

Ecological Impact Assessment

Land off Devizes Road, Hilperton

07 August 2026

Ecology
Arboriculture
Land Management





Report Details

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Report Reference	3131-EcIA-NH

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Revision	Date	Author	Checked By	Approver	Summary of Changes
V2	07 August 2026	Nick Hargreaves BSc MSc MCIEEM	Chris Merrick BSc ACIEEM	Chris Merrick BSc ACIEEM	Include final survey information, scheme amends and reflect consultee comments
V1	04 February 2026	Nick Hargreaves BSc MSc MCIEEM	Faye Midmore BSc MSc MCIEEM	Lindsay Taylor BSc MSc ACIEEM	

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Site Details

Site Name and Location	Land off Devizes Road, Hilperton
Central OS Grid Reference	ST 88083 59311
Client	Redcliffe Homes Ltd

Boundary



Executive Summary

Site Location	The Site is located off Devizes Road and Hilperton Drive (A361) in Hilperton, on the northeastern edge of Trowbridge, Wiltshire.
Proposals	Outline application for the construction of residential development of up to 80 units with associated landscaping and access.
Survey Work	Desk-based study, UK Habitat Classification survey, bat activity survey, bat emergence survey, badger survey and reptile survey between 2023 and 2026.
Designated Sites with Potential Impacts	Bath and Bradford on Avon Bat SAC.
Baseline Habitats	The Site comprises several parcels of other neutral grassland, bounded by a mixture of native hedgerows, mixed scrub, trees, specimen trees. The Site includes a complex of agricultural buildings both active and disused.
Protected/ notable Species	The Site provides opportunities for a range of protected species. Confirmed presence of badgers, commuting, foraging and roosting bats including Annex II species, breeding birds, and reptiles were identified during surveys. The Site lies with the Bechstein's Buffer for the Bath and Bradford on Avon Bat SAC and the Yellow Medium Risk Zone and Grey Hatched Zone of the Trowbridge and Westbury Bat Mitigation Strategy.
Mitigation and Compensation	- Construction Environmental Management Plan (CEMP); - Habitat Management and Monitoring Plan (HMMP); - Creation of 50m Wildlife Buffer along eastern boundary; - Comprehensive Landscaping Scheme; - Sensitive Vegetation clearance for mammals, birds and herptiles; - EPS Licence required – mitigation and compensation for roosting bats including bespoke bat roost and installation of bat boxes; and - Sensitive lighting strategy.
Biodiversity Net Gain	A separate BNG Statement Report is provided (Ref: 3131-BNG-NH). - The Site Baseline comprises: 9.95 Habitat Units; and 2.76 Hedgerow Units. - The indicative Post Development BNG is as follows: 12.29 Habitat Units; and 3.57 Hedgerow Units. - This represents 2.34 (+23.49%) increase in Habitat Units and a 0.81 (+29.14%) increase in Hedgerow Units.
Enhancements	- Bird Boxes -20 no. bird nest box (to be integrated into the new buildings); - Bat Boxes – 40no. Manrose Bat Ridge Roosts to be erected onto new dwellings and 15no. tree mounted bat boxes to be installed on retained trees; 2no reptile hibernacula in new open space; - Hedgehog highways comprising 13cm x 13cm cut out through close-boarded fences (or equivalent gaps under fences) to allow hedgehog movement throughout site.

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1 Introduction

This report presents the results of an Ecological Impact Assessment (EclA) at Land off Devizes Road, Hilperton in relation to an outline planning application. The surveys were commissioned by Redcliffe Homes Ltd.

The area within the application boundary is hereafter referred to as the 'Site'.

1.1 Site Context

The Site is located off Devizes Road and Hilperton Drive (A361) in Hilperton and comprises two separate privately owned land holdings. The land holding to the north comprises a former tenanted (in use at time of survey) horse paddock, with associated yard and stables.

The land holding to the south is within private residential curtilage. There are two stable blocks on the Site; one to the north (Active Stables) and one to the south (Disused Stables). The Site is situated on the outskirts of an urban area and is bordered by farmland interspersed by hedgerows to the north, sports pitches to the east and residential development/roads to the south and west.

1.2 Planning History

The southern parcel of the Site was subject to a planning application in 2022/23 (Wiltshire Council Ref: PL/2022/07977). This application was supported by a suite of ecological survey information and an Ecological Impact Assessment by Engain (Engain, 2023). The application was refused permission in December 2023 primarily on ecological grounds with two of the three reasons for refusal relating to insufficient survey information and inadequate mitigation in respect to the requirements of the Trowbridge and Westbury Bat Mitigation Strategy (TWBMS), and the second being that sufficient and appropriate mitigation was not provided in respect to the loss of bat roosts on Site.

Following the refusal, the client (Redcliffe Homes) commissioned Nicholas Pearson Associates (NPA) to conduct a suite of further surveys in relation to bats, to ensure that sufficient information was collected to inform a future planning application.

In 2025, GE Consulting was brought into the team to compile and coordinate the ecological works to inform the [planning submission which was submitted on 16th February 2026 \(WC Ref – PL/2026/01072\)](#).

1.3 Description of Proposed Development

Proposals consist of an Outline Planning Application for a residential development of up to 80 dwellings with all matters reserved except for access.

1.4 Aims

The aims of this report are to:

-  Identify and describe the habitats and species likely to be affected by the proposed development and assess the ecological value of these features;
-  Identify key ecological constraints to the proposed development and evaluate the significance of any potential effects; and,
-  Provide recommendations for mitigation and enhancement opportunities in accordance with relevant planning policy, legislation and other published guidance (see **Appendix 2**).

2 Methods

2.1 Ecological Scoping and Baseline Data Collection

2.1.1 Desk Study

Due to the level of detailed information available for the Site (original records request in 2023, and through survey works between 2022 and 2025) and through planning applications in the locality, the Wiltshire and Swindon Biological Records Centre (WSBRC) was not contacted for a fresh records search. It is considered unlikely that a fresh request would return any new information which could significantly affect the scope or findings of the assessment.

Nonetheless an internet search was undertaken to identify statutory sites designated for nature conservation value within a 2km radius of the Site boundary (10km for international sites), using the Government's mapping website MAGIC (www.magic.gov.uk). A search was made of MAGIC for European Protected Species (EPS) Mitigation licences issued by Natural England within 2km of the Site boundary since 2008 and Habitats of Principal Importance (HPI) within 50m of the Site boundaries.

2.2 Field Surveys

As outlined above, the Ecological Impact Assessment (Ref: eg211155 Rev 05. Engain, 2023) as well as the bat survey works conducted by NPA across 2024 were used to inform this report. **Table 1** summarises the surveys undertaken to provide ecological baseline information for the Site. Full methods are provided in **Appendix 3**.

Table 1: Summary of Baseline Data Collection Surveys

Survey Type	Date (s)
Extended UK Habitat Classification Survey and Biodiversity Net Gain (BNG) condition assessment	July 2022 (Engain), September 2025 (GE Consulting)
Botanical Assessment	June 2026 (GE Consulting)
Badger Survey	September 2025 (GE Consulting)
Building Inspection	July 2022 (Engain), March & April 2024 (NPA), September 2025 (GE Consulting), June 2026 (GE Consulting)
Bat Emergence Survey	May to September 2024 (NPA)
Bat Activity Surveys	April to October 2024 (NPA)
Tree Assessment for Bats	April to September 2024 (NPA)
Reptile Survey	Summer 2024 (Engain)

2.2.1 Extended UK Habitat Classification Survey

A UK Habitat Classification Survey was conducted in July 2022 by Engain to inform the previous planning application. This was updated on 30 September 2025 by Nick Hargreaves BSc (Hons) MSc MCIEEM FISC 4 when weather conditions were dry with good visibility to ground truth the previous findings.

All habitats within the Site were identified, described and mapped during the field survey in accordance with the UK Habitat Classification (UKHab) UKHab Ltd., 2023 (V2.0)) and Statutory Biodiversity Metric (Defra, 2024) classifications for hedgerows), with other linear and point features mapped using Phase 1 Habitat Survey symbology (JNCC, 2010).

Primary habitats have been mapped to a minimum mapping unit (MMU) of 25m², although where features of note of a smaller scale are present, these have also been recorded and mapped. Any

habitats (e.g. traditional orchard) with no appropriate primary habitat label were assigned a secondary habitat code. Other secondary UKHab codes were recorded where relevant, although they are described qualitatively within this report for ease of reading. A non-exhaustive botanical species list was compiled, with plant names following Stace (2019).

2.2.1.1 *Botanical Assessment*

Further detailed botanical assessment was undertaken in June 2026 by Nick Hargreaves BSc (Hons) MSc MCIEEM FISC 4 when weather conditions were warm and dry. The botanical assessment built upon the UKHab Survey as described above.

A walkover of each grassland parcel was undertaken, followed by detailed sampling using 1m² quadrats, to collect detail on species and sward composition, the number of which was determined by the characteristics of each parcel. Due to previous assessments of the Site grassland as '*other neutral grassland*', six quadrats per parcel were sampled to evidence this.

Estimated percentage cover of the below features was assessed based on a qualitative overall assessment of each parcel, along with data collected from quadrats:

- 🐾 Ryegrass and white clover;
- 🐾 Herbs, sedges and rushes;
- 🐾 'Undesirable species' (as defined within Defra, 2024a); and
- 🐾 Bare ground.

Frequency of species was defined using the DAFOR methodology, adapted from that detailed within the Farm Environment Plan (Natural England, 2010):

- 🐾 Dominant: Recorded to cover a majority of the ground in all quadrats and qualitatively assessed as dominating the sward;
- 🐾 Abundant: Recorded in all quadrats, and qualitatively assessed as comprising a significant proportion of the sward;
- 🐾 Frequent: Recorded in >50% of quadrats;
- 🐾 Occasional: Recorded in 20-50% of quadrats; and
- 🐾 Rare: Recorded in <20% of quadrats.

2.3 Biodiversity Net Gain Assessment

A baseline BNG assessment was undertaken using the statutory biodiversity metric (released in July 2025) to assess the pre-development and indicative post-development value of the habitats on Site following current guidance (Defra, 2024). Further details are provided in the BNG Statement and Assessment Report (GE Consulting, 2026b).

2.4 Consultation

The previous planning application (original application PL/2022/07977) provides context in regard to Wiltshire Council's requirements/expectations in regard to any future planning submission. Additionally, Natural England (NE) commented as a Statutory Consultee on 29th November 2023 and provided detailed comments in regard to impacts on Bath and Bradford on Avon Bat Special Area of Conservation (SAC) and in respect to impacts on bats.

Following the submission of the planning application in February 2026 comments were received on 23rd April 2026 from Kyle Conroy Sustainable Development Higher Officer at Natural England and from Elizabeth Burrows, Senior Ecologist at the Wiltshire Council on 1st May 2026.

Subsequently liaison and meetings were held between the design team and Wiltshire Council with a meeting on 21st May 2026 with Jemma Foster (Development Management) and Elizabeth Burrows (Senior Ecologist) to seek to agree a way overcome the holding objection. It was agreed that the Ecological Impact Assessment and Shadow Habitats Regulations Assessment would be updated and any amendments would be highlighted via **green text**.

Where comments from WC/NE's consultation response has been replicated they have been "quoted", followed by a technical response.

2.5 Baseline Evaluation and Impact Assessment

Determining the importance of ecological features was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018). The guidelines recommend a scale of significance from International to Local ecological importance as a frame of reference, however, also notes that it can be adapted to suit local circumstances. As such, where ecological receptors are assessed to be of less than Local value, an additional valuation of 'Site value' has been included.

An assessment was then made of possible ecological impacts of the proposed development on each feature within the development's likely 'Zone of Influence' (Zol). Where uncertainty exists, a precautionary approach has been adopted.

Measures are described to ensure that any impacts can be avoided, minimised or compensated for by applying the mitigation hierarchy in accordance with NPPF (2024) paragraph 193(a) which states:

"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."

2.6 Limitations

Care has been taken to ensure that balanced advice is provided on the information available and collected during the study period (s), and within the resources available for the project. However, the possibility of important ecological features being missed due to survey timings, absence during surveys or the year of survey cannot be ruled out. In addition, the lack of evidence or records of protected species on Site does not preclude their presence from Site.

Survey/camera coverage of the eastern elevation of the Building B1 (Active Stables) was not possible due to the view being obscured by adjacent vegetation. However, given the lack of features identified on this elevation and the overall limited suitability (i.e. low potential) of the structure, this was not considered a constraint.

This report is based on data collected by third-parties, and as such, while the summary results were made available for analysis, there are some limitations in regard to the presentation of data i.e. all pipistrelle calls have been agglomerated, and noctule, Leisler's and serotine have also been treated as a single group.

Given the openness of the Active Stable and available positions to deploy the automated detector, it is likely that bat activity (i.e. incidental passes outside of the stable) would not have been recorded, and therefore, this data alone could not be relied upon alone to determine the presence of a night roost. As such the patterns of any records and the searches for evidence on the floor were used to determine likely presence/absence.

3 Baseline Conditions & Evaluation

3.1 Designated Sites

A summary of designated sites within the search area is provided in **Table 8**.

Table 8: Designated sites records within 2km of Site boundary, 10km for European sites

Site Name	Proximity to Site	Description
<i>National Site Network</i>		
Bath and Bradford on Avon Bats SAC (Winsley Mines SSSI)	c. 8km W (nearest component)	Annex II species that are a primary reason for selection of this site: 1304 Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> 1323 Bechstein's bat <i>Myotis bechsteinii</i> Annex II species present as a qualifying feature, but not a primary reason for site selection: 1303 Lesser horseshoe bat <i>Rhinolophus hipposideros</i>
Salisbury Plain SAC & SPA	c. 8.5km S	Annex I habitats that are a primary reason for selection of this site: 5130 <i>Juniperus communis</i> formations on heaths or calcareous grasslands 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) Annex II species that are a primary reason for selection of this site: 1065 Marsh fritillary butterfly <i>Euphydryas</i> (<i>Eurodryas</i>, <i>Hypodryas</i>) <i>aurinia</i>
<i>Statutory Designated Sites</i>		
Picket and Clanger Wood SSSI	c. 4.4km S	Picket and Clanger Wood is a floristically rich ancient woodland supporting an outstanding range of butterfly species. The combined butterfly and moth faunas include several scarce species with limited national distributions, among them two which are rare and vulnerable in Great Britain. The site also accommodates a diversity of birds characteristic of ancient woodland in southern and western England.
<i>Non-Statutory Designated Sites</i>		
Green Lane Wood LNR / Green Lane Wood & Meadow LWS	c. 1.2km S	Ancient oak woodland. The open part of the wood is coppiced, encouraging woodland flowers to grow. They include Solomon's seal, stinking Iris and greater butterfly orchid. Important bird and invertebrate assemblages. Core Roost for Bechstein's bats.
Kennet and Avon Canal LWS	c. 1.4km N	Part of the 87-mile-long K&A Canal which links London with the Bristol Channel.
Southwick Country Park LWS	c. 4.89km SW	Site comprises c. 150 acres of old farmland situated on the edge of Trowbridge. Primarily species-rich hay meadows.

The Site lies within a consultation zone for the Bath and Bradford on Avon Bat SAC, as outlined in the Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire (Wiltshire Council, 2015); specifically, the 1500m buffer for Bechstein's bats from Green Lane and Biss Woods Local Wildlife Site (LWS) see **Plate 1** below.

The Site is also located within both the Yellow Zone (Medium Risk) and the Grey Hatched Zone (Medium Risk) within the Trowbridge and Westbury Bat Mitigation Strategy (TWBMS) (Wiltshire Council, 2025). The zones have been developed to identify sensitive areas where development could have an effect on the Bath and Bradford-on-Avon Bats SAC and trigger the requirements of the Habitat Regulations (**Plate 2** refers).

Plate 1: Site Location within Bath and Bradford on Avon Bat SAC consultation zone



Plate 2: Site Location within TWBMS Zones



3.1.1 SSSI Impacts Risk Zones and Habitats of Principal Importance

The Site lies within a SSSI Impact Risk Zone (**Plate 3** refers) which highlights “**All Consultations:** All planning applications (except householder applications) where the proposed development is outside or extends outside existing settlements/urban areas and will increase lighting levels or affect trees/woodland, waterbodies, rural buildings/structures (manmade or natural) or linear landscape features such as hedgerows, streams and rivers through direct loss, fragmentation or change of use.”

Review of Habitats of Principal Importance (HPIs) via MAGIC.gov.uk indicates that the Site does not include any HPIs listed under the priority habitats inventory. However, the Site lies within proximity to several small parcels of deciduous woodland (**Plate 4** refers).

Plate 3: Site Location with SSSI Impact Risk Zones



Plate 4: Habitats of Principal Importance within the Locality



3.2 Habitats and Flora

The distribution of habitats is shown on **Figure 1**.

The Site was subject to habitat survey as part of the Ecological Appraisal to inform the previous planning application (Engain, 2023). As described above, additional field parcels have been included to the north which were not historically subject to survey. The update UKHab survey in 2025 by GE Consulting sought to ground-truth the historic data and update where relevant. Further detailed botanical assessment was undertaken in June 2026.

3.2.1 Grassland

The Site is dominated by two fields of permanent pasture partitioned internally by post and rail, and post and wire fencing for paddocks. It is understood that the fields have been managed historically through a combination of grazing (horse and sheep) and mowing.

Plate 5: Site Photographs – September 2025



At the time of the 2025 survey the sward was relatively uniform in height and dominated by coarse grasses with perennial rye-grass *Lolium perenne*, cock's foot *Dactylis glomerata* and false oat-grass *Arrhenatherum elatius* providing the most abundant species within the sward. A reasonable diversity of other common grasses were also present to varying extents including rough meadow-grass *Poa trivialis*, red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus*, annual meadow-grass *Poa annua*, common bent *Agrostis capillaris*, soft brome *Bromus hordaeceus* and creeping bent *Agrostis stolonifera*. Forb diversity was fairly limited with species indicative of agricultural improvement including creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, cut-leaved cranesbill *Geranium dissectum* and dandelion *Taraxacum officinale* agg. being abundant across the sward, though other forbs including yarrow *Achillea millefolium*, ribwort plantain *Plantago lanceolata*, common nettle *Urtica dioica*, daisy *Bellis perennis*, hogweed *Heracleum sphondylium*, broad-leaved dock *Rumex obtusifolius*, spear thistle *Cirsium vulgare*, creeping thistle *Cirsium arvense*, and chickweed *Stellaria media* are present, albeit infrequently or in local aggregations. During the summer 2026 survey additional species were noted including smooth hawksbeard *Crepis capillaris*, ragwort *Senecio jacobaea*, soft brome *Bromus hordaeceus*, red clover *Trifolium pratense*, common sorrel *Rumex acetosa*, doves foot cranesbill *Geranium molle*, field bindweed *Convolvulus arvensis*, timothy *Phleum pratense*, meadow foxtail *Alopecurus pratensis*, and tufted vetch *Vicia cracca*.

As evidenced by the species assemblage and displayed through the attached photographs, the grassland is typical of agriculturally improved (but not intensively managed) swards that are ubiquitous throughout the surrounding landscape and is indicative of a modified sward (i.e. g4 – modified grassland). While the habitat description and photographs were broadly consistent across

assessments, as the grassland was historically categorised as ‘other neutral grassland’ by Engain as part of the work undertaken in 2023, a more detailed botanical assessment was judged to be required. As such the grassland was subject to a detailed botanical assessment by Principal Ecologist Nick Hargreaves BSc(Hons) MSc FISC 4¹ in June 2026.

Plate 6: Site Photographs – June 2026



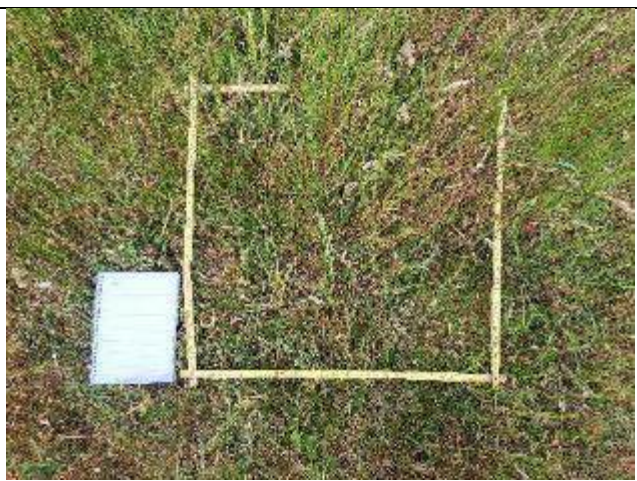
The botanical assessment comprised a modified National Vegetation Classification (NVC) approach, though tailored to collect the information required for Biodiversity Net Gain Condition Assessments rather than seeking to determine particular goodness-of-fit with specific NVC Communities (Rodwell, 1992 & 2000). This comprised six randomly selected 1m x 1m quadrats per field parcel, which resulted in a total of 12 quadrats split across the two main field parcels. Detailed information is provided below in **Tables 9** and **10**.

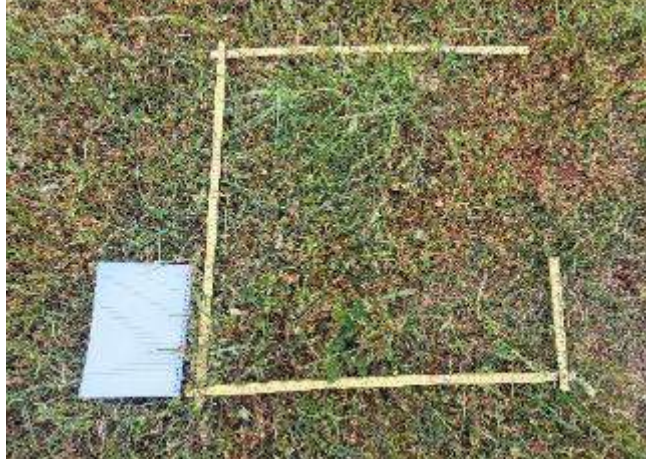
The survey was undertaken within the recognised survey season (May to August is the optimal period for carrying out flora surveys). It should be noted that the grassland had not been cut for an extended period (at GE’s request) to ensure that as much data as could be made available was collected. Further to this, this may have resulted the grassland presenting better than it would have been historically (when subject to more regular managing via mowing and grazing). Additionally, summer 2026 was one of the hottest and driest summers on record, with temperatures in Trowbridge exceeding 30 degrees C, and

¹ BSBI - Field Identification Skills Certificate Level 4

low levels of rainfall across May and June, with almost zero rainfall recorded in July. This did affect the growing conditions of some plants, however this is not considered a significant limitation to this study.

Table 9 – Field 1 Quadrat Information.

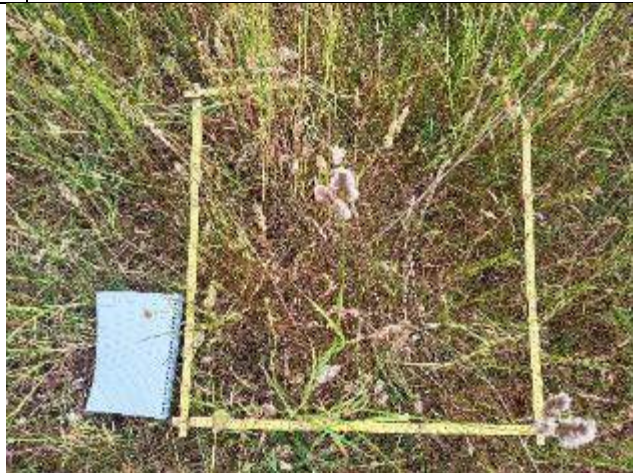
Quadrat F1Q1 51°19'56.6"N 2°10'16.7"W	
Common Name	Scientific Name
Cut-leaved cranesbill (A)	<i>Geranium dissectum</i>
Cocks foot (A)	<i>Dactylis glomerata</i>
Soft brome (O)	<i>Bromus hordeaceus</i>
False oat grass (A)	<i>Arrhenatherum elatius</i>
Perennial rye-grass (A)	<i>Lolium perenne</i>
Tufted vetch (R)	<i>Vicia cracca</i>
Creeping bent (O)	<i>Agrostis stolonifera</i>
Quadrat F1Q2: 51°19'56.3"N 2°10'17.6"W	
Common Name	Scientific Name
Cut leaved cranesbill (A)	<i>Geranium dissectum</i>
Ribwort plantain (O)	<i>Plantago lanceolata</i>
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Cocks foot (A)	<i>Dactylis glomerata</i>
Smooth hawksbeard	<i>Crepis capillaris</i>
Tufted vetch (R)	<i>Vicia cracca</i>
Creeping bent (O)	<i>Agrostis stolonifera</i>

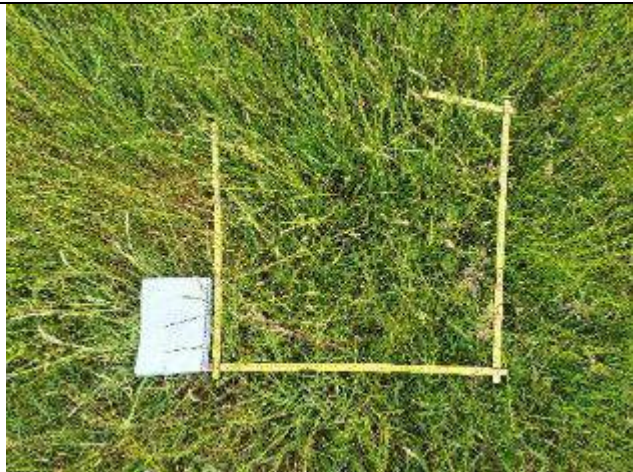
Quadrat F1Q3: 51°19'55.8"N 2°10'20.0"W	
Common Name	Scientific Name
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Cocks foot (A)	<i>Dactylis glomerata</i>
Perennial rye-grass (A)	<i>Lolium perenne</i>
Yorkshire fog (A)	<i>Holcus lanatus</i>
Ragwort (R)	<i>Senecio jacobaea</i>
Cut-leaved cranesbill (A)	<i>Geranium dissectum</i>
Quadrat F1Q4: 51°19'57.7"N 2°10'18.4"W	
Common Name	Scientific Name
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Cocks-foot (A)	<i>Dactylis glomerata</i>
Perennial rye-grass (A)	<i>Lolium perenne</i>
Cut leaved cranesbill (A)	<i>Geranium dissectum</i>
Ribwort plantain (O)	<i>Plantago lanceolata</i>
Creeping thistle (O)	<i>Cirsium vulgare</i>

Quadrat F1Q5: 51°19'59.1"N 2°10'19.4"W	
Common Name	Scientific Name
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Cocks-foot (A)	<i>Dactylis glomerata</i>
Soft brome (O)	<i>Bromus hordeaceus</i>
Yorkshire fog (A)	<i>Holcus lanatus</i>
Creeping buttercup (A)	<i>Ranunculus repens</i>
Cut leaved cranesbill (A)	<i>Geranium dissectum</i>
Rough meadow-grass (R)	<i>Poa trivialis</i>
Dandelion (O)	<i>Taraxacum officinalis</i> agg.
Quadrat F1Q6: 51°19'58.3"N 2°10'21.0"W	
Common Name	Scientific Name
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Cocks foot (A)	<i>Dactylis glomerata</i>
Cut-leaved cranesbill (A)	<i>Geranium dissectum</i>
Creeping bent (O)	<i>Agrostis stolonifera</i>
Field bindweed (O)	<i>Convolvulus arvensis</i>

Table 10 – Field 2 Quadrat Information.

Quadrat F2Q1: 51.332587, -2.173946	
Cocks foot (A)	<i>Dactylis glomerata</i>
Perennial rye-grass (A)	<i>Lolium perenne</i>
Yorkshire fog (F)	<i>Holcus lanatus</i>
Cut-leaved cranesbill (A)	<i>Geranium dissectum</i>
Creeping bent (O)	<i>Agrostis stolonifera</i>
Quadrat F2Q2: 51.332726, -2.174307	
Perennial rye-grass (A)	<i>Lolium perenne</i>
Yorkshire fog (A)	<i>Holcus lanatus</i>
Rib wort plantain (O)	<i>Plantago lanceolata</i>
Common bent (O)	<i>Agrostis capillaris</i>
Rough meadow-grass (O)	<i>Poa trivialis</i>
Quadrat F2Q3: 51.333157, -2.174164	
Perennial rye-grass (A)	<i>Lolium perenne</i>
Cocks foot (A)	<i>Dactylis glomerata</i>

Cut-leaved cranesbill (A)	<i>Geranium dissectum</i>
Creeping bent (O)	<i>Agrostis stolonifera</i>
Soft brome (O)	<i>Bromus hordaeceus</i>
Quadrat F2Q4: 51.333418, -2.173374 	
Perennial rye-grass (A)	<i>Lolium perenne</i>
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Creeping buttercup (A)	<i>Ranunculus repens</i>
Dandelion (O)	<i>Taraxacum officinalis</i> agg.
Rough meadow-grass (O)	<i>Poa trivialis</i>
Common bent (O)	<i>Agrostis capilaris</i>
Quadrat F2Q5: 51.333281, -2.172786 	
Perennial rye-grass (A)	<i>Lolium perenne</i>
Cut leaved cranesbill (A)	<i>Geranium dissectum</i>
Cock's foot (A)	<i>Dactylis glomerata</i>
False oat-grass (A)	<i>Arrhenatherum elatius</i>
Timothy (O)	<i>Phleum pratense</i>
Common bent (O)	<i>Agrostis capilaris</i>

Quadrat F2Q6: 51.333576, -2.172070		
Perennial rye-grass (A)		<i>Lolium perenne</i>
Creeping buttercup (A)		<i>Ranunculus repens</i>
Dandelion (O)		<i>Taraxacum officinalis</i> agg.
White clover (O)		<i>Trifolium repens</i>
Rib wort plantain (O)		<i>Plantago lanceolata</i>
Timothy (O)		<i>Phleum pratense</i>

Whilst some variation was noted in species composition between the various surveys (both historic and those conducted by GE), and the NVC, this is likely the result in seasonal variation and management impacting the composition/appearance of the sward at time of survey. Furthermore, while sampling via quadrats provides the best method of assessing plant communities, it is likely that some plant species may be missed due to the nature of recording only those species present within a quadrat coupled with the size of the site, and seasonal variations in plant communities.

Species composition was fairly consistent throughout the sward, though abundance of species present was variable, with some localised areas of greater abundance of one particular species or another. While some species remained for the most part constant across the various quadrats, as discussed above, local variation was present. Herb diversity was broadly consistent across the quadrats, with diversity on the whole poor and limited to a few frequently occurring species with relative levels of abundance. While there were minor differences in species composition between the various quadrats i.e., some species were only present in a single quadrat, the composition of the grassland was quite consistent across both those quadrats across both field parcels.

The definition for g3c Other Neutral Grassland is “A neutral grassland that does not meet the definition of either g3a (Lowland Meadows) or g3b (Upland Hay Meadows) AND that meets at least three of these four criteria:

1. >20% cover of broadleaved herbs and sedges
2. >8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes);
3. ≥1 grass species that is not generally sown for intensive agricultural production (i.e. rye grasses, timothy, cock's foot, meadow fescue) is at least abundant.
4. Cover of rye-grasses and white clover where present is <30%. “

The definition of g Modified Grassland is “Species-poor vegetation (<9 species per m²) dominated by a few fast-growing grasses on fertile neutral soils. It is frequently characterised by an abundance of rye-grasses and white clover. Most broadleaved species present will be associated with high fertility”.

It should be noted that there is significant overlap in the grass and forb species present in both g3c and g4 grasslands, as grassland exist of a spectrum subject to the type and intensity of management,

coupled with the fertility of soils (whether naturally, or via past inputs of nutrients). As such, a level of overlap would be anticipated.

Based upon the above survey and assessment, neither of the two main field parcels present fulfil the criteria for g3c, as they do not pass the following criteria:

1. Less than 20% cover of broadleaved herbs and sedges. Grasses dominate the sward, with herb diversity typically limited to a few species.
2. The average species richness for Parcel 1 is 6.5, with the average species richness for Parcel 2 being 5.5. As such, neither Parcel fulfils this requirement.
3. Both Parcels 1 and 2 include at least one grass species not generally sown for agricultural production. As such they both pass this criterion.
4. Parcels 1 and 2 both include >30% cover of perennial rye-grass and white clover (though it should be noted that white clover wasn't particularly abundant in the sward, and was only present in 2-3 of 12 quadrats). As such both parcels fail this criterion.

As such, based on the above, the grassland which dominate the Site is considered to represent a modified grassland sward (g4), which is of **Site importance** considering its abundance within the local landscape.

On 27th July the client (Redcliffe Homes) made GE Consulting aware that the grassland within the Site (and the wider locality) had been damaged by wildfire on Friday 24th July. Indicative photographs are shown below.

Plate 7: Site Photographs –July 2025



The damage can be considered an *act of god / force majeure* due to the extreme period of dry weather (c. 40 days without rain across most of southern England, coupled with record breaking temperatures) and was not the result of an inappropriate activity by either landowner (it is understood that it potentially related to an incident further to the west caused by a householder bonfire). This damage is not considered to represent 'degradation' under BNG, as degradation refers to any intentional or unauthorized reduction in a site's biodiversity value prior to a planning application, with the main purpose being to prevent developers from creating a false baseline. As detailed above, a comprehensive baseline was collected prior to the incident, and as such there is no impact upon the robustness of the assessment.

3.2.2 Mixed Scrub

The eastern edge of the Site comprises secondary growth of native trees and scrub (mixed scrub – h3h) surrounding a former area of hard standing (u1b – Developed land sealed surface) that is in part covered in early to late successional vegetation ranging from ephemeral early colonisers, through to tall ruderals

with bramble scrub and self-set woody specimens. Woody vegetation (h3h) is dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*, hazel *Corylus avellana*, elder *Sambucus nigra*, dog rose *Rosa canina*, oak *Quercus robur* and ash *Fraxinus excelsior*.

Plate 8: Site Photographs –September 2025



3.2.3 Woodland and Trees

The Site includes several stands of planted individual native and introduced trees (w1h – other woodland mixed) in isolated patches. The southernmost stand comprises tall non-native trees including Monterey cypress *Cupressus macrocarpa*, purging buckthorn *Rhamnus cathartica*, hornbeam *Carpinus betulus*, red oak *Quercus rubra* and Lombardy poplar *Populus nigra* ‘Italica’. The northernmost stand comprises a mix of mostly native woody species including elm *Ulmus procera*, hawthorn and blackthorn.

Plate 9: Site Photographs –September 2025



3.2.4 Hedgerows

The Site is bound to the east and north by native hedgerows with trees. The hedgerows are in moderate condition, with a good variety and diversity of native woody species and being fairly mature and extensive. Given their modest extent, and average condition, coupled with the extent of similar such habitats within the locality, the boundary features are considered to be of no more than **Local** importance.

Plate 10: Site Photographs –September 2025



3.2.5 Built/Urban

The Site includes a number of buildings including a centrally located Disused Stables and agricultural accommodation building, with a second group of buildings to the northwest including Active Stables, hay store and occupied static caravan. The buildings are described in further detail below in respect to roosting bats.

3.2.6 Summary Habitat Assessment

The fields which dominate the Site are managed for a combination of grazing and mown, with a fairly poor and uniform sward. Areas of dense mixed scrub are associated with the eastern boundary, in discrete stands and around the central complex of agricultural buildings. The modified, grassland and bramble scrub are relatively abundant habitats within the local area; therefore, they are considered to be of **no more than Local** importance.

3.3 Fauna

3.3.1 Amphibians

The Site does not include any waterbodies, and a review of OS Maps and aerial photography does not indicate the presence of any such features within 250m of the Site. The nearest waterbodies include one at Lower Paxcroft Farm c. 550m to the south, with further waterbodies to the SE. A small cluster of three ponds is present c. 800m west adjacent to Church Farm Close. The previous records search returned two records of great crested newts *Triturus cristatus* within 2km of the Site from 2001 and 2006. A review of records via MAGIC does not indicate any records of confirmed presence within proximity, furthermore the nearest European Protected Species Mitigation Licences for GCN are c. 3.2km southwest and Lower Studley and 3.6km northwest at Berryfield.

The Site offers some habitat suitable for amphibian species in their terrestrial phase, however the absence of suitable breeding habitat and the absence of GCN within ponds in the locality indicates that the Site is **Negligible** for amphibians. As such, they are not discussed further within this report.

