



**Land at Wayside
12 Chittoe Heath
Bromham
Wiltshire
SN15 2EH**

Ecological Assessment

Luscinia Ecology
On behalf of
Mr. and Mrs. C J Seed



Document Properties

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Chapter 1: Summary

- 1.1 A planning application for the demolition of six buildings and replacement with six residential units with associated access and landscaping at Land at Wayside, 12 Chittoe Heath, Bromham, Wiltshire, SN15 2EH will be submitted soon.
- 1.2 This report sets out an Ecological Assessment of the Proposed Development at the Site.
- 1.3 A data search and ecological surveys have been completed to determine the Proposed Development's impact, inform the Proposed Development's iterative design, (including implementation of the Mitigation Hierarchy), and to ensure the required ecological mitigation and compensation is embedded into the Proposed Development's design, or delivered via suitably worded planning conditions.
- 1.4 The Proposed Development avoided impacts on ecology and biodiversity as the Site comprises a previously developed area of poor-quality or replaceable habitats. Features of ecological value will be retained. The on-site and adjacent woodland will be retained and protected. A 10m landscape buffer will be in place between the woodland and the construction works. Three trees and all native hedgerows are to be retained by the Proposed Development.
- 1.5 New landscaping is proposed, including native tree and hedgerow planting. New garden lawns will be seeded with a species-rich mow-tolerant seed mix. The overall impact on habitats from the Proposed Development will be at least neutral.
- 1.6 The ecological impacts, and associated mitigation and compensation, associated with the Proposed Development is as follows:
 - A Bat Mitigation licence will be required
 - A planning condition for a Soft Landscaping Plan (or similar)
 - Four compensatory Vivara pro WoodStone 32mm bird nest boxes
 - The implementation of precautionary measures at construction to protect bat flight-paths and foraging habitat, nesting birds, and hedgehogs.
- 1.7 The following enhancements will be provided within the Site:
 - Three Schwegler 1FR bat boxes
 - Three Schwegler 1MR (or similar Vivara Woodstone alternative) bird boxes
 - Hedgehog highways through new fencing
- 1.8 The Applicant is aware of, and has committed to, all the mitigation, compensation, and enhancement measures set out within this report. Based on the results from the survey, context of the Site, and overall low ecological importance of the Site, this report is valid for a period of 18 months (i.e., the 07/07/2026).



Chapter 2: Introduction

- 2.1 A planning application for the demolition of six buildings and replacement with six residential units with associated access and landscaping at Land at Wayside, 12 Chittoe Heath, Bromham, Wiltshire, SN15 2EH will be submitted soon. This report sets out an Ecological Assessment of the Proposed Development at the Site.

Site Description

- 2.2 The Site consisted of existing residential units, grassland, and individual trees (referred to as 'the Site' throughout this report). There were four wood cabins, one mobile home, and a stable block within the Site. The Site is approximately 0.45ha in size and located at National Grid Reference: ST 96796 66736. The Site is accessed from Chittoe Heath to the south. The Site is immediately surrounded by existing areas of residential development to the west, woodland to the north, and horse paddocks to the east and south (**Figure 1**). The wider landscape includes scattered built development, woodland, and farmland.



Figure 1: Aerial image – Site boundary in red line¹

Proposed Development

- 2.3 The report supports the planning application for the demolition of five residential units and a stable block and replacement with six residential units with associated access and landscaping (referred to as the 'Proposed Development' throughout this report). The Proposed Development will be accessed from Chittoe Heath to the south. The

¹ Image used under licence (©2024 Google): Accessed: 26/02/2025.



Proposed Development will result in the removal of the habitats within the Site and replacement with buildings, hardstanding, open space, and gardens. **Figure 2** shows the Proposed Development.



Figure 2: The Proposed Development

Purpose of this report

2.4 The purpose of this Ecological Assessment (EA) is to provide sufficient information for the Local Planning Authority to fully assess and understand the ecological outcomes of the Proposed Development. The key objectives of this EA are to:

- Outline the planning, legal, and landscape context of the Site.
- Ascertain the ecological importance of the Site by identifying and assessing the main habitats and plant communities within the Site and determining the presence/likely absence of protected species within the Site.
- Characterise and assess the ecological impacts/likely ecological impacts of the Proposed Development on the ecological importance of the Site.
- Follow the Mitigation Hierarchy to:
 - Demonstrate how the design of the Proposed Development has been shaped and revised since inception to minimise ecological impacts/likely ecological impacts (avoidance).
 - Demonstrate the Proposed Development's commitment to mitigation, compensation, offsetting, and enhancement in relation to protected and priority habitats and protected, priority and notable species.



- Outline the requirements for future monitoring of ecological receptors, impacted/likely impacted by the Proposed Development.



Chapter 3: Method

- 3.1 This report was written with regard to the CIEEM Guidelines on: Ecological Report Writing², Preliminary Ecological Appraisal³, and Ecological Impact Assessment⁴, as well as the British Standard on the Biodiversity Code of Practice for Planning and Development Biodiversity⁵ and Writing Effective Ecological Reports⁶.

Zone of Influence

- 3.2 The ecological impacts / likely ecological impacts of the Proposed Development will be largely confined to the construction zone within the Site itself and would include the loss, degradation, and fragmentation of habitats, along with ecological impacts (e.g., killing and injury) on protected, priority and notable species, including the loss of ecological functions such as (commuting, hibernation, breeding opportunities). In addition, consideration has been given to the following potential impacts, which may spread beyond the Site:
- Disruption to species and habitats within receiving range of dust, light, noise and pollution during demolition, construction, and occupation of the Proposed Development.
 - Disturbance to habitats/species within walking/driving distance of the new residents of the Proposed Development once the Proposed Development is completed.
- 3.3 The surveys of the Site and search buffers used within the data search are sufficient to capture the full extent of the Zone of Influence (Zol) of the Proposed Development.

² CIEEM (2015). *Guidelines on Ecological Report Writing*. Chartered Institute for Ecology and Environmental Management, Winchester.

³ CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal. 2nd Edition*. Chartered Institute for Ecology and Environmental Management, Winchester.

⁴ CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, and Coastal and Marine*. Chartered Institute for Ecology and Environmental Management, Winchester.

⁵ BSI (2013). BS 42020:2013: *Biodiversity: Code of Practice for Planning and Development*. British Standards Institution, Bristol.

⁶ Dean M. (2021). *Writing Effective Ecological Reports: A Guide to Principles and Practice*. Pelagic Publishing, Exeter.



Data Search

3.4 A review of existing ecological knowledge of the Site and its surrounding area was undertaken on 13/03/2025. The data search included the following:

- A 5km radius around the Site for statutory designated nature conservation sites⁷.
- A 1km radius around the Site for granted European Protected Species Licences (EPSL), great crested newt class survey licence returns, and great crested newt pond surveys 2017 - 2019⁷,
- A 1km data search from Wiltshire and Swindon Biological Records Centre (WSBRC) for protected and notable species and non-statutory sites⁸.
- A 1km review of the habitats within the local landscape, habitat designations, and their suitability to support protected and notable species using aerial imagery⁹.

Field Surveys

3.5 The following surveys were undertaken at the Site:

- Extended UK Habitat Classification Survey¹⁰
- Bats: Preliminary Roost Assessment (PRA)¹¹
- Bats: Ground Level Tree Assessment (GLTA)¹¹
- Bats: Emergence surveys¹¹ (19/05/25, 06/06/25, and 30/06/25; Greg Nightingale, Mungo Nash, Jenn Senft, Mel Granato, and Natalie Nutland-Bowell)
- Consideration of suitability for protected and notable species
- Incidental observations (All dates on Site)

3.6 The initial site visit was completed on 07/01/2025 by Jenn Senft and Greg Nightingale. Subsequent survey dates are listed above. A detailed method for each of the surveys listed above is presented within that **Appendix A**.

Assessing Ecological Importance

3.7 The assessment of the importance of sites, habitats and species are made in line with good practice guidelines⁴. These guidelines provide consistency in the approach to evaluating the importance of the ecological features within a site and the effects or impacts the Proposed Development will have on them.

3.8 Firstly, the Site's habitats and species are assessed using a framework which assigns a level of geographical importance to ecological features. This framework incorporates

⁷ Multi-Agency Geographic Information for the Countryside (MAGIC) maps For England and Wales. Available online at: <https://magic.defra.gov.uk/home.htm>

⁸ Wiltshire and Swindon Biological Records Centre (WSBRC), received 03/01/2025.

⁹ Google Earth. Available online at: <https://earth.google.com/web/>

¹⁰ UKHab Ltd (2023). *UK Habitat Classification Version 2.0*. UKHab Ltd, Stockport.

¹¹ Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)*. The Bat Conservation Trust, London.



a wide range of legislation and governmental guidance in assessing each feature's importance.

- 3.9 Next, the effects/likely effects of the Proposed Development are predicted, considering different stages and activities within the development process. These effects/likely effects are then assessed for their significance, based upon the importance of the Site, habitat or species being assessed. The assessment of the significance of an effect/likely effect is considered before and after the proposed mitigation to give an overall indication of significance.
- 3.10 The importance of specific ecological receptors (sites, habitats, or species) is assigned according to their level of importance using the following terms:
- International
 - National
 - Regional
 - County
 - Local
 - Site

Assessing Ecological Significance

- 3.11 The following factors are considered when assessing the significance of ecological impacts and effects: extent, magnitude, duration, reversibility, timing and frequency and cumulative effects.
- 3.12 An effect is considered significant if it either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific (e.g., for a designated site) or broad (e.g., national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local. Non-significant effects (referred to as 'negligible') are those changes which do not cause an effect (adverse or positive) on the conservation objectives for 'important ecological features' or for biodiversity in general.
- 3.13 Significant ecological effects are qualified with reference to an appropriate geographic scale. However, the scale of significance of an effect may not be the same as the geographic context in which the feature is considered important.
- 3.14 In determining if an effect is ecologically significant, the following is considered:
- For designated sites, the effect of the Proposed Development on the conservation objectives of the designated site and the conservation status of species or habitats for which the Site is designated is assessed.
 - For ecosystems, the effect of the Proposed Development on ecosystem structure and function is assessed.



- For habitats and species, the effect of the Proposed Development on the conservation status is assessed as well as the effects of impacts on individual habitats and species.

Contributor information

3.15 The surveys and assessments were designed and led by Jenn Senft and Greg Nightingale. The EA was written by Jenn Senft. The technical review of this assessment was undertaken by Greg Nightingale. **Table 1** outlines the relevant experience of the assessment contributors.

Contributor	Experience
Greg Nightingale BSc (Hons) MCIEEM	Greg is the Director of Luscinia Ecology (A CIEEM Registered Practice) with over 11 years of experience in ecology and environmental management in the private sector. Greg has worked extensively within the planning system, undertaking protected species surveys, habitat surveys and Ecological Impact Assessments as well as providing advice on habitat management and mitigation and enhancement design. He has a comprehensive understanding of environmental policy and the current and emerging challenges facing the environment and how these challenges are managed within the planning sector. Through an understanding of good practice, planning policy, the ecology of protected habitats and species, and environmental impact pathways, Greg provides robust ecological advice that is cognisant of wider planning and legal requirements. He is experienced in UKHabs Classification system and the Phase 1 Habitat classification. He has designed, undertaken, and reported on numerous habitat and protected species surveys (including badger surveys, bat emergence/re-entry surveys, bat activity surveys, and hazel dormouse surveys), including bespoke survey design and the implementation of numerous protected species mitigation strategies. Greg is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He holds a level two Bat Licence, a level one Great Crested Newt Licence, and a NPTC (CS38) Tree Climbing and Aerial Rescue qualification. In addition, he has been named on badger mitigation licences and has completed courses in barn owls, botany, breeding birds, and hazel dormouse.



Mungo Nash BSc (Hons) ACIEEM	Mungo Nash joined Luscinia Ecology in April 2025 as the Biodiversity Net Gain (BNG) Lead. He has been actively involved in BNG since 2019 and previously worked at Natural England, where he advised Defra on the development of the Statutory Biodiversity Metric and its practical application within the policy framework of the Environment Act. As a Senior Specialist, Mungo collaborated across government departments and with key stakeholders to support a unified, strategic approach to BNG delivery in England. He brings expert-level knowledge of the subject and has delivered training on the Biodiversity Metric to organisations including the Planning Inspectorate, Natural England, the Forestry Commission, and the Environment Agency. With over 15 years of experience in the environmental sector, Mungo has built a broad skill set in plant and habitat identification, as well as habitat management. His background includes five years in private consultancy, where he focused on supporting major housing and commercial developments across the South East.
Jenn Senft BSc (Hons) Qualifying member of CIEEM	Jenn is a Consultant Ecologist at Luscinia Ecology, having worked with the company for over a year. Jenn has practical experience with bat, reptile and great crested newt surveys, the UK Habitat classification system, report writing, and wildlife legislation. She has a deep understanding of current and emerging challenges facing the environment, the impacts this has on people, and how these may be mitigated to suit both the client and the planet. With this knowledge and experience, Jenn provides robust ecological advice, ensuring clients are kept in the loop at every stage of the project. Jenn is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). She is currently working towards gaining level 2 bat licence, and level 1 great crested newt licence. She has also completed online and in person training courses with The Species Recovery Trust, BatAbility, the Field Studies Council, and CIEEM to expand her knowledge in botany, bats, badgers, otters, and tracks and signs.
Mel Granato BSc (Hons) MSc Qualifying member of CIEEM	Mel is an Ecologist at Luscinia Ecology, having graduated in 2023 with a degree in Conservation Ecology. Mel has two publications, one of which can be found in the Journal Insects (Granato <i>et al.</i>, 2024), and one in the Journal World (Granato <i>et al.</i>, 2025). Mel has practical experience and theoretical knowledge with bat, reptile, great crested newt and breeding bird surveys, technical report writing, UK Hab classification systems, biodiversity net gain metrics and QGIS. Mel is a Qualifying Member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Mel is actively working towards gaining a level 2 bat licence and level 1 great crested newt licence.
Natalie Nutland-Bowell BSc (Hons)	Nat is an Assistant Ecologist at Luscinia Ecology, having graduated in 2023 with a degree in Environmental Science. This is her second season in ecological consultancy. She has practical experience and theoretical knowledge with bat, reptile, great crested newt surveys.

