherboarding is unlined. The concrete

trusses and beams and cement-fibre roofing sheets are unsuitable for roosting bats. There are no roof void or other features that provide dark, sheltered areas suitable for roosting bats.

- 5.18 It is considered that the cart lodge has negligible potential for supporting roosting bats. No further surveys are required.

6 Discussion of Results

- 6.1 A desk study was undertaken which included reviewing Magic Maps (the results are summarised in Appendices 1 & 2), the North Herts Council planning webpages and the Pirton Neighbourhood Development Plan 2011 - 2031.
- 6.2 There are no statutory designated sites within 1km of the site.
- 6.3 There are small, isolated areas of priority habitat within 1km of the site. The proposal would not have any effect on any priority habitats.
- 6.4 The application site contains only small patches of modified grassland, none of which would be affected by the proposal. It contains no features suitable for supporting protected species. The cart lodge could be used by nesting birds although no evidence of nesting was recorded. It has at most negligible potential for supporting roosting bats.
- 6.5 No further surveys are required.

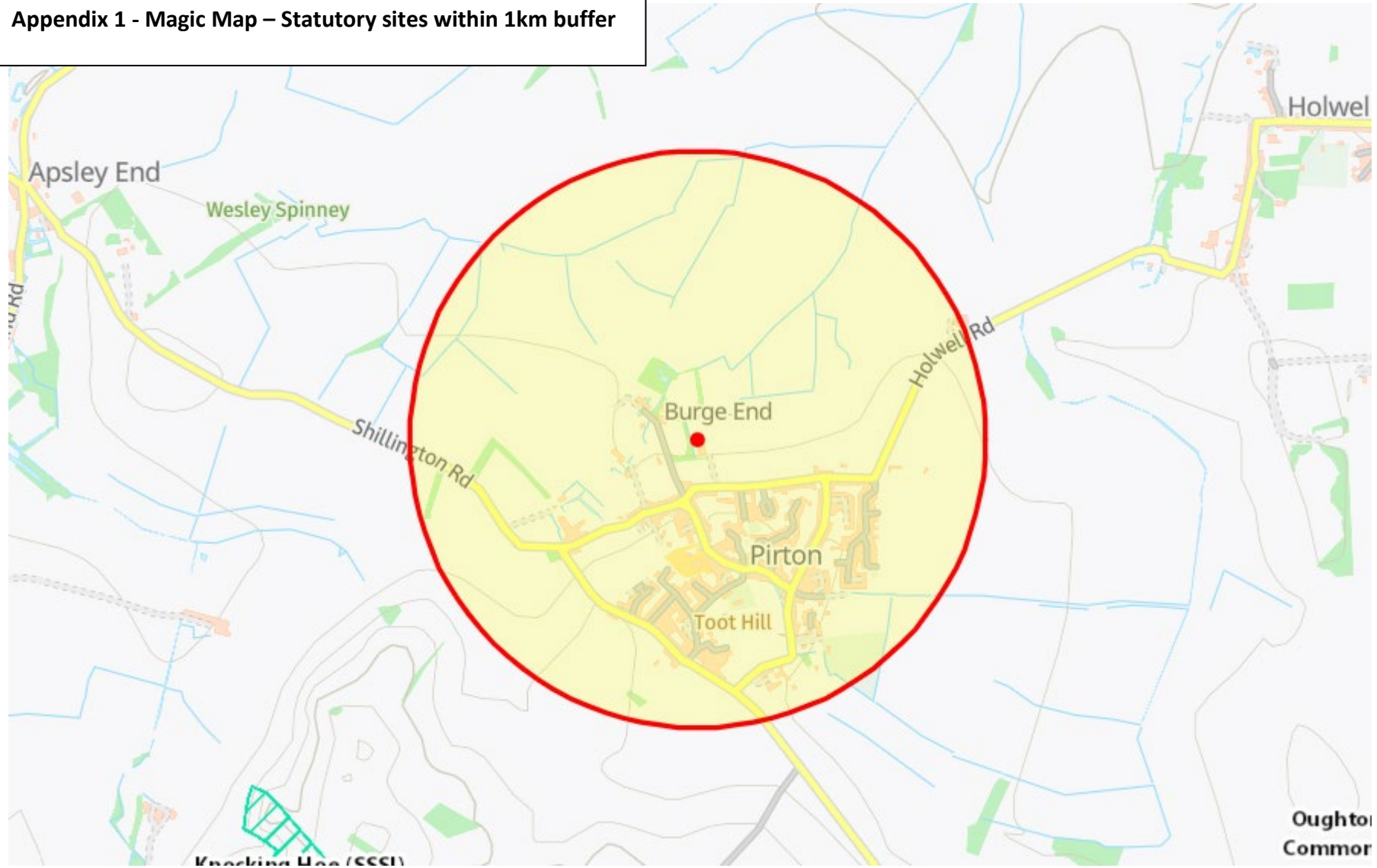
7 Biodiversity Net Gain

- 7.1 The proposal is subject to mandatory biodiversity net gain. The survey however confirmed that the site meets the de minimis exemption criteria
- It will result in less than 25 sqm of non-priority habitat loss
 - It will not result in the loss of any linear habitats
 - It will not affect any Priority Habitat
- 7.2 The NPPF 2024 paragraph 187d states that schemes should contribute to and enhance the natural environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.
- 7.3 The proposal relates to the change of use of an existing building and therefore it offers limited opportunity for providing biodiversity enhancements; however, there would be potential to provide bat and bird boxes on the cart lodge. The details of these can be secured by condition.

8 Conclusions

- 8.1 The proposal is seeking permission for the change of use of an existing open fronted cart lodge to residential (domestic garage). The building is within a former farmyard adjacent to a converted barn which is now a residential dwelling.
- 8.2 The site is considered to have at most negligible potential for supporting protected or important species.
- 8.3 The scheme meets the BNG de minimis exemption criteria due to the absence of any habitat. Opportunities for biodiversity enhancement are limited; however bat and bird boxes can be installed on the cart lodge.

Appendix 1 - Magic Map – Statutory sites within 1km buffer



**Appendix 2 - Magic Map – Priority habitats and protected
species licences within 1km buffer**