3.3.2 Badger

Potential evidence of foraging and commuting activity by badger is present across the Site via well used paths and snuffle holes. A two entrance (one active entrance) outlier sett was identified in the eastern boundary of the Site adjacent to Whaddon Lane which bounds the Site to the east (as shown below). No other evidence of sett construction was noted across the Site. *The sett was checked concurrently with*

the updated botanical survey in June 2026, and conditions/evidence remain consistent with previous results.

Plate 11: Badger Sett



Badger is not listed as a species of principal importance for the conservation of biodiversity in England and has therefore not been assigned a scale of importance in this case, but will be considered further in this assessment in relation to their legal protection only.

3.3.3 Bats

As a function of the Site's location and the extensive level of ecology survey work conducted both at the Site and throughout the wider landscape, there are extensive records both field and roosting for bats within the locality, with records for 12 bat species including for Annex II species greater horseshoe, lesser horseshoe and Bechstein's bat which are associated with the Bath and Bradford on Avon Bat SAC. As discussed above, the Site is located within the Consultation Buffer for Bechstein's bat as outlined in the Planning Guidance for Wiltshire and is within both the Yellow and Grey Hatched Zones as per the Trowbridge and Westbury Bat Mitigation Strategy; specifically, for the Core Roosts for Bechstein's bats at Green Lane and Biss Woods, c. 1.2km (**Plates 1 and 2** refer).

In addition, eleven European Protected Species Mitigation Licences have been granted within 4km with the closest being c. 120m south (EPSM 2012-5169) for the destruction of a common pipistrelle resting site.

As discussed above, NPA were commissioned by Redcliffe Homes to provide detailed bat survey information following rejection of the outline consent. A bat survey report was produced as can be found at **Appendix 8**.

3.3.3.1 Roosting – Trees

The Site contains a number of mature trees, both specimen field trees and associated with the Site boundaries. No evidence of roosting bats was identified on any of the tree inspections. Further details are provided in **Table 9** below.

Table 9: Tree Assessment

Tree No.	Description/Evidence	Further Survey & Findings	Suitability
T1 Elder	1no. south facing knot hole on southern stem, with a cavity extending to approximately 2ft.  1no. south-facing knot holes on southern stem, with a cavity extending to approximately 1.5ft. 1no. upwards facing tear-out on southern stem. Single rot hole on dead limb on east side of tree.	3no. inspections via endoscope. No evidence of roosting bats	PRF-M
T2 Elder	Fallen tree with south-facing pruning cut on dead stem.	3no. inspections via endoscope. No evidence of roosting bats	PRF-I
T3 Purging Buckthorn	Compression fork/barn occlusions	No further inspection required	Negligible
T43 Hornbeam	Low-level / open fissure on main stem.	No further inspection required	Negligible
T54 Red Oak	Lifting bark	No further inspection required	PRF-I
T56 Ash	Pruning cut on main stem	No further inspection required	PRF-I
T57 Elder	South facing knot hole	3no. inspections via endoscope. No evidence of roosting bats	PRF-I
T58 Ash	Wound feature with exposed heartwood on west side of main stem 	3no. inspections via endoscope. No evidence of roosting bats	PRF-I

Tree No.	Description/Evidence	Further Survey & Findings	Suitability
T59 Standing Deadwood	Loose/lifting bark around entire main stem. 3no. woodpecker holes  1no. woodpecker hole (6 x 6cm; narrowing to 3 x 3cm) on main stem (6m high / east facing) with a depth of approximately 10cm; 1no. woodpecker hole (2 x 3cm) on main stem (6.5m high / north-east facing) with a depth of approximately 2cm; and 1no. woodpecker hole (4 x 3cm) on main stem (7m high / north facing) with a depth of approximately 2cm. All woodpecker holes were open, clean and dry.	1no. endoscope inspections via MEWP. Confirmed as PRF-I – no further inspection undertaken. No evidence of roosting bats	PRF-I

3.3.3.2 Roosting – Buildings

The Site includes several buildings including a centrally located stable complex, a hay store and an active stable and static caravan.

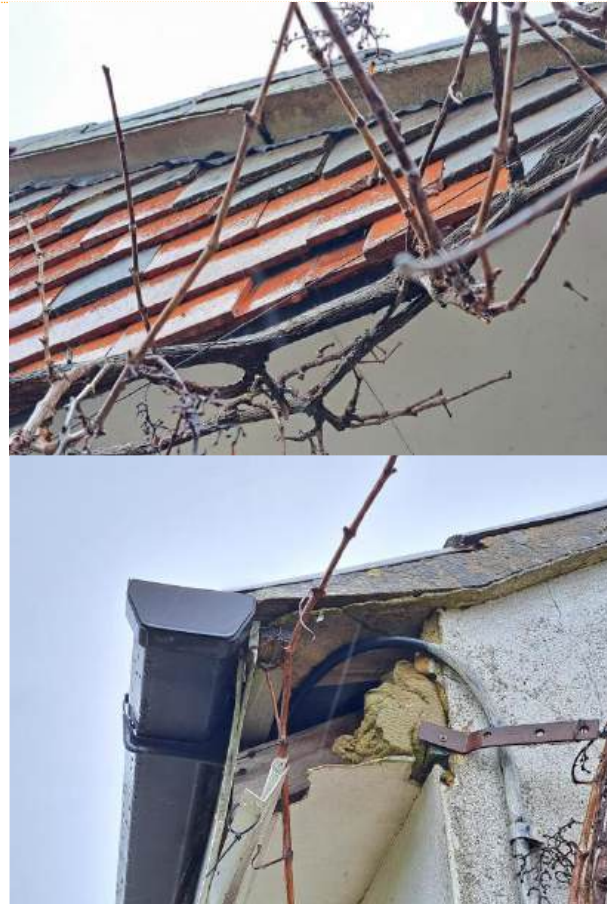
Internal and external inspection surveys of all Site buildings (the two stable blocks and a hay store) was undertaken on the 28 March and 18 April 2024 by a licenced bat worker (NPA, 2025). Further details are outlined in **Table 10** below.

An update Building Inspection was conducted by GE Consulting in September 2025. This was to ground-truth and validate the previous surveys. No new evidence or any change in conditions was identified which would result in a material change to the previous assessment.

Table 10: Assessment of Buildings

Building No.	Description	Bat Evidence/ Access Points/ Potential Features	Photograph	Category (Collins, 2023)
B1 (Disused Stables)	Large central building complex. Split into two broad sections – a stable block/kitchen comprising six stalls to the west; and a house/accommodation to the east. The floors of the stable blocks have been constructed from concrete. The canopy floor has been constructed from brick. The buildings were constructed from brick and block with a stucco/textured render. All stalls have timber windows and doors. The accommodation building is of the same construction with some timber cladding on its eastern elevation as well as a metal up and over garage door and external decorative balcony on the western elevation. The roof of the stable block and attached house has been constructed from timber trusses (standard fink), with a reinforced plastic membrane overlay. Double roman common roof tiles and clay ridge tiles used throughout. Extending from the south side of the stable units is a thin canopy,	- Gap where drainage pipe exits exterior wall. - Linear gaps in mortar below ridge tiles. Numerous linear gaps behind overlapping timber cladding. Gap below roof tiles where mortar has fallen out. Hole at end of soffit board on attached house. Gap where soffit board has loosened/dropped on southern canopy. - Linear gap where fascia board has detached from canopy. - Hole in mortar at end of ridge tile. - Linear gaps between soffit and fascia boards. - Single stable door permanently open, allowing bat access into roof void above stables/ southern canopy. - Holes in plaster boarding on underside of canopy. - Gap where soffit board has loosened/dropped. - Gaps between fascia board and lead flashing. - Gap where hanging tile is missing. - Gap in mortar below eaves. - Gaps at edge of roof, between mortar and roof tiles.	 	Confirmed Roost (LHS and GHS)

Building No.	Description	Bat Evidence/ Access Points/ Potential Features	Photograph	Category (Collins, 2023)
	supported by timber pillars. Clay vertical wall tiles are present at the ends of this canopy. To the underside of the canopy, there is plaster boarding with circular lights along its length. At the apex of the attached house, there is a timber louvre vent with lead flashing (part of roof void).	✎ Gaps under lead flashing (cobwebbed present around entrance). ✎ Hole (c. 200mm x 200mm) where end of fascia board is missing. ✎ Gaps between canopy wall and fascia board. ✎ Gap under lead flashing where hanging tile is missing. ✎ Linear gap where ridge tiles mortar has blown. ✎ Gap below lead flashing in roof valley. ✎ Hole (c. 350mm x 150mm) where soffit board is missing on attached house. ✎ Hole in broken roof tile. Gap between mortar and lead flashing. ✎ Gap at side of fascia board. ✎ Hole in fascia board above metal garage door. ✎ Gap between external wall and fascia board. ✎ Linear gaps behind overlapping timber cladding. ✎ Gaps below lead flashing between attached house wall and canopy. ✎ 1 no. LHS was observed hanging from ridge beam in one of the stables. ✎ Aggregations of droppings were found throughout the stable units,		

Building No.	Description	Bat Evidence/ Access Points/ Potential Features	Photograph	Category (Collins, 2023)
		and within the loft void above the stable kitchen. DNA analysis confirmed presence of GHS.		

Building No.	Description	Bat Evidence/ Access Points/ Potential Features	Photograph	Category (Collins, 2023)
B2 (Active Stables)	The stable block comprises a timber framed and clad single storey building with corrugated metal roofing panels. The stables are partitioned into 4 stalls (c. 5m x 4m). At the northern side of the stables, there is a storage unit with a single glass window and a flat roof. An open, timber lean-to is present on its northern aspect.	- Opening in roof on northern elevation where corrugated metal roofing sheet is missing. - Linear gap above doorway of store. Numerous gaps in broken canopy support brackets. Hole in timber cladding, leading to cavity behind. - Linear gap behind barge board (heavily cobwebbed). Hole in cladding on gable end. Gap at side of fascia board leading into cavity behind cladding.	 	Low

Building No.	Description	Bat Evidence/ Access Points/ Potential Features	Photograph	Category (Collins, 2023)
B3 (Hay Store)	Large hay store c. 16m x 7m in size. Constructed from timber cladding with corrugated metal panel roof.	- No suitable features identified. - No evidence of roosting bats identified.		Negligible

3.3.4 Bats – Emergence Surveys

Surveys were undertaken by Engain in 2022 of the central stable building (B1). A single lesser horseshoe bat was recorded in August 2022, though no activity was recorded during the re-entry survey in September 2022. They concluded the building may be used occasionally as a day roost by a single bat that dispersed after the maternity period and was of low to moderate conservation significance.

NPA conducted a bat emergence survey between June and September 2024. On the 19 June 2024, a single horseshoe bat was seen (i.e. no echolocation recorded) light-sampling from the open stall of Building B1 at 22:03 (35 minutes after sunset). Based on a review of automated detector data (i.e. which recorded early records of GHS bats in June), this was attributed to greater horseshoe bat. On the 18 July 2024, two greater horseshoe bats were recorded entering Building B1 through the open stall at 22:23 (68 minutes after sunset). On the 24 September 2024, a single horseshoe bat was seen (i.e. no echolocation recorded) light sampling beneath the southern canopy of Building B1 between 19:25 – 19:27. Based on the time recorded (i.e. 24 minutes after sunset) and records of GHS bats recorded around the same time on the automated detector deployed in the stable block, this was attributed to greater horseshoe bat. **Plate 12** below shows the emergence/entry point (in red) for all three surveys.

Plate 12 - Greater Horseshoe Emergence Point (Building B1)



On the 18 July 2024, a single common pipistrelle emerged from under a roof tile on the northern elevation of building B1 at 21:57 (42 minutes after sunset), heading north (**Plate 13** refers).

Plate 13: Common Pipistrelle Emergence July 2024



On the 24 September 2024, a single common pipistrelle emerged from beneath the canopy on the southern elevation of Building B1 at 19:21 (20 minutes after sunset), heading south (**Plate 14** refers).

Plate 14: Common Pipistrelle Emergence September 2024



Table 11: Summary Emergence Results.

Building Ref.	Species	Peak Count	Date of Emergences
B1	Greater horseshoe bat	2	19/06/24, 18/07/24 and 24/09/24
B1 (main roof)	Common pipistrelle	1	18/07/24
B1 (stable roof)	Common pipistrelle	1	24/09/24

NPA also conducted supplementary deployments of trail cameras and static bat detectors within both the disused and Active Stables for periods of between 10 and 12 nights in June, July, August and September.

The automated detector deployed internally recorded early GHS registrations (i.e. indicative of day roosting) on 39 occasions and late GHS registrations (i.e. indicative of night roosting) on 7 occasions. Additionally, it recorded early LHS registrations (i.e. indicative of day roosting) on 4 occasions, late LHS registrations (i.e. indicative of night roosting) on 20 occasions and no registrations on 22 occasions (see **Appendix 5** for further detail).

The static detector deployments within the Active Stables returned a total of 27 GHS and 379 LHS registrations across the deployment period. Given the lack of droppings/feeding remains recorded within the stable and short duration of calls, this suggests that the Active Stables does not represent a GHS or LHS night roost.

The trail camera deployed in August recorded low numbers (max. 2no.) of horseshoe bats using the stable for roosting.

An updated Building Inspection of all Site buildings was conducted in June 2026. No roosting bats were noted utilising any of the buildings at the time of survey, and the evidence present (via droppings within B1) remained as per the previous inspection in 2025.

In their comments, WC highlighted “Surveys confirm that Building B1 supports a day roost for small numbers of common pipistrelle, greater horseshoe (GHS), and lesser horseshoe (LHS) bats. It is not agreed that the active stable building is not used by roosting bats. Static detector data confirm that GHS and LHS bats enter the building, and the absence of droppings or feeding remains is likely attributable to regular stable cleaning. It is therefore considered highly likely that the building is used by GHS and LHS bats as a night roost”.

The inactive Stables B2 and Hay Barn B3 were subject to a reinspection concurrently with the one as described above. Building B2 is not currently in use as an active stable, and no evidence of bat roosting (droppings, feeding remains etc) was noted. As such, the building is not considered to represent a night roost for either horseshoe species, as suggested by WC comments.

3.3.4.1 *Foraging and Commuting*

2022 Surveys

As discussed above, surveys were conducted by Engain across 2022, with the report replicated at **Appendix 7**.

The 2022 surveys identified that at least 10 species were utilising the Site to some extent. Overall bat activity was substantially greater at the western edge of the Site than along the east. The western detector, which was placed on a boundary comprising scattered mature trees along a private drive, recorded a total of 1,162.72 passes per night of all species over the period between April and October. By contrast the eastern detector, which was placed on the inside (Site) face of the tree-lined path, only recorded a total of 199.63 passes per night over the same period (17% of the activity recorded on the west). On both detectors the most frequently recorded species was common pipistrelle (around 50% of all calls at both locations).

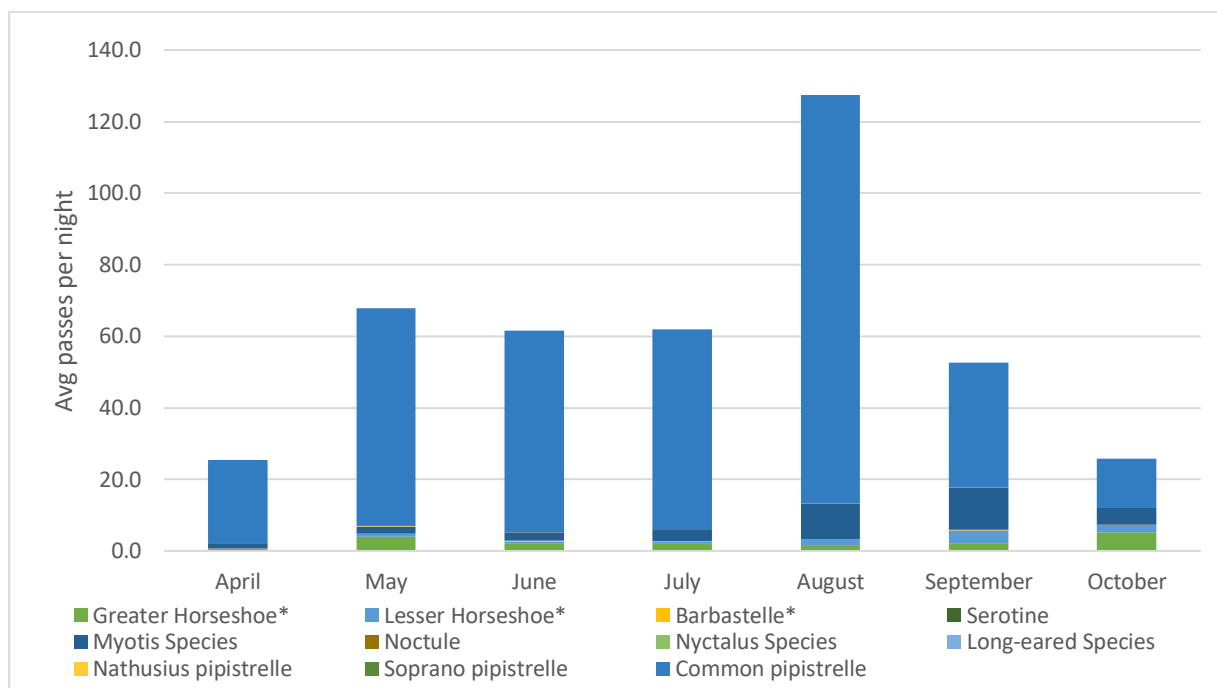
Greater horseshoe bats were recorded on the western detector in May (5.8 passes per night), June (0.6 passes per night), July (2.6 passes per night), August (2.6 passes per night), September (74.4 passes per night) and October (0.25 passes per night). On the eastern detector they were recorded in April (0.2 passes per night), May (1.2 passes per night), August (0.29 passes per night) and September (2.2 passes per night). Activity levels were therefore similarly low in both locations, with a peak in the west in September indicating that an individual bat likely foraged around the detector in that period. This indicates that the Site is used by an individual bat or small numbers of bats commuting through the Site, with greater levels of activity on the west (if the September results are excluded, the total passes per night across the recording period are 10.6 in the west and 0.8 in the east).

Lesser horseshoe bats were recorded on the western detector in May (0.6 passes per night), August (0.3 passes per night) and September (0.2 passes per night). They were recorded on the eastern detector in September only (0.2 passes per night). This indicates that the Site is used infrequently by an individual bat or small numbers of bats commuting through the Site, with more activity on the western edge of the Site compared with the east.

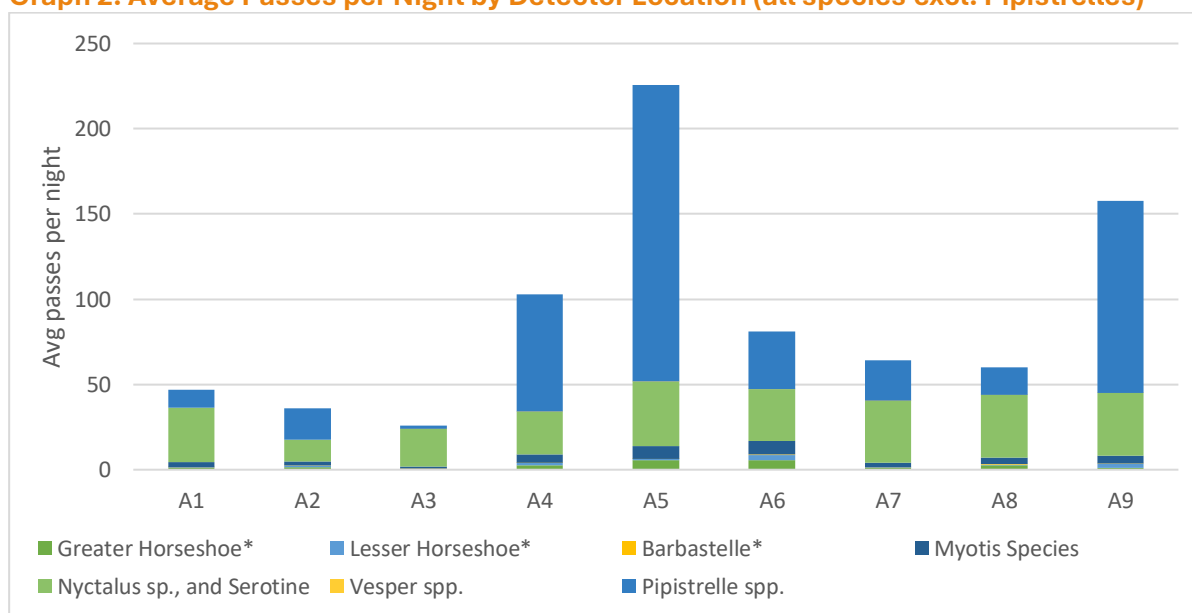
2024 Survey

Further survey work was undertaken in 2024 by NPA in line with the requirements of the TWBMS. Details are provided in **Appendix 3** below, with the original survey report reproduced in **Appendix 8**. These surveys recorded at least 10 bat species using the Site for foraging/commuting with a cumulative 39,836 passes across the 50-night period (~796 passes per night), with pipistrelle bats being the most abundant species accounting for 57.67% of all bats (22,974 registrations). Average number of passes per night was highest in August, was almost double the next highest month (May), with a more even distribution across the rest of the main active season (**Graph 1** refers). **Graph 2** below shows relative activity across detector locations. They were most abundant at Locations A3, A5 and A6 in close proximity to the confirmed roosts in Building B1 and at A9 on the eastern boundary of the Site.

Graph 1: Average Passes per Night (all species)



Graph 2: Average Passes per Night by Detector Location (all species excl. Pipistrelles)

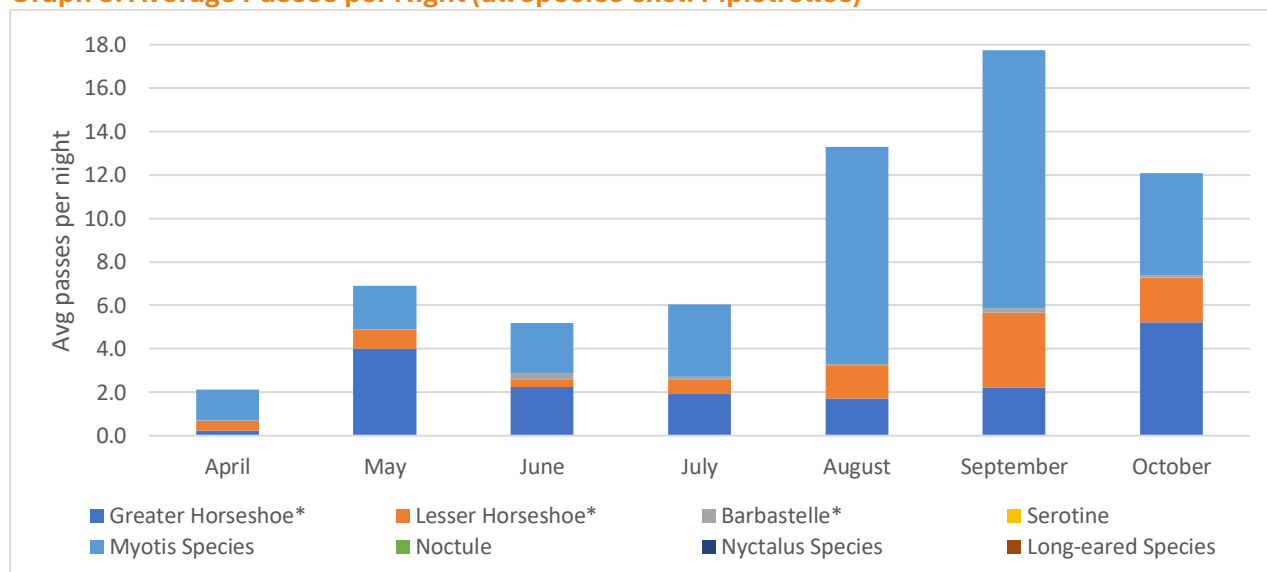


Big bats (*Nyctalus* sp. and serotine - NLS) were the next most abundant accounting for 33.39% of all calls (13,300 registrations) with the highest average NLS activity occurring in June (81.02 passes per night), with the highest average passes by location recorded within the centre of the southern field / location A7 (115.4 passes per night). The majority of these passes are associated with commuting behaviour (i.e. single passes), with records indicative of foraging activity (multiple registrations within a short period of time) recorded only occasionally. Both foraging and commuting activity by noctule and serotine were recorded during the NBW surveys. **Graph 3** below refers.

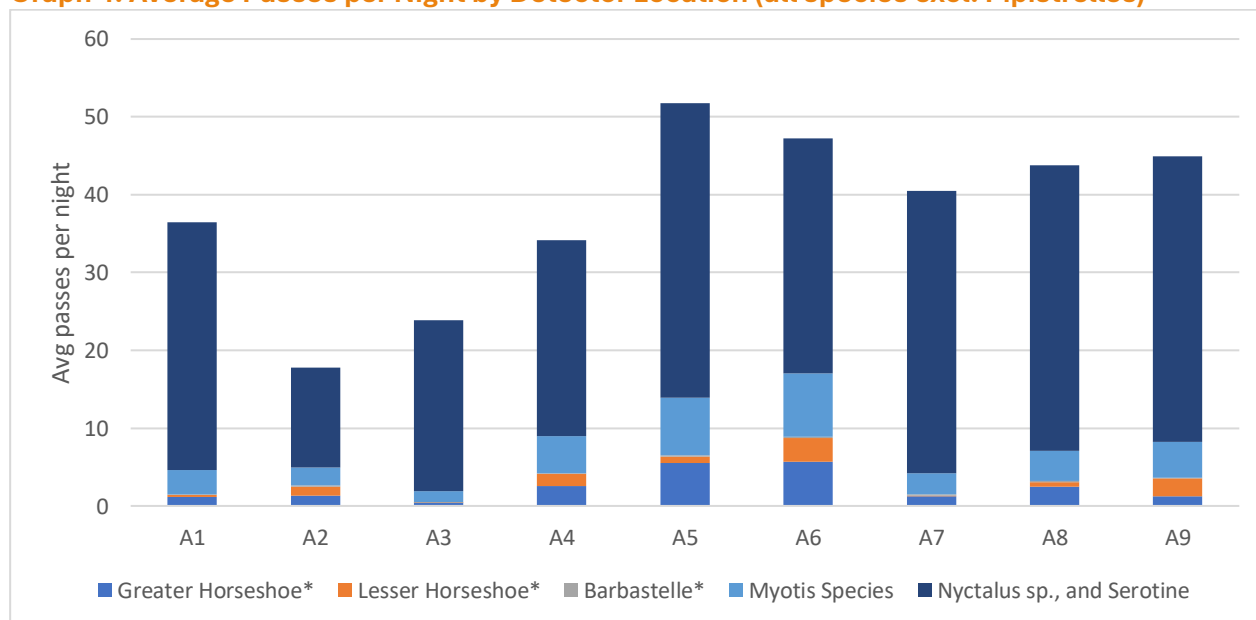
Myotis bats (including Annex II Bechstein's for which the SAC is in part designated) account for 4.82% of total calls (1,921 *Myotis* registrations). The highest *Myotis* activity was recorded in August (9.98 passes per night) and September (11.87 passes per night). The majority of these records are suggestive of commuting behaviour. The NBW surveys recorded both foraging and commuting activity by *Myotis*, with the vast majority recorded close to the eastern boundary of the Site. On average the detectors at A6 and A5 in proximity to Building B1 the recorded the highest *Myotis* activity, though similar levels of

activity were noted across the southern part of the Site at detectors A7, A8 and A9. The higher activity recorded at location A5 in August (40.8 passes per night) is due to a single night (20 August 2024) of higher foraging activity (as suggested by 122 continuous records between 21:31-21:50, with no corresponding records at detectors A4 or A6). On this night *Myotis* activity was recorded much earlier on Site at detectors A6 (centre of Site), A1 (western boundary), A2 (northern boundary) and A9 (eastern boundary) (in order from earlier-later), suggesting the bats were foraging around the Site boundary features. Throughout the NBW surveys no *Myotis* were observed/recorded at Stopping Points 3 or 10 on the southern transect.

Graph 3: Average Passes per Night (all species excl. Pipistrelles)



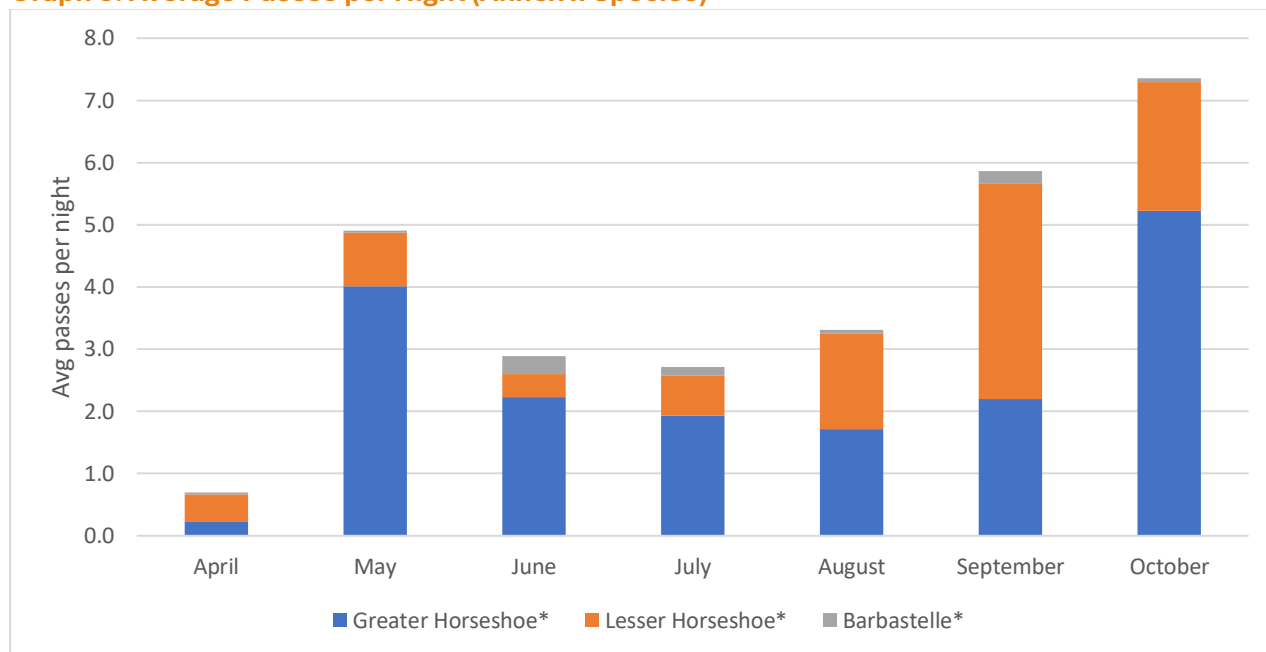
Graph 4: Average Passes per Night by Detector Location (all species excl. Pipistrelles)



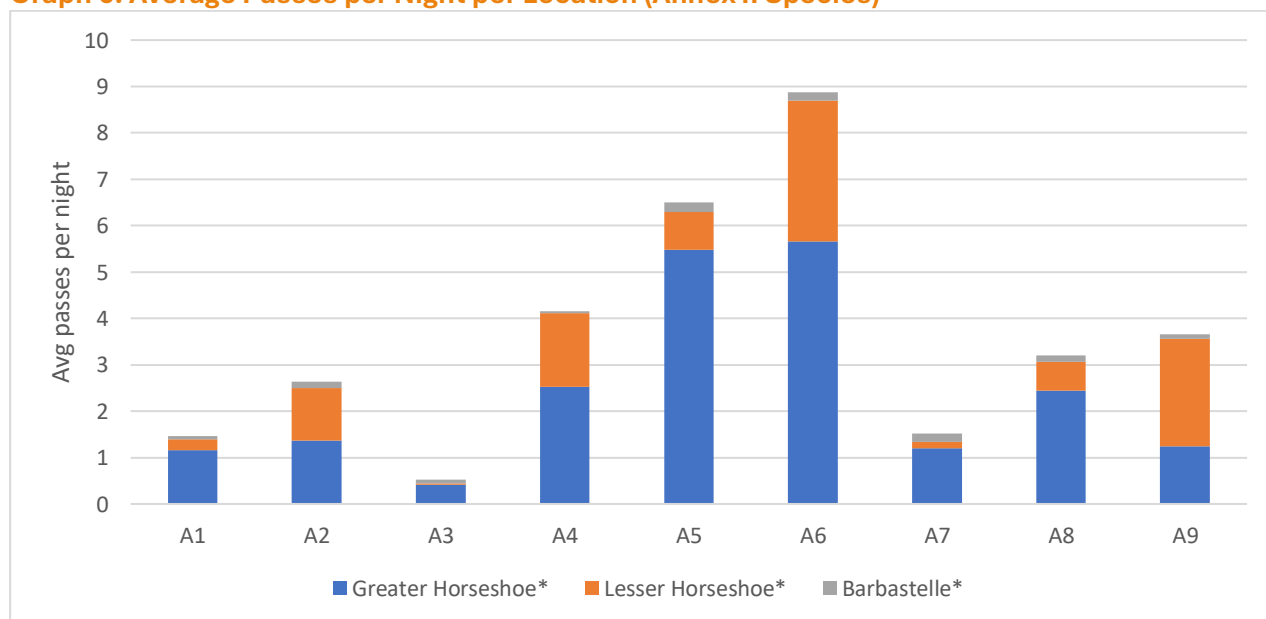
The Annex II species greater horseshoe, lesser horseshoe and barbastelle were all recorded at the Site, albeit in relatively modest proportions of total calls – 1.25% (497 registrations); 2.70% (1074 registrations); and 0.14% (56 registrations) respectively. Activity for horseshoe bats was recorded in all seven months of the active period with peaks in May and October (GHS) and September (LHS), with registrations in April being the lowest, and roughly half the registrations in June, July and August when compared to September and October (**Graph 5** refers). The largest number of calls were associated with A5 and A6 (in close proximity to the confirmed roosts in Building B1), with activity across the Site

otherwise being fairly uniform. This suggests that while the Site certainly provides foraging opportunities for horseshoe bats, it appears to be of less importance during the key maternity period (June/July).

Graph 5: Average Passes per Night (Annex II Species)



Graph 6: Average Passes per Night per Location (Annex II Species)



The assemblage of bats recorded during these surveys is considered to be fairly typical given the Site's geographic location and the habitats on and adjacent to the Site. Overall bat activity was dominated by pipistrelle bats and, with all other species combined accounting for <10% of the total recorded activity with GHS and LHS representing 1.25% and 2.70% of total calls. Due to the difficulty in identifying *Myotis* bats to species level, they have been grouped together. They account for a cumulative 4.82% of total calls, a modest number considering that Annex II Bechstein's will likely account for a proportion of that total. More common *Myotis* species (Natterer's and Daubenton's) and the more uncommon species (whiskered, alcahloe, Brandt's), likely make up a larger proportion. As part of the consultation with Wiltshire Council, it was suggested that some further analysis of *Myotis* calls could be undertaken through greater examination of the shape and rate of frequency change within a bat echolocation call. However, WC ecologist confirmed that this would not be required.

The activity surveys undertaken found that the Site habitats offer a resource for a variety of species including Annex II bats (including day roosting) that are associated with the SAC. However, taking into consideration the modest scale of the Site, its context in the landscape, its proximity to the SAC and the assemblage, and numbers of bats identified, there is no evidence to suggest the Site or either of its boundaries represent a significant/landscape commuting corridor for any of these species (as had been suggested in consultation responses for planning application PL/2022/07977). As such the Site is considered to be of **Local** to **District** importance for bats.

3.3.5 *Birds*

Numerous records for birds were returned from WSBRC including those listed on the red and amber Birds of Conservation Concern (BoCC) lists, Species of Principal Importance (SPIs) and Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). This included records for greylag goose, green sandpiper, hobby and barn owl.

Greylag goose and green sandpiper are unlikely to use the Site, and the records are likely associated with the nearby Kennet and Avon Canal (to the north), the Rivers Avon or Biss, or potentially Stourton Water to the south. Hobby and barn owl could potentially forage over the Site as part of a wider network of such sites, with the Disused Stables and Active Stables to the north offering potential nest sites.

Evidence of nesting barn swallow (droppings, nest sites etc) is present within the stables where access permits. The Site is likely to support common and widespread species within boundary features, scrub and mature trees, however based on the modest size of the Site, and nature of habitats present, there is no indication that a notable breeding bird assemblage could be supported and the Site is considered to be important for nesting birds at a **Local** level.