Table 1: Contributor experience



Assumptions, Clarifications, and Limitations

Assumptions

3.16 None.

Clarifications

3.17 Trees had been recently removed from the Site. The loss of these trees is reported in detail within the Biodiversity Statement and Biodiversity Gain Plan¹².

Limitations

3.18 The limitations associated with the survey work, data analysis, and reporting are set out within **Table 2**, along with an analysis of the effect of the limitation on the validity and robustness of the decision making within this report.

Limitation	Analysis of effect
The desk study does not produce a comprehensive list of plants and animals as this is limited by factors that influence their presence (e.g., activity and dormancy periods), along with varied recording effort across the landscape.	The species records of the desk study reflect survey effort and therefore the data returned from each request is variable across the UK. As a result, the data search data has not been used to rule out the presence of protected species and habitats within and adjacent to the Site.
Measurements within this report are approximate – The mapping of baseline habitats and Proposed Development plans has relied upon the georeferencing of plans provided by the client.	The mapping of baseline habitats and Proposed Development plans has relied upon the georeferencing of plans provided by the project team. The process of georeferencing and mapping of polygon habitats at a fine scale may result in minor deviations from actual and proposed measurements. This has been controlled for via the use of advanced digitising tools and given the scale of the proposals any deviations in spatial areas or point locations are sufficiently minor to be inconsequential and will be subsumed within precautionary rounding.

¹² Luscinia Ecology (2025). *Land at Wayside, 12 Chittoe Heath, Bromham, Wiltshire, SN15 2EH: Biodiversity Statement & Biodiversity Gain Plan: LUS24231 BS&BGP Submission*. Luscinia Ecology, Bristol.



The survey was undertaken in winter, which is outside the optimum survey season for botanical surveys.	Although the survey was undertaken in winter, the evaluation and habitat descriptions (and hence the impacts and their significance), are considered to be accurate for the following reasons: • Given the type of vegetation and habitats present, the valuation of the intrinsic interest is considered unlikely to change. • Access was possible to all areas of the Site and the vegetation was clearly visible. • A grassland quadrat survey was subsequently undertaken on the paddock grassland during the optimum botanical survey period. Overall, the effect on the evaluation and habitat descriptions (and hence the impacts and their significance) was considered negligible.
The interior of all structures (B1 – B5) were not accessible, as they were privately occupied.	The exterior assessment of B1 and B5 confirmed there were no access points or suitability for roosting bats. Interior access is not required for these structures. Two bat emergence surveys will be conducted on B2 and B4 to identify the presence or likely absence of roosts, and to characterise any roosts identified. B3 supports an active bat roost. A bat was recorded between the weather boarding with no access to the interior of the structure. Three bat emergence surveys will be conducted on B3 to characterise the roost and identify the presence or likely absence of further roosts.

Table 2: Summary of limitations and their effect



Chapter 4: Results and Assessment

Data Search

The Local Landscape Context

- 4.1 The Site is immediately surrounded by existing areas of residential development to the west, woodland to the north, and farmland to the east and south. The wider landscape includes scattered built development, woodland, and farmland. The key green infrastructure within the local landscape includes woodland, scrub, and a hedgerow network. This is directly connected to the Site along the northern boundary. The key blue infrastructure is limited but includes scattered ponds separated by roads, and an unnamed lake approximately 1km west of the Site.

Statutory Designated Sites

- 4.2 Statutory designated sites are the most significant ecological receptors and include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites, which are all of **International Importance**, and Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs), which are of **National Importance**.
- 4.3 Local Nature Reserves (LNRs) are notified under Section 21 of the National Parks and Access to the Countryside Act 1949 (as amended) by local authorities and are of **Local Importance**. They are intended for public appreciation and enjoyment of wildlife. The LNR designation does not afford special protection; however, LNRs are protected under legislation and planning policy.
- 4.4 The statutory designated sites within returned by the desk study are shown in **Table 3**.

Site Name	Reason for designation	Distance and direction
Spye Park SSSI	The site is designated for supporting broadleaved mixed woodland. This includes parkland, grassland, woodland mosaic, and wood pasture.	1.1km west
Roundway Down and Covert SSSI	The site is designated for supporting calcareous grassland and broadleaved mixed woodland. The area hosts an important butterfly population.	2.6km east
King's Play Hill SSSI	The site is designate for supporting calcareous grassland.	3.5km east

Table 3: Summary of statutory designated sites returned by the desk study

Non-Statutory Designated Sites

- 4.5 In Wiltshire, Local Wildlife Sites (LWSs) and Protected Road Verges (PRVs) are designated. LWSs and PRVs are of **Local Importance**. The non-statutory designated sites within returned by the desk study are shown in **Table 4**.



Site Name	Reason for designation	Distance and direction
Chittoe Heath Verge PRV	The site supports large trees with grassland.	300m west
Spye Park Heath LWS	The site supports a mosaic of lowland heath, acid grassland and bracken on a level greensand site. The area was formerly used as a nursery plantation for Corsican pine <i>Pinus nigra</i> .	710m north-west
Wyatt's Wood and the Coppice LWS	The site supports wet woodland on a north-west facing slope.	760m south
Spye Park Woodland LWS	The site supports a mixture of semi-natural and plantation woodland on greensand. There are some low-lying wet areas and remnant pasture woodland, including old, pollarded trees.	780m west
St. Edith's Leigh Wood LWS	The site supports a small stand of ancient semi-natural broadleaved woodland.	970m north

Table 4: Summary of non-statutory designated sites returned by the desk study

Protected and Notable Species

- 4.6 The relevant protected species records from the data search are incorporated into the Protected and Notable Species section, below.

Habitat Survey

- 4.7 The Site supported the following habitats:

- **Grassland:** Modified grassland
- **Hedgerow:** Native hedgerow
- **Hedgerow:** Non-native and ornamental hedgerow
- **Individual trees:** Urban tree
- **Urban:** Artificial unsealed surface
- **Urban:** Developed land; sealed surface
- **Urban:** Introduced shrub
- **Urban:** Vegetated garden
- **Woodland and forest:** Lowland mixed deciduous woodland

- 4.8 All the habitats and features described are shown on the Extended UK Habitat Classification Plan at **Appendix B**.

Grassland: Modified grassland

- 4.9 There was an area of other neutral grassland within the Site (**Photograph 1**) in active use as a horse paddock. The ground cover and sward height were consistent. There



was evidence of poaching from horses. There were fewer than six species per square metre present. The species recorded within the area included: annual meadow grass *Poa annua*, broadleaved dock *Rumex obtusifolius*, broadleaved plantain *Plantago major*, burdock *Arctium spp.*, cleavers *Galium aparine*, cocksfoot *Dactylis glomerata*, creeping buttercup *Ranunculus repens*, crested dog's tail *Cynosurus cristatus*, daisy, dandelion, dove's foot cranesbill *Geranium molle*, false brome *Brachypodium sylvaticum*, false oat grass *Arrhenatherum elatius*, meadow buttercup *Ranunculus acris*, milk thistle *Silybum marianum*, ox-eye daisy *Leucanthemum vulgare*, perennial rye grass *Lolium perenne*, red clover *Trifolium pratense*, ribwort plantain *Plantago lanceolata*, smooth meadow grass *Poa pratensis*, spear thistle *Cirsium vulgare*, vetch *Vicia spp.*, white clover *Trifolium repens* and Yorkshire fog *Holcus lanatus*.

4.10 The **modified grassland** was of **Negligible Importance**.



Photograph 1. Modified grassland

Hedgerow: Native hedgerow

4.11 There was one native hedgerow within the Site (**Photograph 2**).

4.12 **H1** was located along the western Site boundary and was comprised exclusively of privet *Ligustrum vulgare*. The hedge was approximately 40m in length, 1.7m in height and 1.2m in width. There was a large gap between the base of the canopy and the ground flora. The ground flora was dominated by ivy *Hedera helix*, with occasional cleavers.

4.13 The **native hedgerow** was of **Site Importance**.





Photograph 2. Privet hedge

Hedgerow: Non-native and ornamental hedgerow

- 4.14 There was one non-native hedgerow within the Site (**Photograph 3**), located along the eastern Site boundary. This was comprised exclusively of a cypress *Cupressus spp.* species. The hedge was maintained at approximately 2m in height and 2m in width. There hedge is disrupted at the south-eastern corner by the stable block.
- 4.15 The **non-native hedgerow** was of **Negligible Importance**.





Photograph 3. Non-native hedgerow

Individual trees: Urban tree

- 4.16 There were 11 individual trees within the Site (**Photographs 4 – 9**). All individual trees within the Site appeared to be in good health with no cracks, breaks, holes, or missing limbs.
- 4.17 There were two trees along the gravel track in the south of the Site (**T02** and **T13**¹³). **T02** was a medium-sized non-native walnut *Juglans regia*, and **T13** was a small wild cherry *Prunus avium*. These were oversailing modified grassland and ephemeral habitats, with a ground cover of dominating ivy.
- 4.18 **T11** was a medium-sized wild cherry, partially oversailing modified grassland and partially within unsealed gravel. This had a diameter at breast height (DBH) of 31cm.
- 4.19 **T14** was a medium-sized (DBH 34cm) wild cherry oversailing vegetated garden (lawn).
- 4.20 **T16** and **T17** were medium-sized trees located in the west of the Site, oversailing garden lawn. Both of these were common ash *Fraxinus excelsior*.
- 4.21 **T25** was a non-native Norway spruce *Picea abies*. This was located in the north-eastern corner of the Site, bordering the woodland. This has not been included within the woodland as there was a significant gap in the tree canopy between the woodland and **T25**.

¹³ The numbering system of all trees within this report follows that of the accompanying arboriculture report form Silverback Arboricultural Consultancy (2025).



- 4.22 **T26 – T28** were in a line located within vegetated garden. **T26** and **T28** were crab apple *Malus sylvestris*, while **T27** was a non-native common lilac *Syringa vulgaris*. These were small in stature.
- 4.23 **T29** was a large poplar *Populus x canadensis* with a DBH of 72cm. This was oversailing vegetated garden lawn.
- 4.24 The **individual trees** were of **Site Importance**.



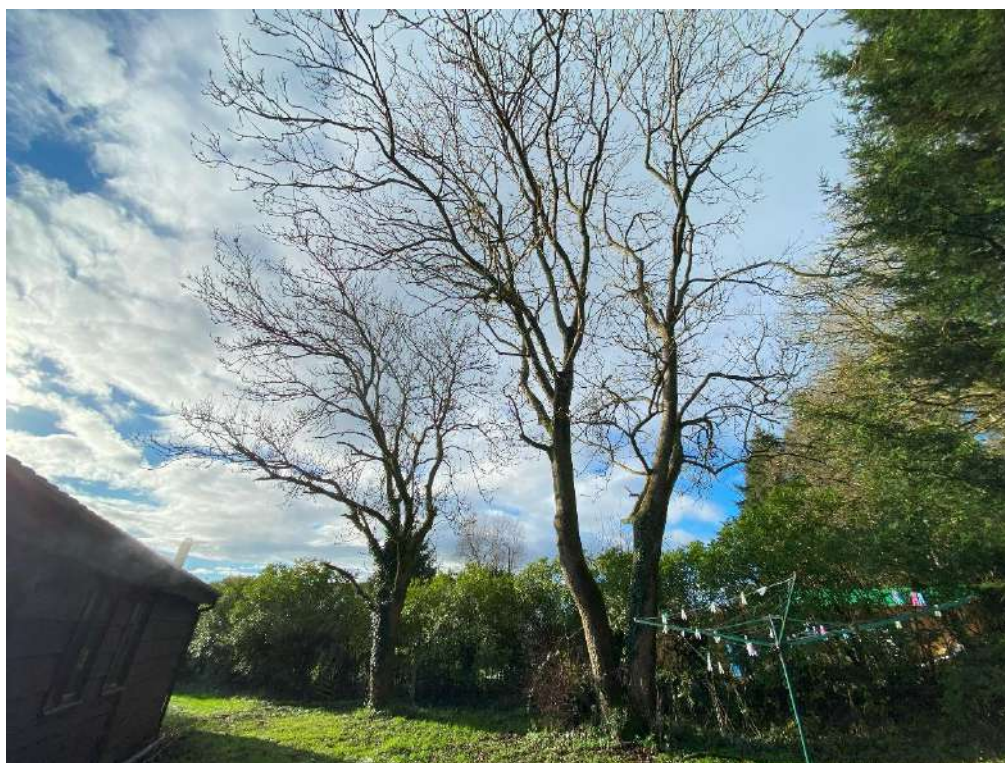
Photograph 4. T11





Photograph 5. T14





Photograph 6. T16 and T17



Photograph 7. T25 (right)





Photograph 8. T26 – 28



Photograph 9. T29

Urban: Artificial unsealed surface

- 4.25 There was a coarse gravel track running through the centre of the Site and surrounding the stable block (**Photograph 10** and **11**). This was in active use for access to the wood cabins and the stable. The **artificial unsealed surface** was of **Negligible Importance**.





Photograph 10. Gravel track



Photograph 11. Curtilage of unsealed surface around the stable block

Urban: Developed land; sealed surface

Buildings

- 4.26 There were seven buildings within the Site (**B1 – B7**). The interior of **B1 – B5** was not accessible.



- 4.27 **B1** was a mobile home (**Photograph 12**). The structure was comprised entirely of metal with a glass door, and windows on all elevations. The mobile home was raised approximately 50cm from the ground. There were no cavity walls or loft spaces present.
- 4.28 **B2 – B5** were single-storey wood cabins, in use as temporary / holiday accommodation, which were all of similar construction (**Photograph 13 – 26**). The rooves were constructed of prefabricated interlocking tile sheets with gable ends. The structures had wooden fascias and soffits. The elevations were clad with wooden weatherboarding and had a felt membrane underneath. Each structure had a glass door and windows.
- 4.29 **B6 and B7** were stable blocks in active use (**Photograph 27 – 32**). The buildings were constructed of wood with metal and wooden supports and beams. The rooves comprised of corrugated metal and hard plastic, creating a lot of light ingress.
- 4.30 The **buildings** were of **Negligible Importance**. The importance of the buildings in relation to bats and birds is discussed within the Protected and Notable Species section below.