3.3.6 *Dormouse*

No records of dormouse were returned in previous data searches, and the nearest EPS Licence for dormouse is c. 9km to the north near Lacock, Bath. While dormouse are present across Wiltshire, freely available records indicate their presence to the north east and Melksham, and south of Trowbridge at Yarnbrook and Westbury. There are no substantial blocks of woodland within proximity to the Site, the nearest being Green Lane Wood c. 1.2km south.

The Site includes some features with potential suitability for dormouse should they be present, including the small stands of mixed scrub, and boundary hedgerows. Surveys were not considered necessary to inform the previous planning application, taking into consideration the scale and nature of the habitats present i.e. being small and relatively isolated from each other and from the surrounding landscape.

Taking into consideration the limited amount of suitable habitat present, its relative isolation from the surrounding landscape, and more optimal habitat (woodland - particularly ancient woodland), the absence of records from within the locality and the previous consultation response from WC that such an approach was acceptable, dormice can be considered absent from the Site and are not considered further in this assessment.

3.3.7 *Invertebrates*

The original EcIA (Engain, 2023) highlighted that records of notable invertebrate species are present in the locality, specifically from Green Lane Wood (c. 1.2km south). Notable species recorded from that site include dragonflies, butterflies and beetles. `

Due to the scale of the Site, the nature and condition of the habitats present, and their abundance in the wider landscape, it is unlikely that the Site would support a significant number of notable invertebrates, and thus further surveys were scoped out. Furthermore, the previous consultation response from WC indicated that no further surveys were deemed necessary. The Site is likely to provide opportunities to a range of common invertebrate species and as such is considered to be of no more than **Local** importance.

3.3.8 Reptiles

WSBRC returned two records of grass snake and 10 records for slow worms within 2km of the Site. As The grassland which dominates the Site and the extensive edge habitat provides suitable opportunities for common reptiles. Surveys in 2023 found no evidence of reptiles, and as such reptiles were deemed to be absent from the Site (Engain, 2023). As a result of the historic absence, and prior consultation response from WC regarding the acceptability of the approach, these surveys have not been updated.

3.3.9 Other Notable Species

The grassland, scrub and hedgerows provide suitable opportunities for foraging and sheltering hedgehog. As a Species of Principal Importance under S41 of the NERC Act 2008, LPAs must give due regard to them when making decisions. As such, the Site is considered to be of up to **Local** value for hedgehogs.

4 Further Survey Work

No further ecological survey work is considered necessary for this application; however, any changes to the proposed masterplan or if any significant amount of time has passed since the date of this report, a re-appraisal may be required.

Update emergence surveys will be required as part of the bat licence process, if, at the time of licence submission, the emergence surveys are not from the most recent bat active season (May – August/ September). A verification survey is always required within three months of submitting the licence application.

5 Impact Assessment And Mitigation

5.1 Designated Sites

Due to the intervening distances between the Site and designated sites within the locality, no direct impacts are anticipated. There is however the potential for indirect impacts to the Bath and Bradford on Avon SAC through two primary pathways – loss of supporting habitat for Annex II species; and the impact of increased recreational pressures. Full details are provided in a separate shadow Habitat Regulations Assessment (sHRA) (GE Consulting, 2026 – Ref: 3131-sHRA-NH) to enable the Competent Authority, in this case Wiltshire Council, to assess the impacts of the proposals.

5.1.1 Bath and Bradford on Avon Bats SAC

The Site lies in close proximity to Green Lane and Biss Woods, two woodlands known to represent Core Roosts for Annex II Bechstein's bats for which the Bath and Bradford on Avon Bat SAC is designated. The SAC is designated for its populations of greater horseshoe and Bechstein's bats as the primary reason for designation, with lesser horseshoe listed as a qualifying species but not a primary reason for designation. This SAC is primarily an underground site which provides stable hibernation conditions and swarming conditions for significant number of the qualifying species. The SAC includes the hibernation

sites associated with 15% of the UK greater horseshoe bat population and is selected on the basis of the importance of this exceptionally large overwintering population. The SAC support small numbers of Bechstein's bats hibernating in abandoned mines, though maternity sites are predominantly in the woodlands (like those highlighted above through the County).

Within Wiltshire, the key guidance document is the "Bath and Bradford on Avon Bat SAC Planning Guidance for Wiltshire" (Wiltshire, 2015). The guidance states *"In order to maintain the integrity of the SACs, it is important to protect the network of 'sensitive features' used by the designated bat populations (as set out in 3.1). These species can be highly mobile and although individual bats are known to occasionally migrate tens of kilometres between roost sites, there are a number of roosts where large numbers of these bats are known to regularly hibernate and breed. These have been identified as 'Core Roosts' for the purposes of this guidance."* Additionally, the landscapes surrounding these Core Roosts which are used regularly for foraging and commuting are also of particular importance and have been identified as 'Core Areas'. The size of these Core Areas is dependent upon the typical ranging behaviour of the species involved. The guidance document defines these as:

-  4km surrounding greater horseshoe Core Roosts;
-  2km surrounding lesser horseshoe Core Roosts;
-  1.5km surrounding Bechstein's Core Roosts; and

As discussed above, the Site lies within the 1.5km zone for Bechstein's and lies within proximity to the 4km Zone greater horseshoe bats.

In addition, Wiltshire Council published an updated Trowbridge and Westbury Bat Mitigation Strategy in July 2025. The TWBMS was prepared in support of the Wiltshire Local Plan Review 2020-2038 with an aim to provide a clear and detailed approach to considering the impact of development in the Trowbridge and Westbury area on the Bath and Bradford-on-Avon Bats SAC. In their announcement of the TWBMS² WC stated that the document would *"...bring the new strategy in line with the council's other mitigation strategies pertaining to European sites, it will not comprise a Supplementary Planning Document (SPD) and this has been agreed with Natural England"*, and that the purpose was to allow flexibility so the strategy can be updated/amended when required.

Wiltshire Council formally withdrew its emerging Local Plan (2020–2038) from examination on 19 May 2026 after government inspectors concluded it failed to allocate sufficient land to meet the county's housing and affordable housing needs, as well as concerns raised regarding the spatial strategy proposed. As such, the legal weight afforded to the TWBMS is somewhat untested. As confirmed via correspondence with Wiltshire Council, unlike the TBMS, the TWBMS does not represent a Supplementary Planning Document (SPD). However, WC has stated that *"The TWBMS remains in place irrespective of the withdrawal of the Wiltshire Local Plan 2020-2038 from examination. It will continue to provide the detailed approach for addressing and mitigating the impacts of development in the Trowbridge and Westbury areas on the Bath and Bradford-on-Avon Bats SAC. As with the TBMS the revised strategy has been prepared to support both the Wiltshire Local Plan and speculative growth. As a result, the TWBMS remains both relevant and appropriate."*

It should be noted that there is some minor discrepancy between the TWBMS Adoption Statement³ (22 July 2025) and the published TWBMS. Para 21 of the TWBMS Adoption Statement states *"A main change put forward in the TWBMS is that new residential development proposals for 50 or more dwellings within*

² <https://www.wiltshire.gov.uk/article/14112/New-strategy-in-place-to-protect-bat-habitats-from-potential-development-in-Trowbridge-and-Westbury>

³ <https://cms.wiltshire.gov.uk/documents/s239477/Trowbridge%20and%20Westbury%20Bat%20Mitigation%20Strategy%20Report.pdf>

*the grey hatched medium recreational risk zone will generally be expected to provide a SANG / sufficient natural recreational focused greenspace, **or to financially contribute** towards a SANG / sufficient greenspace in close proximity to the development site, to minimise intercept new residents and minimise impact upon the important woodland sites. A monitoring fee will also need to be secured via a planning obligation to monitor use of the SANG / greenspace once the development is occupied".* There is some discrepancy between this adoption document and the version of TWBMS within the public domain and it is suggested that there should be flexibility to provide either SANG on-site or a financial contribution, as many other local authorities do.

The Site lies within both the Yellow (Medium Risk) and the Grey Hatched Zone for Recreational Pressures.

5.1.1.1 *Impacts in the Absence of Mitigation*

As the Site provides suitable commuting/ foraging for all three species for which the SAC is designated, there is potential for Likely Significant Effects (LSEs) to occur to the population of the SSSI/SAC bats as the habitats may be functionally linked to SAC designated roost sites. The SAC Guidance (Wiltshire, 2015) identified a number of potential impacts from development within Core Areas including – Physical Changes; Lighting; Noise and Vibration; Recreational Disturbance; Pollution; and Mortality.

5.1.1.2 *Direct Loss of Roosting Habitats*

The scheme will not directly impact upon the Bath and Bradford on Avon Bat SAC, however Building B1 has been identified to represent infrequently used roosts for small numbers of day roosting lesser horseshoe (1no.) and greater horseshoe bats (2no.). As a result of the Site's location, it is reasonable to conclude that these bats could be associated with the Bat SAC, and that the day roosts identified form part of a wider network of such sites across the wider landscape. In the absence of mitigation, the scheme will result in the loss of roosts for Annex II species lesser and greater horseshoe, which for those reasons discussed above, have the potential to be associated with the Bat SAC., While the loss of these roosts, is not likely to exceed the threshold for a Likely Significant Effect on the SAC, it could cumulatively (i.e. with the loss of other lower status roosts) result in an adverse effect on the integrity of the SAC.

Due to the nature of the development, it has not been possible to retain the roosts in-situ, and as such the creation of a bespoke bat house within the 50m wildlife buffer will ensure that sufficient opportunities are created within the wider Site to mitigate for impacts to existing horseshoe roosts (see **Section 5.3.2** for full details). This will ensure that impacts to roosting Annex II bats likely associated with the Bath and Bradford on Avon Bat SAC are suitably mitigated.

5.1.1.3 *Direct Loss of Foraging/Commuting Habitat and Fragmentation*

In the absence of mitigation, the proposed development has the potential to affect commuting and foraging bats through the severance of commuting/foraging routes due to hedgerow removal resulting in bats using less energy-efficient routes (Russ & Montgomery 2002) or abandoning roosts/ foraging areas altogether.

To mitigate, the scheme has been designed as per the requirements of the TWBMS to include a substantial dark corridor (c. 50m in width) along the eastern boundary of the Site. This will be set aside with its primary function as Core Bat Habitat in order to retain a permeable and functioning landscape for the target species. This is significantly in excess of the minimum 15m as required in the TWBMS, with the c. 50m being agreed with Wiltshire Council historically, as part of the wider Site Allocation. This

extensive buffer will avoid severance of commuting routes/fragmentation but also provide high quality habitat for foraging.

Additionally, the scheme seeks to retain permeability around the Site periphery (though to a more modest extent – c. 5-10m), which can be used by foraging and commuting bats, allowing them to continue to move through and around the Site between offsite roosts and foraging grounds. The buffers will comprise a mosaic of grassland, native mixed scrub, small pockets of deciduous woodland and native specimen trees, with new SUDs features providing seasonal waterbodies to both attenuate water and to enhance foraging. New attenuation features will include wet meadow mixtures which is also likely to increase invertebrate prey, along with new areas of diverse grassland, mixed native scrub, trees and woodland. These areas will be kept dark. This will form a significant area of enhanced foraging and commuting habitat for bats, which is well connected to the current core foraging and commuting habitat at the Site. As such this is considered to be a significant enhancement to the current baseline of managed low-quality agricultural grassland. It is proposed that this mitigation is implemented prior to the first occupation of dwellings on Site.

Whilst there will be losses of scrub and specimen trees within the development, fragmentation will be minimised by reducing gaps for roads as much as possible, whilst maintaining dark corridors around the development periphery.

As required by the TWBMS, development within the yellow medium risk zone will be expected to fully mitigate on site for the loss of habitat by ensuring no net loss, to be demonstrated by use of an established metric (preferably the Statutory Biodiversity Metric or subsequent version). **Table 12** below summarises the schemes position using the Statutory Metric. Full details on BNG are detailed in the BNG Statement (GE, 2026b), and this outlines that the current indicative scheme design for the Outline Permission.

Table 12: BNG Assessment (Whole Scheme)

Unit Type	Onsite Baseline Units	Onsite Post-Development Units	Net Unit Change	% Change
Habitat	9.95	12.29	+2.34	23.49%
Hedgerow/Linear	2.76	3.57	+0.81	29.14%
Watercourse	N/A	N/A	N/A	N/A

The scheme also needs to consider the Additionality Principal as outlined in Government Guidance⁴ on what can be counted for BNG is as follows:

“If you already need to create or enhance habitat as part of your development, you may be able to count this towards your 10% biodiversity net gain (BNG)...” and ... “You cannot include some habitat schemes in BNG calculations at all. There are other schemes that you can include:

-  *In full - for enhancing actions, such as green infrastructure (a developer can satisfy all their BNG requirements through the works, receiving 110% of their biodiversity units through them)*
-  *In part - for mitigation and compensation actions, such as nutrient mitigation (at least 10% of the developer’s biodiversity units must come from additional activities other than mitigation and compensation)”*

As part of this guidance, it states that *“Mitigation or compensation to a Special Area of Conservation, Special Protection Area, or Protected Species”* can count towards BNG in part.

⁴ <https://www.gov.uk/guidance/what-you-can-count-towards-a-developments-biodiversity-net-gain-bng>

Table 13: BNG Assessment (Additionality)

Unit Type	Onsite Baseline Units	Onsite Post-Development Units (Additionality Habitat only)	Net Unit Change	% Change
Habitat	9.95	9.95	0	0.02%
Hedgerow/Linear	2.76	2.76	0	0
Watercourse	N/A	N/A	N/A	N/A

Habitats included within the Additionality Metric include those which can be utilised by foraging/commuting bats (i.e. not subject to levels of artificial lighting above the existing baseline).

As such, this demonstrates that the scheme can ensure no net loss of habitats on Site as required by Paragraph 146 of the TWBMS and Policy CP50 of the Wiltshire Core Strategy. It is anticipated that any future Reserved Matters application will include refinement to the scheme design, and as such the BNG Assessment will be updated to reflect this.

In addition, as outlined above, the Site lies within the Yellow (Medium) Risk Zone and new developments must where appropriate, contribute to strategic habitat mitigation, which presumably would include SANG and other habitat provision, albeit this is not particularly clear. The TWBMS costs this at £972.03 per dwelling, which based on the scheme proposals of up to 80 dwellings would result in a cumulative contribution of £77,762.40 to be secured section 106 agreement (s106), a section 111 agreement (s111) or unilateral undertaking (UU).

5.1.1.4 *Loss/ Disruption of Commuting/ Foraging Habitat through Indirect Impacts e.g. Lighting*

Both horseshoe species and Bechstein's bat associated with the SAC are generally light-averse woodland specialists, preferring to commute/ forage within woodlands, along the edges of woodlands or along glades and rides. In the absence of mitigation, lighting within the new development has the potential to cause disruption or loss of these commuting/ foraging routes and as such impacts upon SAC bats cannot be ruled out.

As highlighted by Engain (2023), the Site's connectivity to the Bechstein's Core Roosts to the south is inhibited by existing sources of artificial lighting from the adjacent A361 (via street lighting) as well as from Trowbridge Rugby Club to the east. The existing lighting illuminates the southern part of the Site and the southern end of the tree-lined path that forms the Site's eastern boundary as shown on **Plates 15, 16 and 17** below. In addition, there is some existing residential light spill both from the adjacent dwelling to the west, and via a static caravan in northeast corner of the Site.

Plate 15: View east towards A361 in southern part of the Site



Plate 16: View east along A361 opposite the Site



Plate 17: Trowbridge Rugby Club



Unmitigated, the scheme will result in new sources of artificial lighting which could result in fragmentation/severance to commuting routes for SAC bats.

Historic concerns from WC that the Site forms a choke point along the eastern edge of Trowbridge are not supported by the data collected. However, even if it were the case, that the feature was of significance, it should be acknowledged that development can proceed where adequate mitigation can be put in place to retain the functionality of the habitat. As such the scheme includes an extensive 50m buffer along the eastern boundary of the Site has been included and will be completely unlit to ensure long-term permeability of the Site and the wider landscape as shown in the submitted Lighting Strategy Plan (Highway Lighting Solutions, 2026).

During operation, no lighting is to be directed at the hedgerows and woodland, allowing continuous corridors for bats to be maintained. Whilst a certain level of lighting throughout the Site is necessary for the health and safety of future residents, the strategy includes measures to reduce the impact of this lighting on local fauna including the identification of sensitive zones (in the case of this scheme, the 50m buffer and other boundary buffers) to ensure darker areas are maintained/created to protect important commuting and foraging routes. Lighting within these areas will be kept to an absolute minimum. Best practice technology should be employed to reduce light-spill, for example LED lighting, luminaires with peak wavelengths higher than 550nm, no upward light-spill and/or a part-night lighting regime, in line with current guidelines (Bat Conservation Trust/ Institute of Lighting Professionals, 2023). Key bat habitats, namely the eastern 50m buffer, should be maintained (as per the TWBMS) at no more than 0.2lux on the horizontal plane and less than 0.4lux on the vertical plane lux (or baseline light levels).

Any necessary external lighting throughout the Site will be designed with no spill to exceed the boundaries, particularly along the eastern boundary. Where brighter lighting is necessary, i.e. around

parking spaces and primary footpaths, luminaires will be directional with no upward, sideways or outward spill and fitted with shields where necessary to maintain darker areas along the woodland edges.

5.1.1.5 *Disturbance during Construction Works*

Construction will be restricted to daylight hours, finishing at least 30 minutes before sunset and commencing at least 30 minutes after sunrise throughout the year. If this is not possible, no construction lighting will be allowed to spill onto the Site boundaries, ensuring light averse species can continue to utilise the Site during the construction period.

A Construction Ecological Management Plan (CEMP) will be produced providing details and mechanisms through which this area will be protected during construction.

5.1.1.6 *Comments by Natural England in Respect to Bats and Impacts on the Bat SAC*

As part of their consultation response, Natural England provided detailed comments in respect to the extent of bat survey, and assessment. Technical points have been discussed below, with comments by NE “quoted”, followed by a technical response.

“The submitted survey results demonstrate that the site is used by at least 10 bat species, including all four Annex II species as well as species considered threatened in the UK (serotine). Please note that although not separated from other possible myotis species the assessment should assume that Bechstein’s bat are using the site to forage.

Based on the submitted information Natural England considers the proposed development site to be valuable for bats. In particular, the site is strategically located as an important bat corridor between the roosting sites to the south (including Green Lane Wood) and foraging opportunities around the copse north of Knoll Farm, the canal and the River Avon to the north of the site. Bat commuting corridors have been identified on the eastern and western boundaries of the site.

We also note that the fields to the southwest of the stables include areas of permanent grassland surrounded by areas of mixed scrub and woodland creating a sheltered glade, ideal for bat foraging. Permanent grasslands are likely to support cockchafer beetles which are an important food source of greater horseshoe bats and unless a cockchafer larval survey demonstrates otherwise this should be assumed in the assessment to be a significant greater horseshoe bat foraging resource. It should be noted that cockchafer beetles are known to go through cyclic population fluctuations so that in some years numbers may be low, with the population increasing in subsequent years. The high level of bat activity recorded in the area southwest of the stables, including by the Annex II species, confirm the areas relative importance.”

In a previous Appeal Decision in the area (Dilton Marsh PL/2023/01880 / APP/Y3940/W/24/335216) further surveys in the form of performing invertebrate (i.e. searching for Cockchafer beetle and their larvae) surveys was discussed to provide a further evidence base in assessing the value of the grassland habitat for foraging Greater Horseshoe bats. However, it was acknowledged by NE that such surveys can still be unreliable as even if larvae are found to be low/non-existent then this does not mean that the grassland does not support Cockchafer populations and that multiple years’ of surveys would likely be required. Therefore, the surveys were not undertaken, and the scheme was granted at Appeal.

Further to this the presence of cockchafer does not necessarily equate to important habitat for horseshoe bats. Cockchafer surveys (whether over a single or multiple years) are not a recognised and adopted survey technique when considering impacts on Greater Horseshoe bat. Indeed, the recognised survey requirements are set out in WC’s adopted Bat Special Areas of Conservation (SAC) Planning

Guidance for Wiltshire (September 2015) and the TWBMS clearly sets out transect and static (i.e. automated) monitoring surveys are required to establish usage and any impacts. Indeed, the survey work undertaken has been performed to be compliant with WC adopted guidance, and in fact has greater coverage than would otherwise be recommended for a site of its size, and such surveys would not be considered proportionate or reasonable.

“Natural England welcomes the provision of the 50m ecological buffer along the eastern boundary of the site which with appropriate planting will help in time to mitigate for the loss of permanent grassland and scrub associated with the proposals and will help ensure commuting routes through the development are maintained. Nevertheless, the proposed layout will result in the loss of a significant proportion of the available permanent grassland and associated scrub habitats used for foraging by bats, including GHB, LHB and, in all likelihood, Bechstein’s bat. Further, the proposals will lead to the loss of several bat roosts including a roost used by both GHB and LHB and which may be used as a GHB mating roost.

The stables were subject to deployments of static detectors from June to September, with use by both species recorded in all months (albeit at low levels), with GHS being present either Day or Night Roosting on every night the detectors were deployed. Further to this, while droppings are present, such significant aggregations to indicate use by higher numbers of individuals, is not reflected in Site conditions. Mating sites for horseshoe bats are typically caves, mines, cellars or other underground sites (Ransome, 1991), and a single male may hold the same territory for many years. While it is recognised that other types of Site can be used for these purposes, Building B1 does not provide comparable conditions to the preferred type of structure within which male horseshoe bats set up territories. Furthermore, as the building was used by at least two greater horseshoe bats (as shown through emergence survey), it is our professional judgement that classification of a Mating Roost is an overrepresentation of the status of this roost. Furthermore, the creation of a bespoke bat roost will provide a purpose built structure for all species identified roosting and will be secured via EPSL in the long-term. Further surveys in October are disproportionate to the scale and nature of the roosts identified.

5.1.1.7 Comments by Wiltshire Council in Respect to Bats and Impacts on the Bat SAC

As part of their consultation response, Wiltshire Council provided detailed comments in respect to the extent of bat survey, and assessment. Technical points have been discussed below, with comments by WC “quoted”, followed by a technical response.

“Paragraph 2.6 and Appendix 2 of the Ecological Assessment states that the report is based on a summary of data obtained from third-party sources. Clarification of if GE Consulting has independently verified the bat call analysis is required”.

As discussed above, this Report and the assessment therein was based upon work conducted by NPA on behalf of the client – Redcliffe Homes. While ecologists from GE Consulting have reviewed the information provided by NPA, which is replicated in part within the assessment, and in its original form in **Appendix 8** of this document. For context NPA are a reputable ecological firm, with a known specialism for bat survey and assessment, and as such, there is no reason to doubt the quality of the survey, analysis and assessment provided.

In regard to third party sources, this is misrepresenting NPA’s role. They were commissioned by the client to conduct a specific suite of surveys (i.e. bats) following the refusal of the previous application. Subsequently GE has been tasked to collate the data collected both as part of the original application, and subsequently by NPA and GE to support the new submission through this EclA and supporting sHRA and other documents.

“The assessment of bat foraging and commuting importance has been undertaken solely using previously analysed and summarised bat data and is therefore reliant on desk-based interpretation without the benefit of any direct field observations. As set out in paragraph 8.1.2 of the Bat Survey Guidelines, it is good practice to undertake manual activity surveys to provide site-specific information on bat behaviour, including levels of activity, numbers of bats, use of the site for foraging or commuting, and direction of travel. Furthermore, the available data has not been analysed to identify call characteristics indicative of feeding activity. Clarification and justification of how bat activity, including foraging and commuting use of the site, has been determined is required...” and “...The bat transect surveys were undertaken by either one or two surveyors; where only one surveyor was used, the reduced survey coverage and effort requires justification.”

Manual activity surveys were undertaken by both Engain in 2021/22 and NPA in 2024 and it is this extensive dataset, which has informed GE’s analysis and assessment of the Site and assemblage of bats present. The scope of bat activity survey conducted following the refusal in 2023 to support this application is above and beyond that as outlined in best practice guidance with nine static detectors deployed monthly from April to October which were supplemented by NBWs of two transect routes on 10 separate occasions. Further to this, as outlined in Appendix 3 and within the NPA Report itself – *“Either two individual transects or one combined transect were used to cover the Site. Experienced bat surveyors using handheld bat detectors (Anabat Walkabout) stood at fixed listening points (i.e. near potential flight lines/roosting features, at the boundaries of suitable commuting/foraging habitat) for up to 1 hour after sunset; recording all bat activity within range. After 1 hour, surveyors then followed a pre-determined transect route stopping at pre-defined listening points for approximately five minutes”*.

A key principle for ecological consultants is the need to operate between two competing principles: firstly, taking the Precautionary Principle into account to protect biodiversity and being proportionate so regulation does not become unreasonable or impractical, and how both these principles need to be balanced through evidence-based decision-making.

As outlined in BS 42020:2013 (Biodiversity — Code of practice for planning and development)⁵, proportionality is a core principle for ecological consultants. All the work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. This principle aims to prevent unnecessary burden on developers while ensuring robust environmental protection

The precautionary principle as a concept within the UK assists the decision-making process in the face of a lack of scientific certainty. The precautionary principle is applicable where there is plausible evidence of a risk that a particular policy could cause serious or irreversible damage to the environment, alongside a lack of scientific certainty about the likelihood or severity of this damage.

The majority of ecological surveys are informed by various published guidelines which seek to clearly outline an approach to conducting surveys for specific species groups, to ensure that development schemes across the UK are informed by a comparable level of data collection (though not seeking to create a “one size fits all approach”).

Firstly, Section 2.2.17 of the Bat Survey Guidelines (BCT, 2023⁶) itself refers to Proportionality and is clear that “When planning surveys it is **important to take a proportionate approach**” and that “The type

⁵ <https://www.n-somerset.gov.uk/sites/default/files/2022-06/16%20-%20biodiversity%20-%20code%20of%20practice%20for%20planning%20and%20development%20%282013%29%20BS%20420202013.pdf>

⁶ https://cdn.bats.org.uk/uploads/pdf/Resources/For-professionals/Bat-Survey-Guidelines-4th-edition-AMENDED-27.03.24.pdf?v=1711530492&_gl=1*bpi7ab*_gcl_aw*R0NMLjE3NzAzNjgyODcuQ2p3S0NBaUF2NWJNQmhBSUVpd0FxDIhdUVkM21uS1E5

of survey (or suite of surveys) undertaken and the amount of effort expended **should be proportionate to the predicted impacts of the proposed activities on bats...** and “...it needs to be recognised that robust surveys are fundamental to understanding what those impacts are”. Additionally, this is supported by Clause 4.1.2 of BS42020 (BSI, 2013) states that “professionals should take a **proportionate approach** to ensure that the provision of information with the (planning) application is **appropriate to the environmental risk** associated with the development and its location”. Further to this the Bat Survey Guidelines themselves in Para 2.2.32 include provision that ecologists “...should, as appropriate, modify their approach from that of published good practice or standing advice...”. While this does not allow carte blanche for ecological consultants to ignore survey guidelines, it must be recognised that all ecological consultants will seek to tailor the scope of surveys conducted based upon the scale and nature of the scheme proposals, and the anticipated quantum of impacts predicted.

“The assessment must consider the abundance of greater horseshoe bat (GHS) foraging habitat in the locality. Aerial photography indicates pasture is limited in the locality”.

A review of aerial photography over a c. 10-year period indicates that the majority of undeveloped land in the locality are managed rotationally (i.e. between grassland and arable, with hay/silage being the preponderance). As a brief exercise the following fields have been managed as grassland in the past 10 years on one or more occasions, with the area marked being c. 375ha in extent, of which the Site (c.3.7ha) represents c. 1% of this area.

Plate 18: Review of Aerial photography – Fields managed for grazing within the past 10 years.



**Please note, this does not represent an exhaustive graphical representation and has been used to illustrate the extent of similar such habitats within the locality.*

“The site is not located within, or immediately adjacent to, any statutory or non-statutory designated sites for nature conservation; however, it lies within both the Yellow and Grey Zones of the Trowbridge and Westbury Bat Mitigation Strategy (TWBMS), as acknowledged within the Ecological Impact Assessment (EclA). The interpretation of the survey results in relation to the value of the site to SAC bats (LHS, GHS and Bechstein) in the context of the wider local landscape is not agreed with. The site is situated within the core sustenance zone of a Bechstein’s bat maternity roost, and evidence from radio-tracking studies and ringing projects has demonstrated that Bechstein’s bats roosting in Green Lane Wood and Biss Wood forage in areas north of the A361 and commute to swarming and hibernation sites at Box Mine SSSI.”

That the Site lies within proximity to important Bechstein’s Roosts at Green Lane and Biss Woods is not disputed and has been clearly outlined throughout this report. However, the value of the Site can only be quantified via the collection of data, which has been conducted extensively at the Site since the original planning submission. As such some further analysis as reported by NPA in their bat survey report has been replicated below.

NPA results show that whilst detector A1 recorded the highest records within timecode 2 (14/39), typically the earliest records were made by detectors A4 and A6. This is also the case for all the records within timecodes 2 and 3, with A4 and A6 recording the first *Myotis* record on Site on 28 out of 38 nights (i.e. no records within these time periods on 12 nights), with the earliest record being at timecode A2 on 5 occasions, timecode 5 on 4 occasions and timecode 1 on 1 occasion. This suggests that *Myotis* are not commuting into the Site early from the south (i.e. from Green Lane and Biss Woods), certainly not on the western side of the Site (on the basis the detector at A5 would otherwise have recorded the earliest record more often).

Table 14: *Myotis* Registrations by Timecode

Timecode	Before Sunset	0-20 after SS	21-40 after SS	41-60 after SS	61-80 after SS	81-100 after SS	101-120 after SS	Middle of Night	120-101 before SR	100-81 before SR	80-61 before SR	60-41 before SR	40-21 before SR	0-20 before SR	After Sunrise
Count	0	0	39	135	163	161	83	1086	57	38	81	68	10	0	0

Further to this the highest *Myotis* activity was recorded in August (9.98 passes per night) and September (11.87 passes per night). The higher September average is partly due to the higher *Myotis* activity recorded at location A9 (23.6 passes per night). The majority of these records are suggestive of commuting behaviour.

On average the detectors at A6 and A5 recorded the highest *Myotis* activity. The higher activity recorded at location A5 in August (40.8 passes per night) is due to a single night (20 August 2024) of higher foraging activity (as suggested by 122 continuous records between 21:31-21:50, with no corresponding records at detectors A4 or A6). On this night *Myotis* activity was recorded much earlier on Site at detectors A6, A1, A2 and A9 (in order from earlier-later). This all suggests this higher activity is not evidence that the western boundary of the Site is a significant/landscape commuting corridor for *Myotis* bats. Throughout the NBW surveys no *Myotis* records were made at locations 3 or 10 on the Southern transect.

The higher activity recorded at location A6 in September (18.0 passes per night) is as a result of 28 passes on the 20th and 32 passes on the 21st. These were sporadic records not suggestive of foraging

behaviour. With there being no corresponding records prior at detector A5 on either night, this also suggests this higher activity is not from *Myotis* bats commuting up from the south and heading north.

The higher activity recorded at location A6 in August (17.8 passes per night) is due to 48 passes being recorded on the 22nd during 2 likely foraging bouts. Again, with no corresponding earlier records at A5.

The higher activity recorded at location A5 in September (12.6 passes per night) is as a result of 18 passes on the 20th and 22 passes on the 21st. These were sporadic records not suggestive of foraging behaviour. With there being no records recorded prior at detector A5 on either night, this also suggests this higher activity is not from *Myotis* bats commuting up from the south and heading north. As such, the analysis as made by NPA is correct and consistent in its interpretation of the survey findings.

“There are multiple LHS and GHS maternity and hibernation roosts in the wider landscape around Trowbridge and as such the site is located in landscape that is highly likely to be of importance to the SAC’s qualifying species.

As acknowledged within the EclA, the site provides suitable commuting and foraging habitat for all SAC bat species. Pasture represents optimum foraging habitat for GHS bats, while linear features such as tree lines and scrub constitute favoured commuting habitat for all SAC qualifying species. Surveys further confirm that both LHS and GHS bats roost within buildings on the site, and that all three SAC bat species regularly utilise habitats across the site.

*These species were recorded during every month surveyed and detected on all deployed automated bat detectors. Given the inherent difficulty in reliably distinguishing Bechstein’s bat calls from those of other *Myotis* species, the presence of this species is reasonably assumed. Apparent low levels of recording should not, in isolation, be interpreted as evidence of low site importance, as such conclusions fail to account for bat behaviour, echolocation characteristics, and recognised survey limitations.”*

It should be noted that in the absence of counteracting data, targeted radio tracking and ringing data should not necessarily be extrapolated to ascribe importance to a Site solely based on proximity. Bats can and do utilise features and habitats which typical bat behaviour would suggest that they would not. A notable example is GHS bats at Berry Head Quarry, Brixham (part of the South Hams SAC), where bats cross street lit roads and traverse urban areas to get from their roosts in the quarry to the wider countryside, whereas typical GHS behaviour would suggest they would typically avoid this. As outlined in the EclA, *Myotis* species account for only 4.82% of total calls, and of that total, it is reasonable to conclude that Bechstein’s will only account for a proportion of the total, considering that the UK is resident to five other *Myotis* species, of which Natterer’s and Daubenton’s are common and widespread across Wiltshire.

“Taken together, this evidence confirms habitats within the site have roosting, foraging and commuting functionality for SAC bats and that the site plays a functional role within the wider landscape. Unless further justification is provided the Ecological Impact Assessment must be amended to reflect this.

As above, this is seeking to ascribe greater value to the Site than the data would indicate. The first or last record of the night was always recorded at detectors A4, A5 or A6, which all corresponds with a GHS roost being recorded at the disused stables.

Table 15: GHS Registrations by Timecode

Timecode	Before Sunset	0-20 after SS	21-40 after SS	41-60 after SS	61-80 after SS	81-100 after SS	101-120 after SS	Middle of Night	120-101 before SR	100-81 before SR	80-61 before SR	60-41 before SR	40-21 before SR	0-20 before SR	After Sunrise
Count	0	0	82	141	65	46	43	419	14	27	57	127	53	0	0

The highest activity was recorded in October (5.22 passes per night) and May (4.01 passes per night). The higher October and May averages is partly due to the higher activity recorded at location A6 in October (11.00 passes per night) and in May (13.25 passes per night). This also resulted in location A6 having the highest overall average activity. These higher averages appear likely as result of GHS foraging activity shortly after/before GHS would have been expected to emerge/return to roost at the disused stables. This also appears to be reason for the higher averages at A5 in May, June and July.

In regard to LHS bats, the first or last record of the night was recorded at A4 on 4 occasions, A6 on 2 occasions, A1 on 1 occasion and at A2 on 1 occasion, which all corresponds with a LHS roost being recorded at the disused stables.

Table 16: LHS Registrations by Timecode

Timecode	Before Sunset	0-20 after SS	21-40 after SS	41-60 after SS	61-80 after SS	81-100 after SS	101-120 after SS	Middle of Night	120-101 before SR	100-81 before SR	80-61 before SR	60-41 before SR	40-21 before SR	0-20 before SR	After Sunrise
Count	0	0	19	10	14	41	29	356	10	4	5	5	4	0	0

The highest activity was recorded in September (3.47 passes per night) and the highest average activity recorded at A6 and A9. This is in part due to the higher averages recorded at location A9 (10.2 passes per night) and location A6 (7.2 passes per night) in September.

The higher activity recorded at A9 in September is due 22 records on the 20th and 14 records on the 21st. The higher activity recorded at A6 in September is due 15 records on the 21st. These all appear due to a combination of foraging and commuting activity. This is also the case for the activity at A4 in October.

At A4 in October, and at A6 in May and September, there are rarely any corresponding records at A5, which suggests (along with lower average recorded at A5) that the western boundary of the Site is not a significant/landscape commuting corridor.

The proposed Landscape Buffer and Ecological Corridor (approximately 50 m wide) is welcomed. It is essential that this corridor is designed and delivered with the primary objective of providing Core Bat Habitat and a coherent ecological network, to ensure compliance with Policy CP50 and the NPPF (paragraph 187(a) and (d)).

The 50m buffer was requested as part of the previous application, with its main function to ensure landscape connectivity south to north (and vice versa) for bats from Green Lane and Biss Wood to components of the Bat SAC to the north. This is in-line with Policy CP50 as it seeks to protect features of nature conservation value as part of the design rationale, and is above the typical buffers which would be expected to be provided (as such represents a bespoke measure), to demonstrate no adverse effect upon the SAC.