Photograph 12. B1 – mobile home





Photograph 13. B2 – south-east corner



Photograph 14. B2 – south-west corner





Photograph 15. B2 – eastern elevation



Photograph 16. B2 – northern elevation





Photograph 17. B2 – western elevation



Photograph 18. B3 – from the south-eastern corner





Photograph 19. B3 – northern elevation



Photograph 20. B3 – western elevation





Photograph 21. B4 – from the southern corner



Photograph 22. B4 – form the northern corner





Photograph 23. B5 – northern elevation



Photograph 24. B5 – eastern elevation





Photograph 25. B5 – southern elevation



Photograph 26. B5 – western elevation





Photograph 27. B6 – western and southern elevations



Photograph 28. B6 – eastern elevation





Photograph 29. B6 – northern elevation



Photograph 30. B6 – interior





Photograph 31. B7 – northern and western elevations



Photograph 32. B7 – interior

Hardstanding

- 4.31 There was a small area of hardstanding in the south of the Site. This formed the driveway of the neighbouring property and lead to the gravel driveway into the Site.
- 4.32 The **hardstanding** was of **Negligible Importance**.



Urban: Introduced shrub

- 4.33 There were two areas of introduced shrub within the Site (**S1** and **S2**).
- 4.34 **S1** was located in the east of the Site, situated between **B1** and **B2**. This was approximately 3m in height and comprised entirely of ornamental, non-native species (**Photograph 25**).
- 4.35 **S2** was located in the west of the Site, situated between **B4** and **B5**. This was approximately 6m in height and comprised entirely of ornamental, non-native species (**Photograph 26**).
- 4.36 The **introduced shrub** was of **Negligible Importance**.



Photograph 33. Introduced shrub (S1)





Photograph 34. Introduced shrub (S2)

Urban: Vegetated Garden

- 4.37 There was an area of vegetated garden in the north of the Site, situated between the five wood cabins (**Photographs 4, 7, 19, 21, and 27**). This comprised of a managed lawn, which appeared regularly maintained to a short sward height. The ground cover was consistent. There were small patches of ruderal/ephemeral habitat within the lawn. Species recorded in the lawn included: annual meadow grass, cleavers, common vetch *Vicia sativa*, cow parsley *Anthriscus sylvestris*, daisy, dandelion, dove's foot cranesbill, meadow buttercup, perennial rye grass, and ribwort plantain. Species recorded within the ruderal/ephemeral patches included: bramble *Rubus fruticosus*, ivy, and nettle *Urtica dioica*.
- 4.38 The **vegetated garden** was of **Negligible Importance**.





Photograph 35. Vegetated garden

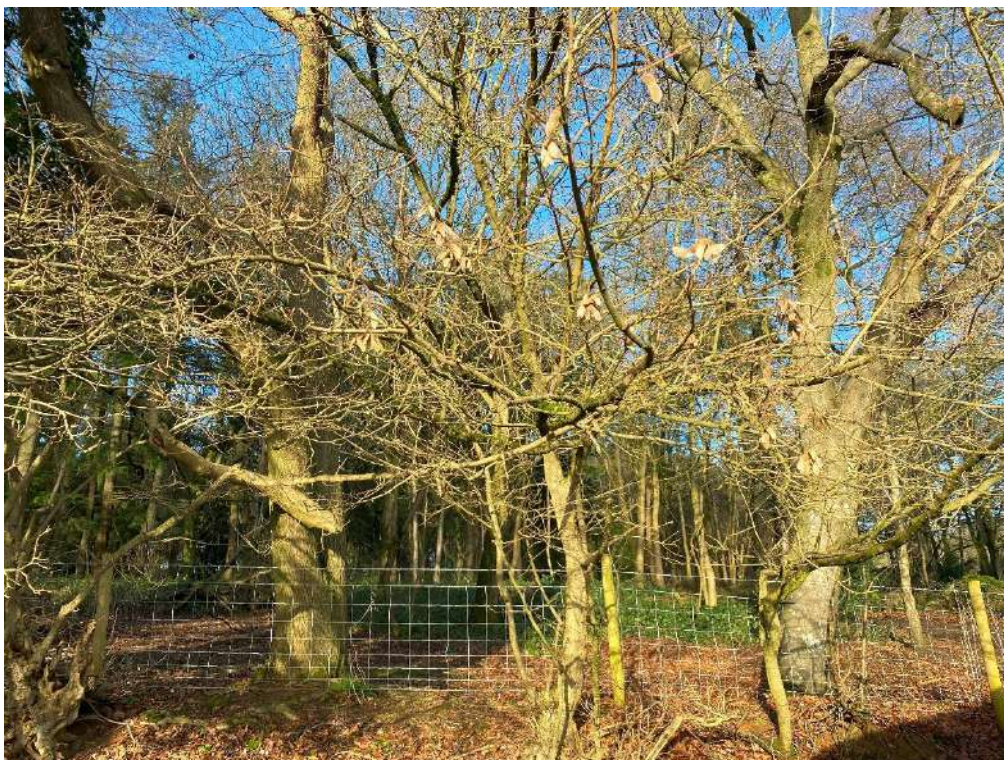
Woodland and forest: Lowland mixed deciduous woodland

- 4.39 A small area of mixed deciduous woodland was present in the Site (**Photograph 28 and 29**). This formed a subsection of the adjacent woodland to the north of the Site, which was encroaching into the Site. A fence delineated the separation between the woodland to the north and the Site. The woodland adjacent to the Site is denoted as deciduous woodland within the Priority Habitat Inventory⁷. The wider woodland structure and composition has been considered within this assessment, as the woodland section within the Site forms a functional unit of the woodland as a whole.
- 4.40 The woodland displayed at least two age classes, with woodland regeneration and mature trees present. There were no veteran trees. The canopy and ground flora were at least 80% native, with non-native conifers also present. Native woody species included: ash, beech *Fagus sylvatica*, hazel *Corylus avellana*, holly *Ilex aquifolium*, oak *Quercus spp.*, and silver birch *Betula pendula*. Standing deadwood comprised approximately 5% of the woodland. Bracket fungus was recorded on an ash tree. There was no significant browsing damage and no evidence of large herbivore presence within the woodland. The understorey was open, with ground flora dominated by bramble. Holly and ivy were also frequently occurring. There were several brash piles and a consistent layer of leaf litter.
- 4.41 The **woodland** was of **Local Importance**.





Photograph 36. Woodland adjacent to the northern Site boundary



Photograph 37. Woodland within the Site

Protected and Notable Species

- 4.42 Based upon the nature, location, and characteristics of the Site and adjoining landscape, the suitability of the Site to support the following species/species groups is outlined below:



- Amphibians, including great crested newt *Triturus cristatus*



- Bats
- Birds
- Hazel dormouse *Muscardinus avellanarius*
- Hedgehog *Erinaceus europaeus*

4.43 If a species or species group is not listed above, then it has been scoped out of this assessment based upon the nature, location, and characteristics of the Site and adjoining landscape.

Amphibians

4.44 There were no granted great crested newt EPSL, positive great crested newt pond surveys (2017 – 2019) or great crested newt class survey licence returns within 1km of the Site.

4.45 SWBRC returned four records of amphibians. These were three records of common toad *Bufo bufo*, and one record of common frog *Rana temporaria*. The closest of these was a common toad located approximately 810m north-west of the Site. All records are separated from the Site by roads.

4.46 A review of aerial photography and OS Mapping confirmed that there were two ponds within 500m of the Site:

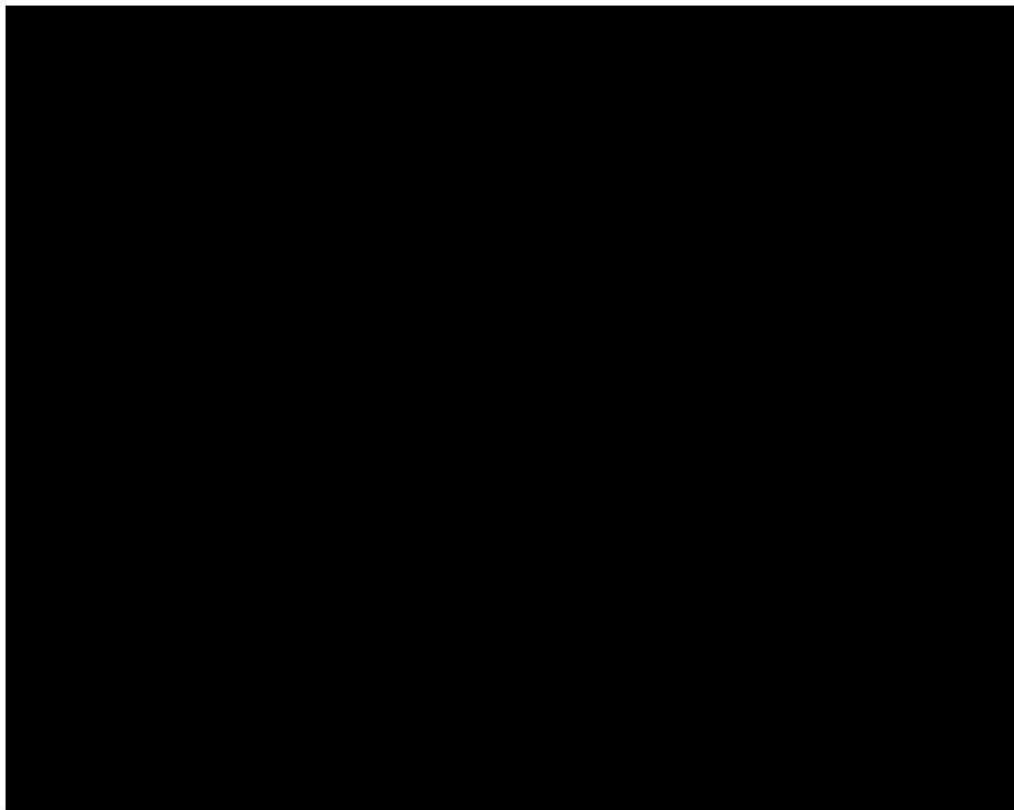
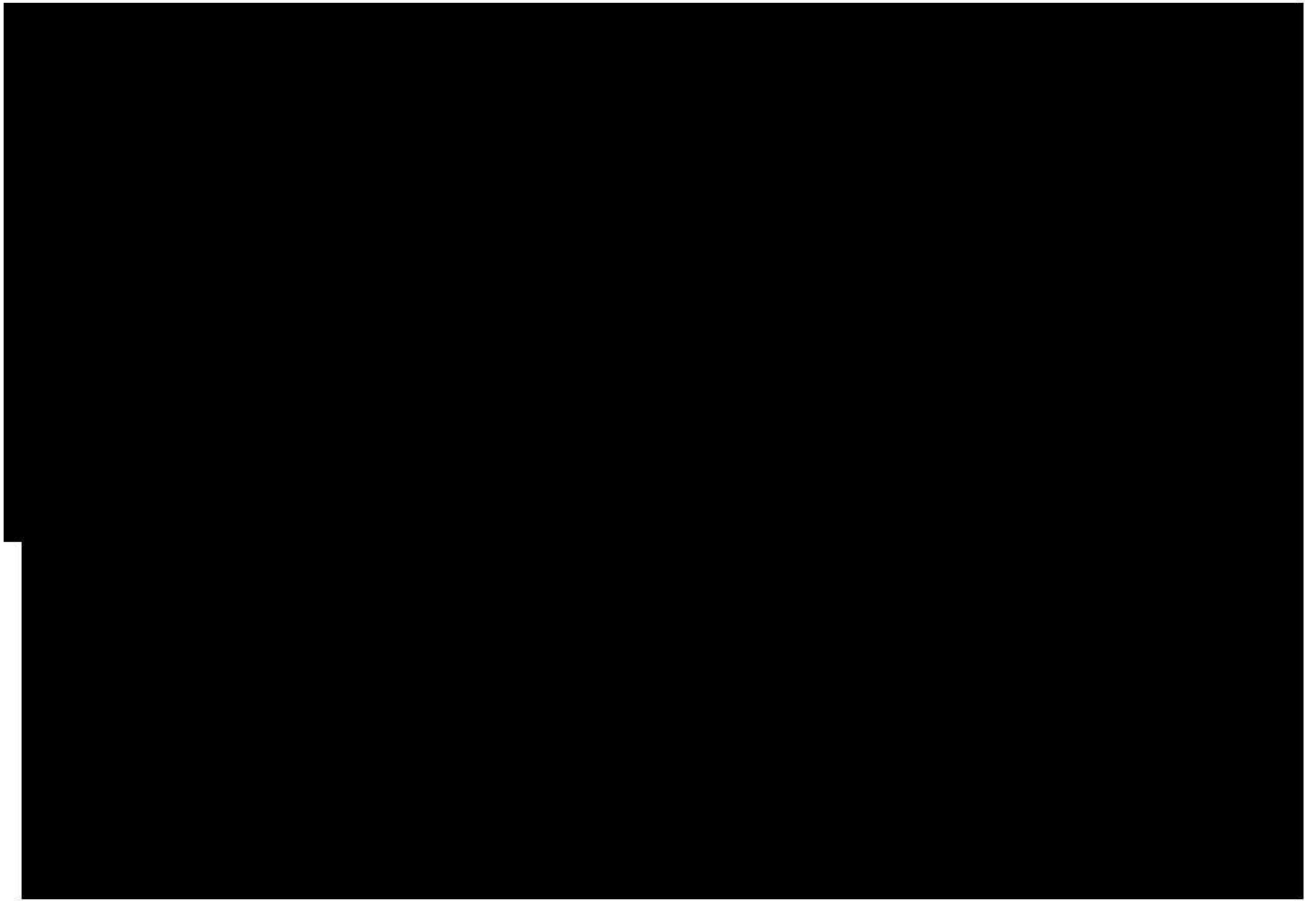
- **P1**, located within farmland, approximately 200m east of the Site (National Grid Reference: ST 97024 66741)
- **P2**, located between farmland and scrub, approximately 340m south-west of the Site (National Grid Reference: ST 96599 66376)

4.47 **P1** is separated from the Site by a high-speed road. **P2** is separated from the Site by arable fields and two country lanes.