However, it is not agreed that the proposed Landscape Buffer and Ecological Corridor would constitute an enhancement for foraging bats. The development would result in the loss of approximately 3 hectares of preferred habitat (noting this is a rough estimate) currently used by foraging GHS bats and GHS and LHS day roost and night perch.”

While the Site is used by horseshoe bats to some extent, for roosting, commuting and foraging, it alone, is not considered to represent a significant resource for horseshoe bats (as shown through the modest number of calls recorded, even when balancing limitations of survey methods i.e. directionality of call, with the large number of detectors utilised at the Site). As discussed above, the grassland present represents a modified sward, and while the scheme would result in a partial loss of this habitat to facilitate development, this would be more than mitigated for via enhancement to other neutral grassland, coupled with the creation of a bespoke bat house, secured and managed under a European Protected Species Mitigation Licence.

“The Landscape Buffer and Ecological Corridor is proposed on habitat that is already confirmed foraging habitat utilised by foraging bats. Consequently, even if it is assumed that the Landscape Buffer and Ecological Corridor will deliver optimal foraging habitat for GHS bats, there would still be an overall unacceptable net loss of foraging resource as a result of the development which is contrary to CP50.”

As above, WC’s comments are ascribing greater value to the habitats within the Site, than the data (both habitat/botanical survey and bat activity) indicates. While the presence of and use of the Site by the three Annex II species for which the SAC is designated is clear, and as rarer species nationally, they are less abundant than our most common species, we must be cognizant that the Site is in proximity to Site important for these species, yet a modest number of registrations for all three species were recorded via methodology where significantly more static detectors were deployed (total 9no.) across the entire active period. Considering the Site supports intermittently used day/night roosts for GHS and LHS bats, the modest number of registrations does not indicate that the Site is being used to a great extent by those bats as roosting. Further to this, the TWBMS requires schemes within the yellow risk zone to “...firstly, fully mitigate on site for the loss of habitat by ensuring no net loss, to be demonstrated by use of an established metric (preferably the Statutory Biodiversity Metric or subsequent version) based on best practice. This is notwithstanding the need to adhere to Biodiversity Net Gain (BNG) requirements” which the scheme demonstrates via the Statutory BNG Metric (**Section 7** refers). Furthermore Core Policy 50 requires proposals to “...demonstrate how they protect features of nature conservation and geological value as part of the design rationale”, that “All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development” and that “Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance... otherwise bespoke measures must be provided...” all of which are shown by the measures as described above.

5.1.1.8 *Increased Recreational Pressures*

The TWBMS highlights the potential for increased recreational pressures on woodlands which support bats associated with the Bath and Bradford on Avon Bat SAC. As such a Zol has been developed around these roosts (the Grey Hatched Zone) within which, new residential development is expected to result

in increased recreational pressure (and therefore adverse effects) on key woodland bat sites. The TWBMS requires that “*New residential development proposals for 50 or more houses within this zone will be expected to provide mitigation in the form of SANG / sufficient natural recreational focused greenspace; and new residential development proposals for less than 50 dwellings within this zone will be expected to make a financial contribution towards the delivery of strategic mitigation to address recreational pressure on the woodland sites*”. Suitable Alternative Natural Greenspaces (SANGs) is the term given to greenspaces that are created or enhanced with the specific purpose of absorbing recreation pressure that would otherwise occur at designated nature conservation site, particularly European wildlife sites. SANGs are created, or existing greenspaces enhanced to create a SANG, in order to mitigate for the effects of new housing development, absorbing the level of additional recreation pressure associated with the new development. It is understood that this is in addition to the contributions being sought for ‘strategic’ bat habitat mitigation within the ‘Yellow Zone’, to mitigate for the loss of bat habitat, as opposed to recreational pressure.

The proposals are for 80 dwellings, and therefore it is expected that the site should provide mitigation in the form of SANG / sufficient natural recreational focused greenspace. The revised TBMS is clear throughout that ‘*sufficient natural recreational focused greenspace*’ is an alternative option for mitigation to a strategic scale SANG, and this is a reasonable approach to take within the guidance given that it cannot reasonably be expected for a 50-dwelling scheme to provide the same level of mitigation as an 800 dwelling scheme.

SANG originally derives from Natural England’s *Suitable Alternative Natural Greenspace (SANG) Guidance* (August 2021) which provides a recognised framework for delivering alternative greenspace that seeks to divert recreational pressure from protected sites, and was written in relation to the Thames Basin Heaths Planning Zone. The TWBMS (and the TBMS prior to this) was drafted based upon visitor survey information collected by Footprint Ecology in 2018 as published in the Trowbridge Recreation Strategy and Visitor Surveys (Panter, C., Lake, S. & Liley D. 2018).

The 50-dwelling threshold for when schemes are required to provide “*SANG / sufficient natural recreational focused greenspace*” as referred to in the TWBMS seems to derive from work produced by Footprint Ecology, who themselves conducted work on behalf of WC as discussed above. A literature review of similar such documents produced by Footprint Ecology indicates that this derives originally from the Thames Basin Heaths Delivery Framework (Joint Strategic Partnership Board, 2008) which sets out that applications for large scale development **beyond the zone of influence**⁷ should be assessed on an individual basis. This follows from the advice of the technical assessor (Burley, 2007) who recommended that residential developments of 50 or more dwellings within 5-7km should be assessed and **may** be required to provide mitigation⁸. The document recommends that such cases be considered on a **case-by-case basis**. Further review of Burley 2007 indicates that there was significant discussion between stakeholders (The Joint Strategic Partnership Board) on what would constitute a ‘small site’ however this discussion was around at what threshold would Sites be considered to have an impact and at which distance and as such should provide a contribution to strategic mitigation. As such, it’s inclusion in other documents dealing with strategic mitigation appears to represent an arbitrary number and not be based on evidence regarding significance of impacts.

As Footprint Ecology specialise in visitor surveys, recreational mitigation schemes and Habitats Regulations Assessments of Local Plans, this number appears to have proliferated throughout the wider literature. Most similar strategic mitigation schemes have been written in such a way to provide flexibility and not to introduce an artificial barrier to development proposals (i.e. by providing the option to provide

⁷ The 5km Zol identified by the TBH SPA Delivery Framework

⁸ <https://www.bracknell-forest.gov.uk/sites/default/files/2021-08/thames-basin-heaths-spa-delivery-framework.pdf>

bespoke SANG on site where possible, or to contribute SANG/SAMM payments to the LPA as part of a strategic scheme).

In the previous version of the document (the TBMS) (an adopted SPD), the requirement was in line with this trend. New residential development would be able to demonstrate no adverse effect on site integrity of the SAC provided that funding being collected via CIL towards the LPA scheme for SANG/SAMM for mitigating residual in-combination effects from recreational pressure (which contribute toward a new 38ha SANG and hence reflect a maximum worst-case scenario).

In addition to this, it is recognised that the Draft Local Plan (now withdrawn) puts forward site allocations for major residential development in Trowbridge and Westbury (for which this site forms part of the wider Trowbridge allocation for 600 homes) which have been assessed as having the potential to increase recreational / visitor pressure on the woodlands that support Bechstein's bats. As such, two strategic SANGs have likewise been allocated in the draft Local Plan; one in Trowbridge and one in Westbury. The strategic SANGs / Country Parks proposed in Trowbridge and Westbury have been allocated by means of Policy 54: North Trowbridge Country Park and Policy 63: Westbury Country Park respectively, albeit it should be recognised that alternative SANG provision could come forward to mitigate for development if those sites weren't to come forward. At the time of writing, the Inspectors who are examining the new Local Plan have not confirmed whether this mitigation is appropriate or acceptable and this will be monitored.

However, the location of the strategic SANGs / Country Parks has been selected by the Council so as to maximise the potential for use by new residents of the site allocations in Trowbridge and Westbury put forward in the draft Local Plan and is currently proposed to be located between the strategic site allocations for major residential development and the closest woodlands that support Bechstein's bat roosts. This is to ensure that the SANGs / Country Parks are appropriately located to intercept residents that may otherwise visit the woodlands.

The allocated SANGs / Country Parks should be designed to provide attractive greenspace alternatives to the sensitive woodlands, as per the guidance set out above.

In March 2025, Wiltshire Council and Natural England published a Statement of Common Ground as part of Wiltshire Council's Local Plan Review⁹. Within it stated *"3.53 - At North Trowbridge there is a proposal for a Country Park (Policy 54), functioning as SANG, to ensure that the planned growth within the plan period will seek to avoid harm to the Bechstein's bat maternity colonies in Green Lane and Biss Woods to the south-east of the town, which are functionally linked to the Bath and Bradford-on-Avon Bats SAC. Natural England offered support for the proposed North Trowbridge Country Park as set out in Policy 54 of the draft Wiltshire Local Plan at the Regulation 19 stage. Natural England are aware of ongoing discussions with regards the delivery of this SANG and are working with the Council and landowners in bringing forward a deliverable scheme of suitable scale alongside the potential for a phased approach. Any outcome will need to mitigate impacts upon the aforementioned bat species / habitats with any agreed phasing / amendments needing to be agreed by Natural England to maintain a sufficient level of mitigation. Natural England can confirm that the most recent SANG masterplan as set out by the promoter will secure a suitable level and layout of SANG relative to the allocation at Policy 54 and appropriate landscaping will further enhance the foraging opportunities for Bechstein's bats across the SANG"*.

A review of the Trowbridge Recreation Strategy and Visitor Surveys (Panter, C., Lake, S. & Liley D. 2018) makes it clear that there *"is insufficient information to identify particular thresholds of access, activities that should be singled out or levels of development at which impacts occur, however the review does*

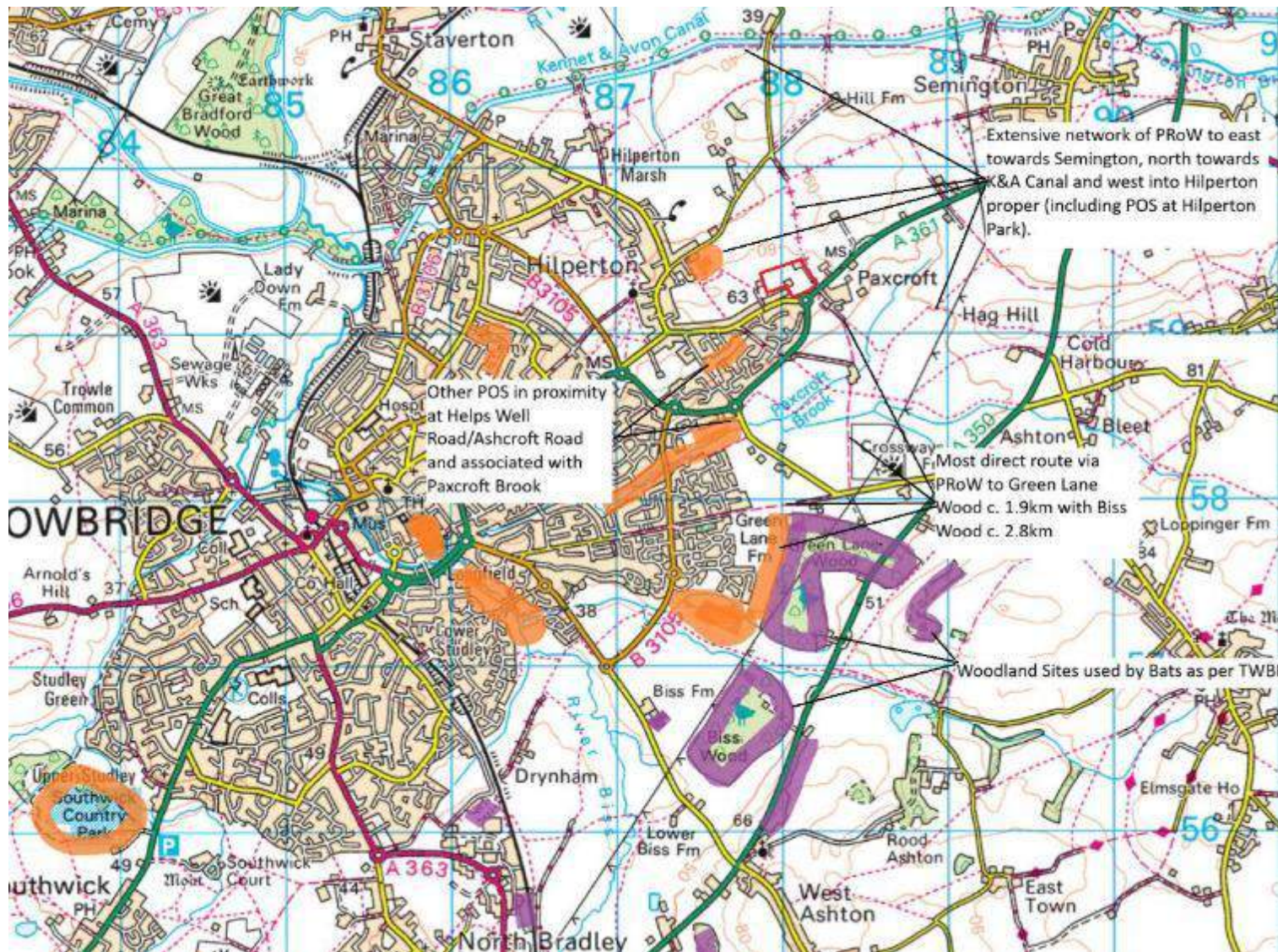
⁹ https://www.localplanservices.co.uk/_files/ugd/017f5b_910bb5add65e49f2adb49c9f0166007a.pdf

highlight risks for Bechstein's Bat. These risks relate to the overall pressure on the woodland sites, which are themselves relatively fragmented. These pressures will grow with increased levels of development". It also found that "...Estimates of total visitor numbers to sites highlight that the bat woodland sites are relatively quiet (up to 0.2 per ha per hour), and Biss Wood was particularly quiet (0.02 people per ha per hour). The other greenspace sites were much busier, for example Southwick Country Park was estimated to have 0.44 people per ha per hour and Biss Meadows and Paxcroft Mead around 0.9 people per ha per hr". Further to this roughly "two thirds (65%) of interviewees arrived at sites on foot". With Clanger and Picket Wood and Southwick Country Park (main car-park) were the locations with high proportions of interviewees arriving by car.

While on average, the distance between the home postcode of interviewees and the survey point where interviewed was 2.5km, but half of all postcodes were within a 700m radius and three quarters within in a 1.8 km radius, visit rates (i.e. number of interviewees per household) show that the woodland sites draw visitors on foot from a radius of around 600m, beyond this distance visit rates are low and constant.

This is key in seeking to assess potential quantum of impact as through liaison in June 2026, WC stated "...Where the SANG criteria are not met, applicants must provide robust justification demonstrating how recreational impacts will be appropriately mitigated to ensure no adverse effect on the Bath and Bradford Special Area of Conservation" and that the scheme should seek to demonstrate that the site wouldn't contribute to recreational pressure via showing how new residents might use or access other areas rather than the SAC, looking at other footpaths in the locality, commenting on barriers to access etc. As such, **Plate 19** below seeks to show existing open space, public rights of way, areas of restricted access and other such factors (i.e. barriers etc) within the Site's locality.

Plate 19: Open Space and Access within the Locality



Site boundary delineated by **Red Line**. Public Rights of Way delineated by **Pink Lines** (Solid/Dashed/Dotted). **Orange Area** delineates existing Public Open Space/Open Access Land under CROW Act 2000. **Purple Area** delineates Important Bat Woodlands

As shown above, the Site is well connected to the PRoW network via HILP21 which bounds the Site to the east. This provides links to the north to Whaddon Lane, other PRoWs and the Kennet and Avon Canal. It also provides a link east via HILP22/SEMI9A to Semington. The most recent comments from WC Highways Officer have indicated that a contribution is required to enhance HILP21, which the applicants have agreed to provide. As such, works to improve this Byway Open to all Traffic (BOAT) will be undertaken and provide further enhanced opportunities for walking along this route for leisure and recreation purposes. Other links via public highway and PRoW to the west (Devizes Road) and HILP25 and HILP29 provide links to the centre of Hilperton proper and its associated POS off of Whaddon Lane. Further routes branch west from St Michael and All Angels Church to Hilperton Marsh and Trowbridge. To the south there are links via Hilperton Drive to the POS at Helps Well Road/Ashcroft Road which represents the closest larger area of linear POS, with a larger linear POS associated with Paxcroft Brook/TROW122.

When considering potential access to Green Lane and Biss Wood, the shortest distance via PRoW and public highway (with pavement) is via HILP26 to Lower Paxcroft Farm then south via SASH7 to Ashton Road. There is no footway on Ashton Road, which requires the walker to navigate c. 500m of a busy minor road, to Green Lane Wood Nature Park to the west of Green Lane Wood, which represents a distance of c. 1.9km. As outlined in Trowbridge Visitor Survey c. 65% of respondents had arrived via foot, with three quarters of respondents from within a 1.8km radius. Furthermore, visit rates (i.e. number of interviewees per household) show that the woodland sites draw visitors on foot from a radius of around 600m, beyond this distance visit rates are low and constant. As such, the majority of new residents can be anticipated to utilise POS (both formal and informal within the scheme and in the locality) within closer proximity to their residence than the closest of the sensitive woodlands, and there are ample alternative opportunities for recreation other than the SAC.

In addition, this assessment does not include any ameliorating factors of the WC's stated aim to include a new Country Park at North Trowbridge as detailed in Policy 54 of the now withdrawn Draft Local Plan. Natural England (in their Statement of Common Ground with WC) "...can confirm that the most recent SANG masterplan as set out by the promoter will secure a suitable level and layout of SANG".

Further to this, the Footprint Ecology assessment recognises that there is "...very little work directly addressing the impacts of disturbance on woodland bats. However, a simulation model of possible impacts on *Barbastelle Bats* (a rare breeding woodland species which switches roosts following disturbance by a predator/perceived predator) concluded that the greatest risk of disturbance was from unrestricted recreationists (i.e. those wandering off the paths) and that the risk of disturbance was greater closer to car parks (Bennet et al. 2009)". While it is valid to extrapolate from one type of woodland specialist bat to another (*Barbastelle* to *Bechstein's*) the journal article does state "From the results of the simulation runs, anthropogenic disturbance does not appear to be negatively influencing *barbastelle* bat breeding success", and that "simulation suggests that anthropogenic disturbance of the *barbastelle* bat is not preventing the females from establishing maternity roosts in *Chedworth Wood*..." and "...factors other than human disturbance may be influencing the use of the potentially suitable roost trees within the wood".

As such, the conclusions of the article are not as clear-cut as is otherwise suggested within the Footprint Report, and this is before considering that "wildlife individuals may have differing tolerances for interactions with recreationists (Vaske et al., 1995), especially considering the existing and long-term uses of the Green Lane and Biss Woods specifically for recreational purposes (as Wiltshire Wildlife Trust Reserves) and the active management by the WWT (i.e. the Site seeks to deter/prevent unrestricted access), including through a new Ecological Centre on the reserve, which includes a full time warden and part time education officer and will be funded in the long-term via s106 contributions. The WWT

stated¹⁰ *“We acknowledge that increased footfall requires extra management of the site. With the additional resource we will intensify our monitoring of the reserve's important wildlife, and the overall condition of the woodland. Our highest priority is protecting sensitive species like the Bechstein's bat. The presence of the dedicated Warden and the centre will be key to actively deterring disturbance, vandalism, and fires, safeguarding this locally rare species from any adverse effects of the new proximity to development.”*

The aforementioned SANG design standards requires SANGs to be in the order of 30ha in size, with a further recommendation of 8 hectares of open greenspace per 1,000 new residents / people as detailed in guidelines on SANG creation, which is based on the average of 2.4 people per household. Based on the number of dwellings proposed via this outline application (up to 80), this results in an average occupancy level of 192 residents. If one were to utilise the guidance therefore, the scheme should require c. 1.536ha of SANG or ‘sufficient natural recreational focused greenspace’.

The scheme proposals themselves include significant areas of accessible public green space will be created as part of the development totalling c. 2.335ha of formal and informal open space, which is in excess of the 1.536ha of ‘sufficient natural recreational focused greenspace’ required as per the above calculation. This includes other neutral grassland, modified grassland mixed scrub and other broadleaved woodland. At a minimum the southern and eastern areas of open space account for c.1.27ha (of grassland, scrub and woodland), with the central formal POS/LEAP accounting for c.0.05ha. The provision of these areas will provide new and existing residents in the local area with new opportunities for dog walking and recreation in combination with providing ecological mitigation and enhancement for Annex II bat species, and as discussed above provides links out to the wider countryside for walking purposes. It is proposed that this greenspace should be delivered prior to first occupation of the development.

Accordingly, whilst it is considered that sufficient alternative natural recreational space will be provided on site (in totality), it is recognised that some of this area may not be as optimal and as such it is anticipated that the applicant would provide a financial contributions to Wiltshire Council via s106/s111/UU to address any such shortfall.

Furthermore, Habitat Information Packs (HIPs) will be provided to new residents. These packs will include information on habitats within the Site, in addition to local footpaths and additional areas of POS within the wider area to further reduce pressures on the woodlands associated with the Bat SAC.

A Habitat Management and Monitoring (HMMP) has been produced detailing the methods and strategies to manage the new grassland areas, woodland, and orchard as described above, as well as providing details of the funding mechanisms and timescales for management which will ensure the above mitigation is provided to mitigate any impacts from potential increased visitor pressure.

In conclusion, whilst the scheme will include extensive areas of greenspace (both for wildlife and for recreational uses), it is considered disproportionate and unfeasible to deliver SANG on site, and suitable natural alternative greenspace has been provided instead which will be delivered in advance of the first occupation of homes. In addition, the proposals will contribute to wider SANG provision as per the TWBMS guidance.

5.1.2 National and Non-Statutory Designated Sites

There are no statutory designated sites within close proximity, with the nearest being Picket and Clanger Wood SSSI, and no direct impacts are anticipated given the intervening distance between them. There

¹⁰ <https://www.wiltshirewildlife.org/blog/statement-green-lane-woods-ecological-centre>

are a number of non-statutory sites within proximity, including Green Lane Wood LWS c. 1.3km south and the Kennet and Avon Canal LWS c. 1.6km north. As with the above SSSI no direct impacts are anticipated given their spatial separation.

As discussed above, Green Lane Wood represents one of the Core Bechstein's Roosts for the Bath and Bradford on Avon Bast SAC, and as discussed above, there is potential for increased recreational pressures. However, no further mitigation than that described above as per the Bat SAC is required.

In summary, due to the spatial separation between these designations and the Site, no adverse impacts are anticipated. Standard airborne and water pollution prevention measures will be employed during construction. Such measures should be detailed within a Construction Environmental Management Plan (CEMP) which could be secured by an appropriately worded planning condition.

All other Sites are located over 2km from the Site and accordingly are not considered likely to be affected by the proposals.

5.2 Habitats and Flora

It is anticipated that the proposals will result in the loss of the majority of grassland habitats within the Site. While these habitats are of limited ecological value, their loss will be compensated for through the creation of green infrastructure features along the western, northern and southern boundaries of the Site, as well as the creation of an extensive 50m buffer along the eastern boundary. In addition, linear swathes of informal POS and SUDs/rain gardens will be created throughout the scheme. Mature trees within the Site will be targeted for retention, or monolithed where dead or structurally unsound. Some removal of trees will be required to facilitate the scheme proposals, though these will be adequately compensated through the schemes landscape proposals.

The 50m buffer will comprise a mosaic of grassland and mixed scrub and tree planting along with retention of existing scrub and tree vegetation providing a variety of habitats with structural diversity.

Whilst it is an outline application and full details of habitat creation are not known, to ensure a biodiversity net gain, habitat creation within the buffers could include wildflower neutral grassland and patches of native scrub, ensuring further structural diversity. A grassland seed mix containing yellow rattle, a hemi-parasitic species, is recommended to reduce the dominance of competitive grass species and allow the growth of a wider variety of species including forbs/ wildflowers. For the area within the attenuation basins, a seed mix suitable for occasional inundation will be sown. The addition of raingardens and street trees will also provide enhanced foraging and nesting opportunities for a wide variety of species, including birds and bats.

The boundary features will be retained and enhanced. New hedgerow planting is proposed along the southern boundary of the Site, to help screen the new access off the A361, and to provide a soft edge to development and the adjacent POS.

There is potential for accidental damage to tree and hedgerow species during construction activities. To avoid such impacts, Root Protection Areas (RPAs) will be identified, and suitable protective fencing installed where required in line with best arboricultural practice during construction (BS5837:2012) and all existing and newly created habitats will be managed to maximise biodiversity. It is recommended that measures to restore and enhance existing habitats, to ensure successful establishment of new habitats, and to maintain the value of all ecological features in the long-term are detailed within a Habitat Management and Monitoring Plan (HMMP) which could be controlled through an appropriately worded planning condition.

5.3 Fauna

5.3.1 Badger

Badgers and their setts receive protection under the Protection of Badgers Act 1992, which protects them from deliberate harm and injury.

An active two-hole outlier sett was identified on the eastern Site boundary. This feature will be retained and buffered from proposals by at least 50m and as such no impacts are anticipated. However, mindful that badgers are highly mobile and frequently establish new setts, suitable habitats which are to be affected by development, such as hedgerows could support badger setts in the future. As a precaution, it is recommended that an update walkover for badger is undertaken no less than one month prior to works commencing to ensure the species hasn't moved in in the meantime.

In addition, good practice construction measures to ensure badgers are either unable to access the construction site or cannot become trapped in excavations (e.g. through covering up at night or inserting an 'escape ramp') should be implemented during the construction phase.

The habitats creation and enhancement measures proposed above would maintain and enhance foraging opportunities for badgers post-development.

5.3.2 Bats

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2017 (as amended) and Section 5 of the Wildlife and Countryside Act 1981 (as amended).

5.3.2.1 Commuting/ Foraging

The potential unmitigated impacts to bats during construction and operation are from disturbance from lighting leading to fragmentation of commuting corridors. Mitigation for these potential impacts is described above in **Section 5.1.1.3** and **5.1.1.4** above.

It is anticipated that habitat retention and enhancement measures can be designed in which will provide greater diversity and quality of habitats on the Site. The future management of the Site under the provisions of a HMMP will ensure successful establishment and long-term management of these features and as such will increase their value to foraging and commuting bats.

5.3.2.2 Roosting Bats – Trees

GLTA and further endoscopy did not identify any tree roosts within the Site, as such no impacts upon tree roosting bats is anticipated. Bat roosts in trees are by their very nature difficult to identify, being hard to locate and often transient in nature. For example, features such as flaking bark (popular as a roosting site for some of our bat species) change in a relatively short period of time. Some of these relatively delicate and short-lived roost types are lost and others appear; hence tree roosting bats move between a number of roosts.

As such, should works to trees be required, or should future amendments to the scheme design necessitate tree removal, further assessment via endoscope, and involving climbing assessments where necessary to identify presence/likely absence of roosting bats will be undertaken. In the event that evidence of roosting bats is identified, works will cease and further information collected in order to inform a mitigation licence application to Natural England.

5.3.2.3 Roosting Bats – Buildings

The surveys indicate that the buildings are used by three different species as summarised below.

Table 17: Summary of Loss of Roosting Habitats

Building	Species	Max No. of Bats Recorded	Roost Type and Impact	Geographical Importance (Based on CIEEM 2023)
B1	Lesser horseshoe bat	1	Day roost to be lost through demolition of building. Compensation through bespoke bat roost.	Local
B1	Greater horseshoe bat	2	Day roost to be lost through demolition of building. Compensation through bespoke bat roost.	Local to District
B1 (main roof)	Common pipistrelle	1	Day roost to be lost through demolition of building. Compensation through bespoke bat roost and bat boxes.	Site
B1 (stable roof)	Common pipistrelle	1	Day roost to be lost through demolition of building. Compensation through bespoke bat roost and bat boxes.	Site

The surveys indicate that Building B1 is being for used for roosting by three different species of bats including Annex II greater and lesser horseshoe associated with the Bath and Bradford on Avon Bat SAC.

The lesser and greater horseshoe bat roosts are of greatest conservation significance with an individual lesser horseshoe noted on occasion with at least two greater horseshoe day roosting. These horseshoe bats, are likely using the features as part of a network of such features both within the Site itself and within the locality, subject to environmental conditions. There was some correlation between the presence of greater horseshoe bats and the absence of lesser horseshoe bat, suggesting that interspecies competition may be a factor.

Individual common pipistrelle day roosting was also recorded via the emergence surveys. The buildings which dominate the Site provide ample opportunities for these species, however, due to the small numbers present, as with the horseshoe bats, Building B1 is likely being used as one of many such roosts within the locality.

In the absence of mitigation, the demolition of this building (B1) could result in injury/ mortality to several species of bat along with the loss of roost sites. This would be an offence under UK legislation. The Site will therefore require a **European Protected Species (EPS) Mitigation Licence (Bats)** from Natural England prior to works to the buildings. A licence cannot be applied for until full planning permission is granted, and all wildlife related conditions are discharged.

As no roosts have been identified within Buildings B2, B3 works to these buildings will not require a licence.

Licencing Requirements

During the licencing process there is a requirement to demonstrate that the application meets the 'Three Tests' under the Conservation of Habitats and Species Regulations 2017 (as amended). If met, these tests provide for derogations via the licensing process which allow what would under normal circumstances be illegal acts, to take place legally. When considering planning applications local authorities also have a duty to consider whether it is likely that these tests can be met and therefore the likelihood of the licence being granted by NE.

The three tests are as follows:

1. Regulation 55(2) (e) states: a licence can be granted for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment".
2. Regulation 55(9) (a) states: the appropriate authority shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".
3. Regulation 55(9) (b) states: the appropriate authority shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."

The three tests will be met in this case as follows:

1. The licence would be applied for under 'other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'.
2. This project would meet this test to satisfy the need for housing in the area and no satisfactory alternative for development is available.
3. The loss of the roosting sites in their current location will not be detrimental to the population of bats in their natural range as proportionate mitigation measures will be put in place to allow bats to continue to roost on Site.

In order to ensure that the 'Favourable Conservation Test' can be met, a mitigation statement will need to be submitted as part of the licence application. This includes measures to ensure that bats are not harmed during works and to ensure that there is long term provision of alternative roosting opportunities on Site. Input from a licensed bat worker will be required during licensable activities at the site (such as roof removal, soft demolition, conversion etc).

The table within **Appendix 8** lists types of works that have the potential to disturb roosting bats. Prior to commencing any works on the building, this form should be completed and returned to the ecologist at the earliest opportunity. This is to ensure that both the developer and ecologist have a detailed understanding of the works that may impact roosting bats prior to the licence application process and commencement of works.

Outline Mitigation and Compensation

Mitigation measures will be required to ensure that bats are not harmed during demolition works and that there is long term provision of roosting opportunities for all species of bat on Site. Detailed specifications will be included within the subsequent licence application; however, a summary is provided below.

As part of their consultation comments NE stated “Further justification should be provided as to why the old stables building used by horseshoe bats cannot be reused and incorporated into the new development with connectivity to adjoining habitat maintained. Such an approach would be a potential “satisfactory alternative” that should be considered by the application. If the loss of the stables is considered unavoidable then details of the proposed replacement roosts should be provided prior to determination. These should include details of the location of the replacement roost within the development site and architectural drawings to show detailed design, dimensions and materials to be used. The scheme will need to demonstrate how roosting opportunities for both GHB and LHB will be provided within the structure as the two species should be provided with separate roosting areas. In addition, new crevice roosting opportunities should be provided within appropriately located buildings within the development. “

The current situation ‘status quo’ isn’t acceptable or feasible as the buildings in question are currently disused and have fallen into a state of disrepair. The majority of buildings present are not suitable for conversion into residential dwellings (being stables/agricultural focused buildings) without significant modification where it wouldn’t be cost-effective to undertake such works. In the long-term without the proposals, it is anticipated that this will result in the loss of the roosts present.

Due to the nature of the development, it has not been possible to retain the roosts in-situ. As described above Building B1 is not fit for conversion to a residential dwelling/s without significant modification, and the location of the roosts (in the stable section of the building) would likely preclude conversion of those sections for residential purposes.

Further to this if retained, the roost would be centrally located within a new residential development, and new sources of artificial lighting. There would be conflicting lighting requirements in regard to ecologically sensitive design for light averse bats in close proximity to residential dwellings and policy requirements for street lighting for public health and safety. As well as introduce significant constraints for Site access arrangements, and access to the larger Site Allocation which the scheme provides access to.

Further to this, the incorporation of a bat roost into a residential dwelling which is proposed for general sale introduces another variable/constraint to the sale of the property, as the successor in title to the building within which the bat roost is located would need to become responsible party (as the Licensee) under any European Protected Species Mitigation Licence. Which does not represent a practicable solution in the long term when compared to the creation of a bespoke bat roost, to be managed by the anticipated Management Company for the scheme POS.

As such the creation of a bespoke bat house to the east of the Site, associated with the 50m buffer coupled with erection of bat boxes on retained trees will ensure that sufficient opportunities are created within the wider Site to mitigate for impacts to existing roosts.

This purpose-built bat house will provide a range of opportunities for both crevice and void dwelling species including those found to be roosting within the buildings at the Site.

Common pipistrelles are very adaptable, typically roosting in cracks and crevices in buildings, behind hanging tiles, soffit and barge or eaves boarding as well as between roofing felt and roof tiles or in cavity walls.

Lesser horseshoe and greater horseshoe bats both require open, uncluttered roof spaces with access that provides uninterrupted flight to the roof apex and allows them to hang freely within their roosts. Their roosting requirements are similar, though due to their larger size greater horseshoes require a larger access point. While the two species can often be found utilising the same roosts, mitigation

should be designed carefully to provide separate areas for each species due to the known interspecies competition.

The mitigatory roost should be constructed in accordance with the following guidelines:

- 👉 The bat house should include a roof with an apex, unobstructed by constructional timbers, with a height to apex of c. 2.8m.
- 👉 Ideally one of the roof pitches should be south facing to maximise solar gain.
- 👉 The recommended size of the roost is c. 5m x5m (or of similar internal volume).
- 👉 The primary entrance to the roost for free flying species (greater horseshoe bats in particular) would be via a horizontal slot of 400mm width and 300mm height.
- 👉 The roost should have internal baffles and a hot-box comprising triangular panels with additional timber flooring and a secondary access hole provided via a horizontal slot 300mm in width by 200mm in height (to provide a feature not accessible by greater horseshoe to prevent interspecies competition).
- 👉 The roof of the replacement void within the bat house should be constructed of the same/similar tiles to those used on other buildings within the Site and should be lined with traditional Type 1 bituminous felt.
- 👉 Modern breathable roofing membranes/ manmade will not be used due to potential for bat mortality.
- 👉 4no. bat access tiles/ridge tiles will be installed on the roof to provide opportunities for crevice dwellers such as pipistrelles.
- 👉 The bat house should include internal crevice dwelling features via 2 no. Kent style bat boxes affixed to the interior walls.
- 👉 As horseshoe species are light-sensitive, light spill onto the roost needs to be considered within the scheme. As horseshoe bats typically undertake 'light sampling' prior to emergence, a covered area will be created around the entrance where bats can undertake this activity.
- 👉 One of the key limiting factors for bats is the availability of roosting sites, with bats typically utilising a network of sites across their territory. As such a very effective ecological enhancement is the installation of tree mounted bat-boxes, to be located on retained trees within the 50m buffer. It is recommended that a number of bat boxes are erected on mature trees - 5no. Schwegler 1FD and 5no. Schwegler 2F to be erected in pairs
- 👉 All boxes should be erected on mature trees at varying heights and aspects between 3-6 metres and ideally sited in more open and sunny positions.
- 👉 In addition, Manrose Ridge Roosts should be installed on all gable ends of every other dwelling.
- 👉 A sensitive lighting strategy will be developed in accordance with the ILP Guidance Note 08/23 on Bats and Artificial Lighting as described above.

An indicative bat house design, and other mitigatory features are included in **Appendix 7**.

Important Information

Once the licence has been granted, the following will be required:

- 👉 A tool-box talk and a precautionary check for bats by a licenced ecologist will be required immediately prior to all works.
- 👉 Works to key features will need to be supervised by a licensed ecologist and exclusions of lesser horseshoe bats will be required.
- 👉 Enabling works will be conducted under the supervision of the Named Ecologist or an Accredited Agent to the Named Ecologist on the licence.
- 👉 While no evidence of hibernating bats was found within the buildings, as a precaution, a pre-commencement check by the Named Ecologist or an Accredited Agent to the Named Ecologist on the licence will be undertaken immediately prior to any structural works the fabric of the buildings.