4.48 There were no breeding opportunities for amphibians within or adjacent to the Site. There are no ponds, watercourses, or ditches within 250m of the Site. Furthermore, the Site is not located within the commuting pathway between a network of ponds. The habitats within the Site are of moderate suitability for amphibians during the terrestrial phases. The likelihood of amphibians being present within the local landscape or within the Site is negligible.

4.49 The **amphibian interest** was of **Negligible Importance** and amphibians will not be discussed further within this report.





Bats

Data search

- 4.54 There were no granted EPSL for bats within 1km of the Site.
- 4.55 WSBRC returned nine records of bats, including six roosts. The closest record was located approximately 360m north-east of the Site. This was for a single count of brown long-eared bat *Plecotus auritus*. Two individual counts of Natterer's bat *Myotis nattereri* were also recorded. These were located approximately 870m north-west of the Site, associated with woodland. There was a record for a lesser horseshoe *Rhinolophus hipposideros* maternity roost approximately 1km south-west of the Site. The data search also returned roosts for pipistrelle *Pipistrellus spp.* and greater horseshoe *Rhinolophus ferrumequinum*.

Preliminary Roost Assessment

- 4.56 There were seven buildings within the Site (**B1 – B7**) as described above. **Evidence of bats was found within B3.** An assessment of the suitability of each of the buildings to support a bat roost is set out below, within **Table 5**, and within **Figure 3**.
- 4.57 **B1** was constructed of metal and did not display any Potential Roost Features (PRFs). **B1** was assessed as supporting **No (None) suitability** for roosting bats.
- 4.58 **B2** was constructed of prefabricated linked roof tiles and wooden weatherboarding. This structure displayed three PRFs due to gapping and holes in the soffits of the building. There was also one instance of gapping between the weatherboarding (**Photograph 31 – 33**). No evidence of bats was recorded within this structure. **B2** was assessed as supporting **Moderate Suitability** for roosting bats.



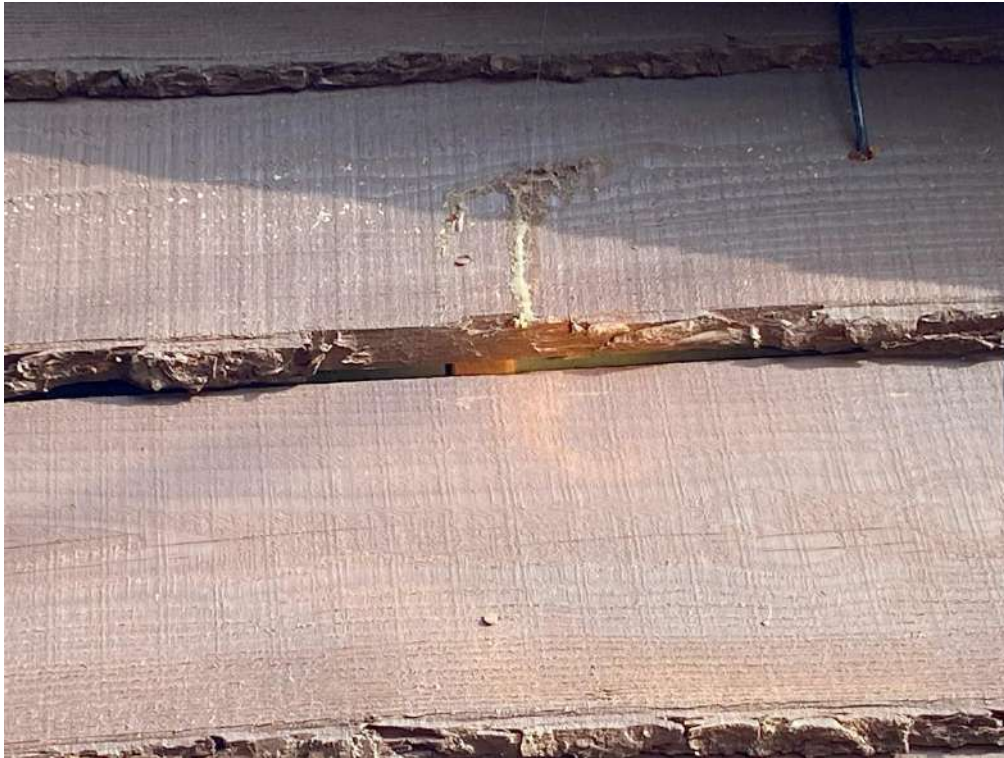


Photograph 39. PRF in the south-eastern corner of B2



Photograph 40. PRF on the southern elevation of B2





Photograph 41. PRF between weatherboarding in B2

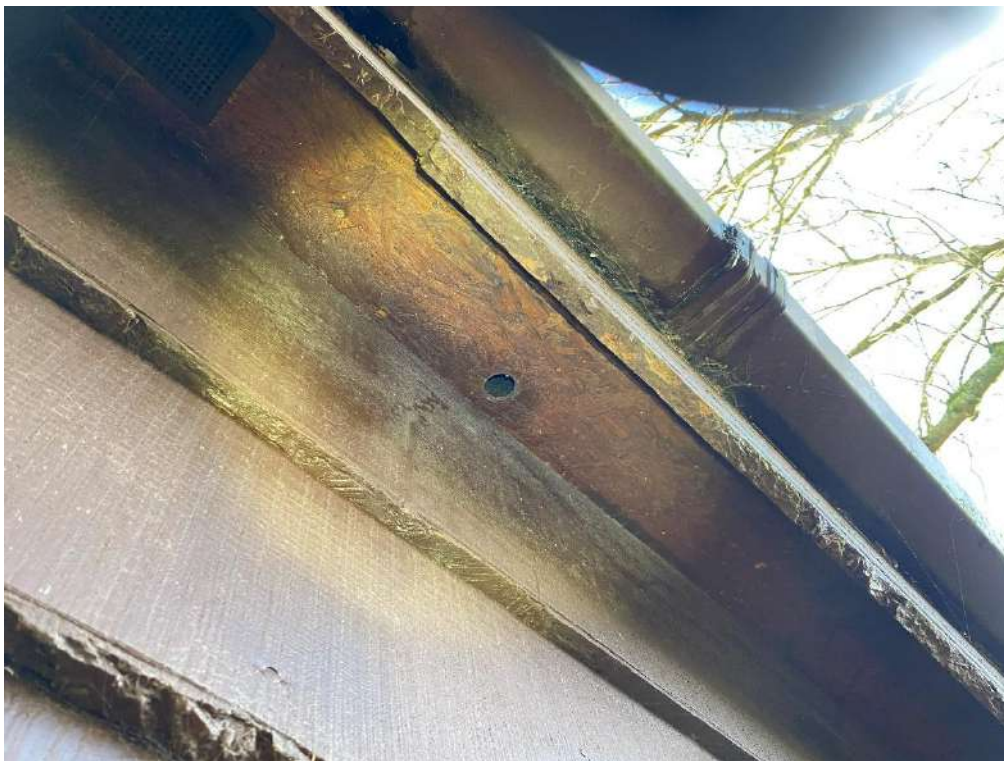
- 4.59 **B3** supported a confirmed roost. This was evidenced from the presence of a bat located in a gap between the weatherboarding on the southern elevation, approximately 2m from ground level (**Photograph 34**). Visual identification of the bat confirmed this to be a Natterer's bat¹⁴. The remainder of the structure supported two additional PRFs (**Photograph 35**). These consisted of a small gap in the soffit and a gap in the northern gable end. **B3 was assessed as having High Suitability for roosting bats, with the southern elevation supporting a confirmed roost.**

¹⁴ Identified by James Shipman (Author of 'Identifying Bats of Britain and Ireland A Field Worker's Guide') via an online forum.





Photograph 42. Natterer's bat recorded on the southern elevation of B3



Photograph 43. PRF on the western elevation of B3

- 4.60 **B4** was constructed of prefabricated linked roof tiles and wooden weatherboarding. This displayed gapping between the wooden weatherboarding on the south-western elevation. This was similar in structure and condition to the location of the confirmed roost recorded in **B3**. As such, this elevation supports **High Suitability** for roosting bats. The remainder of **B4** did not display any PRFs and was therefore assessed as supporting **No (None) suitability** for roosting bats.



- 4.61 **B5** was constructed of prefabricated linked roof tiles and wooden weatherboarding. This was located in a shaded corner of the Site, with no clear drop zones. No evidence of bats was recorded. **B5** was assessed as supporting **No (None) Suitability**.
- 4.62 **B6** and **B7** were constructed of wood with metal and wooden supports / beams, and a metal and hard plastic roof. There were no roof voids or cavity walls. No evidence of bats was recorded. **B6** and **B7** were assessed as supporting **No (None) Suitability**.

Building no.	B1	B2	B3	B4	B5	B6	B7
Suitability of Materials	No	Yes	Yes	Yes	Yes	No	No
Loft space	No	No	No	No	No	No	No
Cavity walls	No	No	No	No	No	No	No
Potential access features	No	Yes	Yes	Yes	No	Yes	Yes
Evidence of bats	No	No	Yes	No	No	No	No
Summer roost suitability	No (None)	Moderate	High	Moderate	No (None)	No (None)	No (None)
Hibernation suitability	No (None)	No (None)	Confirmed	(No (None)	No (None)	No (None)	No (None)

Table 5: Suitability of the buildings within the Site to support bat roosts



Figure 3: Bat Roost Suitability Plan



DNA Analysis

- 4.63 Bat droppings from **B3** were collected on 30/06/25 and sent for DNA analysis in order to identify the species present. This returned a result of common pipistrelle (**Appendix C**).

Roost Characterisation and Bat Emergence Surveys

- 4.64 **B2** and **B4** were subject to two emergence surveys. An Emergence Survey Plan can be found in **Appendix D**. These concluded the likely absence of bat roosts within these structures.
- 4.65 Three emergence surveys were conducted on **B3**. These confirmed the presence of further roosts:
- Two common pipistrelle day roosts (**R1** and **R2**)
 - One soprano pipistrelle day roost (**R3**)
- 4.66 The first common pipistrelle roost (**R1**) was evidenced on 19/05/2025 by three individuals exiting the building. The roost access point was identified as the top left corner of the porch on the southern elevation (**Figure 4**).
- 4.67 **R2** was evidenced on 10/06/2025 by two individuals exiting the building from a separate location to the initial common pipistrelle roost. The roost access point was identified as south-eastern corner of the roof (**Figure 5**).
- 4.68 The soprano pipistrelle roost (**R3**) was evidenced on 30/06/2025 by one emergence of an individual from the weatherboarding above the south-facing porch (**Figure 6**).
- 4.69 The species for all emergences were confirmed through sonogram analysis. All recorded emergences across all emergence surveys can be found within **Table 6**.
- 4.70 In addition, **B3** supports a Natterer's hibernation roost (**R4**). This was reasoned on the basis of the presence of a Natterer's bat using **B3** on 07/01/25. It is not expected that the roost is used throughout the hibernation season, as the bat was relatively active and it is not expected that the feature provides suitable thermal protection throughout winter.





Figure 4: R1: common pipistrelle roost access point



Figure 5: R2: common pipistrelle roost access point (red) with bat (blue)





Figure 6: Soprano pipistrelle roost access point

Date	Time	Species	Roost Number
19/05/2025	20:58	Common pipistrelle	R1
	21:04		
	21:07		
10/06/2025	21:46	Common pipistrelle	R2
	21:48		
30/06/2025	21:26	Soprano pipistrelle	R3
<i>Note: Natterer's hibernation roost confirmed on 07/01/25 during Preliminary Roost Assessment (R4)</i>			

Table 6: Dates and times of all emergences

4.71 **All of the roosts** were assessed to be of **Site Importance**.

Ground Level Tree Assessment

4.72 There were 11 mature individual trees, and a small area of woodland within the Site.

4.73 The individual trees did not support any gaps, holes, breaks, cracks, or other PRFs. These were assessed as supporting No (**None**) **suitability** for roosting bats.

4.74 There was one tree (**T20**) within the on-Site woodland that supported suitable features for roosting bats (**Photographs 36** and **37**). This was a large pedunculate oak *Quercus robur*, with a DBH of 61cm. There was dense ivy present on the trunk, which had formed a lattice and displayed lifted sections. These PRFs were suitable for individual bats and therefore **T20** was assigned **PRF-I Suitability**.





Photograph 44. T20



Photograph 45. Section of lifted ivy lattice on T20

Flight-paths and Foraging Habitat

- 4.75 The Site supports a simple habitat structure formed of manmade habitats and/or poor-quality habitats. The Site is adjacent to woodland. The wider landscape is largely rural, with various fields, roads, and scattered residential and commercial development. The



key green infrastructure within the local landscape, includes woodland, scrub, and a hedgerow network. The wider landscape broadly aligns with High Suitability habitat:

“Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge.

High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.

Site is close to and connected to known roosts.”

- 4.76 During all three emergence surveys it was noted that up to five Leisler’s bats *Nyctalus leisleri* were using the woodland edge within the Site for foraging.
- 4.77 The habitat within the Site was assessed to be of **Moderate Suitability** for bat flight paths and foraging habitat.

Nesting birds

- 4.78 WSBRC returned 122 records of birds. The closest of these records was a merlin *Falco columbarius* located approximately 90m east of the Site. The majority of the records are located to the north of the Site, and along Devizes Road to the east. Species of note returned by the data search included: brambling *Fringilla montifringilla*, crossbill *Loxia curvirostra*, fieldfare *Turdus pilaris*, hobby *Falco subbuteo*, kestrel *Falco tinnunculus*, red kite *Milvus milvus*, and tawny owl *Strix aluco*.
- 4.79 The woodland, introduced shrubs, individual trees and hedgerows within the Site support suitable habitat for nesting birds. There was no evidence of nesting birds within the Site. All buildings within the Site are unlikely to support nesting birds due to the construction materials.
- 4.80 The **nesting bird interest** was of **Site Importance**.