5.3.3 Birds

All wild birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (as amended), with certain species afforded additional protection measures.

Any removal of or disturbance to any vegetation on Site that is considered to offer potential nesting habitat for breeding birds (i.e. the hedgerows), should be undertaken between September and February inclusive or following inspection for active nests by a suitably qualified ecologist. If nesting birds are found to be present then a buffer will be implemented around the nest, in which no works can take place until all birds have fledged.

To compensate for the loss of nesting opportunities resulting from hedgerow losses, integrated bird bricks will be included (see **Section 8** below). Detailed locations and specifications would be provided in the HMMP however integrated swift bricks provide suitable opportunities for a range of species and would be appropriate in this location.

5.3.4 Invertebrates

Invertebrates will be impacted at no more than local level through the removal of grassland and scrub, with those habitats identified as being of greatest ecological importance i.e. the mature and veteran trees and boundary hedgerows being retained and enhanced through incorporation into the schemes POS and green infrastructure.

Enhancement will be facilitated through new scrub and tree planting and via the inclusion of wildlife friendly species, such as natives or those selected from RHS Plants for Pollinators List as part of the soft landscaping scheme.

5.3.5 Reptiles

No reptiles were found during the historic surveys. Despite this, suitable habitat is present on Site in the form of scrub vegetation at the base of hedgerows and Site grassland (subject to annual management).

In order to protect reptiles which could be present onsite during construction and enabling works, the following Method Statement will be followed when removing any habitat considered suitable for reptiles (as described above):

Habitat manipulation will be undertaken to encourage reptiles to disperse to areas of retained habitat around site margins and beyond the eastern boundary. These works will only be undertaken during the reptile active season of April to October inclusive, in suitable weather conditions when temperatures exceed 10°C.

Habitat suitability will be reduced by strimming vegetation using a staged cutting process;

-  Initially, any grassland, scrub and hedgerow vegetation to be removed will be cut to approximately 150mm, with the arisings removed and habitats left for a minimum of 48 hours in suitable weather conditions i.e. no rain or high winds;
-  A further cut will then be made to 50mm, beginning at one end of the Site and moving in one direction, to encourage any remaining reptiles towards the retained areas of suitable habitat.
-  Once complete, the vegetation will be maintained at a low-level (<50mm) until the start of development works.

5.3.6 Other Notable Species

During the construction and enabling works, there is potential to harm hedgehogs. The measures outlined above for reptiles and badgers will also ensure that hedgehogs will be safeguarded. Any

individuals encountered during enabling works will be moved to a place of safety, namely the 50m buffer associated with the eastern boundary. The retention of the majority of hedgerow areas will ensure foraging opportunities on Site are maintained whilst new habitat creation as part of the soft landscaping proposals will provide new enhanced opportunities for the species.

6 Summary of Assessment and Mitigation

The above measures detail the avoidance, mitigation and compensation measures required to minimise significant impacts to ecological features. This demonstrates that the mitigation hierarchy has been adhered to by focusing on the **avoidance** of ecological features of greatest importance, mitigating unavoidable impacts and, as a last resort, providing **compensation**.

7 Biodiversity Net Gain

7.1 National Mandatory Biodiversity Net Gain Information

Table 18 provides the BNG information required to support the planning application under Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015.

Table 18: National Mandatory Baseline BNG Information

Information required	Description	
Would the planning permission, if granted, be subject to the biodiversity gain condition?	Yes – meets criteria of a major development.	
Pre-development biodiversity value of the on-Site habitat on the date of application	Habitats	9.95
	Hedgerows	2.76
	Watercourses	N/A
Publication date of the biodiversity metric calculation tool used	July 2024	
Is an earlier date proposed?	No – the relevant date is the date of the planning application submission.	
Is there any evidence of habitat degradation?	No – there is no evidence of any unauthorised habitat degradation since the statutory cut-off date of 30 January 2020.	
Is there any irreplaceable habitat on Site?	No – there is no irreplaceable habitat within the Site boundary.	
Plan of on-Site habitat on the date of the application (or earlier date)	Refer to Figure 1 .	

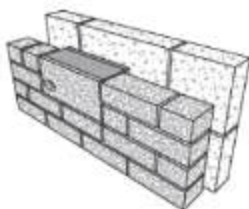
An indicative BNG assessment suggests that the Site is likely to be capable of delivering c.12.29 habitat units, and 3.57 hedgerow units providing a 23.49% and 29.14% net gain respectively.

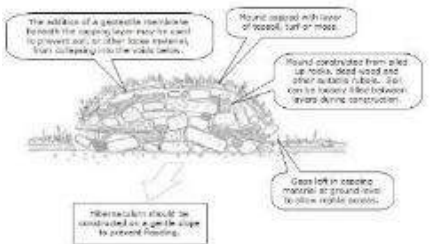
Further details are provided in the BNG Statement and Assessment Report (GE Consulting, 2026a), which provides the BNG information required to support the planning application under Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015 as well as local information required by Wiltshire Council, and in the submitted statutory biodiversity metric (GE Consulting, 2026b).

8 Protected/Notable Species Features

The following enhancements/ mitigation features detailed in **Table 19** are recommended in line with national guidance and local planning policy.

Table 19: Enhancement and Mitigation Features

Quantity & Type	Illustrations	Description & Installation
20 no. integrated bird nest box	 WoodStone Build-in Swift Nest Box Deep (nhbs.com)  Installation – integral nestbox installed in outer leaf of brickwork in a traditional cavity wall construction	- N.B. Swifts and house sparrows are colony nesters so multiple can be put on same building as long as >50cm apart. - Fully integrated boxes to be built into the fabric of the building. - Suitable models include the PRO UK Rendered Build-in Swift Box or the WoodStone Build-in Swift Nest Box Deep which can be chosen to suit the finishing of the building. Suppliers include www.nhbs.com and www.wildcare.co.uk. - Swift boxes are recommended as they are considered a universal box suitable not only for swifts but also for house sparrows and other small birds (CIEEM, 2021). - Install at the highest point of the building, ideally at least 5m above ground level. - To be sited under the shelter of eaves or overhanging roofs where possible. - Entrance out of direct sun and the prevailing weather and away from perches/ledges where birds are at risk from predators. See swift-conservation.org for additional advice.
40no. Manrose Bat Ridge Roosts		To be installed on southern gable ends of buildings.
15no. tree mounted bat boxes	 Schwegler 2F bat box	5no. to mitigate for the loss of common pipistrelle roosts, 10no. to provide enhancements for roosting bats. - To be externally mounted in pairs on trees at a height of at least 3m above ground level. - Fix securely to an open section of tree trunk. - Boxes are to be made of a durable material such as woodstone or woodcrete. - Suitable models include the Schwegler 2F bat box, and 1FF bat box or similar

Quantity & Type	Illustrations	Description & Installation
	 Schwegler 1FF bat box	approved. Suppliers include www.nhbs.com and www.wildcare.co.uk. - Locate where there is a clear, unlit flight path for bats to linear vegetation (e.g. hedgerows) and away from windows. - Install away from any lighting.
2 no. hibernaculum/ habitat piles	 Example hibernaculum design	- Provide hibernacula/ resting places for fauna such as reptiles, mammals and invertebrates. - Constructed from dead wood and rubble, topped with loose soil and turf. Dimensions to be a minimum of 2m length x 1m width x 1m height. - Located in suitable locations such as within the western POS in a relatively undisturbed marginal area of the Site.
Hedgehog holes		- Include 13cm x 13cm cut out through close-boarded fences (or equivalent gaps under fences) to allow hedgehog movement throughout site. - These can be holes created during fence construction, or purpose made products such as the Durapost Hedgehog Hole and Hedgehog Gravel Boards (or similar) available from suppliers including www.jacksons-fencing.co.uk or www.wickes.co.uk. - To reduce the risk of these being blocked by future residents, a small 'Hedgehog Highway Sign' should be attached. Available from www.nhbs.com. - Further information is available at: https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/

9 Monitoring

Monitoring should be undertaken to ensure that the mitigation described in this report has been undertaken to a satisfactory standard. This applies to both the construction and operation phases of the development. Details and frequency will be provided within the HMMP, which will be a 'live' document and subject to regular updates and iterations, or the method statement for any mitigation licences required to ensure successful establishment and delivery of mitigation and enhancement measures. Additionally, the required EPS Licence will require some level of post-development monitoring (to be agreed as part of the licence application) to ensure Favourable Conservation Status of the population.

10 Conclusions

In summary, the development of the Site has the potential to impact on a variety of protected species including foraging, commuting and roosting bats (including those associated with the Bath and Bradford on Avon Bat SAC), nesting birds, badger and common species of reptile. The main impacts identified will be through a result of direct habitat losses and indirect impacts caused by disturbance factors both during construction and operation.

Suitable avoidance and mitigation measures have been incorporated into the design to ensure that the proposal and work programme is designed to minimise adverse impacts on protected species and ensure legislative compliance.

Enhancement recommendations have also been outlined and detailed planting plans will be developed at the Reserved Matters stage. The current outline proposals demonstrate that the statutory 10% biodiversity net gain on-Site is achievable (current, assessment shows the scheme is capable of delivering c.12.29 habitat units, and 3.57 hedgerow units providing a 23.49% and 29.14% net gain respectively) contributing to the aims of National Planning Policy Framework and local policy, and meeting legislative requirements

11 References

Bat Conservation Trust (2014) *Artificial lighting and wildlife. Interim Guidance: Recommendations to help minimise the impact artificial lighting*. Available at http://www.bats.org.uk/pages/bats_and_lighting.html

Bat Conservation Trust (2022) *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys*. Available at: <https://cdn.bats.org.uk/uploads/pdf/Interim-guidance-note-on-NVAs-May-2022-FINAL.pdf?v=1653399882>

Bat Conservation Trust/ Institute of Lighting Professionals (2023) *Guidance Note 08/23, Bats and Artificial Lighting at Night*. Available from: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F (2014). *Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA*. Freshwater Habitats Trust, Oxford. Bright P.W., Morris P.A. and Mitchell-Jones A. (2006) *Dormouse Conservation Handbook, 2nd Edition*. English Nature, Peterborough.

Bright P.W., Morris P.A. and Mitchell-Jones A. (2006) *Dormouse Conservation Handbook, 2nd Edition*. English Nature, Peterborough.

British Ornithologists' Union. 2022. *The British List: A Checklist of Birds of Britain (10th edition)*. Ibis 164: 860–910.

BSI (2012) *BS5837: 2012 Trees in Relation to design, demolition and construction. Recommendations*. British Standards Institution, London, UK.

BSI (2013) *BS42020: 2013 Biodiversity. Code of practice for planning and development*. British Standards Institution, London, UK.

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

CIEEM (2021). *Biodiversity Net Gain Report and Audit Templates*. Chartered Institute of Ecology and Environmental Management, Winchester, UK.

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

Defra (2024) *The Statutory Biodiversity Metric User Guide (Updated July 2025)*. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

Defra (2024) *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology (Updated July 2025)*. Available from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

Engain (2023). *Ecological Impact Assessment. Hilperton, Trowbridge*. Redcliffe Homes. Report ref: eg211155 rev 05.

Froglife (1999) *Froglife Advice Sheet 10: Reptile Survey - An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife, London.

GE Consulting (2026a). *Biodiversity Net Gain Statement. Land at Devizes Road, Hilperton, Trowbridge.* Redcliffe Homes Ltd. Report ref: 3131-BNGS-NH.

GE Consulting (2026b). *Statutory Biodiversity Metric. Land at Devizes Road, Hilperton, Trowbridge.* Redcliffe Homes Ltd. Report ref: 3131-SBM-NH

GE Consulting (2026c). *Shadow Habitats Regulations Assessment. Land at Devizes Road, Hilperton, Trowbridge.* Redcliffe Homes Ltd. Report ref: 3131-sHRA-NH

Harris S., Cresswell P. and Jefferies D. (1991) *Surveying Badgers.* Mammal Society, London.

Highway Lighting Solutions (2026). *Lighting Strategy. Land off Devizes Road, Hilperton.* Redcliffe Homes Ltd.

Joint Nature Conservation Committee (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit.* Reprinted by JNCC, Peterborough.

Panter, C., Lake, S. & Liley D. (2018). *Trowbridge Visitor Survey and Recreation Management Strategy.* Unpublished report by Footprint Ecology for Wiltshire Council.

Ransome, R. D. (1991) *Greater horseshoe bat.* In *The handbook of British mammals* (ed. G. B. Corbet & S. Harris), pp. 88-94. Oxford, UK: Blackwell

RHS (2019) *RHS Plants for Pollinators.* Available from: www.rhs.org.uk/science/conservation-biodiversity/wildlife/plants-for-pollinators.

Rodwell J. (1992). *British Plant Communities, Volume 3, Grasslands and Montane Communities.* Cambridge University Press.

Stace, C. (2019) *New Flora of the British Isles* (4th Edition). C&M Floristics.

Stanbury A., Eaton M., Aebischer N., Balmer D., Brown A., Douse A., Lindley P., McCulloch N., Noble D., and Win I. (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain.* British Birds 114: 723-747

Stone, E.L. (2013) *Bats and lighting: Overview of current evidence and mitigation guidance.*

UKHab Ltd (2023) *UK Habitat Classification Version 2.0* <https://www.ukhab.org>

Vaske, J.J., Decker, D.J., Manfredo, M.J., 1995. *Human dimensions of wildlife management: an integrated framework for coexistence.* In: Knight, R.L., Gutzwiller, K.J. (Eds.), *Wildlife and Recreationalists: Coexistence through Management and Research.* Island Press, Washington, DC, pp. 33-49.

Wiltshire Council (2015). *Bat Special Areas of Conservation (SAC) – Planning Guidance for Wiltshire.* Natural England and Wiltshire Council. Available at: <https://cms.wiltshire.gov.uk/documents/s149190/BIO21BatSpecialAreasofConservationSACPlanningGuidanceforWiltshire.pdf>

Wiltshire Council (2020). *Trowbridge Bat Mitigation Strategy Supplementary Planning Document.* Wiltshire Council, and Johns Associates Limited. Available at: [Appendix 2 for Trowbridge Bat Mitigation Strategy Supplementary Planning Document.pdf](https://www.wiltshire.gov.uk/media/18096/Trowbridge-Bat-Mitigation-Strategy-Supplementary-Planning-Document.pdf)

Wiltshire Council (2025). *Trowbridge and Westbury Bat Mitigation Strategy.* Wiltshire Council, and Johns Associates Limited. Available at: https://www.wiltshire.gov.uk/media/18096/Trowbridge-and-Westbury-Bat-Mitigation-Strategy/pdf/TWBMS_v4_Final_July_2025.PDF?m=1758027614863



Key:

- Site Boundary
- 1160 - Introduced shrub
- 17 - Ruderal/ephemeral
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- u1b5 - Buildings
- u1c - Artificial unvegetated unsealed surface
- Vegetated Garden
- w1h - Other woodland mixed
- Rural Tree (Broadleaved)
- Native Hedgerow
- Native Hedgerow with trees
- Ornamental Hedgerow



Imagery ©2026 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies. Map data ©2026 Google

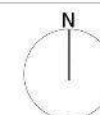
Figure 1:
UK Habitat Classification Survey

Project:
Devizes Road, Hilperton

Client:
Redcliffe Homes

Date:
5/8/2026
Ref:
3131-EcIA-F1

Drawn:
NH
Revision:
1





Key:

- ◆ Automated Detector Locations
- Tree GLTAs
- Transect North
- Transect South
- Listening Points - Transect South
- Listening Points - Transect North

Imagery ©2025 Airbus, Maxar Technologies, Map Data ©2025

Source: Nicholas Pearson Associates

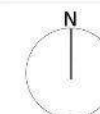
Figure 2:
Night-time Bat Walkover Survey Plan

Project:
Land off Devizes Road, Hilperton

Client:
Redcliffe Homes

Date:
27/1/2026
Ref:
3131-EdA-F2

Drawn:
EB
Revision:
-





Key:

- Site Boundary
- ★ Static Locations
- All bats
- All bats excluding pipistrelle species
- Annex II

Circles are indicative of the average number of bat passes per night for monthly surveys conducted between April and October



Imagery ©2026 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies. Map data ©2026 Google

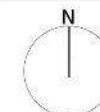
Figure 3:
Automated Bat Detector Survey Results

Project:
Land off Devizes Road, Hilperton

Client:
Redcliffe Homes

Date:
27/1/2026
Ref:
3131-EdA-F3

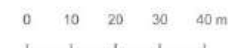
Drawn:
EB
Revision:
-





Key:

- Site Boundary
- Bat House
- g3c - Other neutral grassland
- g4 - Modified grassland
- h3h - Mixed scrub
- u1b - Developed land, sealed surface
- u1c - Artificial unvegetated unsealed surface
- Vegetated Garden
- w1g - Other woodland-broadleaved
- Native Hedgerow
- Native Hedgerow with trees
- Native Species Rich Hedgerow
- Ornamental Hedgerow
- New Urban Tree (Broadleaved)
- Retained Rural Tree (Broadleaved)



Imagery ©2026 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies. Map data ©2026 Google

Figure 4:

Post Development: Biodiversity Net Gain Plan

Project:

Devizes Road, Hilperton

Client:

Redcliffe Homes

Date:

7/8/2026

Ref:

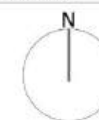
3131-EclA-F4

Drawn:

NH

Revisions:

1



Appendix 1 – General Glossary of Terms

Annex I	Threatened bird listed on Annex I of the EC Birds Directive/ Habitats listed on Annex I of the EC Habitats Directive
Annex II	Species of community interest whose conservation requires the designation of SACs
BAP	Biodiversity Action Plan
BNG	Biodiversity Net Gain
BoCC	Bird of Conservation Concern
CEMP	Construction Environmental Management Plan
EPS	European Protected Species
EPSL	European Protected Species Licence
HPI	Habitat of Principal Importance required under Section 41 of the NERC Act 2006
HSI	Habitat Suitability Index
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LEMP	Landscape and Ecology Management Plan
NERC Act	Natural Environment and Rural Communities Act 2006
NPPF	National Planning Policy Framework
NVC	National Vegetation Classification Survey
SAC	Special Area of Conservation
SPA	Special Protection Area
SPI	Species of Principal Importance required under Section 41 of the NERC Act 2006
SSSI	Site of Special Scientific Interest
TWBMS	Trowbridge and Westbury Bat Mitigation Strategy
WCA	Wildlife and Countryside Act 1981(as amended)
ZOI	Zone of Influence

Appendix 2 – Planning Policy and Legislation

Habitat and Species Legislation

Species and habitats receive legal protection in the UK under various legislation, including:

- 🔥 The Wildlife and Countryside Act (WCA) 1981 (as amended);
- 🔥 The Conservation of Habitat and Species Regulations 2017 (as amended);
- 🔥 The Countryside Rights of Way (CROW) Act 2000;
- 🔥 The Hedgerows Regulations 1997;
- 🔥 The Protection of Badgers Act 1992; and
- 🔥 The Natural Environment and Rural Communities (NERC) Act 2006.

Where relevant, this report takes into account the legislative protection afforded to specific habitats and species.

Environment Act 2021

The Environment Act 2021 operates as the UK's legal framework for environmental protection and provides legislation on environmental governance, principles, targets and improvement plans, waste and resource efficiency, nature protection, and water and air quality.

Part 6 of the Environment Act 2021 requires a minimum 10% biodiversity net gain for all new developments (with specified exemptions), and amends Schedule 7a (Biodiversity Gain in England) of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021) to mandate this in England. This will apply to most major developments from 12th February 2024 and to small sites from 2 April 2024.

The biodiversity net gain regulations most directly relevant to planning are:

- 🔥 The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations (2024)
- 🔥 The Biodiversity Gain Requirements (Exemptions) Regulations (2024)
- 🔥 The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations (2024)
- 🔥 The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024).

In addition, there are regulations for the Biodiversity Gain Site register established under section 100 of the Environment Act 2021 for registered off-site biodiversity gains.

National Planning Policy Framework 2024

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how local planning authorities should incorporate them into their own policies and plans. Section 15 of the NPPF contains several policies targeted at enhancing the natural environment and requires local authorities to consider how impacts on biodiversity can be minimised and provide net gains in biodiversity. Paragraph 187 (a-f) states that:

“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 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.”*

In addition, paragraph 192 (b) ensures that to protect and enhance biodiversity and geodiversity, plans should:

“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.”

Additional Planning Practice Guidance (PPGs) supports the NPPF and includes guidance on:

-  Agricultural land, soil and brownfield land of environmental value;
-  Green infrastructure;
-  Biodiversity, geodiversity and ecosystems; and
-  Landscape.

Wiltshire Local Planning Policy

Wiltshire Council adopted the Wiltshire Core Strategy Development Plan Document in January 2015 which provides an overarching policy framework for Wiltshire up to 2026. Core Policies (CP) which were considered as part of this report include:

-  CP50: Biodiversity and Geodiversity
-  CP52: Green Infrastructure

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (UK BAP) was succeeded in 2012 by the ‘UK Post-2010 Biodiversity Framework’ which demonstrates a whole-environment strategy on how the UK contributes to achieving the Convention on Biological Diversity’s (CBD) 20 Aichi Biodiversity Targets. In England, ‘Biodiversity 2020: A strategy for England’s wildlife and ecosystem services’ (Defra, 2011) sets out the strategic direction for biodiversity policy in the future. The former UK BAP was used to draw up lists of species and habitats of ‘principal importance’ which continue to be regarded as priorities under the Post-2010 Biodiversity Framework and are identified under Section 41 of the NERC Act 2006; these species have been considered throughout this report.

Wiltshire Biodiversity Action Plan

The latest available Wiltshire Biodiversity Action Plan (BAP) was produced by the Wiltshire Biodiversity Partnership in 2008. The plan includes a Generic Action Plan, ten Habitat Action Plans and a Bat Species Action Plan, which covers all bat species in Wiltshire. The Wiltshire and Swindon Biodiversity Action Plan Steering Group have since published Landscape Biodiversity Areas which provides an additional framework for landscape-scale conservation with which to coordinate conservation efforts in Wiltshire and Swindon.

Bat Special Areas of Conservation (SAC) – Planning Guidance for Wiltshire

This guidance has been prepared jointly by Natural England (NE), Wiltshire Council and local experts and researchers. It is aimed at applicants, agents, consultants and planners involved in producing and assessing development proposals in the landscapes surrounding Wiltshire's most sensitive bat roosting sites which are protected by European wildlife legislation. Within these areas there will be a requirement for adequate survey information, mitigation and compensation for bats in order to demonstrate that development proposals will not impact on the designated bat populations. The guidance applies to all types of development that are subject to planning control.

The guidance explains how development activities can affect Wiltshire's bat SACs and what must be done to avoid or mitigate any impacts. It aims to flag up the types and locations of development that present risks to the SACs so that the needs of bats can be taken into consideration as early as possible in order to avoid unnecessary delays to development projects.

Trowbridge and Westbury Bat Mitigation Strategy (2025) TWBMS

The Trowbridge and Westbury Bat Mitigation Strategy (TWBMS) is aimed at developers, consultants and planners involved in assessing development proposals in the landscapes in and surrounding Trowbridge and Westbury.

The overall aim is to provide a clear and detailed approach to considering the impact of development in the Trowbridge and Westbury area on the Bath and Bradford-on-Avon Bats Special Area of Conservation (SAC). This will help inform strategic planning for the area's future housing needs.

The TWBMS sets out survey and mitigation requirements to ensure forthcoming development in the Trowbridge and Westbury areas will deliver robust mitigation and that planned development will not result in adverse effects on the integrity of the Bath and Bradford-on-Avon Bats SAC and functionally linked woodlands to the east and south-east of Trowbridge either alone or in combination with other plans and projects. Any planning applications for speculative development that fall within the bat sensitivity zones set out in this document would also need to adhere to the requirements detailed herein and would be assessed accordingly.

Appendix 3 – Consultation Responses (Natural England and Wiltshire Council)

Council Planning Consultation Response

ECOLOGY

Officer name:	Elizabeth Burrows, Senior Ecologist
Date:	01/05/2026
Application No:	PL/2026/01072
Proposal:	Outline planning application, with all matters reserved except for the main point of access from Devizes Road, for the demolition of existing building and development of up to 80 dwellings, public open space, drainage, landscaping and ancillary works.
Site Address:	Land North of Devizes Road, Hilpertown, Trowbridge
Case Officer:	Jemma Foster

Recommendations:

☐	No Comment
☐	Support
☐	No objection
☐	Condition (no objection subject to conditions)
☒	Objection - further information required
☐	Objection in principle
☒	HRA required.

Appropriate Assessment with a positive conclusion must be completed and endorsed by Natural England, who must agree the conclusion (within 21 days) prior to this application being permitted. Comments dated 23rd April 2026 recommend a holding objection.

Further Information Required:

	Issue	Policy/Legislative Compliance	Date information requested & Further information required	Satisfactorily addressed
1	Baseline data	CP50	Updated Ecological Impact Assessment in response to: 2026 Botanical Surveys. Issues raised in relation to bats survey and assessment.	
2	Mitigation (bats, GHS, LHS)	CP50, NPPF (paragraph 187(a) and (d))	Mitigation for impacts on foraging bats (specifically GHS) and roosting bats (specifically GHS and LHS).	
3	Bath and Bradford on Avon Bat SAC	Hab Regs, CP50. NPPF 187. (a)	Amended Combined Parameter Plans – 01. Dwg no. CPP-01. (Thrive Architects, 09/01/2026) addressing issues raised. Recreational impact mitigation strategy addressing issues raised.	
4	Biodiversity Net Gain	Town and Country Planning Act	2026 grassland survey. Clarification of Site area. Amended metric and condition assessment with issues raised addressed.	

The outstanding document(s) listed above are needed to enable the council's ecology team to consider all the relevant impacts and benefits of the proposed scheme. The council's ecologists will provide a further response once all the above information has been submitted via the case officer. Please Note: When resubmitting a revised document, ALL changes must be highlighted to enable review.

Thank you for your consultation on the above application. I have reviewed the submitted documents against OS maps, aerial photographs of the site and surrounding area, together with GIS layers of statutory and non-statutory designated sites and existing records of protected species.

Information considered:

- Ecological Impact Assessment. Land off Devizes Road, Hilperton. (ge Consulting, 05 February 2026).
- Combined Parameter Plans – 01. Dwg no. CPP-01. (Thrive Architects, 09/01/2026).
- Concept Master Plan – 01. Dwg no. CMP-01. (Thrive Architects, 17/12/2026).
- Statutory Metric Calculator (05/02/2026).
- Biodiversity Net Gain Statement and Assessment. (ge Consulting, 05 February 2026).

COMMENTS:

The submitted Ecological Impact Assessment (EclIA) references and relies on surveys and reports completed a previous application/s (Ecological Impact Assessment, Table 1). These provide useful ecology context however to ensure the data is easily accessible for review the reports should be submitted with this application.

The other fields of neutral grassland are reported to comprise largely coarse, species-poor permanent pasture with a limited forb assemblage. **Updated botanical surveys are anticipated in spring/summer 2026, the results of which are required to inform the Biodiversity Net Gain Assessment and impact assessment.** Until these surveys are submitted, the comments below are provided without prejudice.

The Site is reported to comprise *‘several parcels of other neutral grassland, bounded by a mixture of native hedgerows, mixed scrub, trees, specimen trees. The Site includes a complex of agricultural buildings both active and disused’* (Ecological Impact Assessment, 05/02/2026). The Site is bounded to the east and north by mature native hedgerows with trees and qualifying as Habitats of Principal Importance. The Concept Master Plan indicates that hedgerow impacts could be avoided and minimised to an acceptable level.

Based on the information submitted it is agreed that the following protected and notable species are unlikely to be present and therefore unlikely to represent a constraint to development great crested newts, reptiles and dormice.

Birds

The site supports nesting and foraging habitat for birds including confirmation that swallow nest in the barn. To ensure compliance with CP50 and NPPF (paragraph 187 (d)) mitigation for birds must be secured by condition.

Badger

Evidence that badgers forage and commuted across the site and an outlier sett at the eastern boundary adjacent to Whaddon Lane. Badgers and their setts (tunnels and chambers where they live) are protected by law and any sett disturbance that can't be avoided must be carried out under license from Natural England.

Bats

Paragraph 2.6 and Appendix 2 of the Ecological Assessment states that the report is based on a summary of data obtained from third-party sources. **Clarification of if GE Consulting has independently verified the bat call analysis is required.**

Although the bat survey methodology is set out in Appendix 2, there is no confirmation that this methodology has been verified or endorsed by the third-party ecologist responsible for the original survey work. **To properly demonstrate the validity and reliability of the bat assessment, the primary survey report must be submitted, or alternatively a formal statement confirming the accuracy and validity of the data, analysis, and methodology must be provided by the third-party ecologist.**

The assessment of bat foraging and commuting importance has been undertaken solely using previously analysed and summarised bat data and is therefore reliant on desk-based interpretation without the benefit of any direct field observations. As set out in paragraph 8.1.2 of the Bat Survey Guidelines, it is good practice

to undertake manual activity surveys to provide site-specific information on bat behaviour, including levels of activity, numbers of bats, use of the site for foraging or commuting, and direction of travel. Furthermore, the available data has not been analysed to identify call characteristics indicative of feeding activity. **Clarification and justification of how bat activity, including foraging and commuting use of the site, has been determined is required.**

In addition the following issues must be addressed to enable the bat assessment to be reviewed:

- Graphs 1 and 2 use multiple shades of blue meaning it is very difficult to distinguish which blue relates to which species.
- The title of Graph 1 indicates that all species are included but pipistrelle bats that are reported in the text above to the most abundant are absent from the graph.
- The detector references used in the graphs and text must be clarified and accord with the figures. Figure 2 refers to Automated Detector Locations A1-9 whereas the graphs refer to L1-L9.
- Inclusion of October bat transect survey results.
- The bat transect surveys were undertaken by either one or two surveyors; where only one surveyor was used, the reduced survey coverage and effort requires justification.
- The assessment must consider the abundance of greater horseshoe bat (GHS) foraging habitat in the locality. Aerial photography indicates pasture is limited in the locality.

Seven trees were identified as having features suitable for roosting bats; however, surveys indicate that none are currently used as roosts. Surveys confirm that Building B1 supports a day roost for small numbers of common pipistrelle, greater horseshoe (GHS), and lesser horseshoe (LHS) bats. It is not agreed that the active stable building is not used by roosting bats. Static detector data confirm that GHS and LHS bats enter the building, and the absence of droppings or feeding remains is likely attributable to regular stable cleaning. It is therefore considered highly likely that the building is used by GHS and LHS bats as a night roost.

Until the issues raised have been satisfactorily addressed, the comments set out below are provided without prejudice.

The site is not located within, or immediately adjacent to, any statutory or non-statutory designated sites for nature conservation; however, it lies within both the Yellow and Grey Zones of the Trowbridge and Westbury Bat Mitigation Strategy (TWBMS), as acknowledged within the Ecological Impact Assessment (EclA). The interpretation of the survey results in relation to the value of the site to SAC bats (LHS, GHS and Bechstein) in the context of the wider local landscape is not agreed with.

The site is situated within the core sustenance zone of a Bechstein's bat maternity roost, and evidence from radio-tracking studies and ringing projects has demonstrated that Bechstein's bats roosting in Green Lane Wood and Biss Wood forage in areas north of the A361 and commute to swarming and hibernation sites at Box Mine SSSI. There are multiple LHS and GHS maternity and hibernation roosts in the wider landscape around Trowbridge and as such the site is located in landscape that is highly likely to be of importance to the SAC's qualifying species.

As acknowledged within the EclA, the site provides suitable commuting and foraging habitat for all SAC bat species. Pasture represents optimum foraging habitat for GHS bats, while linear features such as tree lines and scrub constitute favoured commuting habitat for all SAC qualifying species. Surveys further confirm that both LHS and GHS bats roost within buildings on the site, and that all three SAC bat species regularly utilise habitats across the site. These species were recorded during every month surveyed and detected on all deployed automated bat detectors. Given the inherent difficulty in reliably distinguishing Bechstein's bat calls from those of other *Myotis* species, the presence of this species is reasonably assumed. Apparent low levels of recording should not, in isolation, be interpreted as evidence of low site importance, as such conclusions fail to account for bat behaviour, echolocation characteristics, and recognised survey limitations.

Taken together, this evidence confirms habitats within the site have roosting, foraging and commuting functionality for SAC bats and that the site plays a functional role within the wider landscape. Unless further justification is provided the Ecological Impact Assessment must be amended to reflect this.

The proposed Landscape Buffer and Ecological Corridor (approximately 50m wide) is welcomed. It is essential that this corridor is designed and delivered with the primary objective of providing Core Bat Habitat

and a coherent ecological network, to ensure compliance with Policy CP50 and the NPPF (paragraph 187(a) and (d))

However, it is not agreed that the proposed Landscape Buffer and Ecological Corridor would constitute an enhancement for foraging bats. The development would result in the loss of approximately 3 hectares of preferred habitat (noting this is a rough estimate) currently used by foraging GHS bats and GHS and LHS day roost and night perch. The Landscape Buffer and Ecological Corridor is proposed on habitat that is already confirmed foraging habitat utilised by foraging bats. Consequently, even if it is assumed that the Landscape Buffer and Ecological Corridor will deliver optimal foraging habitat for GHS bats, there would still be an overall unacceptable net loss of foraging resource as a result of the development which is contrary to CP50.

The location of bat roost mitigation must also be shown on the plans.

Please refer to Draft AA below for further comments relating to impacts on the Bath and Bradford on Avon Bat SAC.

Habitats Regulation Assessment (HRA)

Bath and Bradford on Avon Bat Special Area of Conservation (SAC)

The application site is within multiple a consultation zones for bats associated with the Bath & Bradford on Avon Bats Special Area of Conservation (SAC) (TWBMS Grey Hatched Zone Medium risk for increased recreational impacts and TWBMS Yellow Zone Medium risk for habitat loss) and therefore has potential to result in significant adverse impact on the special features of that site. Appropriate Assessment (AA) under Section 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) must be carried out by the relevant Competent Authority (the LPA) to determine the potential significant effects and the suitability of any measures proposed to avoid or mitigate those effects.

As detailed in the draft Appropriate Assessment below insufficient information has so far been submitted to enable the AA to be concluded positively. Once concluded positively it must be sent to and agreed with Natural England prior to the application being determined. **Please refer to Bold text in Draft AA below.**

Draft Appropriate Assessment

PART A: INFORMATION REVIEWED	
Information about the plan or project	Planning application PL/2026/01072 Outline planning application, with all matters reserved except for the main point of access from Devizes Road, for the demolition of existing building and development of up to 80 dwellings, public open space, drainage, landscaping and ancillary works. Address: Land North of Devizes Road, Hilperton, Trowbridge The Site is reported to comprise 'several parcels of other neutral grassland, bounded by a mixture of native hedgerows, mixed scrub, trees, specimen trees. The Site includes a complex of agricultural buildings both active and disused. Surveys have confirmed that habitats within the site are used by roosting, foraging and commuting SAC qualifying species GHS, LHS and Bechstein bat (SAC bats) functionality for SAC bats and considered by the Council ecologist to be functional role within the wider landscape.
European Site	Bath and Bradford on Avon Bats Special Area of Conservation (SAC)
List of European Site interest features	This development is screened into appropriate assessment in relation to the Bath and Bradford on Avon Bats SAC as it lies within both the yellow and grey zones where the Council has identified a potential for development to lead to an increase in recreational pressure at woodlands in south Trowbridge and to reduce bat habitat in a zone beyond the woodlands. The site is also within a core roost buffer (associated with Bath and Bradford on Avon Bats SAC) for a Bechstein's bat maternity roost (~1km southeast).