Hazel dormouse

- 4.81 WSBRC returned no records of hazel dormouse.
- 4.82 The Site and adjacent priority woodland supports suitable habitat for hazel dormouse. However, the woodland contains a sparse understorey which is in regular use. The habitats within the Site comprise of ornamental hedgerow and a single-species native hedgerow, which are not suitable for supporting hazel dormouse. There is no scrub or significant woodland within the Site.
- 4.83 In addition, the Site and adjacent woodland is suitably isolated from the wider landscape via roads. There is no ancient woodland within the wider landscape. As such, it is considered highly unlikely that hazel dormouse are present within the Site or wider landscape.



- 4.84 The **hazel dormouse interest** was of **Negligible Importance**. Hazel dormouse will not be mentioned further within this report.

Hedgehog

- 4.85 WSBRC returned 27 records of hedgehogs. The closest record was located approximately 120m south-west of the Site and is separated by a road.
- 4.86 During the emergence survey on 19/05/2025 one hedgehog was noted using the western boundary of the Site for commuting. It is expected that a larger population of hedgehogs may enter the Site to commute, forage, and rest. The non-native hedgerow along the eastern boundary provides sufficient ground cover for hedgehogs to hibernate.
- 4.87 The **hedgehog interest** was of **Site Importance**.

Results Conclusion

- 4.88 A summary of the results is presented in **Table 7**. Where further consideration is required, this is addressed and resolved in the following chapters of this report.



Ecological Feature	Ecological Importance / Suitability*	Further consideration required?
Spye Park SSSI	National	Yes
Roundway Down and Covert SSSI		
King's Play Hill SSSI		
Chittoe Heath Verge PRV	Local	
Spye Park Heath LWS		
Wyatt's Wood and the Coppice LWS		
Spye Park Woodland LWS		
St. Edith's Leigh Wood LWS		
Grassland: Modified grassland	Negligible	No
Hedgerow: Native hedgerow	Site	Yes
Hedgerow: Non-native and ornamental hedgerow	Negligible	No
Individual trees: Urban tree	Site	Yes
Urban: Artificial unsealed surface	Negligible	No
Urban: Developed land; sealed surface		
Urban: Introduced shrub		
Urban: Vegetated garden		
Woodland and forest: Lowland mixed deciduous woodland	Local	Yes
Amphibians	Negligible	No
Bats: Roosts: Buildings (B1 and B5 – B7)	No (None)*	No
Bats: Roosts: Buildings (B2 and B4)	Roosts likely absent	Yes
Bats: Roosts: Buildings (B3)	Four confirmed bat roosts (Site)	
Bats: Roosts: Trees (T20)	PRF-I*	
Bats: Roosts: Trees (all other trees)	No (None)*	No
Bats: Flight-paths and foraging	Moderate*	Yes
Nesting birds	Site	
Hazel dormouse	Negligible	No
Hedgehog	Site	Yes

Table 7: Summary of Results



Chapter 5: Discussion

- 5.1 The report follows the mitigation hierarchy. The avoidance measures and the embedded mitigation are set out. Followed by additional mitigation measures to minimise impacts further and then compensation/offsetting to address any remaining impacts. Lastly, ecological enhancements are provided.
- 5.2 The following discussion and assessment have been provided to ensure full compliance with legislation and both local and national planning policy set out in **Appendix E**.
- 5.3 This report is valid provided the plans shown in **Figure 2** do not change.
- 5.4 All details set out in this Chapter are deliverable with the Proposed Development and have been approved by the Applicant.

Embedded Mitigation

- 5.5 Using the design principles and layout within **Figure 2**, this section considers the embedded mitigation associated with the Proposed Development.
- 5.6 The selection of the Site for Proposed Development has inherently avoided impacts on ecology and biodiversity as the Site comprises a previously developed area, including buildings, hardstanding, and poor-quality habitats. The removal of introduced shrubs, garden and a small length of non-native hedgerow is not considered significant. The Proposed Development will not impact any green or blue infrastructure.
- 5.7 The woodland on-site and adjacent to the Site will be retained and protected. There will be a 10m landscape buffer in place between the woodland and the construction works. Tree protection fencing will be implemented along this 10m buffer. This will protect the woodland adjacent to the Site. The Proposed Development will result in betterment of the woodland, as the new residential units will be set back further from the woodland edge compared to the footprint of the current structures.
- 5.8 Three trees and all native hedgerows are to be retained by the Proposed Development. Tree protection fencing will be implemented to protect retained trees **T16** and **T17**.

Effects of the Proposed Development

- 5.9 Using the design principles and layout within **Figure 2**, this section concerns an assessment of ecological effects resulting from the Proposed Development. In the absence of mitigation, the following effects have been identified:
 - The demolition of **B1 – B7**.
 - The destruction of two active common pipistrelle and one soprano pipistrelle day bat roosts within **B3**.



- The removal of modified grassland, unsealed surface, garden (lawn), and introduced shrubs.
- The clearance of the Site and construction process potential to kill/injure [REDACTED] hedgehogs.
- There will be increases in light spill during construction and occupation.
- There will be pollution during construction in the form of dust, noise, chemical, and litter.
- There will be an increase in residential units, leading to increases in recreation and human-related effects in the local area.

Site Wide Mitigation

- 5.10 Care will be taken during clearance/groundworks to ensure wildlife is not harmed. In the event a protected species is found when an ecologist is not in attendance, works will stop, and an ecologist will be contacted.
- 5.11 The construction phase is likely to be limited given the small scale of the Proposed Development. The Proposed Development will implement standard and well-rehearsed pollution control measures throughout construction. Given the scope of the development, the following actions will be implemented during construction:
- Take measures to minimise and prevent erosion and run-off, including minimising adjacent land disturbance.
 - Control dust through fine water sprays used to dampen down the Site.
 - Screen the edge of the Construction Zone by placing a fine mesh screening close to any dust sources.
 - Cover skips and trucks loaded with construction materials and continually damp down with low levels of water.
 - Cover piles of building materials like cement, sand and other fine materials and powders, regularly inspect for spillages, and locate them where they will not be washed into waterways or drainage areas.
 - Use non-toxic paints, solvents and other hazardous materials wherever possible.
 - Segregate, tightly cover, and monitor toxic substances to prevent spills and possible site contamination.
 - Cover up and protect all drains within and adjacent to the construction footprint.
 - Collect, control, and avoid wastewater generated from construction activities, screen, discharge the clean water, and dispose of remaining sludge according to environmental regulations.
 - No burning of materials.
 - Reduce noise pollution through careful handling of materials; modern, quiet power tools, equipment and generators; and low impact technologies.



5.12 Lighting during construction and occupation has the potential to disrupt / modify the behaviour of wildlife. A Sensitive Lighting Strategy will be implemented. This strategy will include consideration of the following principles:

- Lighting within the Site will be reduced as far as practicable.
- Luminaires will be positioned and directed away from ecological receptors.
- Column heights will be reduced as far as practicably possible to reduce light spill along with the consideration of low-level bollard lighting.
- White light will be avoided, and warm colours preferably used. Preferable colours are 3000°k to 2700°k (where feasible) with peak wavelengths greater than 550nm.
- 0% upward light output and no tilting of the light head.
- Use vegetation, fencing and walls as a light buffers.
- Motion sensors for security lighting.
- For street lighting, the consideration of part night lighting and dimming (the latter viable with LED's only).
- As a last resort, the incorporation of shields, baffles and cowls fitted to the luminaires.

Designated Sites

5.13 The statutory and non-statutory designated sites are spatially isolated from the Proposed Development as to avoid impacts in relation to recreation, habitat loss, habitat fragmentation, habitat degradation, noise, light, dust, and pollution.

5.14 This is supported by the SSSI Impact Risk Zones¹⁵ that the Site lies within, which are not indicating that a development of this scale and nature in this area would result in likely impacts on internationally or nationally protected Sites.

5.15 Designated sites are not discussed further within this report.

Habitats

5.16 There are mitigation measures embedded into the design of the Proposed Development to protect habitats. These are set out above.

5.17 Eight individual trees are to be removed. The loss of habitat will be compensated with the planting of approximately 5m of native hedgerow, and approximately 35m of non-native shrubs. Species to be included within the native hedgerow include: dogwood *Cornus sanguinea*, guelder rose *Viburnum opulus*, hazel, holly, and field maple *Acer campestre*.

5.18 Non-native shrubs will include ever-green and flowering plants that provide feeding opportunities for birds and pollinators. Species to be included within this will include:

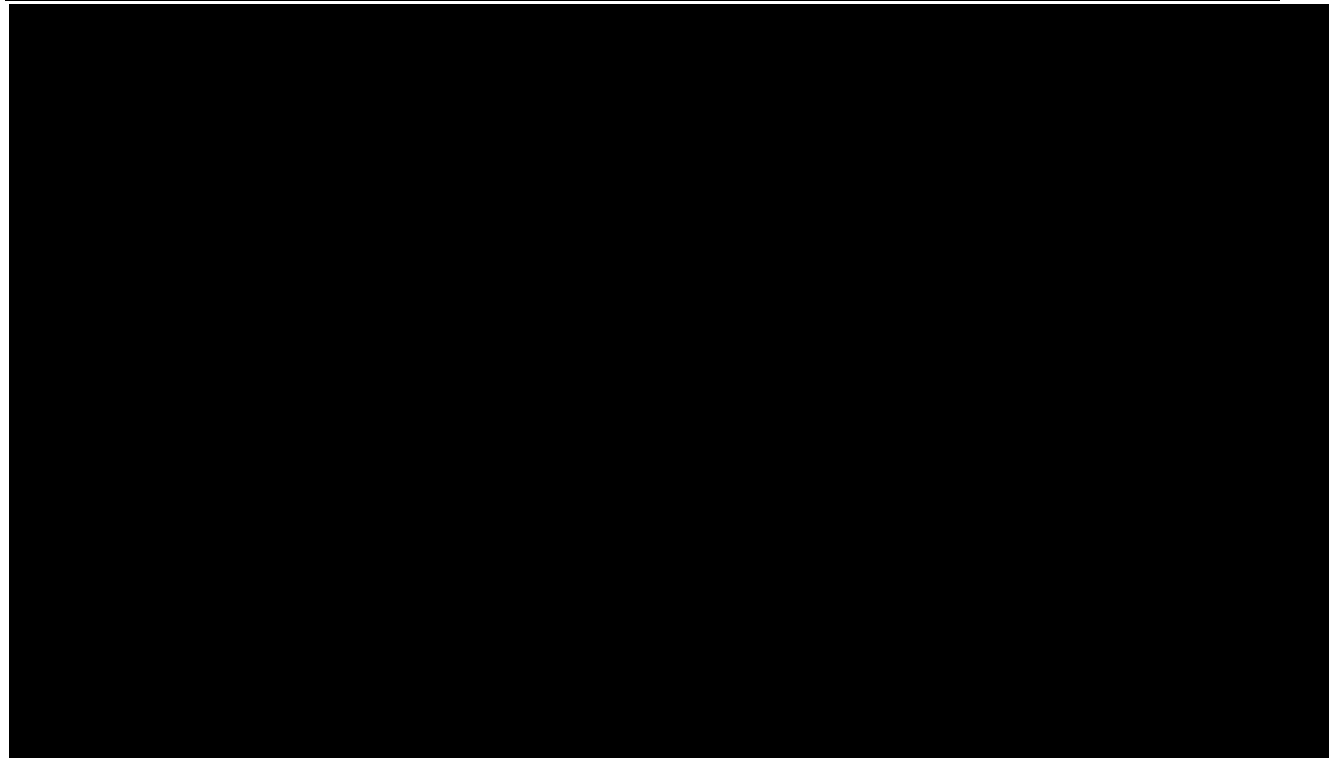
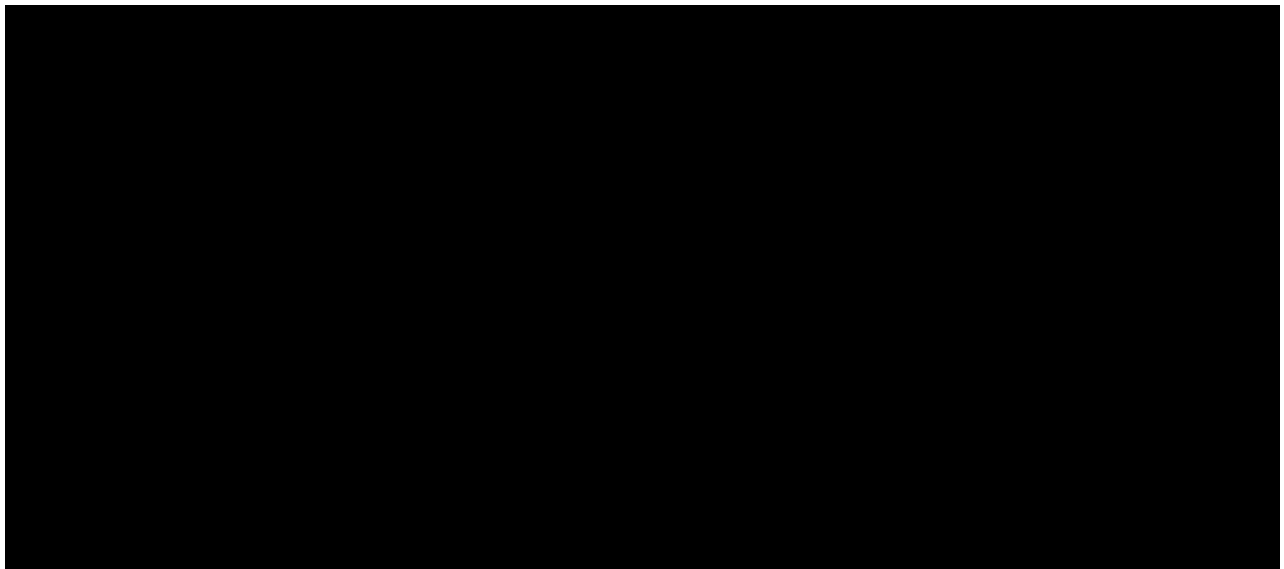
¹⁵ The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) are for local planning authorities (LPAs) to determine if a proposed development is likely to affect a terrestrial SSSI and when to consult Natural England.