	Background information for this appropriate assessment is contained in the Trowbridge & Westbury Bat Mitigation Strategy (TWBMS) which was adopted as of July 22nd 2025. The SAC's qualifying Features are as follows: 1. Bechstein's bat <i>Myotis bechsteinii</i> 2. Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> 3. Lesser horseshoe bat <i>Rhinolophus hipposideros</i> The conservation objectives for the site are: "To ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of the habitats of qualifying species; • The structure and function of the habitats of qualifying species; • The supporting processes on which the habitats of qualifying species rely • The populations of qualifying species; and • The distribution of qualifying species within the site." Publication Date: 27th November 2018 – version 3. This document updates and replaces an earlier version dated 30 June 2014 to reflect the consolidation of the Habitats Regulations 2017.
Information about the site	Supplementary advice was published by Natural England last updated on 20 March 2019 and sets out further details of the requirements needed to achieve the conservation objectives. Of particular relevance to the Trowbridge area is the need to "Maintain the presence, structure and quality of any linear landscape features which function as flightlines. These should remain unlit functioning as dark corridors". In the Site Improvement Plan dated 1 April 2015, the lack of knowledge about the roosting habits of Bechstein's and the foraging / commuting habitats of all three SAC species is judged by Natural England to be a threat to achieving the conservation objectives of the SAC. Bat ringing data has shown the same bats using Green Lane Wood (and surrounding woodlands) and the SAC. The woodlands are therefore considered to be functionally linked to the SAC and it is possible the conservation objectives for the SAC may not be met if the bats are disturbed or prevented from breeding there. Studies have shown that Bechstein's bats are not confined to the woodlands but travel to find additional foraging and roosts outside them. Consequently, the TWBMS recognises the importance of both the woodlands and their surrounding habitats through 2 buffer zones. i) Extending 600m from the woodland edge, the red zone is an area of development restraint due to the high probability that this zone is of current and future importance for maintaining the breeding colonies. ii) Beyond this, the yellow zone, which takes into consideration the foraging areas and flightlines of horseshoe bats, is anticipated to be able to accept a degree of development pressure provided applications are designed in accordance with the principles in the TWBMS. iii) The grey hatched zone identifies the distance within which 75% of visitors to Green Lane Wood, Biss Wood, Picket and Clanger Woods are expected to come from and a package of mitigation measures is identified in the TWBMS to accommodate the anticipated growth within this zone.
Other relevant plans, projects or policies.	• Wiltshire Core Strategy adopted January 2015 • Trowbridge & Westbury Bat Mitigation Strategy (adopted 2025) • Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire (September 2015).

Assessment against TWBMS criteria

Item	TWBMS criteria	Details provided for Application
1	Surveys should be completed: • In accordance with Council pre-application advice if provided • In accordance with BCT Good Practice Guidelines and the specifications described in Section 6 of the TWBMS • Confirming the location of core bats habitat (commuting and foraging). • Confirming the status of roosts.	Bat surveys have been carried out in 2025 and reported in the Ecological Impact Assessment. Land off Devizes Road, Hilperton. (ge Consulting, 05 February 2026). The issues raised in the Section on Bats above must be resolved to confirm these surveys are acceptable. Without prejudice surveys have confirmed the site supports foraging and commuting habitat (pasture, hedgerow, scrub and trees) suitable for and used by all three SAC qualifying species. Surveys have confirmed the presence of day roost and night perch used by LHS and GHS bats. The Site has an important function role in the landscape for the commuting SAC bats.
2	Masterplan to be provided which covers entire allocation (referenced in WHSAP housing policies).	As this is not a WHSAP site this is not applicable. Refer to comments on parameters plan below.
3	<u>For outline applications</u>, Ecological Parameters Plan (para 161) to address: • Specific site design measures. • Commuting functionality. • Foraging functionality. • Roosting functionality. • Core bat habitat provision. • Additional green infrastructure (Suitable alternative natural green space SANG).	The following observations are made however please note these are made without prejudice and maybe subject to change once the functionality of the site to SAC species has been agreed The Combined Parameter Plans – 01. Dwg no. CPP-01. (Thrive Architects, 09/01/2026) includes: A 50m Landscape Buffer and Ecological Corridor. 10m and 5m landscape buffer along part of the western boundary. Figure 4: Post Development Biodiversity Net Gain Plan (4/02/2026) embedded in Ecological Impact Assessment includes proposed habitats. The proposed 50 m-wide Landscape Buffer and Ecological Corridor is welcomed and provided it is delivered primarily as Core Bat Habitat and not subject to urbanisation, should ensure the continued north–south movement of bats across In order to ensure the Landscape Buffer and Ecological Corridor is not adversely impacted by urbanisation a sensitive lighting strategy must be secured by condition. In addition, whilst it is accepted that public access can be achieved it must not compromise the primary objective of delivering Core Bat Habitat. The development is considered to result in a loss of GHS foraging habitat. Additional foraging habitat for GHS is required. To ensure are required measures are secured plans must be amended to include the following: • Lighting restrictions. • Replacement roost location. • GHB foraging habitat.

		• Quantum of additional green infrastructure (including area m²). • Public access requirements.
4	Statutory Biodiversity Metric calculation demonstrating no net loss of biodiversity.	Statutory Metric Calculator (05/02/2026) submitted but issues need to be addressed. Please refer to Biodiversity Net Gain section below.
5	<u>For reserved matters and full applications</u>, an Ecological Mitigation Plan to be submitted containing (para 162): (i) Scaled drawing to show • Details of replacement roosts. • Commuting routes and foraging habitat to be retained, created and enhanced. • Location/extent and full landscape specifications for tree and shrub planting, wildflower grassland etc. • Limit of built development.	Not applicable. This is an outline application.
6	The EMP proposals submitted for item 5 above are in accordance with the standards for habitat mitigation and management as described at section 8.2 and Figure 6 in the TWBMS.	Not applicable. This is an outline application.
7	<u>For Reserved Matters and Full applications</u>, CEMP to set out: • Measures to protect retained and created core bat habitat during construction. • Schedule of works covering enhancement and creation of core bat habitat features.	Not applicable. This is an outline application. A CEMP must be secured by condition.
8	Application to demonstrate retained core bat habitat connects to the wider habitat network.	The Combined Parameter Plans – 01. Dwg no. CPP-01. (Thrive Architects, 09/01/2026) includes a 50m Landscape Buffer and Ecological Corridor demonstrating that retained core bat habitat would connect to the wider habitat network (refer to Item 3). Further information is required to demonstrate how GHS foraging habitat and roosting functionality will be maintained.
9	Application to demonstrate measure to ensure core bat habitat will remain relatively undisturbed by the effects of urbanisation.	Please refer to further information requested in Item 3 above.
10	<u>For Reserved Matters and Full applications</u>, LEMP to set out: • Management objective for core bat habitat. • Measures to ensure long-term management of core bat habitat.	Not applicable. This is an outline application. A LEMP must be secured by condition..

	• Management roles and responsibilities. • Core bat habitat delivery time scales. • Time scales for delivery of functional alternative green space. • Review and monitoring mechanism.	
11	The potential impacts of lighting are adequately modelled and assessed with appropriate mitigation included to minimise the effects artificial lighting across the site in accordance with section 8.3.	Anticipated to be secured by lighting condition.
12	An appropriate lighting monitoring regime has been provided.	Anticipated to be secured by lighting condition.
13	Greenfield sites Yellow Zone: The applicant agrees that a financial contribution towards the Council led scheme for mitigating residual effects from loss / degradation of bat habitat will be secured by S106.	For residential development, the 2026-27 strategic financial mitigation contribution is £1000.00 per dwelling plus admin fee, which will be payable through S106, S111 or unilateral undertaking.
15	Grey Hatched Zone: Deliver sufficient natural recreational focused space/ Suitable Alternative Natural Greenspace (SANG) plus monitoring fee.	The site is lies within walking distance to Green Lane Wood (approximately 1.6 km via footpaths). Footpaths connected to the site offer possible circular walking routes however most require crossing the A361 or require walking along sections of road. Increased recreational impacts on important bat woodland is predicted. It is proposed that 1ha of alternative green space (SANG) will be provided in the Landscape Buffer and Ecological Corridor. In accordance with SANG guidelines 1.536ha of alternative green space would be required. The Landscape Buffer and Ecological Corridor measures approximately 1ha and would include SUDS and scrub restricting the space available for dog walkers. Public access must not compromise the primary objective of delivering Core Bat Habitat. The Landscape Buffer and Ecological Corridor would not meet the requirements of SANG. Additional alternative green space is required. Mitigation via developer contributions for developments over 50 dwellings are not in accordance with the strategy. The council will be required to monitor the alternative green space which must be funded by developer contributions.

CONCLUSION	
Is the project likely to affect site integrity?	
a) Alone?	Yes

b) In combination with other plans or projects?	Yes
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Biodiversity Net Gain (BNG)

Under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021) this application is required to deliver 10% Biodiversity Net Gain (BNG). The Biodiversity Gain Plan condition will automatically apply if approval is forthcoming.

A completed statutory metric calculation (Statutory Metric Calculator, 05/02/2026) has been submitted (including the condition assessment sheets (if applicable) and maps).

The following issues must be addressed in order to confirm the baseline prior to determination:

- Completion of botanical surveys. These must include quadrat data to justify species m2 as required by the relevant criteria of the condition assessments.
- Clarification of Site Area. The application form states the Site Area is 3.99 hectares whereas the metric states it as 4.03 hectares.
- Further justification of other neutral grassland failing criterion A and F, such as quadrat data.
- Further justification of modified grassland failing criterion A, such as quadrat data.

Confirmation of how the development will achieve BNG is a post-determination matter however it is noted that the metric currently indicates off-site units will be required to deliver the mandatory BNG requirement. In addition, the Biodiversity Gain Plan must be accompanied by a completed Biodiversity Metric with the following issues addressed:

- Evidence of enhanced habitat creation.
- Evidence that other neutral grassland of good condition will be achievable in POS given likely high levels of public use and management limitations. To ensure the predicted net change is achievable a more realistic condition would be preferred.

The proposed BNG is considered 'significant' due to:

- (i) the scale and nature of the application (major);
- (ii) units required, and
- (iii) the BNG proposed (including medium distinctiveness habitats (other neutral grassland, mixed scrub and species-rich native hedge).

A Habitat Management and Monitoring Plan (HMMP) will be required, and must be secured via condition.

In order for the council to fulfil its BNG monitoring responsibilities, a Biodiversity Net Gain On-site 30 year Monitoring Fee must be secured through a Section 111, Section 106 or Unilateral Undertaking with contributions secured prior to commencement. The applicant should be directed to the Guidance Note for Completing Agreements Under S.111 of the Local Government Act 1972. Where the applicant elects to use the S111 process the fee must be paid and S111 signed by both the applicant and the council on the granting of planning permission.

In order for the council to fulfil its monitoring obligations, the BNG monitoring fee would be £11165 plus legal fees payable on commencement of development.

Summary of planning obligation/ S106 requirements

1. £925.00 per dwelling to contribute towards the council's strategic recreational pressure mitigation scheme
2. Biodiversity Net Gain On-site 30 year Monitoring Fee of £11165 plus legal fees.
3. SANG monitoring contribution.

DRAFT CONDITIONS:

The following, or similarly worded, conditions are recommended:

Conditions:

1. Compliance with submitted documents

The development will be carried out in strict accordance with the following documents:

- Combined Parameter Plans – 01. Dwg no. CPP-01 [TBC]. (REF TBC).
- Concept Master Plan – 01. Dwg no. CMP-01 [TBC]. (REF TBS).

REASON: For the avoidance of doubt and for the protection, mitigation and enhancement of biodiversity.

2. Artificial Lighting

No external lighting shall be installed on site until plans showing the type of light appliance, the height and position of fitting, illumination levels and light spillage have been submitted to and approved in writing by the Local Planning Authority. The plans will be in accordance with the appropriate Environmental Zone standards set out by the Institution of Lighting Professionals (ILP) Guidance Notes on the Avoidance of Obtrusive Light (GN 01/2021) and Guidance note GN08/23 "Bats and artificial lighting at night", issued by the Bat Conservation Trust and Institution of Lighting Professionals.

Where light spill has the potential to impact bat habitat, a lighting impact assessment must be submitted with the reserved matter application(s) to demonstrate the requirements of section 8.3 of the Trowbridge and Westbury Bat Mitigation Strategy February are met.

The approved lighting shall be installed and maintained in accordance with the approved details and no additional external lighting shall be installed.

This condition will be discharged when a post-development lighting survey conducted in accordance with the Trowbridge and Westbury Bat Mitigation Strategy has been submitted to the Local Planning Authority demonstrating compliance with the approved lighting plans, having implemented and retested any necessary remedial measures.

REASON: In the interests of the amenities of the area, to minimise unnecessary light spillage above and outside the development site and to ensure lighting meets the requirements of the Trowbridge Bat Mitigation Strategy and the Habitat Regulations Assessment.

3. CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN (CEMP)

Prior to the commencement of works, including demolition, ground works/excavation, site clearance, vegetation clearance and boundary treatment works, a Construction Environmental Management Plan (CEMP) shall be submitted to the local planning authority for approval in writing. The Plan shall provide details of the avoidance, mitigation and protective measures to be implemented before and during the construction phase, including but not necessarily limited to, the following:

- a) Identification of ecological protection areas/buffer zones (50m Landscape Buffer and Ecological Corridor, hedgerow and trees).
- b) Details of physical means of protection of buffers zones during construction.
- c) Details and timescale for delivery of capital works of 50m Landscape Buffer and Ecological Corridor/ alternative green space.
- d) Working method statements for protected/priority species, such as bats, nesting birds and reptiles.
- e) Work schedules for activities with specific timing requirements in order to avoid/reduce potential harm to ecological receptors; including details of when a licensed ecologist and/or ecological clerk of works (ECoW) shall be present on site.
- f) Key personnel, responsibilities and contact details (including Site Manager and ecologist/ECoW).

Development shall be carried out in strict accordance with the approved CEMP.

REASON: To ensure adequate protection and mitigation for ecological receptors prior to and during construction, and that works are undertaken in line with current best practice and industry standards and are supervised by a suitably licensed and competent professional ecological consultant where applicable.

4. LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN (LEMP)

Prior to the start of construction, a Landscape and Ecology Management Plan (LEMP) shall be submitted to and approved in writing by the Local Planning Authority. The LEMP will include long term objectives and targets, management responsibilities and maintenance schedules for each ecological feature, including but not exclusively, the Alternative Green Space/ SANG within the development, together with a mechanism for monitoring success of the management prescriptions, incorporating review and necessary adaptive management to attain targets.

The LEMP shall be implemented in full and for the lifetime of the development in accordance with the approved details.

REASON:
To ensure the long-term management of landscape and ecological features retained and created by the development, for the benefit of visual amenity and biodiversity for the lifetime of the scheme.

6. ECOLOGICAL ENHANCEMENTS

Prior to the commencement of any works, including vegetation removal and demolition, details of the number, design and locations of ecological enhancement features including (delete as necessary) bat boxes, bird boxes, reptile features and hedgehog hibernacula shall be submitted to the Local Authority for approval. The approved details shall be implemented for the lifetime of the development and before completion of the final works.

Formatted: Justified

REASON: To provide mitigation /enhancement for biodiversity.

Informative:

Bat Roost
Buildings on site are used as a bat roost. Under the Conservation of Habitats and Species Regulations 2017 (as amended), it is an offence to harm or disturb bats or damage or destroy their roosts. Planning permission for development does not provide a defence against prosecution under this legislation. The applicant is advised that a European Protected Species Licence will be required before any work is undertaken to implement this planning permission.

General Protected Species

The applicant should note that under the terms of the Wildlife and Countryside Act (1981) and the Conservation of Habitats and Species Regulations 2017 (as amended) it is an offence to disturb or harm any protected species including for example, breeding birds and reptiles. The protection offered to some species such as bats, extends beyond the individual animals to the places they use for shelter or resting. Please note that this consent does not override the statutory protection afforded to any such species. In the event that your proposals could potentially affect a protected species you should seek the advice of a suitably qualified and experienced ecologist and consider the need for a licence from Natural England prior to commencing works. Please see Natural England’s website for further information on protected species.

Sign off by WC Ecologist will only be given once ALL outstanding information has been submitted and agreed sufficient.

Ecologist	Date

Date: 23 April 2026
Our ref: 541943
Your ref: PL/2026/01072



Jemma Foster
Case Officer
Wiltshire Council

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

Dear Ms Foster,

Planning consultation: Outline planning application, with all matters reserved except for the main point of access from Devizes Road, for the demolition of existing building and development of up to 80 dwellings, public open space, drainage, landscaping and ancillary works.

Location: Land North of Devizes Road, Hilperton, Trowbridge

Thank you for your consultation on the above dated 19 February 2026.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Bath & Bradford on Avon Bat SAC – Objection further information required

The application site lies within an area known to support bats that form part of the populations for which the Bath and Bradford-on-Avon Bats SAC is notified and therefore has the potential to affect its interest features. European sites are afforded protection under the Conservation of Habitats and Species Regulations 2017, as amended (the 'Habitats Regulations').

In considering the European site interest, Natural England advises that you, as a competent authority under the provisions of the Habitats Regulations, should have regard for any potential impacts that a plan or project may have¹. The [Conservation objectives](#) for each European site explain how the site should be restored and/or maintained and may be helpful in assessing potential impacts.

On the basis of information provided, Natural England's advice is that this proposed development will require mitigation measures intended to avoid or reduce the likely harmful effects on a European site which cannot be taken into account when determining whether or not a plan or project is likely to have a significant effect on a site and requires an appropriate assessment (following the People Over Wind ruling by the Court of Justice of the European Union). For this reason, the proposed mitigation measures need to be formally checked and confirmed by your Authority, as the competent authority, via an Appropriate Assessment.

¹ Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process.

The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. <http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/>

Natural England notes that the Habitats Regulations Assessment (HRA) has not been produced by your authority, but by the applicant. As competent authority, it is your responsibility to produce the HRA and be accountable for its conclusions. Natural England is a statutory consultee at the Appropriate Assessment stage of the Habitats Regulations Assessment process. The following advice is provided to support the conclusions drawn and to assist your authority to undertake an Appropriate Assessment:

Bat Activity

The submitted survey results demonstrate that the site is used by at least 10 bat species, including all four Annex II species as well as species considered threatened in the UK (serotine). Please note that although not separated from other possible myotis species the assessment should assume that Bechstein's bat are using the site to forage.

Based on the submitted information Natural England considers the proposed development site to be valuable for bats. In particular, the site is strategically located as an important bat corridor between the roosting sites to the south (including Green Lane Wood) and foraging opportunities around the copse north of Knoll Farm, the canal and the River Avon to the north of the site. Bat commuting corridors have been identified on the eastern and western boundaries of the site.

We also note that the fields to the southwest of the stables include areas of permanent grassland surrounded by areas of mixed scrub and woodland creating a sheltered glade, ideal for bat foraging. Permanent grasslands are likely to support cockchafer beetles which are an important food source of greater horseshoe bats and unless a cockchafer larval survey demonstrates otherwise this should be assumed in the assessment to be a significant greater horseshoe bat foraging resource. It should be noted that cockchafer beetles are known to go through cyclic population fluctuations so that in some years numbers may be low, with the population increasing in subsequent years. The high level of bat activity recorded in the area southwest of the stables, including by the Annex II species, confirm the areas relative importance.

Bat Roost

The bat surveys have demonstrated that the disused stables (Building B1) are an active greater and lesser horseshoe bat roost (GHB and LHB). The roost was being used by GHB late in the summer with 2 bats recorded on cameras in August. Based on the information available, the possibility of the disused stables being used as a GHB mating roost cannot be discounted, with low counts at any one time but potentially a far higher number of individuals using the roost over the mating season. If this is the case, then the roost would be far greater ecological significance than the submitted information suggests. Further, more detailed surveys completed through October would be required to determine the status of the roost.

Grassland Assessment

We understand that a detailed botanical assessment is due to be undertaken in Spring/Summer 2026. We will await the results of this survey before commenting on this matter. Please reconsult Natural England when the botanical survey has been submitted.

Proposed Bat Mitigation

Natural England welcomes the provision of the 50m ecological buffer along the eastern boundary of the site which with appropriate planting will help in time to mitigate for the loss of permanent grassland and scrub associated with the proposals and will help ensure commuting routes through the development are maintained. Nevertheless, the proposed layout will result in the loss of a significant proportion of the available permanent grassland and associated scrub habitats used for foraging by bats, including GHB, LHB and, in all likelihood, Bechstein's bat. Further, the proposals will lead to the loss of several bat roosts including a roost used by both GHB and LHB and which may be used as a GHB mating roost.

Further justification should be provided as to why the old stables building used by horseshoe bats cannot be reused and incorporated into the new development with connectivity to adjoining habitat maintained. Such an approach would be a potential "satisfactory alternative" that should be considered by the application. If the loss of the stables is considered unavoidable then details of the

proposed replacement roosts should be provided prior to determination. These should include details of the location of the replacement roost within the development site and architectural drawings to show detailed design, dimensions and materials to be used. The scheme will need to demonstrate how roosting opportunities for both GHB and LHB will be provided within the structure as the two species should be provided with separate roosting areas. In addition, new crevice roosting opportunities should be provided within appropriately located buildings within the development.

Suitable Alternative Natural Greenspace (SANG)

The proposed scheme falls within the buffer zone to provide mitigation in line with the Trowbridge and Westbury Bat Mitigation Strategy (TWBMS) and thus would be required to provide SANG and a financial contribution to strategic habitat mitigation. For residential development, the financial contribution is £972.03 per dwelling and should be secured via a legal agreement prior to determination.

The scheme proposes to provide the required SANG within the 50m bat corridor, which is stated as providing circa 1ha of potential SANG which is 0.46 ha below the minimum size criteria for the size of development proposed. The sHRA for the scheme suggests the short fall in SANG area can be made up through use of strategic SANGs that are allocated in the draft Local Plan. Natural England objects to this approach as there is no certainty that the strategic SANG will be available for use at first occupation.

Further the size criteria for a SANG is only the minimum area required, in addition consideration should be given to the attractiveness and functionality of the SANG for recreational use by the new residents and the existing population. This should include opportunities for letting dogs off the lead, the inclusion of features that are attractive to the users of the SANG, including provision of open areas and ensure provision of attractive circular walks of between 2.3 and 2.5 km. For this reason, SANGs are often required to provide a far larger area than the minimum criteria and include features such as accessible open water and links to the wider footpath network. In this case the area proposed for the SANG is also required to provide bat habitat, including a requirement for a replacement bat roost. There is therefore likely to be conflicting objectives for the land, for example access will need to be excluded from the vicinity of the replacement roost, which will further reduce the available SANG area.

Based on the information provided Natural England advises that the proposed SANG area is not sufficient to serve as a functioning SANG, nor is it well integrated into the developed area and insufficient information is provided on how the SANG will meet both its recreational and bat habitat mitigation objectives. Further information will also be required on how the required circular walks will be provided, what habitats and infrastructure will be incorporated to improve the attractiveness of the SANG and how it will be managed in perpetuity.

Lighting Strategy

Natural England welcomes the considerations of the impacts of lighting. The lighting strategy for the development must meet the lux levels prescribed in the TWBMS guidance. The lighting strategy for the scheme should consider the construction and operational phases and be agreed by your Authority. We further advise that a post-development lighting survey is secured by planning condition and that any remedial measures will be implemented in areas of excess light levels.

Natural England must therefore advise that permission is not granted until the SANG arrangements and bat mitigation measures have been agreed.

Sustainable Drainage System (SuDS)

It is recommended that the onsite SuDS are designed to hold permanent water. This should be conditioned with any granted permission and should use suitable aquatic planting to increase the sites capacity to provide foraging opportunities for bats and improve the area's attractiveness to residents.

Construction Environmental Management Plan (CEMP)

A CEMP for the scheme to avoid and mitigate effects on ecological features should be agreed by your Authority prior to commencement of the scheme.

Other Matters:

Protected Species

The scheme will impact on a number of protected species including bats, reptiles and otters. Natural England has produced [standing advice²](https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals) to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. The final protected species mitigation strategy should be agreed by your Authority's Ecology Team.

Biodiversity and wider environmental gains

Development should provide net gains for biodiversity in line with the NPPF paragraphs 187(d), 192 and 193. Major development (defined in the [National Planning Policy Framework \(publishing.service.gov.uk\)](https://publishing.service.gov.uk) glossary) is required by law to deliver a biodiversity gain of at least 10% from 12 February 2024 and this requirement was extended to smaller scale development in Spring 2024. For nationally significant infrastructure projects (NSIPs), it is anticipated that the requirement for biodiversity net gain will be implemented from 2025.

For further information on the timetable for mandatory biodiversity net gain, we refer you to [Biodiversity Net Gain moves step closer with timetable set out - GOV.UK \(www.gov.uk\)](https://www.gov.uk). [Biodiversity net gain - GOV.UK \(www.gov.uk\)](https://www.gov.uk) provides more information on biodiversity net gain and includes a link to the draft [Biodiversity net gain - GOV.UK \(www.gov.uk\)](https://www.gov.uk) Planning Practice Guidance.

The statutory biodiversity metric should be used to calculate biodiversity losses and gains for terrestrial and intertidal habitats and can be used to inform any development project. We refer you to [Calculate biodiversity value with the statutory biodiversity metric - GOV.UK \(www.gov.uk\)](https://www.gov.uk) for more information. For small development sites, [The Small Sites Metric - JP040 \(naturalengland.org.uk\)](https://naturalengland.org.uk) may be used. This is a simplified version of the statutory biodiversity metric and is designed for use where certain criteria are met.

The mitigation hierarchy as set out in paragraph 193 of the NPPF should be followed to firstly consider what existing habitats within the site can be retained or enhanced. Where on-site measures are not possible, provision off-site will need to be considered.

Where off-site delivery of biodiversity gain is proposed on a special site designated for nature (e.g. a SSSI or habitats site) prior consent or assent may be required from Natural England. More information is available on [Sites of Special Scientific Interest: managing your land](https://naturalengland.org.uk). Development also provides opportunities to secure wider biodiversity enhancements and environmental gains, as outlined in the NPPF (paragraphs 8, 77, 109, 125, 187, 188 and 193). Opportunities for enhancement might include incorporating features to support specific species within the design of new buildings such as swift or bat boxes or designing lighting to encourage wildlife.

[The Environmental Benefits from Nature Tool - Beta Test Version - JP038 \(naturalengland.org.uk\)](https://naturalengland.org.uk) may be used to identify opportunities to enhance wider benefits from nature and to avoid and minimise any negative impacts. It is designed to work alongside the statutory biodiversity metric. [Natural environment - GOV.UK \(www.gov.uk\)](https://www.gov.uk) provides further information on biodiversity net gain, the mitigation hierarchy and wider environmental net gain.

Further general advice on consideration of protected species and other natural environment issues is provided below at Annex A.

Should the developer wish to discuss any of the above with Natural England, we recommend that they seek advice through our Discretionary Advice Service.

² <https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals>

Should the proposal change, please consult us again.

If you have any queries relating to the advice in this letter please contact me directly.

Yours faithfully,

Kyle Conroy
Sustainable Development Higher Officer
Wessex Area Team

Annex A – Additional advice

Natural England offers the following additional advice:

Wider landscapes

Paragraph 187 of the NPPF highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland, or dry-stone walls) could be incorporated into the development to respond to and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape and Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the [Guidelines for Landscape and Visual Impact Assessment \(GLVIA3\) - Landscape Institute](#) for further guidance.

Biodiversity duty

Section 40 of the [Natural Environment and Rural Communities Act 2006 \(legislation.gov.uk\)](#) places a duty on the local planning authority to conserve and enhance biodiversity as part of its decision making. We refer you to the [Complying with the biodiversity duty - GOV.UK \(www.gov.uk\)](#) for further information.

Designated nature conservation sites

Paragraphs 193-195 of the NPPF set out the principles for determining applications impacting on Sites of Special Scientific Interest (SSSI) and habitats sites (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)). Both the direct and indirect impacts of the development should be considered. A Habitats Regulations Assessment is needed where a proposal might affect a habitat site (see [Habitats regulations assessments: protecting a European site - GOV.UK \(www.gov.uk\)](#) and Natural England must be consulted on 'appropriate assessments' (see [Appropriate assessment - GOV.UK \(www.gov.uk\)](#) for more information for planning authorities).

Natural England must also be consulted where development is in or likely to affect a SSSI and provides advice on potential impacts on SSSIs either via the [SSSI Impact Risk Zones \(England\) \(arcgis.com\)](#) or as standard or bespoke consultation responses. Section 28G of the Wildlife and Countryside Act 1981 places a duty on all public bodies to take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of the features for which an SSSI has been notified ([Sites of special scientific interest: public body responsibilities - GOV.UK \(www.gov.uk\)](#)).

Local sites and priority habitats and species

The local planning authority should consider the impacts of the proposed development on any local wildlife or geodiversity site, in line with paragraphs 187, 188 and 192 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity to help nature's recovery. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local environmental records centre, wildlife trust, geoconservation groups or recording societies. Emerging [Local nature recovery strategies - GOV.UK \(www.gov.uk\)](#) may also provide further useful information.

Those habitats and species which are of particular importance for nature conservation are included as 'priority habitats and species' in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest on the Magic website or as Local Wildlife Sites. We refer you to [Habitats and species of principal importance in England - GOV.UK \(www.gov.uk\)](#) for a list of priority habitats and species in England. You should consider priority habitats and species when applying your 'biodiversity duty' to your policy or decision making

Natural England does not routinely hold priority species data. Such data should be collected when impacts on priority habitats or species are considered likely.

Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. We refer you to the [Brownfield Hub - Buglife](#) for more information

Annex A – Additional advice

and Natural England's [Open Mosaic Habitat \(Draft\) - data.gov.uk](#) (Open Mosaic Habitat inventory), which can be used as the starting point for detailed brownfield land assessments.

Green Infrastructure

For evidence-based advice and tools on how to design, deliver and manage green and blue infrastructure (GI) we refer you to [Green Infrastructure Home \(naturalengland.org.uk\)](#) (the Green Infrastructure Framework). GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational, walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all. GI provision should enhance ecological networks, support ecosystems services and connect as a living network at local, regional and national scales.

Development should be designed to meet the 15 [GI How Principles \(naturalengland.org.uk\)](#). The GI Standards can be used to inform the quality, quantity and type of GI to be provided. Major development should have a GI plan including a long-term delivery and management plan. Relevant aspects of local authority GI strategies should be delivered where appropriate.

The [Green Infrastructure Map \(naturalengland.org.uk\)](#) and [GI Mapping Analysis \(naturalengland.org.uk\)](#) are GI mapping resources that can be used to help assess deficiencies in greenspace provision and identify priority locations for new GI provision.

Access and Recreation

Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths, together with the creation of new footpaths and bridleways should be considered. Links to urban fringe areas should also be explored to strengthen access networks, reduce fragmentation, and promote wider green infrastructure.

Rights of Way, Access land, Coastal access and National Trails

Paragraphs 105 and 187 of the NPPF highlight the importance of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development.

Consideration should also be given to the potential impacts on any nearby National Trails. We refer you to [Find your perfect trail, and discover the land of myths and legend - National Trails](#) for information including contact details for the National Trail Officer.

Appropriate mitigation measures should be incorporated for any adverse impacts on Rights of Way, Access land, Coastal access, and National Trails.

Further information is set out in the Planning Practice Guidance on the [Natural environment - GOV.UK \(www.gov.uk\)](#).

Appendix 4 – Field Survey Methodology

Badger Survey

Badger surveys were undertaken by Engain to inform the previous planning application. The survey was most recently updated on 30 September 2025 by Nick Hargreaves BSc (Hons) MSc MCIEEM. The survey involved a thorough search of the Site for evidence of badger activity based on the methodology outlined by Harris, Creswell and Jefferies (1991). A search was made for:

- 🦡 Setts, including earth mounds/ spoil, evidence of bedding and runways between setts;
- 🦡 Latrines, often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
- 🦡 Prints and paths;
- 🦡 Hairs within sett entrance or caught on nearby fencing; and,
- 🦡 Other evidence including snuffle holes, feeding and playing areas and scratching posts.

All burrows on Site were inspected to identify badger setts, with a torch where necessary to confirm dimensions of at least 25cm wide by 17cm high in both the entrance and visible tunnel sections (these are the minimum dimensions of badger setts under normal circumstances; Natural England 2009; Neal & Cheeseman 1996; Roper, 2010). This included inspection of all burrows in and around rabbit warrens, as badgers often start new setts by extending from an entrance of a pre-existing rabbit warren and the two species often coinhabit even in main setts.

Where setts were observed, their status and the level of activity were noted. Sett status can be broadly classified as:

Main sett – Sett with at least five entrances and a high level of activity. Main setts always have active badger runs leading away from them and are normally marked by latrines. Social groups usually only have one main sett, which is the most important sett in the territory. It is used throughout the year and is the breeding sett used by the dominant boar and sow.

Annexe sett – Setts are categorised as annexe setts where they are assumed to form part of the main sett area but where the sett is unlikely to be directly linked by an underground passage to the main sett either due to a barrier (e.g. separated by a watercourse or ditch) or by distance. Annexe setts are normally linked to the main sett by a well-used path and lie within 150m of a main sett entrance.

Subsidiary sett – Setts that offer an alternative sett complex to the main sett are categorised as subsidiary setts. Subsidiary setts are normally, at least, 50m from the main sett and are not always obviously linked by a well-used path to the main sett (unlike annexe setts). Subsidiary setts often exhibit moderate levels of activity, are larger than outlier setts but smaller than main setts. They can be used intermittently, and are normally unoccupied throughout winter, when all members of a social group will usually sleep together at the main sett to save body heat. Subsidiary setts are often marked by latrines.

Outlier sett – These setts only have one or two entrances, and tend to have much simpler internal architecture than the other sett categories – often having only one or two blind-ended tunnels with associated sleeping chamber/s. They are normally unoccupied throughout winter when all members of a social group will usually sleep together at the main sett to save body heat, and will often go unoccupied for more than a month between spring and autumn. Often found at the boundaries of a badger social group's territory.

Activity levels were noted as either used, partially used or disused based on field signs around entrances, including freshly-excavated spoil outside any entrances, entrances with little accumulation of leaf litter, other debris or weeds, prints, bedding (on sunny days), fresh droppings in any nearby latrines. Badgers often only use one small area of the sett for a period, and therefore the entrance/s with the highest activity levels determine the overall sett activity rating.

Bat Survey

The information in this appendix includes that collected by Engain (**Appendix 6** refers) and part of the original outline planning submission, and that collected by NPA in 2024 (**Appendix 7** refers).

Preliminary Roost Assessment

A detailed Preliminary Roost Assessment (PRA) for bats was undertaken by NPA on 28th March and 19th April 2024 by a Licenced Bat Worker. This was most recently updated on 30 September 2025 by Nick Hargreaves BSc (Hons) MSc MCIEEM, Natural England Level 2 licence holder (2024-11871-CL18-BAT) in accordance with current best practice methodology (Collins, 2023). All buildings within the Site boundary were assessed.

This involved an external and internal inspection using close focusing binoculars, high-powered torches, extendable ladder and endoscope where appropriate. A search was made for features which could provide suitable roosting spaces for bats.

The building was/ The buildings were then prescribed a category based on their potential to support roosting bats as detailed in **Table 3.1**. If evidence of a bat roost was identified during the PRA, this was noted as a 'confirmed roost'.

Table 3.1: Bat Roost Potential (adapted from Collins, 2023)

Potential Suitability	Description of bat roosting potential
None	No habitat features 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 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 year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable habitat to be used on a regular basis or by a larger number 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 e.g. a maternity or hibernation roost.
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.

Where bat species could not be identified during the survey, droppings were collected following the BCT bat dropping collection protocol (Collins, 2023). A combined sample of droppings were sent to Swift Ecology for DNA analysis to confirm species identification (**Appendix 4** refers).

Tree Assessment for Bats

Ground Level Tree Assessment (GLTA)

The trees on Site were subject to a Ground Level Tree Assessment (GLTA) by NPA on 18th April 2024.

Trees were inspected from ground-level for Potential Roost Features (PRFs) such as rot holes, hazard beams, cracks or splits, woodpecker holes, knot holes, man-made holes, cankers, gaps between overlapping stems/branches, loose bark, dense ivy, epicormic growth and bat, bird or dormouse boxes. Signs indicating possible use by bats were also recorded such as bat droppings, odour, scratches, staining and audible sounds. Information collected about PRFs included a description, the height of the feature above ground level and the orientation of the feature in relation to the trunk.

Trees were then prescribed a category based on their potential to support roosting bats as detailed in **Table 3.2**. Locations are shown in **Figure 2**.

Table 3.3: Assessment of Tree Bat Roost Potential from Ground Level (adapted Collins, 2023)

Suitability	Description of bat roosting potential
None	Either no PRFs in the tree or highly unlikely to be any
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. Estimate only during GLTA.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony. Estimate only during GLTA.