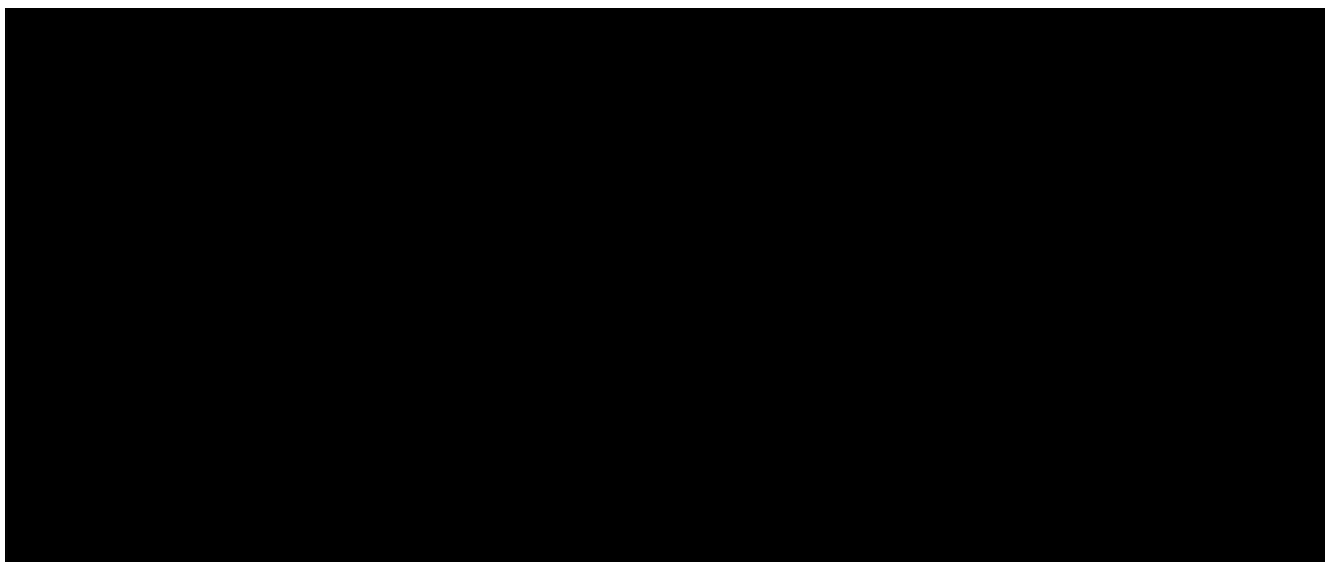


California lilacs *ceanothus spp.*, cheesewood *pittosporum spp.*, Hebe *Veronica speciosa* and lavender *Lavandula spp.*.

- 5.19 New landscaping and structural planting are proposed, including new gardens and hedgerow planting. The new private lawns will be seeded with a species-rich mow-tolerant seed mix, such as Emorsgate Seeds EL1 flowering lawn mix. These measures will maintain the level of greenspace within the Site, along with overall species diversity at the Site. The overall impact on habitats from the Proposed Development will be at least neutral.
- 5.20 The landscaping and habitat provision should be secured by a suitably worded planning condition for a Soft Landscape Plan (or similar).

Protected and Notable Species





Bats

Roosts: Buildings (B3)

5.23 **B3** supports four active bat roosts:

- One Natterer's hibernation roost
- Two common pipistrelle day roosts
- One soprano pipistrelle day roost

5.24 The species, activity, access points, and type of roosts have been characterised.

5.25 The Proposed Development includes the demolition of **B3**, which will result in the destruction of the bat roosts. Bats and their roosts are protected by Law. The legislation and planning context in relation to bats is set out in **Appendix E**.

5.26 A Natural England Licence will be required to demolish the building and Wiltshire Council should request a planning condition is imposed onto any permission for the Site, requesting a copy of the Natural England Licence to be submitted to the council¹⁶ prior to commencement of the Proposed Development.

5.27 The applicant has committed to the following avoidance, mitigation, compensation, and enhancement:

- Seasonal and timing constraints in line with the survey findings and predicted degree of impact and level of risk.
- Works will be undertaken in suitable weather conditions when bats are active.
- A toolbox talk will be provided by the ecologist to all workers involved with the Natural England licenced works before any works commence. The toolbox talk will outline where bats are likely to be found within all buildings, the legislation relevant to bats, the method statement that must be followed to protect bats, and the

¹⁶ The wording of the condition should be carefully considered. The Council will not be required to approve the licence as this is undertaken by Natural England.



procedure to follow in the event that a bat is found. A record of the attendees will be kept by the ecologist.

- The presence of an ecologist in an Ecological Clerk of Works (ECoW) role during the demolition of **B3**.
- Prior to any works affecting **B3**, a pre-works inspection will be undertaken by the named ecologist or their accredited agent. Torch light and an endoscope will be used to search for any bats present in suitable features.
- Reasonable avoidance measures during the demolition/renovation **B3** (as advised by the ecologist). The ecologist will search for the presence of bats prior to and as works proceed. The roof and woodwork will be removed with a lifting motion rather than sliding to avoid injuring any bats beneath them. The roof and woodwork will be carefully inspected for the presence of bats after removal and prior to removal from the Site.
- Compensation for the loss of a Natterer's hibernation roost, two common pipistrelle day roosts, and one soprano pipistrelle day roost, including the following features:
 - One bat box suitable for hibernation (e.g., 1GS Schwegler Brick Roost)
 - Three integrated bat boxes (one per pipistrelle roost)
 - Sensitive lighting design to avoid light spill onto bat roost entrance points and existing and proposed areas suitable for roosting bats.
 - No exterior lighting beyond that required for health and safety will be installed throughout the site.
- Enhancement in the form of new ridge tile access points or bat boxes integrated into three of the proposed residential units.
- Monitoring of the Site as required by any Natural England Licence granted to enable to construction works.

5.28 By following the above strategy there would be no significant impact on roosting bats and the development will be able to proceed lawfully and in line with survey and mitigation guidelines.

5.29 As a Natural England Licence is required, the three licensing tests must be considered, alongside a mitigation strategy. The three tests are that:

- 1) The activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety
- 2) There must be no satisfactory alternative
- 3) The Favourable Conservation Status (FCS) of the bat species must be maintained.



5.30 For a small-scale housing development such as the Proposed Development, Tests 1) and 2) are considered met as set out by Government guidance¹⁷. In relation to Test 3), we can confirm that the above strategy, if implemented in full, will ensure:

- Individual bats are not harmed.
- Mitigation to minimise effects will be implemented.
- Compensatory roosts will be equivalent to those lost and will be designed to be as similar in location, height, orientation and materials as feasibly possible, whilst maintaining the likelihood of future occupancy.
- Additional enhancement roost opportunities will be provided and legally secured.

5.31 Given the above, the FCS of the bat species involved will be maintained.

Roosts: Trees

5.32 **T20** supports suitability for individual roosting bats. This tree is located within the woodland in the north of the Site. This is to be retained by the Proposed Development. If this were to change, the advice of an ecologist should be sought prior to any works commencing.

5.33 The Sensitive Lighting Strategy set out above will protect **T20** from additional light spill during occupation.

5.34 With the above mitigation, the risk of harm to bat roosts in trees will be mitigated and the overall residual impact neutral.

Bats: Flight-paths and Foraging Habitat

5.35 The Site was assessed to be of Moderate Suitability in relation to bat flight-paths and foraging habitat.

5.36 The Proposed Development will not significantly alter the landscape or modify / sever habitats of high importance to bat flight-paths or foraging habitat. It is highly likely that the replacement of the existing habitats within the Site with hardstanding and a garden will result in an undetectable change in the use of the Site by the local bat assemblage.

5.37 As set out above, a Sensitive Lighting Strategy will be implemented during construction and occupation. This includes the protection of the woodland from light spill and no lighting to be placed within the woodland. It is expected that any new light sources from the Proposed Development will be minor, low-level, similar to existing light sources, and will not significantly illuminate adjacent habitats.

5.38 In line with the limited predicted degree of risk and proportionality principle¹⁸, no bat activity surveys were undertaken. This was reasoned as follows:

¹⁷ Available at: <https://www.gov.uk/government/publications/reasoned-statement-to-support-a-mitigation-licence-application/protected-species-licences-when-to-include-a-reasoned-statement-with-your-application>

¹⁸ See sections 8.2.7, 2.2.2 and 2.2.5 of the Bat Survey Guidelines, reference 12.



- The Site and Proposed Development were small in scale with a limited ZOI.
- The Site contained a simple habitat structure / connectivity (adjacent to suitable habitats only).
- The Site itself supported habitats of Low Suitability.
- Impacts (modification, fragmentation, and severance) on commuting and foraging habitats were avoided by embedded mitigation.
- The Proposed Development will introduce new structural planting and increase canopy cover over time.

5.39 With the above mitigation, there will be a negligible impact on bat flight-paths and foraging habitat, with the overall residual impact neutral.

Nesting birds

5.40 There is a low risk that nesting birds and their young could be harmed during the removal of eight trees.

5.41 The removal of trees should ideally be undertaken outside the nesting bird season (which is generally taken to be March – August inclusive). Should it prove necessary to conduct these works during the bird nesting season, then the area will be checked in advance for the presence of bird nests by a suitably competent person¹⁹. If there is no evidence of breeding birds the work will be completed within 48 hours of inspection. If any active nests are identified, clearance will cease, and an appropriate buffer zone must be established around the nest in discussions with an ecologist (usually 5m). The buffer must remain intact until it has been confirmed that the young have fledged, and the nest is no longer in use.

5.42 The removal of these nesting opportunities is not expected to have any lasting effect on the bird populations in the local area. Nevertheless, to compensate:

- Four Vivara pro WoodStone 32mm nest boxes (or similar long-lasting alternatives) will be installed within the Site onto newly constructed buildings or retained trees at heights of 2m, and facing north or east.

5.43 With the above mitigation and compensation, the risk of harm to nesting birds and their young will be mitigated and the overall residual impact on nesting birds will be neutral.

Hedgehog

5.44 There is the low risk that hedgehogs may enter the Site during construction and be killed/injured. The above measures [REDACTED] will protect commuting and foraging hedgehogs.

5.45 There is a low risk that hibernating hedgehogs may be disturbed, injured, or killed during the construction works associated with the Proposed Development. Areas

¹⁹ Given the low risk, limited extent of removal, and ease at which nests can be seen and identified within buildings, a competent person will be able to assess for the presence of bird nests prior to demolition.



suitable for hedgehog hibernation are to be retained by the Proposed Development. This minimises the impact on hibernating hedgehogs.

- 5.46 Garden habitats will include features to allow the movement of hedgehogs and other wildlife between gardens by either raising close board fencing above the ground or by cutting small 13cm x 13cm holes cut in the fencing gravel boards allowing continued access.
- 5.47 Hedgehogs will continue to be able to access habitats within and adjacent to the Site to commute, forage, and rest.
- 5.48 With the above mitigation, the risk of harm to hedgehogs will be mitigated and the overall residual impact on hedgehogs will be neutral.



Assessment Conclusion

5.49 A summary of the assessment outcomes is presented in **Table 8**.

Ecological Feature	Ecological Importance / Suitability*	Assessment outcome
Spye Park SSSI	National	Impacts avoided / No Impacts
Roundway Down and Covert SSSI		
King's Play Hill SSSI		
Chittoe Heath Verge PRV (PV3-6)	Local	
Spye Park Heath LWS		
Wyatt's Wood and the Coppice LWS		
Spye Park Woodland LWS		
St. Edith's Leigh Wood LWS		
Hedgerow: Native hedgerow	Site	Reasonable avoidance measures during construction and operation to be implemented. Secure by this report.
Individual trees: Urban tree		
Woodland and forest: Lowland mixed deciduous woodland	Local	
Bats: Roosts: Buildings (B2 and B4)	Likely absence	Impacts avoided / No Impacts
Bats: Roosts: Buildings (B3)	Four confirmed bat roosts (Site)	A Natural England European Protected Species Mitigation Licence will be required.
Bats: Roosts: Trees (T20)	PRF-I*	Impacts avoided / No Impacts
Bats: Flight-paths and foraging	Low	Reasonable avoidance measures during construction and operation to be implemented. Secure by this report.
Nesting birds	Site	
Hedgehog		

Table 8: Summary of assessment outcomes

5.50 Based on the results from the survey, context of the Site, and overall low ecological importance of the Site, this report is valid for a period of 18 months (i.e., the



07/07/2026). It is reasoned that there would be no material change on Site within this time period. This is reasoned in line with good practice guidelines²⁰.

Enhancement

5.51 The National Planning Policy Framework encourages development to provide gains in biodiversity. In addition to the compensations above, the following ecological and biodiversity enhancements will be provided within the Site:

- As set out above, new ridge tile access points or bat boxes (e.g., Schwegler 1FR bat tube or similar Woodstone alternative) will be integrated into three of the proposed residential units (a total of three features). The features will be installed at heights of at least 4m, facing south or west, located at the edges or gable tops of the structures, and away from sources of artificial light. The boxes will be integrated into the structures to limit the likelihood of their removal in the future.
- One bird nest box (Schwegler 1MR or any Vivara pro Woodstone nest boxes) will be incorporated into the external walls of half of the new residential units (a total of three features), thereby increasing nesting opportunities for birds at the Site. The bird boxes should be installed in or near area of suitable habitat at least 3m above ground level. The boxes will have greater potential for use if sited as high up as possible.

²⁰ CIEEM (2019). Advice Note: *On the Lifespan of Ecological Reports and Surveys*. Chartered Institute for Ecology and Environmental Management, Winchester



Appendix A: Survey Methods

Extended UK Habitat Classification Survey

- A. 1 The Site was surveyed using the UK Habitat Classification Survey method. The method classified the Site into areas of similar botanical community types with a representative sample of those species present at the time of the survey being described. The vegetation present was clearly visible and allowed an accurate assessment to be made. Any subsequent visits to the Site were used as an opportunity to update the results and classifications of the UK Habitat Survey.
- A. 2 The survey was 'extended' to look for evidence of protected and notable species of flora or fauna²¹ and to assess the suitability of the Site to support these flora or fauna. In the context of this report, rare, protected, and notable species of flora or fauna were those considered to meet any of the following criteria:
- Species protected by UK or European legislation.
 - UK Post 2010 UK Biodiversity Framework priority species or Local Biodiversity Action Plan (LBAP) species.
 - Nationally rare or nationally scarce species.
 - Species of Conservation Concern (e.g., JNCC Red List, RSPB/BTO Red or Amber Lists).
- A. 3 The Wildlife and Countryside Act (1981) as amended, makes it an offence to release or allow to escape into the wild any animal, plant, or micro-organism not ordinarily resident in the UK (as listed in Schedule 9 of the Act). Plant species listed in Schedule 9 were searched for during the survey. However, many invasive species can be cryptic and therefore this survey does not provide a guarantee that an invasive species is not present and shouldn't be relied upon to rule out absence of an invasive species²².
- A. 4 An Extended UK Habitat Plan was produced (**Appendix B**), incorporating Target Notes (**TNs**) used to highlight features of ecological interest.

Hedgerow Survey

- A. 5 The Hedgerow Regulations (1997) contain detailed instructions of how hedgerows should be assessed (hereafter referred to as 'The Regulations'). The Regulations apply to:

"Any hedgerow that is growing in, or adjacent to, protected land, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, if-

(a) It has a continuous length of, or exceeding, 20 metres: or

²¹ Suitability was determined using respective good practice guidance for each species/species group.

²² Invasive species can be cryptic and can rapidly spread from adjacent land. Luscinia Ecology cannot be held liable for invasive species found within the Site after the date of the UK Habitat Survey.



(b) It has a continuous length of less than 20 metres and, at each end, meets (whether by intersection or junction) another hedgerow”.

- A. 6 Importantly, the Hedgerow Regulations give specific instructions on how to measure hedgerows and these are set out at Regulation 3:

“A hedgerow which meets (whether by intersection or junction) another hedgerow is to be treated as ending at the point of intersection or junction”.

- A. 7 These measurement instructions must be followed exactly to ensure that the Regulations are applied correctly. The Regulations also make specific mention of gaps:

“For the purposes of ascertaining the length of any hedgerow -

(a) any gap resulting from a contravention of these Regulations; and

(b) any gap not exceeding 20 metres”

shall be treated as part of the hedgerow”.

- A. 8 Once the length of a hedgerow has been determined, the importance of a hedgerow is assessed through the application of a number of criteria, which are referenced under Regulation 4. Regulation 4 sets out that:

“For the purposes of section 97 (hedgerows) of the Environment Act 1995 and these Regulations, a hedgerow is “important” if it, or the hedgerow of which it is a stretch, -

(a) Has existed for 30 years or more; and

(b) Satisfies at least one of the criteria listed in part II of Schedule 1”.

- A. 9 The criteria listed in Part II of Schedule 1 are divided into two main sections, namely ‘Archaeology and History’ and ‘Wildlife and Landscape’. If a hedgerow meets any one of each of the criteria listed, it qualifies as important. The majority of these criteria are split into parts, with sub-criteria to be applied in turn to each hedgerow. With this survey being an ecological survey, the hedgerows within the Site have not been assessed against the Archaeological and Historical criteria.

- A. 10 Criteria by which the importance of a hedgerow is judged in ‘Wildlife and Landscape’ terms are set out at criteria 6-8 of Schedule 1 Part II of the Regulations. Criterion 6 refers to the presence of rare, notable or protected species within a hedgerow. Criterion 7 sets out the specific types, numbers and/or associated features that a hedgerow must contain for it to qualify as important.

- A. 11 Considering criterion 7 of The Regulations and relevant to the location of the Site, for a hedgerow within the Site to qualify as important, it must include one of the following:

(i) At least 7 woody species;



(ii) *At least 6 woody species and be associated with at least three of the features specified below;*

(iii) *At least 6 woody species, including one of the following:*

- *Black-poplar tree (Populus nigra spp. betulifolia);*
- *Large-leaved lime (Tilia platyphyllos);*
- *Small-leaved-lime (Tilia cordata);*
- *Wild Service Tree (Sorbus torminalis).*

(iv) *At least 5 woody species and be associated with at least four of the features specified below.*

A. 12 The associated features of the hedgerow, as referred to above, are:

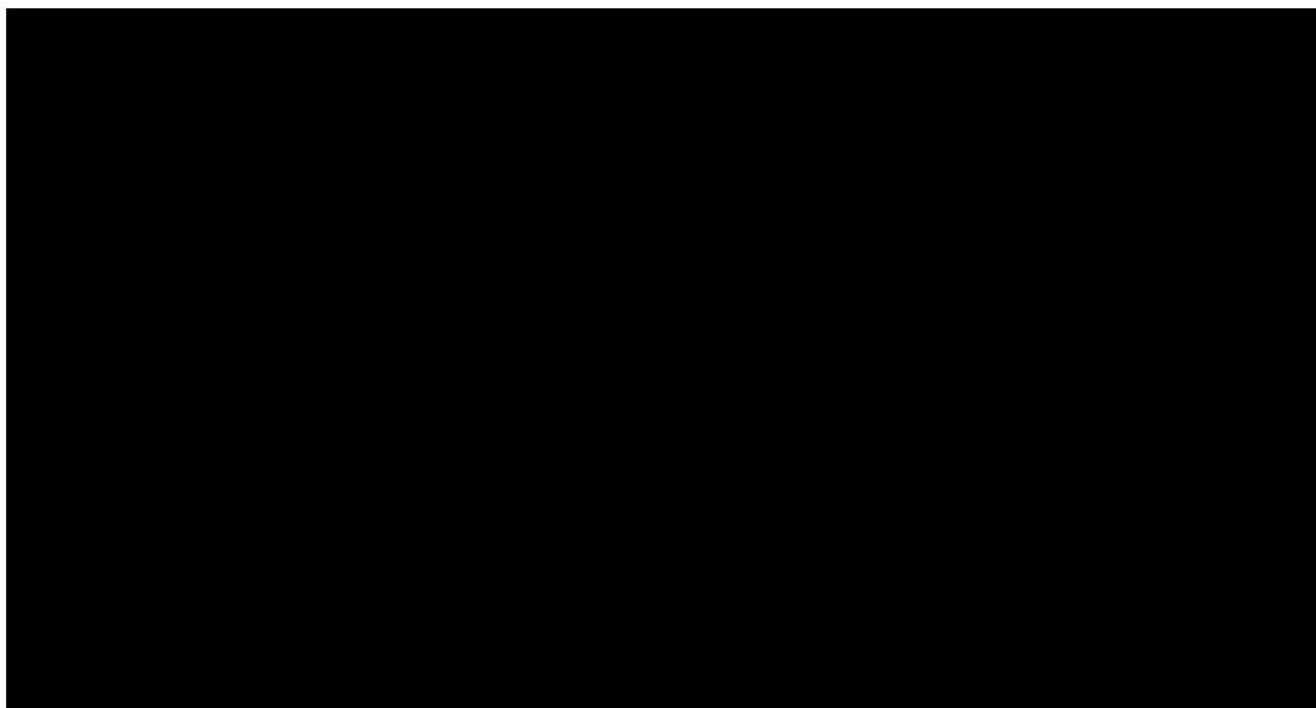
- (a) *A bank or wall that supports the hedgerow along at least one half of its length;*
- (b) *Gaps which in aggregate do not exceed 10% of the length of the hedgerow;*
- (c) *Where the length of the hedgerow does not exceed 50 metres, at least one standard tree;*
- (d) *Where the length of the hedgerow exceeds 50 metres but does not exceed 100 metres, at least 2 standard trees;*
- (e) *Where the length of the hedgerow exceeds 100 metres, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50 metres;*
- (f) *At least 3 woodland species (as listed on Schedule 2 of the Regulations) within one metre, in any direction, of the outermost edges of the hedgerow;*
- (g) *A ditch along at least one half of the length of the hedgerow;*
- (h) *Connections scoring 4 points or more in accordance with the following paragraph below;*
- (i) *A parallel hedge within 15 metres of the hedgerow.*

A. 13 Regarding point h) above, a connection with another hedgerow scores 1 point and a connection with a pond or a woodland in which the majority of trees are broadleaved trees scores 2 points; and a hedgerow is connected with something not only if it meets it but also if it has a point within 10 metres of it and would meet it if the line of the hedgerow continued.

A. 14 Criterion 8 sets out that when a hedgerow is located adjacent to a public right of way, bridleway or footpath, four woody species and two associated features are required for it to qualify as important.



A. 15 The woody species referred to above are set out on Schedule 3 of the Regulations²³.



Bat Surveys

Preliminary Roost Assessment

- A. 17 The structures within the Site were subject to a Preliminary Roost Assessment (PRA) following good practice guidelines. This is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.
- A. 18 Prior to the external inspection, each structures' age, design, location, construction materials, state of repair, and current use, were assessed. These were then related to the likelihood of a bat roost being present, along with consideration of which species of bat are most likely to use the building. The external inspection included searching for the following features to determine if suitable exit/entry points were present:
- Holes, gaps, cracks, and damage to masonry/walls.

²³ Alder (*Alnus glutinosa*), Apple, crab (*Malus sylvestris*), Ash (*Fraxinus excelsior*), Aspen (*Populus tremula*), Beech (*Fagus sylvatica*), Birch, downy (*Betula pubescens*), Birch, silver (*Betula pendula*), Black-poplar (*Populus nigra* sub-species *betulifolia*), Blackthorn (*Prunus spinosa*), Box (*Buxus sempervirens*), Broom (*Cytisus scoparius*), Buckthorn (*Rhamnus cathartica*), Buckthorn, alder (*Frangula alnus*), Butcher's-broom (*Ruscus aculeatus*), Cherry, bird (*Prunus padus*), Cherry, wild (*Prunus avium*), Cotoneaster, wild (*Cotoneaster integerrimus*), Currant, downy (*Ribes spicatum*), Currant, mountain (*Ribes alpinum*), Dogwood (*Cornus sanguinea*), Elder (*Sambucus nigra*), Elm (*Ulmus* species), Gooseberry (*Ribes uva-crispa*), Gorse (*Ulex europaeus*), Gorse, dwarf (*Ulex minor*), Gorse, western (*Ulex gallii*), Guelder rose (*Viburnum opulus*), Hawthorn (*Crataegus monogyna*), Hawthorn, midland (*Crataegus laevigata*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hornbeam (*Carpinus betulus*), Juniper, common (*Juniperus communis*), Lime, large-leaved (*Tilia platyphyllos*), Lime, small-leaved (*Tilia cordata*), Maple, field (*Acer campestre*), Mezerium (*Daphne mezereum*), Oak, pedunculate (*Quercus robur*), Oak, sessile (*Quercus petraea*), Osier (*Salix viminalis*), Pear, Plymouth (*Pyrus cordata*), Pear, wild (*Pyrus pyrastra*), Poplar, grey (*Populus x canescens*), Poplar, white (*Populus alba*), Privet, wild (*Ligustrum vulgare*), Rose (*Rosa* species), Rowan (*Sorbus aucuparia*), Sea-buckthorn (*Hippophae rhamnoides*), Service-tree, wild (*Sorbus torminalis*), Spindle (*Euonymus europaeus*), Spurge-laurel (*Daphne laureola*), Walnut (*Juglans regia*), Wayfaring-tree (*Viburnum lantana*), Whitebeam (*Sorbus* species), Willow (*Salix* species), and Yew (*Taxus baccata*).



- Lifted, missing, slipped, and damaged tiles, including tiles at the ridge, hip and across the roof.
 - Lifted, slipped and missing areas of hanging tiles, weatherboarding, and cladding.
 - Gaps/holes/damaged to soffits and fascias.
 - Lifted flashing around air vents, chimneys, roof joints.
 - Interfaces of different materials and roof designs, where construction and/or damage can cause gaps.
- A. 19 If suitable exit/entry points were observed during the external inspection, the following evidence of roosting bats was carefully searched for on the exterior of the building:
- Droppings (down the wall, on the floor, caught in spiderwebs, on windowsills).
 - Staining and/or clean/smoothed areas, indicative of exit/entry.
 - Feeding remains, including moth/butterfly wings and beetle wing casings.
- A. 20 Prior to the internal inspection, the roof/loft design, likely levels of disturbance, and any likely recent changes to the roof/loft were assessed. These were then related to the likelihood of a bat roost being present, along with consideration of which species of bat are most likely to use the roof/loft space. The internal inspection included searching for the following evidence of roosting bats within the roof/loft space:
- Roosting bats within crevices or free hanging.
 - Bat corpses (on the floor, in uncovered water tanks or other containers).
 - Bat droppings, including beneath likely roosting areas.
 - Feeding remains, including moth/butterfly wings and beetle wing casings.
 - Scratch marks, staining and/or clean/smoothed areas, indicative of regular use.
 - Bat-fly Nycteribiid spp. pupal cases.
 - Gaps within the structure of the building, including:
 - Light ingress in the roof indicating access points to the outside.
 - Between the roof lining and roof covering.
 - Within the structure of walls and suitable access points to cavity or rubble-filled walls.
 - Around the structure of chimneys or within disused chimney.
 - Around lintels.
 - Evidence beneath roof insulation, which indicates use by bats before the insulation was installed.
 - Clean swept floors, which may indicate evidence has been removed.
- A. 21 The following equipment was used for the Preliminary Roost Assessment:



- Elevation and baseline drawings of the building or structure.
- Binoculars (Pentax Papilio II 6.5 x 21 Close focusing).
- Powerful torch to illuminate dark corners from the ground.
- A ladder.
- Camera to record evidence.

A. 22 The assessment of the suitability of the buildings within the Site was assessed against Table 4.1 of the Bat Survey Guidelines. A redacted version of the table is set out in **Table 9** below, with additional information as noted.



Potential Suitability	Description of roosting habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation site.
Confirmed*	Evidence of bats has been confirmed within the structure. A temporal scale of recent use can also be applied based upon the type of evidence found and its condition. If a roost is found it may be assigned to the following: - Confirmed, active. - Confirmed, likely active. - Confirmed, unknown if active.
*This is an addition to Table 4.1 within the Bat Survey Guidelines but is based upon assertions and reasoning within the Bat Survey Guidelines.	