PRF Aerial Inspections

Where a tree was categorised with potential PRF-Is and PRF-Ms and was considered likely to be impacted by the proposals, a more detailed inspection involving the use of a Mobile Elevating Work Platform (MEWP) was undertaken. Based on the findings of the detailed inspection, each feature was re-categorised based on the criteria listed in **Table 3** above.

PRF-Is were subject to a single aerial inspection. Where features were deemed unsuitable to support bats (e.g. aerial inspection revealed the PRF did not support conditions conducive to roosting), or the feature was confirmed as a PRF-I, no further surveys were undertaken.

Any features with the potential to support multiple bats were subject to a detailed endoscope inspection by a licensed bat worker from NPA on the 11 June 2024. Those that were then confirmed to have PRF-M status were endoscoped on 2 further occasions, on the 18 July and 25 September 2024. Some PRF-I trees were also endoscoped on those occasions where they could easily be inspected from the ground.

Bat Emergence Surveys

Four dusk emergence surveys were conducted in accordance with best practice guidelines (Collins, 2023) on the dates detailed in **Table 3.3**.

Surveyors and Night Vision Aids (NVAs) were positioned around the building with a good view of any potential bat access points and roost features. At manned positions, surveyors were equipped with a bat detector, and where possible, with night vision aids (NVAs) to assist in visual identification. There were also unmanned positions, where appropriate NVAs were left with a bat detector to record a certain feature or elevation. An additional surveyor was responsible for ensuring all NVAs at unmanned positions were positioned appropriately and recorded throughout the survey.

The dusk surveys commenced 15 minutes before sunset and continued for approximately one and a half hours after sunset. All surveys were completed during optimal weather conditions of at least 10°C temperature at the start of the survey, dry and with very little or no wind.

Table 3.3: Emergence Survey

Building	Survey	Date	Sunset (Start/Finish)	No. of Surveyors	No. of NVAs	Weather Conditions			
						Temp (°C)	Wind (Bf)	Rain	Cloud Cover (%)
B1	1/3	19/06/24	21:28 (21:13 – 23:13)	4	3	14.4-11.5	0	N/A	5-60%
	2/3	18/07/24	21:15 (21:00 – 22:45)	4	3	20.6-14.5	0	N/A	0%
	3/3	24/09/24	19:01 (18:46 – 20:31)	4	3	13.5-12.2	0-1	N/A	100%
B2	1/1	29/05/24	21:13 (20:58 – 22:58)	2	2	14.2-10.7	1-2	N/A	0-5%

The bat detectors used included a combination of AnaBat Walkabout, Echometer Touch 2, Petterson M500. The NVAs used were Sony Handycam FDR-AX53, Nightfox Whisker and Canon AX 70.

Following the survey, the latest version of Wildlife Acoustics Kaleidoscope Pro software was used to process and analyse the bat detector data. Calls were cross referenced with surveyor's observations to corroborate the species that were identified or were used to aid identification of bat emergences observed on the camera footage. Calls by *Myotis*, *Nyctalus* and long-eared species were identified to genus level. Camera footage was analysed using VLC media player video software to review points of interest and clip confirmed emergences/re-entries as required.

For all NVAs used, a still shot was taken at the darkest point of survey to illustrate the field of view and that there was appropriate illumination (**Appendix 4**).

Automated Detector Survey (Buildings)

Two automated detectors were installed, one a piece in Building B1 and B2 on the dates shown in **Table 3.4**.

Table 3.4: Automated detector details (2024)

Month	Deployment Dates (Total No. of Nights)	
	Building B1 (Disused Stables)	Building B2 (Active Stables)
June	21 st – 30 th (10 nights)	21 st – 30 th (10 nights)
July	19 th – 30 th (12 nights)	19 th – 30 th (12 nights)
August	19 th – 1 st (Sep) (14 nights)	-
September	0 th – 29 th (10 nights)	20 th – 29 th (10 nights)
October	-	22 nd – 3 rd (Nov) (13 nights)

Bat Activity Surveys - Night-time Bat Walkover Surveys

NBW surveys were undertaken on 10 occasions over the course of the survey season, as required due to the Site's location within the Yellow (Medium Risk) Zone of the TWBMS (Wiltshire Council, 2025). Either two individual transects or one combined transect were used to cover the Site.

Experienced bat surveyors using handheld bat detectors (Anabat Walkabout) stood at fixed listening points (i.e. near potential flight lines/roosting features, at the boundaries of suitable commuting/foraging habitat) for up to 1 hour after sunset; recording all bat activity within range. After 1 hour, surveyors then followed a pre-determined transect route stopping at pre-defined listening points for approximately five minutes (see **Figure 2** for listening points and transect route).

Where species identification could not be determined during the NBW, acoustic recordings were analysed using bat sound analysis software (Anabat Insight). As the calls of *Myotis* bat species are very similar, with most of the variation between their calls attributable to the habitat in which they occur, the *Myotis* recordings have not been attributed to a particular species.

Surveys were undertaken in suitable weather conditions (temperature $\geq 10^{\circ}\text{C}$ at start of survey, little or no rain and no strong winds over Beaufort 3). The surveys commenced at sunset and continued up to 2hrs thereafter.

Table 3.5: Bat activity transect survey dates and personnel

Survey No.	Date	Sunset (Start/End)	No. Surveyors	Weather Conditions			
				Temp	Wind (B)	Rain	Cloud (%)
1	23/04/2024	20:19 (20:19 – 22:19)	2	9.3 – 5.7	0 – 1	None	0
2	23/05/2024	21:05 (21:05 – 23:05)	1	12 – 10	1 – 2	None	90
3	26/06/2024	21:29 (21:29 – 23:29)	1	19.7 – 16.	6 0 – 1	None	0
4	18/07/2024	21:15 (21:00 – 23:15)	1	20 – 18	0	None	5 – 10
5	05/08/2024	20:48 (20:48 – 22:48)	2	18.9 – 18.3	1 – 2	Light rain for 10 mins	100
6	21/08/2024	20:17 (20:17 – 22:17)	2	16 – 15	2 – 3/4	None	20 – 80
7	04/09/2024	19:47 (19:47 – 21:47)	1	17 – 16	1	None	100
8	26/09/2024	18:57 (18:57 – 20:57)	1	13.1 – 11.9	0 – 3	None	50 – 100
9	14/10/2024	18:17 (18:17 – 20:17)	1	13	1	None	100
10	24/10/2024	17:56 (17:56 – 19:56)	1	14.5 / 14.6	1 – 2	None	95 – 100

Bat Activity Surveys - Automated Detector Surveys

Night-time bat walkover surveys were supplemented with the use of static automated detectors to increase survey effort. This involved the deployment of 9no. automated/static bat detectors (Anabat Rangers) across the Site (**Figure 3** refers) on a monthly basis from April – October 2024, and for at least 5 nights in each month. In accordance with the guidelines set out within TWBMS Planning Document (Wiltshire Council, 2025), a minimum of 50 nights were analysed over the course of the survey season (**Table 3.6** below shows the selected nights that were analysed). The automated detectors were programmed to turn on 30 minutes before sunset and turn off 30 minutes after sunrise.

Table 3.6: Automated Detector Deployments

Month	No. Nights	Dates
April	8	18 th – 25 th
May	8	17 th , 20 th – 25 th , 27 th
June	10	21 st – 30 th
July	9	19 th – 27 th
August	5	19 th – 23 rd
September	5	20 th – 21 st , 24 th , 26 th – 27 th
October	5	22 nd – 26 th
Total no. of nights	50	

Bat Data Analysis

Analysis of data was undertaken by NPA in 2024/2025 through use of the automated species identification feature within Kaleidoscope Pro (Version 5.6.6). Based on a review of historic data collected on other projects using the AnaBat Rangers, the automated species identification in Kaleidoscope Pro works well for certain species (e.g. pipistrelles) but is less accurate for others (e.g. identification of a particular *Myotis* species). As such the following protocols were followed:

- 🦇 *Myotis* bats were grouped together;
- 🦇 The larger bat species; Noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri* and serotine *Eptesicus serotinus* were grouped together as NLS;
- 🦇 Pipistrelle species were grouped together;
- 🦇 Files labelled as Barbastelle *Barbastella barbastellus* and long-eared bats *Plecotus* sp. were analysed manually;
- 🦇 Files labelled as No ID (i.e. what Kaleidoscope identifies as a bat but is unsure of what species) were analysed manually;
- 🦇 Files labelled as Noise (i.e. what Kaleidoscope does not identify as a bat) that passed a scan for bat calls within AnaLookW, were analysed manually; and
- 🦇 Where a call was of insufficient quality to determine a particular bat species/group, but it was clear it was not a horseshoe species it was labelled as *Vespertilionidae/Vesper*.
- 🦇 Files that were labelled as noctule, Leisler's or serotine (which Kaleidoscope can mistakes as insect noise) were manually analysed.

Recorded echolocation calls were run through filters for both horseshoe bat species within AnaLookW to identify likely horseshoe bat calls. These were then analysed manually to verify if they were attributable to either lesser *Rhinolophus hipposideros* (LHS) or greater *Rhinolophus ferrumequinum* horseshoe bats (GHS).

Assessment of analysed NPA data was undertaken by GE Consulting in 2025/2026 in order to inform this impact assessment.

Appendix 5 – Emergence Survey Night Vision Aid Positions (NPA)

Building No.	Survey No. (Date)	Description / Still
B1	Survey 1 (19/06/2024)	 Building B1 Disused Stable; south view (East)
		 Building B1 Disused Stable; south view (West)
		 Building B1 Disused Stable; south-west view
	Survey 2 (18/07/2024)	

Building No.	Survey No. (Date)	Description / Still
		Building B1 Disused Stable; north view
		
		Building B1 Disused Stable; south view
		
	Survey 3 (24/09//2024)	Building B1 Disused Stable; south-west view
		
		Building B1; Disused Stable; north view
		

Building No.	Survey No. (Date)	Description / Still
		Building B1; Disused Stable; south view 
B2	Survey 1 (29/05/2024)	Building B1; Disused Stable; south-west view 
		Building B2 Active Stable; north-west view 
		Building B2 Active Stable; south-west view

Appendix 6 – DNA Analysis Results (Swift Ecology)

Appendix 3: DNA Analysis Results

Order Number: 2881



Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-2881-1	Yes	Faecal	18/04/2024	C. Bats	BA14 7QS		

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-2881-1	EG-2024-1353	Rhinolophus ferrumequinum (Greater horseshoe bat) Note: All UK bat species tested for - only a single species detected in this sample.	qPCR	20	

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Appendix 7 – Engain Ecological Assessment



**Hilperton,
Trowbridge:**

Ecological Impact Assessment

Date: 6 June 2023

For: Redcliffe Homes Ltd

Ref: eg211155

Revision: 05

Produced by:
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ABBREVIATIONS

CIEEM	Chartered Institute of Ecology and Environmental Management
EcIA	Ecological Impact Assessment
IEF	Important Ecological Features
JNCC	Joint Nature Conservation Committee
LEMP	Landscape and Ecological Management Plan
MAGIC	Multi-Agency Geographic Information for the Countryside
MMU	Minimum Mapping Unit
NERC	Natural Environment and Rural Communities Act 2006
POS	Public Open Space
S41	Section 41 of the NERC Act 2006
TBMS	Trowbridge Bat Mitigation Strategy
UK Habs	UK Habitats Classification Survey
UK	United Kingdom
WCA	Wildlife and Countryside Act 1981
WSBRC	Wiltshire and Swindon Biological Records Centre

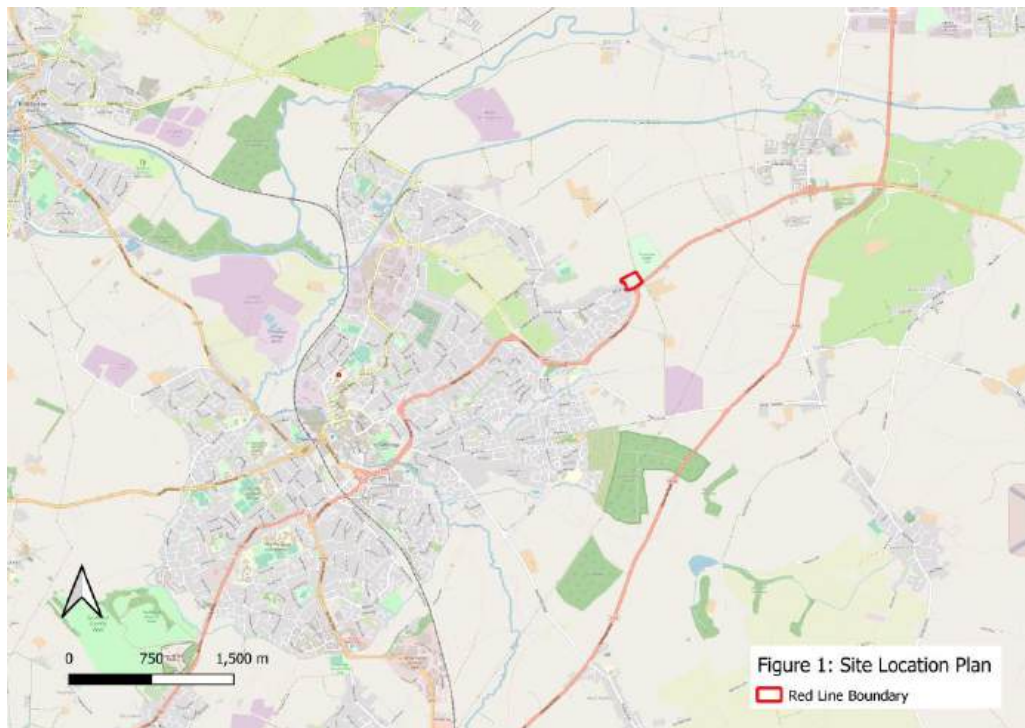
1 INTRODUCTION

- 1.1 This report provides an Ecological Impact Assessment (EclA) of a proposed residential development on a plot of land at Hilperton, Trowbridge.
- 1.2 The scope of this assessment is based on the Guidelines for Ecological Impact Assessment in the UK, published in 2018 by Chartered Institute of Ecology and Environmental Managers (CIEEM).
- 1.3 It is supported by an ecological data search, a desk study to identify notable or protected sites, habitats or species on or near to the site, a field survey to map and describe the habitats of the site, a review of existing ecological data and field surveys for protected species.
- 1.4 The purpose of the EclA is to:
 - Identify Important Ecological Features (IEF) within the Zone of Influence (Zol).
 - Assess the impacts from the Development on the IEFs and any resulting significant effects.
 - Set out measures to avoid or mitigate negative impacts.
 - Assess the residual effects after the incorporation of agreed avoidance or mitigation measures.
 - Set out agreed measures to offset any significant residual effects.
 - Set out opportunities for ecological enhancement.

2 SITE LOCATION AND PROJECT DESCRIPTION

Site Location

- 2.1 The site is located on the outskirts of Hilperton close to Trowbridge in Wiltshire (Figure 1). The Ordnance Survey grid reference for the center of the site is ST88138 59297.



Project Description

- 2.2 The proposed development comprises the construction and occupation of 37 dwellings along with associated infrastructure, hard and soft landscaping including SUDS features and public open space. An extract of the proposed landscape masterplan is provided below (Figure 2)¹.

¹ Refer to the original drawing for full details including scale

Hilperton, Trowbridge Ecological Impact Assessment



Figure 2: Extract of the landscape masterplan

3 LEGISLATION AND POLICY

- 3.1 Wildlife in the UK is protected through European Directives, which are transposed into national legislation, supported by a range of national, regional and local planning policy and best practice guidance. Planning policy and legislation seeks to set broader goals for the conservation and enhancement of the natural environment and halting the continued loss of biodiversity in the UK.
- 3.2 Development can contribute to these goals through, for example, protecting the ecological features of a site and making them a valued part of the site's new use, and by incorporating enhancements to improve the site's value for wildlife.
- 3.3 The sections below provide a brief guide to the principal legislation and policy that sets the terms of reference for ecological appraisals in the UK. This is not intended to be a full description of all the obligations enacted by the various referenced documents, which should be referred to in their original form for the full details.

Relevant Legislation

- 3.4 The principal pieces of legislation relating to wildlife that are of relevance to this report are:
1. *The Environment Act 2021;*
 2. *EU Habitats Directive (1992);*
 3. *Conservation of Habitats and Species (Amendment) Regulations 2017;*
 4. *The Wildlife and Countryside Act 1981 (as amended) (WCA);*
 5. *The Natural Environment and Rural Communities (NERC) Act 2006;*
- 3.5 The presence of species and habitats on a site which are protected under UK and European legislation is a material consideration when a planning authority is considering a development proposal. Ecological assessments and protected species surveys are therefore designed to provide local planning authorities with the baseline information they require in order fully consider the potential ecological effects of a planning application.

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- 3.6 Furthermore, *The Environment Act 2021* introduces a clearer responsibility for development to provide measurable net gains for biodiversity following good practice guidelines that are secured in the long term.

Relevant Policy

- 3.7 Regional and local planning authorities are obliged to follow key principles to ensure that the potential impacts of planning decisions on biodiversity conservation are fully considered. *The National Planning Policy Framework* sets out the Government's policies for the protection and enhancement of biodiversity through the town and country planning system. This encourages the contribution to, and enhancement of, natural and local environments through minimising the impacts on biodiversity and providing net gains in biodiversity where possible.
- 3.8 Planning authorities are required to follow key principles in their consideration of potential impacts of planning decisions on biodiversity conservation. *Circular 06/05: Biodiversity and Geological Conservation* provides guidance on the application of the law relating to planning and nature conservation and complements the *National Planning Policy Framework*.
- 3.9 Biodiversity 2020: A strategy for England's wildlife and ecosystem services, provides the UK Post-2010 Biodiversity Framework and country level biodiversity strategies for England, based on the list of habitats and species listed under The NERC Act 2006.

Local Planning Policy

- 3.10 The Wiltshire Core Strategy (2015) is the relevant Local Plan for this project, and Core Policy 50 (Biodiversity and Geodiversity) provides guidelines for the protection and enhancement of the natural environment.
- 3.11 Wiltshire Council (WC), Natural England (NE), and local experts and researchers, have jointly prepared the Bat Special Areas of Conservation (SAC) Planning Guidance for Wiltshire (2015). This sets out guidelines for projects that have potential to impact upon bats associated with the Bath and Bradford on Avon Bats SAC, including maps of buffer zones around core roosts.

Hilperton, Trowbridge Ecological Impact Assessment

- 3.12 John's Associates have also prepared, on behalf of Wiltshire Council, the Trowbridge Bat Mitigation Strategy, which forms a Supplementary Planning Document to the Local Plan. This document sets out guidance for planning applications and development within buffer zones around known bat roosts around Trowbridge and Hilperton, and is referred to throughout this report.

4 METHODS

Desk Study

- 4.1 Desktop data was obtained from Wiltshire and Swindon Biological Records centre (WSBRC) in July 2022. The search area was set at a radius of 1km from the site boundary for records of non-statutory sites, habitats and species, extended to 5km for bats. Pre-application advice was sought from Wiltshire Council, supported by a technical note setting out the results of assessments that had been completed at the time and the scope of proposed further surveys. The response on ecology noted that *“The proposed survey scope is appropriate and required (as long as the bat survey components are in line with the TBMS)”*.
- 4.2 Online resources were also used, including the UK government’s online resource for geographic information about the natural environment (MAGIC Map). This and other resources were used to scope the habitat survey at an appropriate scale and level of detail. MAGIC maps and the reports from ecology surveys previously carried out at the site were checked to identify if there were any known or possible locations of rare and/or habitats of high nature conservation priority, including sites of European importance within 10km and National importance within 5km.

Habitat Survey

- 4.3 A habitat survey was conducted on the 8th July 2022. The field survey method was based on the UK Habitats Classification Survey (UK Habs) as per the UK Habs User Manual (2020).
- 4.4 Considering the size of the site and the nature of variation in habitats across the site, the appropriate scale of mapping was determined to be a fine scale Minimum Mapping Unit, meaning no areas of habitats less than 25m² or 5m in length if a linear feature need be recorded.
- 4.5 The Primary Habitats were mapped using the professional edition of the hierarchy, at a minimum of a Level 4 habitat using the UK Habs Habitat Definitions as a guide. Once a Primary Habitat was assigned, a Secondary Code was added to further define the habitat type. Habitats are described with reference to their dominant and constituent species, and their UK Habs codes

are given in the relevant sections. In some cases, secondary codes are referred to where there is sufficient variation in the habitat to warrant their use.

Evaluation for Protected/Notable Species

4.6 The potential for the Site to support legally protected and notable species has been assessed using the desk study results combined with observations during the field surveys. The assessment of habitat suitability for protected and notable species was based on knowledge and judgement of an experienced professional team supplemented in all cases by recognised sources of guidance on habitat suitability assessment for key animal groups including:

- Amphibians (Gent and Gibson, 2003);
- Badgers (Harris *et al.*, 1991; and Roper, 2010);
- Bats (Collins, 2016; and Mitchell-Jones, 2004);
- Birds (wintering and breeding) (Gilbert *et al.*, 1998; and Bibby *et al.*, 2000);
- Dormice (Bright *et al.*, 2006);
- Otters (Chanin, 2003; and Crawford, 2011);
- Water voles (Strachan *et al.*, 2011);
- Other notable mammal;
- Reptiles (Gent and Gibson, 1998; and Froglife, 1999); and
- Terrestrial Invertebrates (Drake *et al.*, 2007; and Kirby, 2001).

Badger Survey

4.7 A badger survey (and other notable mammals) was undertaken on the 1st August 2022. The badger survey was completed in line with good practice guidelines (Harris, Cresswell and Jefferies (1989)). The Site was searched for evidence of badger and where setts were recorded, their status and level of activity was noted.

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Bat Surveys

Ground Level Tree Assessment

- 4.8 A ground level assessment of trees within the site was carried out on 1st June 2022 by an experienced bat surveyor.

Bat Activity Surveys

- 4.9 All bat surveys were carried out according to standard guidance (Collins, 2016; Mitchell-Jones, 2004; and Mitchell Jones & McLeish, 2004) and the requirements of the TBMS. The site has moderate quality habitats for bats – the boundary features provide linear commuting and foraging routes, the field is species-poor and there is very bright street lighting along the southern boundary with the A361 road.
- 4.10 In accordance with paragraph 115 of the TBMS, static bat detectors were on site for at least one working week in each month between April and October and covered a total of 49 nights (1 night less due to batteries running out). The detectors were full-spectrum detectors (SM4 Mini) capable of detecting horseshoe bats, in accordance with the requirements of the TBMS. Although the guidance in Collins (2016) would indicate that one detector would be adequate, to comply with the requirements of the TBMS two detectors were deployed on either edge of the site (Figure 3).
- 4.11 In accordance with paragraph 116 of the TBMS, manual transect surveys were carried out by two surveyors once a month from April to October 2022. The transect route included all habitats within the site, including the edge habitats and the open fields (Figure 3).
- 4.12 Dusk transect surveys began at sunset and continued for two and a half to three hours. Visual observations were supported by the use of EM3+ and EMTouch and Anabat Walkabout bat detectors.

Table 4-1 Bat transect survey schedule

Date	Time Start / Finish	Sunset / Sunrise time	Temp (°C)	Weather Conditions*
27/04/2022	20:09 / 21:51	20:24	10	Rain: 0 Cloud: 8 Wind: 3
17/05/2022	20:41 / 22:26	20:56	15	Rain: 1 Cloud: 5 Wind: 1

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Date	Time Start / Finish	Sunset / Sunrise time	Temp (°C)	Weather Conditions*
27/06/2022	21:14 / 22:59	21:29	14	Rain: 0 Cloud: 1 Wind: 0
14/07/2022	21:05 / 23:05	21:20	20	Rain: 0 Cloud: 1 Wind: 3
01/08/2022	20:41 / 22:56	20:56	23	Rain: 1 Cloud: 7 Wind: 3
08/09/2022	19:39 / 22:39	19:39	16	Rain: 1 Cloud: 7 Wind: 3
09/09/2022	04:34 / 06:34	06:34	14	Rain: 0 Cloud: 7 Wind: 3
13/10/2022	18:30 / 21:20		12	Rain: 0 Cloud: 8 Wind: 3

Automated Static Surveys

4.13 The static detector surveys were designed with the objective of establishing:

- a list of bat species using the site;
- an estimate of the relative abundance of the different species at the site;
- any spatial variation in the abundance or diversity of bat species between the two static detector locations; and
- commuting or foraging habitat used by Bechstein's bats or horseshoe bats.



Figure 3: bat transect route and static detector locations

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Table 4-2 Bat static detector survey schedule

Location	Start Date	End Date	Number of Nights
West	27/04/2022	03/05/2022	7
	17/05/2022	22/05/2022	6
	17/06/2022	22/06/2022	5
	01/07/2022	05/07/2022	5
	01/08/2022	07/08/2022	7
	08/09/2022	12/09/2022	5
	04/10/2022	17/10/2022	14
Total			49

Bat Data Analysis

4.14 Species were identified using Kaleidoscope Pro (Wildlife Acoustics Version 4.0.1) and verified to the following parameters:

- All myotis calls were assigned to the group not a species;
- A minimum of 5% of all pipistrelle calls were verified manually;
- A minimum of 10% of noise files were checked for bat calls;
- A minimum of 10% of unidentified calls were check for bat calls; and
- All other calls were verified manually.

Reptile Survey

4.15 Roofing felt squares were set out at the site (Figure 4) in July and left to 'bed in' before surveys were commenced.

4.16 Presence / absence surveys were completed on seven occasions between 1st August and 29th August.

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Figure 4: reptile mat locations

Important Ecological Features

- 4.17 The main criteria by which IEFs are identified are diversity, naturalness, and extent as per CIEEM (2019) guidelines. Identification of IEFs is supported by best practice such as the Bat Surveys for Professional Ecologists, Good Practice Guidelines (Collins, J. (ed) 2016) and other literature, including Usher (1986) and Ratcliffe (1977).
- 4.18 The level of importance of a given feature is assigned to one of the following geographical scales:
- International and European;
 - National (England);
 - Regional (South West);
 - County (Wiltshire);
 - Local (Hilperton); and
 - Site.

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- 4.19 Based on best practice (CIEEM, 2018), any features considered to be less than of local value are not assessed within this EclA.
- 4.20 Not all potential or confirmed IEFs within the ZoI have the potential to be significantly affected by the development and a proportionate approach has been employed. Where features are unlikely to be affected by the development, or where any effects that impact IEFs are unlikely to be significant, for the reasons listed below, such features have been scoped out of the assessment:
- No pathway of effect has been identified, for example the feature is sufficient distance from the site or there is the presence of a barrier between its location and the site; or
 - The feature is of insufficient biodiversity conservation value within the ZoI, due to its quality, extent, or population size.

Impact Assessment

- 4.21 The impact assessment process involves:
- Identifying and characterising impacts and their effects;
 - Incorporating measures to avoid and mitigate negative impacts and effects;
 - Assessing the significance of any residual effects after mitigation;
 - Identifying appropriate compensation measures to offset significant residual effects; and
 - Identifying opportunities for ecological enhancement.

Predicting Ecological Impacts and Effects

- 4.22 The process of predicting ecological impacts and effects has considered the relevant aspects of ecosystem structure and function. Examples include the availability of the identified IEF's resources, such as connective or breeding habitat and environmental processes such as the hydrological regime of adjacent River Chew.

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Characterising Ecological Impacts

4.23 When describing ecological impacts and effects, the following characteristics are considered:

- Positive or Negative;
- Extent;
- Magnitude;
- Duration;
- Frequency And Timing; and
- Reversibility.

Determining Significant Effects

4.24 A 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives of any identified IEFs.

4.25 The following considerations are made in relation to the identified IEFs:

- Any processes or key characteristics that will be removed or changed;
- Whether there will be an effect on the nature, extent, structure and function of habitats; and
- Whether there is an effect on the average population size and viability of a species.

The evaluation of significant effects is based on available scientific evidence. The level of an effect is stated with reference to the matrix in Table 4-2.

Table 4-2. Matrix for stating the level of significance of an ecological effect.

Magnitude / Scale of impact (degree of change)						
		No Change	Negligible	Minor	Moderate	Major
National (England)		Neutral	Slight	Moderate or Large	Large or Very Large	Very Large

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Ecological Importance	Regional (south-west)	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
	County (Wiltshire)	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Local (Hilperton)	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Site	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

Limitations

- 4.26 Engain cannot verify the accuracy of third party information. Records held by a local biological record center and local recording groups are generally collected on a voluntary basis; therefore, the absence of records does not demonstrate the absence of species, it may simply indicate a gap in recording coverage.
- 4.27 The field survey is not definitive and represents a snapshot of the ecological status of a site. However, through use of professional judgement and desk study information to supplement site survey data, it is considered that an accurate assessment of the potential for the site to support protected species or those of conservation concern was possible.
- 4.28 The site was freely accessible with no areas that could not be accessed. Areas surrounding the site were visible from the site boundaries, which helped provided ecological context.

5 RESULTS

Statutory Designated Sites

5.1 There are two European designated sites within 10km:

- Bath and Bradford on Avon Bats SAC: the Winsley Mines Site of Special Scientific Interest (SSSI) component is approximately 8km west of the proposed development site
- Salisbury Plain SPA & SAC is approximately 8.5km south of the proposed development site.

5.2 There are two Local Nature Reserves (LNR) within 5km:

- Green Lane Wood LNR is approximately 1.2km south of the proposed development site
- Southwick Country Park is approximately 5km south-west of the proposed development site

5.3 There are two SSSI within 5km:

- Steeple Ashton SSSI is approximately 4.2km south-east of the proposed development site
- Pickett and Clanger Wood SSSI is approximately 4.4km south of the proposed development site.

Non-Statutory Designated Sites

5.4 There are two Local Wildlife Sites (LWS) within 2km:

- Green Lane Wood & Meadow and Smith's Well Wood WWT Reserve LWS
- Kennet & Avon Canal LWS

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Habitats

- 5.5 The majority of the site consists of two fields of permanent pasture, dominated by coarse grasses including cock's foot (*Dactylis glomerata*) and false oat-grass (*Arrhenatherum elatius*). Other grasses include rough meadow-grass (*Poa trivialis*), perennial rye-grass (*Lolium perenne*) and creeping bent (*Agrostis stolonifera*). Forbs including creeping buttercup (*Ranunculus repens*) and white clover (*Trifolium repens*) are frequent in the sward and other scattered forbs include hogweed (*Heracleum sphondylium*) and broad-leaved dock (*Rumex obtusifolius*). The grassland is typical of agriculturally-improved but lightly-managed swards that are ubiquitous throughout the surrounding landscape. It is referable to the UK Habs type g3c 'other neutral grassland'. It has a relatively even sward structure and low species diversity and is graded as fairly poor condition.
- 5.6 The green corridor along the eastern edge of the site comprises secondary growth of trees and shrubs surrounding a former area of hard standing that is covered in brambles and tall ruderals. Trees and shrubs include hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), hazel (*Corylus avellana*) and ash (*Fraxinus excelsior*). It is referable to the UK Habs type h3h mixed scrub, in moderate condition.
- 5.7 There are also two stands of planted trees and shrubs in isolated patches. The southernmost stand comprises tall non-native trees including Monterey cypress (*Cupressus macrocarpa*) and Lombardy poplar (*Populus nigra* 'Italica'). It is referable to the UK Habs type w1h5 in poor condition.
- 5.8 The northernmost stand comprises a mix of mostly native shrubs including elm (*Ulmus procera*), hawthorn and blackthorn. It is referable to the UK Habs type h3h mixed scrub, in moderate condition.
- 5.9 There is a tall Leyland cypress (*xCupressocyparis leylandii*) hedge alongside the drive adjacent to the house, and scattered trees elsewhere on site.
- 5.10 All of the habitats on the site are common and widespread and they are not of high botanical value. They are therefore not included as an Important Ecological

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Feature in the impact assessment, but the retention, enhancement and management of habitats is included in the Biodiversity Net Gain strategy and Landscape and Ecological Management Plan.



Figure 4: baseline habitats plan

Badgers - **REDACTED**





Figure 5: badger survey results plan - REDACTED

Bats

5.13 The data search returned records of 12 species of bats within 5 km of the site:

- Bechstein bat (*Myotis bechsteinii*) – 114 records
- Common Pipistrelle (*Pipistrellus pipistrellus*) – 43 records
- Soprano Pipistrelle (*Pipistrellus pygmaeus*) – 18 records
- Serotine (*Eptesicus serotinus*) – 13 records
- Lesser horseshoe (*Rhinolophus hipposideros*) – 10 records
- Brown Long-eared Bat (*Plecotus auritus*) – 10 records
- Noctule Bat (*Nyctalus noctule*) – 9 records
- Natterer's Bat (*Myotis nattereri*) – 8 records
- Daubenton's Bat (*Myotis daubentonii*) – 3 records
- Whiskered Bat (*Myotis mystacinus*) – 3 records
- Greater horseshoe bat (*Rhinolophus ferrumequinum*) – 1 record
- Western barbastelle (*Barbastella barbastellus*) – 1 record

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- 5.14 The site is not within a buffer zone around a core roost as set out in the Bath and Bradford on Avon Bats SAC Planning Guidance from 2015 (Figure 6).



Figure 6: buffer zones around core roosts, taken from Wiltshire Council planning guidance

- 5.15 The site is within the Yellow Zone for Habitats and the Grey Hatched Zone for Recreational Pressure, as set out in the TBMS (Figure 7).

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Figure 4 Trowbridge Bat Mitigation Strategy – Bat Sensitivity Zones for Habitat

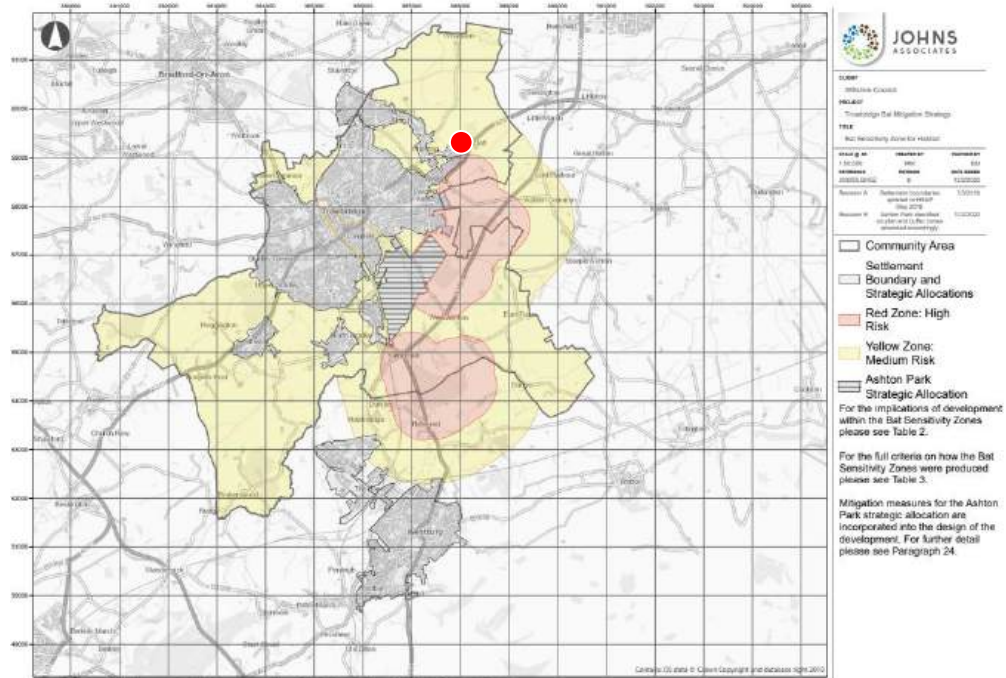


Figure 7. Extract from the TBMS showing the site location (red dot) in relation to the bat sensitivity zones for habitat

- 5.16 There are Bechstein's roosts within and to the north of Green Lane Wood, which is approximately 1.2km south of the site, and the nearest core roosts identified in the Bradford on Avon Bats SAC Planning Guidance are to the west of the site (Figure 6).
- 5.17 The site's connectivity to the core roosts to the south is limited by the A361 road and the streetlights along it. The streetlights illuminate the southern part of the site and the southern end of the tree-lined path that forms the site's eastern boundary (Figure 8 and Figure 9).

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Figure 8: looking through the southern part of the site, east along the A361 road



Figure 9: looking east along the A361 road with a street light positioned at the end of the green corridor between the site and the rugby club

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- 5.18 The rugby pitches to the east of the site are also lit by a mix of permanent and temporary lighting (Figure 10).