Table 9: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement – redacted and with additions

Emergence Surveys

Field survey

- A. 23 The bat emergence survey was undertaken during the appropriate survey season (May – September, with September being sub-optimal). The emergence survey commenced approximately 15 minutes before sunset and continued for approximately 1.5 hours after sunset. The details of the surveys are set out in **Table 10**.
- A. 24 Surveyors were equipped with Bat Logger M2 or Anabat Scout Active bat detectors, along with a Canon XA60 (coupled to infra-red flood lights), Nightfox Red / Whisker cameras (coupled to infra-red flood lights), a Guide TRACK 19 Thermal camera, or a



DJI MAVIC 3E/3T drone. The thermal was turned on 15 minutes after sunset²⁴. Surveyors were positioned to ensure complete coverage of the building and/or the known/suitable roost access points (**Figures 7 – 22**).

- A. 25 All bat activity was recorded, including roost access points (where present), species, timings, direction of flight, behaviour, and use of landscape features.

Date	Survey Type	Survey Times	Temp °C	Cloud Okta	Rain	Wind *B
19/05/25	Dusk / Emergence	20:43 – 22:28 Sunset: 20:58	12 – 14	1 – 0	None	0 – 1
06/06/25	Dusk / Emergence	21:08 – 22:53 Sunset: 21:23	15 – 14	8 – 4	None	0 – 0
30/06/25	Dusk / Emergence	21:13 – 23:30 Sunset: 21:28	24 – 23	1 – 83	None	2 – 2

Table 10: Bat emergence survey details



Figure 7: Survey 1: Position 1: Start: Natalie Nutland-Bowell, Nightfox Red

²⁴ Constraints with memory storage. Not a limitation as visibility was good prior to the thermal being turned on.





Figure 8: Survey 1: Position 1: End: Natalie Nutland-Bowell, Nightfox Red



Figure 9: Survey 1: Position 2: Start: Standalone, Canon XA60





Figure 10: Survey 1: Position 2: End: Standalone, Canon XA60



Figure 11: Survey 1: Position 3: Start: Jenn Senft, Guide TRACK 19 Thermal





Figure 12: Survey 1: Position 3: End: Jenn Senft, Guide TRACK 19 Thermal



Figure 13: Survey 1: Position 4: Start: Mel Granato, Nightfox Red





Figure 14: Survey 1: Position 4: End: Mel Granato, Nightfox Red²⁵



Figure 15: Survey 1: Position 5: Start: Standalone, Nightfox Red

²⁵ The infrared sensor on the camera stopped working during the survey. The surveyor had continued sight of the building throughout the entire survey. The position was covered in a subsequent survey with no technical issues. The camera was subsequently retired from use.





Figure 16: Survey 1: Position 5: End: Standalone, Nightfox Red



Figure 17: Survey 1: Position 6: Start: Standalone, Nightfox Red





Figure 18: Survey 1: Position 6: End: Standalone, Nightfox Red



Figure 19: Survey 1: Position 7: Start: Greg Nightingale, Canon XA60





Figure 20: Survey 1: Position 7: End: Greg Nightingale, Canon XA60



Figure 21: Survey 2: Position 8: Start: Mungo Nash, DJI MAVIC 3E/3T drone





Figure 22: Survey 2: Position 8: End: Mungo Nash, DJI MAVIC 3E/3T drone

Sonogram Analysis

- A. 26 All bat data was converted from WAV to Zero Crossing files and analysed using the software programme Analook. A series of Analook Scans utilising species/genus filtered were carried out and the results of each scan were reviewed by Jenn Senft and approved by Greg Nightingale. Bat passes were assigned to the lowest tax group possible (genera/species), whilst maintaining a high level of certainty. Where bat calls were indistinguishable between two similar species it was assumed that both species were present, unless an overriding factor would clearly demonstrate that a species is highly unlikely to be present within the Site. This approach to call analysis ensured a robust assessment.

Video Analysis

- A. 27 Infra-red cameras recorded video and sound in real time. The video data was viewed to cross reference surveyor observations. Video data was played back using VLC Media player. Video analysis was carried out by Jenn Senft.
- A. 28 Any video data from standalone cameras (unmanned) were passed through Wildlife Imaging Systems' (WIS) Bat Emergence Video Processing software²⁶. The software processes the data frame-by-frame, recognising motion and saving this to an image for later review. One summary image per 30 seconds of video was returned. These images were analysed by Jenn Senft. Where any uncertainty remained, the original video file was viewed to cross reference results.

²⁶ The WIS webpage is available here: <https://www.wildlifeimagingsystems.com/services-bat-emergence>



Ground Level Tree Assessment

- A. 29 The trees within the Site were subject to a Ground Level Assessment (GLTA) following good practice guidelines. This is an external and internal inspection survey, the purpose of which is to search for bats/evidence of bats and assess the likelihood of bats being present and the need for further survey and/or mitigation.
- A. 30 The features suitable to support bat roosts were searched for on the trees with reference to the Bat Tree Habitat Key²⁷. These features are as follows:
- Longitudinal splits.
 - Crevices.
 - Rot-hollows.
 - Transverse cracks.
 - Loose bark.
 - Ivy.
- A. 31 The following equipment was used for the Ground Level Assessment:
- Binoculars (Pentax Papilio II 6.5 x 21 Close focusing).
 - Powerful torch to illuminate dark features from the ground.
 - A ladder.
 - Camera to record evidence.
- A. 32 The assessment of the suitability of the trees within the Site was assessed against Table 4.1 of the Bat Survey Guidelines. The table is set out in **Table 11** below.

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Table 11: Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.

Flight-path and Foraging Habitat Assessment

- A. 33 The assessment of the suitability of the bat flight-paths and foraging habitat of the Site was determined using Table 4.1 of the Bat Survey Guidelines. A redacted version of the table is set out in **Table 12** below.

²⁷ Andrews H. (2018). *Bat Roosts in Trees - A Guide to Identification and Assessment for Tree-care and Ecology professionals: Bat Tree Habitat Key*. Pelagic Publishing, Exeter.



Potential suitability	Description of flight-path and foraging habitats
None	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e., no habitats that provide continuous lines of shade/protection for flight-paths or generate/shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is close to and connected to known roosts.

Table 12: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement – redacted.



Appendix B: UK Habitat Classification Plan



Appendix C: DNA Analysis

Folio No: 3809-2025
Purchase Order: LUS24231
Contact: Luscinia Ecology
Issue Date: 31.07.2025
Received Date: 17.07.2025



Biological Sample Analysis

Summary

Most biological materials (tissue, feces, hair, blood, etc.) contain small amounts of DNA from the organism of which it originated. Using molecular methods such as PCR (polymerase chain reaction) and DNA sequencing, SureScreen Scientifics are able to analyze an unknown sample to determine which species the sample originates from our methods are optimized for the detection of species including bats (over 92% of bat species worldwide can be identified including all 18 UK bat species), mammals; bees, wasps & hornets; birds; fish; plants (from roots, leaves, stem and even dried wood) and many more species.

Results

Lab ID	Site Name	OS Reference	Sample Type	Species Name	Match(%)
B5129	LUS24231-1	ST 96774 66753	Bat Dropping	Common pipistrelle (Pipistrellus pipistrellus)	98.99
Genetic Sequence ATTATATTGGAGGATTTGGAAGTACTAGTTCCTAATAATTGGAGCCCTGACATGGCATTTCCTCGTATAAATA ATATAAGTTTCTGACTCCTACCTCCTTTCTACTACTACTAGCCTCGTCTATAGTAGAAGCGGGAGCGGGTACA GGCTGAACAGTCTACCCCTCTAGCAGGAAACCTAGCACATGCA					

Matters affecting result: none
Reported by: Amy Bermudez

Approved by: Consuela Sopronyi



Appendix D: Emergence Survey Plan



Appendix E: Legislation and Planning Policy

- E. 1 The following local policy, national planning policy and legislation relating to nature conservation and biodiversity status, are considered of relevance to the current proposal.

Planning and Biodiversity

- E. 2 Local Authorities have a requirement to consider biodiversity conservation issues when determining planning applications.
- E. 3 The following ecological and environmental policies from the Wiltshire Core Strategy are of relevance to the Site:
- Core Policy 50: Biodiversity and Geodiversity
 - Core Policy 51: Landscape
 - Core Policy 52: Green Infrastructure
- E. 4 Chapter 15, Conserving and Enhancing the Natural Environment of the National Planning Policy Framework (NPPF)²⁸ includes the following:

“187 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;

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

²⁸ MHCLG (2024). *National Planning Policy Framework. December 2024.* Ministry of Housing, Communities and Local Government, London.



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.

188. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁶⁵; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

...

Habitats and biodiversity

192. To protect and enhance biodiversity and geodiversity, plans 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 biodiversity⁶⁸; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶⁹; 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.

193. 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 reasons⁷⁰ and a suitable compensation strategy exists; and



d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

194. The following should be given the same protection as habitats sites:

a) potential Special Protection Areas and possible Special Areas of Conservation;

b) listed or proposed Ramsar sites⁷¹; and

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

195. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."

Legislation and biodiversity

E. 5 Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended). These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

E. 6 Other relevant legislation and policy documents that have been consulted include:

- Protection of Badgers Act (1992)
- The Countryside and Rights of Way Act 2000
- The Hedgerow Regulations 1997
- Biodiversity Action Plans, both UK-wide (UKBAP), Local plans (LBAPs) and similar nature partnership plans.

Wildlife & Countryside Act 1981 (as amended)

E. 7 The Wildlife & Countryside Act 1981 (as amended; WCA) is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act outlines the protection of wildlife.

E. 8 Most offences are now covered under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended), but some 'intentional' acts are still covered under the WCA, such as obstructing access to a bat roost.



- E. 9 The provisions relating to animals in the WCA only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.
- E. 10 There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.
- E. 11 Certain prohibited actions under the WCA may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence.

Natural Environment and Rural Communities (NERC) Act

- E. 12 The UK Post-2010 Biodiversity Framework, which supersedes UK Biodiversity Action Plan (UK BAP) priority habitats and species, provides the 'broad enabling structure for action across the UK', which in England is interpreted into Biodiversity 2020: A strategy for England's wildlife and ecosystem services; however, some authorities do still refer to BAPs. Protecting habitats and species listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 is an outcome of this strategy. The lists of priority habitats and species in England required under S41 were published by Natural England in May 2014. These measures are given due acknowledgement where relevant.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended)

- E. 13 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (as amended; The Regulations), which are the principal means by which the EC Habitats Directive is transposed in England and Wales update the legislation and consolidate all the many amendments which have been made since they were first made in 1994.
- E. 14 The Regulations provide for the:
- Protection of European Protected Species (EPS; animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain), including: bats, hazel dormice, great crested newts, otters, sand lizard, and smooth snake.
 - Designation and protection of domestic and European Sites (e.g., Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protected Areas (SPA).
 - Adaptation of planning controls for the protection of such sites and species.
- E. 15 Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function (e.g., when determining a planning application).



- E. 16 There is no defence that an act was the incidental and unavoidable result of a lawful activity.
- E. 17 It is possible for actions which would otherwise be an offence under The Regulations to be undertaken under licence issued by the proper authority. For example, where an EPS has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required.

Species Protection

- E. 18 The following protected species information is relevant to this report. Legislation is only discussed in relation to planning and development; other offences may exist.

Amphibians

- E. 19 Common frog, common toad, common newt, and palmate newt receive protection under the Wildlife and Countryside Act 1981 (as amended), making it illegal to sell or trade them.
- E. 20 The great crested newt and Natterjack toad are EPS and fully protected under The Regulations, making it an offence to:
- Deliberately capture, injure, kill, or disturb either species.
 - Intentionally or recklessly obstruct access to any structure/place used for shelter or protection.
 - Damage or destroy a breeding site or resting place.

Badger

- E. 21 Badgers are protected in the UK under the Protection of Badgers Act 1992. Under the act it is an offence to:
- Wilfully kill, injure, take, possess, or cruelly ill-treat a Badger, or attempt to do so
 - To intentionally or recklessly interfere with a sett (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).
- E. 22 The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain; it is not intended to prevent properly authorised development.

Bats

- E. 23 All British bats are classed as EPS and therefore receive protection under The Regulations, making it an offence to:
- Deliberately kill, injure, or capture a bat.
 - Deliberately disturb bats.



- Damage or destroy a breeding site or resting place of a bat.
- E. 24 In addition, all British bats are also listed under Schedule 5 of the WCA, which contains further provisions making it an offence to intentionally or recklessly:
- Obstruct access to any structure or place which any bat uses for shelter or protection.
 - Disturb any bat while occupying a structure or place which it uses for that purpose.
- E. 25 If proposed development work is likely to destroy or disturb bats or their roosts, then a licence will need to be obtained from Natural England, which would be subject to appropriate measures to safeguard bats.

Birds

- E. 26 In the UK, the provisions of the Birds Directive are implemented through the WCA and The Regulations. All wild birds, their nests and eggs are protected, and it is an offence to:
- Kill, injure, or take any wild bird.
 - Take, damage, or destroy the nest of any such bird whilst it is in use or being built.
 - Take or destroying an egg of any such wild bird.
- E. 27 The law covers all species of wild birds including common, pest or opportunistic species. Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

Brown hare

- E. 28 Brown hare is listed on Schedule 5A of the WCA and it is an offence to intentionally or recklessly kill, injure or take Brown hare during their 'close season' (which is 1st February - 30th September), and sale and possession is an offence for any of these animals taken unlawfully.

Hazel dormouse

- E. 29 The hazel dormouse is classed as a European Protected Species and therefore receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence *inter alia* to:
- Deliberately capture, injure, or kill hazel dormice
 - Deliberately disturb hazel dormice
 - Damage or destroy a breeding site or resting place of a dormouse
- E. 30 In addition, hazel dormouse is listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:



- Obstruct access to any structure or place which a hazel dormouse uses for shelter or protection; or
- Disturb a hazel dormouse while occupying a structure or place which it uses for that shelter or protection.

Hedgehog

E. 31 Hedgehog are protected under sections of the schedule 6 of the Wildlife and Countryside Act 1981 (as amended) making it an offence to:

- It illegal to kill or capture hedgehogs unless they are suffering or need to be rehabilitated then released back into the wild.

Reptiles

E. 32 Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile.

E. 33 Smooth snakes and sand lizards are European Protected Species under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals.
- Deliberately or recklessly take or destroy eggs of these animals.
- Damage or destroy a breeding site or resting place of such a wild animal.
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.