Figure 10. Lighting of the adjacent rugby pitches

- 5.19 The trees and shrubs along the site's western boundary have limited connectivity, as they do not form a continuous linear feature and they abut the existing residential area and lit roads to the west and south.
- 5.20 The large open fields to the north and west of the site comprise a mix of arable and pasture land divided by mature hedgerows. The fields are large and intensively managed and there is little woodland in the landscape to the north of the site (Figure 11).

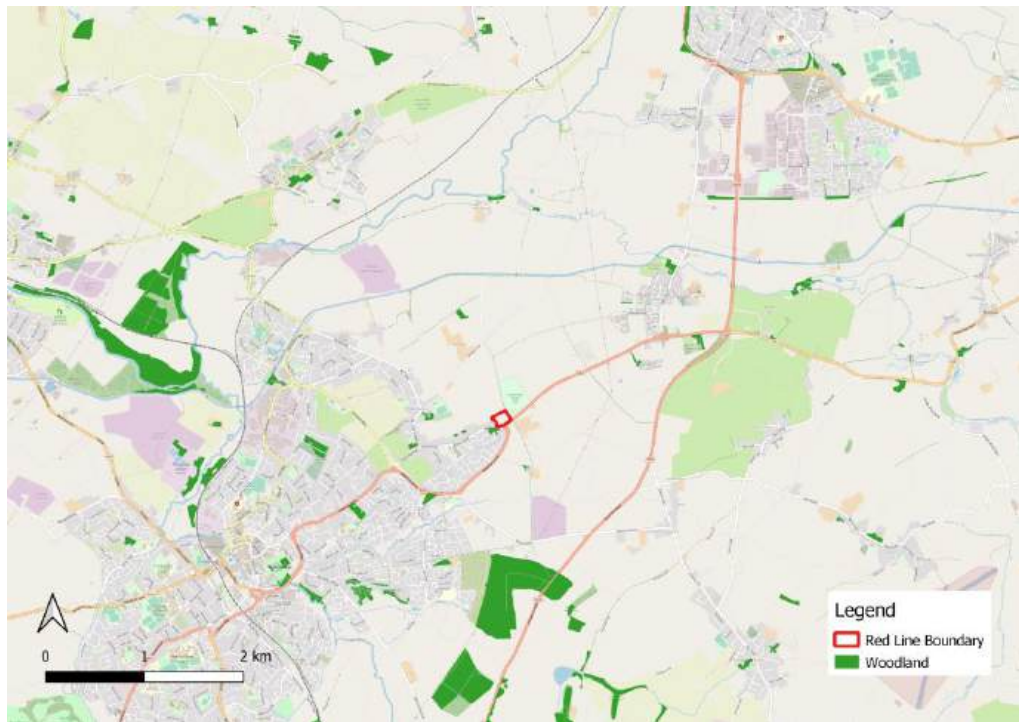


Figure 11. Woodland in the landscape surrounding the site

- 5.21 The vast majority of bats recorded during transect surveys were common and soprano pipistrelles, noctules and serotines. Bat activity peaked in the times between sunset and half an hour after sunset, after which activity became more sporadic. These bats were seen foraging and commuting during the surveys, with foraging activity around the edges of the site. No lesser horseshoe bats were recorded during the transect surveys but there were three recordings of greater horseshoe bats (Figure 9).

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Figure 9: greater horseshoe bat observations during transect surveys between April and October

5.22 The static detectors recorded 10 species of bat, in addition to calls assigned to the *Myotis* group (Table 5-1):

- Western barbastelle
- Serotine
- Leisler's bat (*Nyctalus leisleri*)
- Noctule
- Brown long-eared bat
- Nathusius' pipistrelle (*Pipistrellus nathusii*)
- Common pipistrelle
- Soprano pipistrelle
- Greater horseshoe bat
- Lesser horseshoe bat

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Table 5-1. Passes per night of all bat species recorded by static detectors.

		Barb	Eser	Myo sp.	Nlei	Nnoc	Paur	Pnat	Ppip	Ppyg	Rferr	Rhipp
West	April	0.00	1.86	1.43	0.00	8.86	0.29	0.00	35.00	1.43	1.00	0.00
	May	0.33	17.33	28.83	2.33	2.67	0.17	0.67	132.17	2.83	5.83	0.67
	June	0.00	4.00	0.80	3.80	36.60	0.20	0.00	79.20	1.20	0.60	0.00
	July	0.00	7.80	0.40	23.60	18.00	0.00	3.60	121.80	0.60	2.60	0.00
	August	0.00	11.71	3.71	10.00	73.43	0.29	4.71	150.57	5.57	2.57	0.29
	September	0.20	18.80	90.00	11.40	14.00	1.00	6.20	68.20	3.60	74.40	0.20
	October	0.00	3.88	6.75	0.13	1.38	0.13	0.00	49.25	1.63	0.25	0.00
	Total	0.53	65.38	131.93	51.26	154.93	2.06	15.18	636.19	16.86	87.25	1.15
	% Abundance	0.05	5.62	11.35	4.41	13.32	0.18	1.31	54.72	1.45	7.50	0.10
East	April	0.00	1.80	2.60	0.00	7.20	0.20	0.00	8.20	0.20	0.20	0.00
	May	0.00	11.80	3.20	1.40	3.00	0.00	0.00	8.60	1.20	0.20	0.00
	June	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	July	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	August	0.29	5.57	2.00	5.43	13.14	0.29	1.86	69.29	0.57	0.29	0.00
	September	0.80	8.00	6.20	3.80	8.40	2.60	0.20	5.80	0.20	2.20	0.20
	October	0.07	1.50	1.50	2.21	0.71	0.64	0.07	6.00	0.00	0.00	0.00
	Total	1.16	28.67	15.50	12.84	32.46	3.73	2.13	97.89	2.17	2.89	0.20
	% Abundance	0.58	14.36	7.76	6.43	16.26	1.87	1.07	49.03	1.09	1.45	0.10

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- 5.23 Overall bat activity was substantially greater at the western edge of the site than along the east. The western detector, which was placed on a boundary comprising scattered mature trees along a private drive, recorded a total of 1,162.72 passes per night of all species over the period between April and October. By contrast the eastern detector, which was placed on the inside (site) face of the tree-lined path, only recorded a total of 199.63 passes per night over the same period (17% of the activity recorded on the west).
- 5.24 All species of bats were recorded more frequently on the western edge of the site than the eastern edge with the only exception being brown long-eared bats (2.1 passes per night on the west, 3.7 passes per night on the east). On both detectors the most frequently recorded species was common pipistrelle (around 50% of all calls at both locations).
- 5.25 Barbastelle bats were recorded on both detectors: at the western edge they were recorded in May and September, and on the eastern edge in August, September and October. In all cases there was less than 1 pass per night.
- 5.26 Greater and lesser horseshoe bats were recorded on both detectors.
- 5.27 Greater horseshoe bats were recorded on the western detector in May (5.8 passes per night), June (0.6 passes per night), July (2.6 passes per night), August (2.6 passes per night), September (74.4 passes per night) and October (0.25 passes per night). On the eastern detector they were recorded in April (0.2 passes per night), May (1.2 passes per night), August (0.29 passes per night) and September (2.2 passes per night). Activity levels were therefore similarly low in both locations, with a peak in the west in September indicating that an individual bat foraged around the detector in that period. This indicates that the site is used by an individual bat or small numbers of bats commuting through the site, with greater levels of activity on the west (if the September results are excluded, the total passes per night across the recording period are 10.6 in the west and 0.8 in the east).
- 5.28 Lesser horseshoe bats were recorded on the western detector in May (0.6 passes per night), August (0.3 passes per night) and September (0.2 passes per night). They were recorded on the eastern detector in September only (0.2

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passes per night). This indicates that the site is used infrequently by an individual bat or small numbers of bats commuting through the site, with more activity on the western edge of the site compared with the east.

- 5.29 The site's value for commuting and foraging bats is set out in the tables below, using the approach in Wray *et al.*, 2010. The survey data indicate that the site is not used regularly for foraging and commuting by horseshoe bats, it is not within any of the core areas around known roosts, and it is isolated from the nearby core roosts by roads, lighting and urban areas. Therefore whilst it is important habitat for bats (as indicated by the evaluation according to the Wray criteria) it is not core habitat within the meaning of the TBMS.

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Table 5-2. Valuing commuting habitat for bats (scores in brackets)

Species	Number of Bats	Roost / Potential Roost Nearby	Type and Complexity of Linear Feature	Suggested Score and Valuation
Rarest: greater horseshoe and barbastelle (20)	Individual bats: (5)	Small number (3)	Well-grown and well-connected hedgerows, small field sizes (4)	(32) Regional
Rarer bats: lesser horseshoe, leisler's noctule, Nathusius' pipistrelle, serotine (5)	Small number of bats (10)	Moderate number/Not known (4)	Well-grown and well-connected hedgerows, small field sizes (4)	(23) County
Common bats: common pipistrelle, soprano pipistrelle, brown long-eared (2)	Large number of bats (20)	Moderate number/Not known (4)	Well-grown and well-connected hedgerows, small field sizes (4)	(30) County

Table 5-3. Valuing foraging habitat for bats (scores in brackets)

Species	Number of Bats	Roost / Potential Roost Nearby	Type and Complexity of Linear Feature	Suggested Score and Valuation
Rarer bats: leisler's noctule, Nathusius' pipistrelle, serotine (5)	Small number of bats (10)	Moderate number/Not known (4)	Isolated woodland patches, less intensive arable and/or small towns and villages (3)	(21) County
Common bats: common pipistrelle, soprano pipistrelle, brown long-eared (2)	Large number of bats (20)	Moderate number/Not known (4)	Isolated woodland patches, less intensive arable and/or small towns and villages (3)	(29) County

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- 5.30 None of the trees within or adjacent to the site have features suitable for roosting bats. The house and stables in the site's north-west corner have some features where bats could roost. The house has areas of lapped wooden boarding, and the stable buildings have areas of hanging tiles and one of the stables has an open door. The stable buildings are otherwise well sealed and there is no access to the interior. The roof has been relatively recently refurbished with new lining inside, which limits the roosting potential.
- 5.31 A single lesser horseshoe bat emerged from the open stable during a survey in August 2022. The bat emerged approximately half an hour after sunset and, after 'light-testing' for some minutes, flew off to the south along the private drive. However, during the bat re-entry survey on 30th September no bats flew into the stable. This indicates that the site may be used occasionally as a day roost by a single bat that dispersed after the maternity period. According to Figure 4 of the Bat Mitigation Guidelines (Mitchell-Jones, 2004), this is a roost of low-moderate conservation significance. In a geographical frame of reference after Table 2 in Wray *et al.* 2010, this would be a roost of County importance.
- 5.32 Bat roosting and commuting habitat are therefore Important Ecological Features that will be considered in the impact assessment.

Birds

- 5.33 The data search includes hundreds of records for birds within the 2km radius of the site. These include records of the following notable species:
- Graylag Goose (*Anser anser*)
 - Green Sandpiper (*Tringa ochropus*)
 - Hobby (*Falco subbuteo*)
 - Barn owls (*Tyto alba*).
- 5.34 Graylag goose and green sandpiper are not likely to use the site, but both hobbys and barn owls could forage over the site.
- 5.35 The open barn is used by nesting swallows, and the trees and shrubs around the site will be used by a range of common garden and farmland birds.

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- 5.36 The site is typical of the surrounding landscape and is unlikely to support notable species in significant numbers. Nesting birds are therefore excluded from the list of Important Ecological Features that will be considered in the impact assessment. The site's value for foraging and nesting birds is however factored into the biodiversity net gain strategy for the site, which is set out in the separate Biodiversity Net Gain report accompanying the planning application.

Great Crested Newts

- 5.37 There are no ponds on site and none are visible on aerial imagery and maps within 250m of the site. There are two records of great crested newts (*Triturus cristatus*) within 2km of the site from 2001 and 2006. The record from 2001 is 1.76km from the site and the record from 2006 is 375 meters from the site. There are no great crested newt licence returns on MAGIC within 500m of the site, and the nearest eDNA record is a negative result from 1.2km away.
- 5.38 The site's grassland, trees and scrub are suitable terrestrial habitat for great crested newts, but there is no suitable breeding habitat on site.
- 5.39 Considering the site's habitats, desktop data and the absence of any breeding habitat within 250m it is not likely that great crested newts are present at this site, and they are excluded from the list of Important Ecological Features that will be considered in the impact assessment. As they are unlikely to be present on the site now or after the proposed development is completed, they are not factored into the biodiversity net gain strategy for the site.

Reptiles

- 5.40 There are two records of grass snakes (*Natrix helvetica*) and 10 records of slow-worms (*Anguis fragilis*) within 2km of the site. Although the site's grassland and scrub is suitable habitat for reptiles, none were recorded on any of the presence / absence surveys. Reptiles are therefore excluded from the list of Important Ecological Features that will be considered in the impact assessment. As they are unlikely to be present on the site now or after the proposed development is completed, they are not factored into the biodiversity net gain strategy for the site.

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Dormice

- 5.41 There are no records of dormice (*Muscardinus avellanarius*) from the data search.
- 5.42 The stands of scrub are small and somewhat isolated from each other and from the surrounding landscape. There are no stands of woodland close to the site – the nearest substantial areas of woodland are Green Lane Wood 1.2km south.
- 5.43 Considering the limited amount of habitat on the site, its relative isolation from woodland (particularly ancient semi-natural woodland) and the absence of desktop records, it is not likely that dormice are present at this site, and they are excluded from the list of Important Ecological Features that will be considered in the impact assessment. As they are unlikely to be present on the site now or after the proposed development is completed, they are not factored into the biodiversity net gain strategy for the site.

Terrestrial Invertebrates

- 5.44 The data search contains records of notable species, particularly from Green Lane Wood. Notable species recorded from that site include dragonflies, butterflies and beetles. Some of the notable species found in the data search may use the site but as it comprises common habitats of moderate ecological value it is not likely to support significant numbers of notable invertebrates. Invertebrates are not therefore considered in this assessment as an Important Ecological Feature of the site, but the Biodiversity Net Gain Strategy includes measures aimed at enhancing the site for invertebrates.

Summary of Important Ecological Features

- 5.45 The ecological features within the study area and their value according to the geographical criteria set out in the Methods section are detailed in **Table 5-4** below.

Table 5-4 – Summary of Important Ecological Features

Site, Habitat or Species	Ecological Importance
A day roost of a single lesser horseshoe bat	County

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Site, Habitat or Species	Ecological Importance
Commuting habitat for the rarest bat species	Regional
Commuting habitat for the rarer and common bat species	County

Future Baseline

- 5.46 Significant changes in baseline conditions between the time of writing and the proposed commencement of construction (if within 2-3 years) are considered unlikely, given the current management regime of the site.

6 IMPACT ASSESSMENT

Inherent Avoidance, Mitigation and Enhancement

6.1 The following built-in features of the project will avoid or mitigate impacts on wildlife:

- The retention and enhancement of scrub habitat along the site's eastern edge and the avoidance of artificial lighting that would illuminate this bat habitat.
- The provision of a new hedgerow comprising native shrub species along the site's western boundary, and the avoidance of artificial lighting that would illuminate this bat habitat.
- Ensuring no net loss of habitat, using the Defra Biodiversity Net Gain metric
- The creation of a SUDS feature with wetland planting, species-rich grassland and public open space at the frontage of the site.

6.2 An extract of the landscape masterplan, illustrating the proposals to retain, enhance and create boundary habitats is provided in **Figure 2**. An outline Landscape and Ecological Management Plan has been provided with the application. This sets out prescriptions for managing the habitats with the objective of maximising their value for bats.

6.3 An illustration of the proposed lighting strategy with lux contours is provided below (Figure 10)². Lighting columns will be a maximum of 6m tall (some will be 5m tall). Luminaires will be LED lamps of warm white colour and a colour temperature of 2,700 kelvin. They will be mounted at 0° tilt and capable of dimming to 75% output from 8pm to 11pm and 50% output from 11pm to 6am.

² Refer to the original drawing for full details including scale

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Figure 10: Extract of the lighting plan and lux contours for the proposed development

Potential Impacts

Construction

6.4 In the absence of avoidance or mitigation measures, the constriction of the proposed development could lead to the following impacts:

- Demolition of the stables will result in the loss of a bat roost.
- Construction-stage lighting could deter light-averse bats from foraging and commuting through the site along the eastern and western boundaries.

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- The removal of trees, shrubs, scrub and ruderal vegetation that forms part of the foraging and commuting habitat for bats, leading to a reduction in the site's value for bats. The extent of tree and scrub removal is illustrated in the Tree Protection Plan submitted with the application, an extract of which is provided below³.

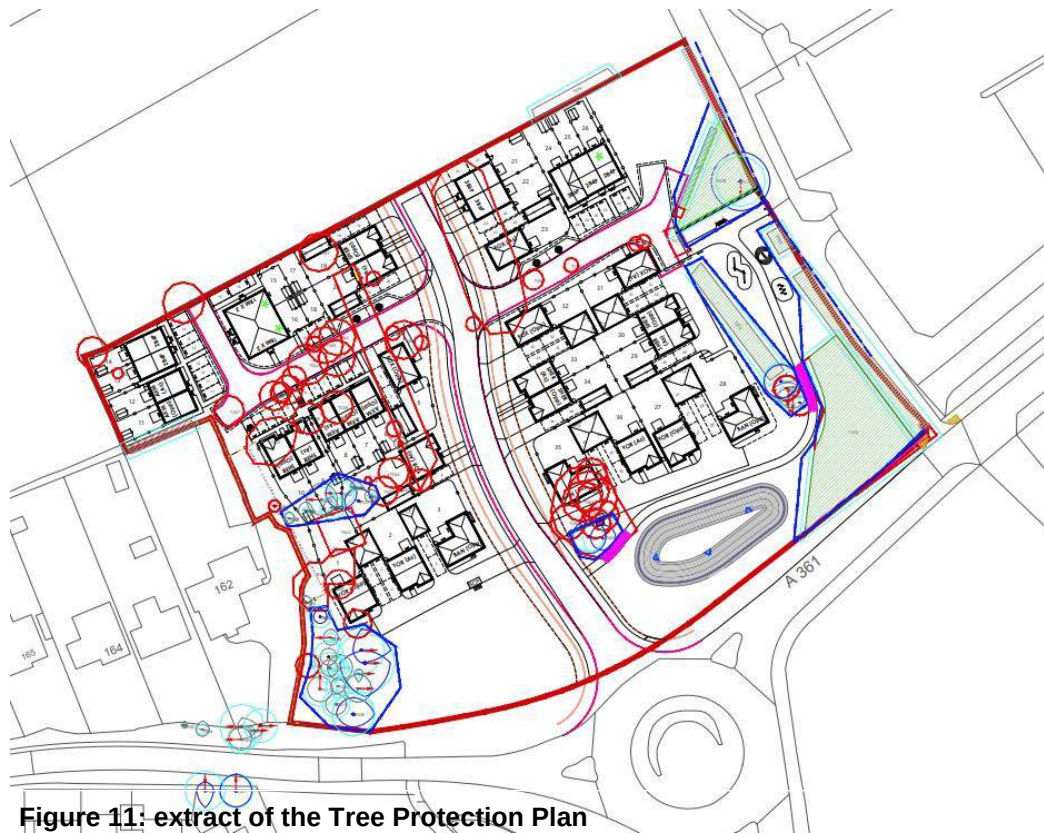


Figure 11: extract of the Tree Protection Plan

Operation

- 6.5 Once constructed and occupied, artificial lighting within the proposed development could deter light-averse bat species from commuting through the site.

³ Refer to the original drawing for full details including scale

Avoidance, Mitigation and Enhancement

Construction

- 6.6 The Bat Mitigation Guidelines (Mitchell-Jones, 2004) state that for a roost of the type present at this site, mitigation should consist of:

“Provision of new roost facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species’ requirements. Minimal timing constraints or monitoring requirements”

- 6.7 The proposed development will therefore include the provision of a new roost suitable for lesser horseshoe bats. This will be provided as close as possible to the location of the original roost, in an area that is not illuminated by artificial lighting. Space has been made available in the garage of Plot 19, on the site’s northern boundary. The roost would therefore directly access into the adjacent open countryside.
- 6.8 A Construction Ecological Management Plan will be prepared that will set out measures to avoid impacts on wildlife. This will include measures to restrict and control the use of artificial lighting during construction. Construction hours will be limited to typical working hours, meaning that in summer artificial lighting would not be required. If lighting is required during shorter day lengths this will typically be in winter, when bats are hibernating or considerably less likely to be active whilst lighting is in use.
- 6.9 The retention and enhancement of habitats along the western and eastern boundaries of the site has been designed to ensure that there is a dark, continuous habitat corridor suitable for light-averse bats along both edges of the site. The purpose of this is to ensure that the site provides a permeable and functional landscape for bats, within the limitations set by the surrounding roads, lighting and urban areas.
- 6.10 The existing vegetation along the western corridor has been retained where possible and will be strengthened by additional shrub and tree planting, which will be managed to provide high quality foraging and commuting habitat for bats. The habitat corridor along the eastern edge of the site will be retained, enhanced with additional planting and managed to provide high quality commuting habitat

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for bats. The green corridor will be maintained at its current width, with additional planting in the north-east corner of the site to widen this corridor.

Operation

- 6.11 The habitat corridors along the western and eastern edges of the site, and the green space at the site frontage, will not be illuminated by proposed artificial lighting.
- 6.12 The habitat provided for foraging and commuting bats will be managed to provide naturalistic habitat with edge habitats and a diverse range of species. The objective will be to provide sheltered areas that are not lit by artificial lighting, which will support insect prey including moths, diptera, tipulids and cockchafers. The combination of SUDS, species-rich grassland, edge habitat with shrubs and trees will provide ideal habitat for these bat prey species. An outline LEMP is submitted with this application, outlining how these habitats will be managed.

Assessment of Effects

Construction

- 6.13 In consideration of the proposed measures to avoid and mitigate potential effects on the existing bat roost in the stable block, there would be a short-term impact between demolition of the roost and the construction of the new roost (maximum of two seasons). This would affect an IEF of County importance and with reference to Table 6.1 in the Bat Mitigation Guidelines (Mitchell-Jones, 2004) it would be of no greater than moderate scale of impact. With reference to Table 4-3, this would result in a temporary adverse effect of moderate significance, that would be reversed within two seasons.
- 6.14 In consideration of the measures proposed to manage artificial lighting during construction, there would be no significant adverse effects on foraging or commuting bats.
- 6.15 The amount of habitat to be removed is very small relative to the total amount of these habitat types within the commuting ranges of the bat species. Furthermore, the existing habitats are not high-quality foraging and commuting habitat, they are not within the buffer zones around core roosts associated with

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the SAC and they are not core habitat for SAC species. The magnitude of habitat loss during construction is therefore negligible within the geographical frame of reference at which the foraging bat habitat is valued. The proposed development would therefore have an adverse effect of neutral or slight significance on foraging and commuting bats.

Operation

- 6.16 In consideration of the measures to avoid illumination of retained and created bat commuting habitat there would be an impact of negligible magnitude. The proposed development would therefore have an adverse effect of neutral or slight significance on foraging and commuting bats.

7 CONCLUSIONS

7.1 The proposed development would have the following effects on Important Ecological Features:

1. A temporary adverse effect of moderate significance on a bat roost of County value, that would be reversed within two seasons.
2. A permanent adverse effect of neutral or slight significance on foraging and commuting bats as a result of the removal of habitats

7.2 The proposed avoidance and mitigation measures will ensure that there is no long-term adverse effect on roosting bats, and the proposed development layout has been designed to provide additional planting along the eastern boundary, and to ensure that this boundary is not lit by artificial lighting. This will ensure that the development proposal will not prevent bats from foraging or commuting through the site. The proposed approach is set out in the Ecological Mitigation Plan, below.



Figure 12. Ecological Mitigation Plan

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- 7.3 The proposed landscape design and long-term management will deliver a net biodiversity gain and manage habitats to provide foraging and commuting resources for bats as well as good habitat for a range of other wildlife.

REFERENCES

Best Practice and Guidance

Bat Conservation Trust and Institute of Lighting Professionals. (2018).

Guidance Note 08/18: Bats and artificial lighting in the UK. ILP, Rugby.

BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.

Bibby C.J., Burgess N.D., Hill D.A., & Mustoe S.H. (2000). *Bird Census Techniques*. Second Edition. Elsevier Ltd.

Bright, P. W., Morris, P. A., & Mitchell-Jones, A (2006). *Dormouse Conservation Handbook (2nd Edition)*. English Nature, Peterborough.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). *The UK Habitat Classification User Manual Version 1.1* at <http://www.ukhab.org/>

Chanin, P. (2003). *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No.10. English Nature, Peterborough.

CIEEM. (2019). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1 - updated 2019*. Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, L. (2016). *Bat Surveys: Good Practice Guidelines, 3rd Edition*. Bat Conservation Trust.

Crawford, A. (2011), *Fifth otter survey of England 2009 – 2010*. Environment Agency Technical report.

Drake, C.M., Lott, D.A., Alexander, K.N.A., & Webb, J. (2007). *Surveying terrestrial and freshwater invertebrates for conservation evaluation. Natural England Research Report NERR005*. Natural England, Peterborough.

Hilperton, Trowbridge Ecological Impact Assessment

Froglife (1999). *Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice sheet 10. Froglife, Halesworth.

Gent, A., & Gibson, S. (2003). *Herpetofauna Workers Manual*. JNCC. Peterborough.

Gilbert, G., Gibbons, D.W., & Evans, J. (1998). *Bird Monitoring Methods: A Manual of Techniques for Key UK Species*. RSPB.

Harris, S., Cresswell, P., & Jefferies, D. (1991). (Report) Surveying Badgers. The Mammal Society, Bristol.

Kirby, P. (2001). *Habitat Management for Invertebrates: A Practical Handbook*. RSPB Management Guides.

Mitchell-Jones, A.J., & McLeish, A.P. (2012). *The Bat Workers' Manual*. Pelagic Publishing, Exeter.

Roper, T.J. (2010). *Badger*. Harper Collins.

Stace, C. (2019). *New Flora of the British Isles*. Fourth Edition.

Strachan, R., Moorhouse, T., & Gelling, M (2011). *Water Vole Conservation Handbook (3rd Edition)* Wildlife Conservation Research Unit (WildCRU), Oxford University.

UK Government's Countryside Geographic Information website: URL: www.magic.gov.uk. [January 2022].

Legislation and Policy

The Conservation of Habitats and Species (Amendment) Regulations 2012 (UK Parliament). *The National Archives* [online]. URL: <http://www.legislation.gov.uk/ukxi/2012/1927/contents/made> [January 2022].

The Wildlife and Countryside Act 1981 (England and Wales) (Amendment) Regulations 2004 (UK Parliament). *The National Archives* [online]. URL:

Hilperton, Trowbridge Ecological Impact Assessment

<http://www.legislation.gov.uk/ukpga/1991/39/contents> *Countryside and Rights of Way Act, 2000* [January 2022].

The Protection of Badgers Act 1992 (UK Parliament). *The National Archives* [online]. URL: <http://www.legislation.gov.uk/ukpga/1992/51/contents> *The Hunting Act, 2004* [January 2022].

Natural Environment and Rural Communities Act 2006 (UK Parliament). *The National Archives* [online]. URL: <http://www.legislation.gov.uk/ukpga/2006/16/contents> [January 2022].

Department for Communities and Local Government (2012) National Planning Policy Framework [online]. URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf Circular 06/05 – Statutory Obligations and Their Impact Within the Planning System (2005) [January 2022].

Department for Environment, Food and Rural Affairs (2011) Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services [online] URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf [January 2022].

Council of the European Communities (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (EN). *Official Journal of the European Communities* [online]. 35, 7-50. URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:1992:206:TOC> [January 2022]

European Parliament and the Council of 30 November 2009 (2010) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (EN). *Official Journal of the European Union* [online]. 53, 7-25. URL: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2010:020:TOC> [January 2022].



Appendix 8 – NPA Bat Survey Report

Bat Survey Report

Hilperton, Trowbridge

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Revision letter

	Name	Signature	Position	Date
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Approved by:	D Harvey	DH	Associate Director	09/01/2026

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Rev letter	Date prepared	Prepared by	Checker / Approver	Description of changes

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- 1: Photographs
2: Camera Coverage
3: DNA Analysis Results
4: Disused Stable Automated Detector Deployment Dates and Horseshoe Bat Activity

1.0 Introduction

- 1.1 Nicholas Pearson Associates (NPA) has been commissioned by Redcliffe Homes to undertake a series of bat surveys on an area of land to the north-east of Hilperton, Trowbridge (OS Grid Reference: ST 88057 59318), hereafter referred to as the 'Site'.
- 1.2 The Site is located off of Devizes Road and Hilperton Drive (A361) in Hilperton and comprises two separate privately owned land holdings. The land holding to the north comprises a former tenanted (in use at time of survey) horse paddock, with associated yard and stables (Appendix 1; Photos 1 and 2). The land holding to the south is within private curtilage (Appendix 1; Photos 3 and 4). There is two stable blocks on the Site; one to the north (Active Stables) and one to the south (Disused Stables). The Site is situated on the outskirts of an urban area and is bordered by farmland interspersed by hedgerows to the north, sports pitches to the east and residential development/roads to the south and west.
- 1.3 To inform the proposals, NPA undertook a series of bat surveys during the 2024 survey season. These included Ground-Level Tree Assessments (GLTAs), Preliminary Roost Assessments (PRAs), Bat Emergence/Re-entry Surveys, Night-time Bat Walkover (NBW) Surveys, and Automated/Static Detector Surveys. Any trees with the potential to support multiple roosting bats (*i.e.* PRF-M) were subject to a detailed inspection (including aerial MEWP inspections where required) by a licensed bat worker.
- 1.4 This report sets out the results of the bat surveys undertaken.

2.0 Legislation

- 2.1 All species of British bat are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (W&CA 1981) and the Conservation of Habitat & Species Regulations 2017 (as amended), known as the Habitat Regulations.
- 2.2 This legislation affords strict protection to bat roosts and makes it an offence to disturb bats in a way which would be likely to impair their ability to, survive, breed, reproduce, rear or nurture their young, hibernate, migrate; or affect significantly the local distribution or abundance of the species to which they belong.

3.0 Methods

Tree Assessment

- 3.1 In accordance with Good Practice Guidelines¹, a ground-based assessment of on-site trees was undertaken by an NPA ecologist on the 18 April 2024.
- 3.2 This survey involved a detailed inspection of the tree from the ground to search for Potential Roost Features (PRF; *e.g.* cavities, loose bark, splits/cracks) likely to be used by roosting bats, and evidence of bats (*e.g.* droppings, bark staining).
- 3.3 All trees with PRFs were assigned a preliminary rating based on their potential to support roosting bats, as outlined below:
- Negligible: not suitable for roosting bats; however, a small element of uncertainty remains;
 - PRF-I: suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat; and
 - PRF-M: suitable for multiple bats and may therefore be used by a maternity colony.
- 3.4 Any features with the potential to support multiple bats were subject to a detailed endoscope inspection by a licensed bat worker on the 11 June 2024. Those that were then confirmed to have PRF-M status were endoscoped on 2 further occasions, on the 18 July and 25 September 2024. Some PRF-I trees were also endoscoped on those occasions where they could easily be inspected from the ground.

Preliminary Roost Assessment of Structures

- 3.5 An internal and external inspection in accordance with Good Practice Guidelines¹ of the two stable blocks and a hay store was undertaken on the 28 March and 18 April 2024 by a licenced bat worker and an assistant. See Appendix 1 for photographs of the structures/potential roosting features taken during the inspection.
- 3.6 The survey comprised a detailed inspection of the structures to search for features suitable for roosting bats, potential exit/entry points and sign of bats (*e.g.* droppings, feeding remains). Any potential bat droppings found during the inspection were collected and later sent off for DNA analysis.

¹ Collins, J (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 4th Edition. London: The Bat Conservation Trust.

3.7 The structures were then assigned a rating based on their potential to support roosting bats, as outlined below:

- Roost: Bats and/or evidence of bats recorded,
- High: one or more potential roosting sites that are obviously suitable for use by larger numbers of bats,
- Moderate: one or more potential roost sites, but unlikely to support a roost of high conservation status,
- Low: includes one or more potential roost sites that could be used opportunistically by individual bats,
- Negligible: no obvious habitat features on site likely to be used by roosting bats, but a small element of uncertainty remains, and
- None: complete absence of habitat features on site likely to be used by any roosting bats.

Bat Emergence/Re-entry Surveys

3.8 Due to their potential to support day roosting bats, the disused and active stables blocks were subject to bat emergence/re-entry surveys in accordance with Good Practice Guidelines and the Interim Guidance Note on Night Vision Aids². Surveys were undertaken in suitable weather conditions (temperature $\geq 10^{\circ}\text{C}$, little or no rain and no strong winds over Beaufort 3). The surveys commenced 15 minutes prior to sunset and continued up to 1.75hrs after sunset (see Table 3.1 below for survey details).

3.9 Experienced bat surveyors using full spectrum bat detectors (AnaBat Walkabout, Echometer Touch 2, Petterson M500) and night vision aids (Sony Handycam FDR-AX53, Nightfox Whisker, Canon AX 70) stood at fixed positions around the buildings to record any bats emerging from/entering the structures (see Appendix 2 for camera coverage during the surveys).

² Bat Conservation Trust (2022) *Interim Guidance Note on Night Vision Aids*. [Online]. Available at: <https://cdn.bats.org.uk/uploads/pdf/Interim-guidance-note-on-NVAs-May-2022-FINAL.pdf?v=1653399882> (Accessed: 24 November 2025).

Table 3.1: Emergence Survey Dates and Weather Conditions

Survey No.	Coverage	Date	Sunset (start/finish)	No. of surveyors	No. of NVAs	Weather Conditions			
						Temp (°C)	Beaufort	Rain	Cloud Cover (%)
1	Active Stables	29/05/2024	21:13 (20:58 – 22:58)	2	2	14.2 – 10.7	1 – 2	None	0 – 5
2	Disused Stables	19/06/2024	21:28 (21:13 – 23:13)	4	3	14.4 – 11.5	0	None	5 – 60
3	Disused Stables	18/07/2024	21:15 (21:00 – 22:45)	4	3	20.6 – 14.5	0	None	0
4	Disused Stables	24/09/2024	19:01 (18:46 – 20:31)	4	3	13.5 – 12.2	0 – 1	None	100

- 3.10 Camera footage was analysed using VLC media player video software to review points of interest and clip confirmed emergences/re-entries as required.

Limitations

- 3.11 Survey/camera coverage of the eastern elevation of the Active Stables was not possible due to the view being obscured by adjacent vegetation. However, given the lack of features identified on this elevation and the overall limited suitability (*i.e.* Low potential) of the structure, this was not considered a constraint.

Bat Activity Surveys

- 3.12 A combination of Night-time Bat Walkover Surveys and Automated/Static Detector Surveys were undertaken over the course of the 2024 survey season. This included the deployment of automated detectors within the Active and Disused Stables.
- 3.13 To better determine the number of roosting bats using the Disused Stable, a trap camera was deployed within the southern canopy void from 05 – 19 August 2024.

Night-time Bat Walkover Surveys

- 3.14 Bat activity transect surveys were undertaken on a monthly basis from April - October 2024 in accordance with Good Practice Guidelines. In accordance with the guidelines set out within the Trowbridge Bat Mitigation Strategy Supplementary Planning Document³, a total of 10 transect surveys

³ Johns Associates (2020) *Trowbridge Bat Mitigation Strategy SPD*. Version 6 [PDF] Johns Associates

were undertaken over the course of the survey season, details of which are provided in Table 3.2 below. Either two individual transects or one combined transect were used to cover the Site.

- 3.15 Experienced bat surveyors using handheld bat detectors (Anabat Walkabout) stood at fixed listening points (*i.e.* near potential flight lines/roosting features, at the boundaries of suitable commuting/foraging habitat) for up to 1 hour after sunset; recording all bat activity within range. After 1 hour, surveyors then followed a pre-determined transect route stopping at pre-defined listening points for approximately five minutes (see Figure 1 for listening points and transect route).
- 3.16 Where species identification could not be determined during the NBW, acoustic recordings were analysed using bat sound analysis software (Anabat Insight). As the calls of *Myotis* bat species are very similar, with most of the variation between their calls attributable to the habitat in which they occur⁴, the *Myotis* recordings have not been attributed to a particular species.
- 3.17 Surveys were undertaken in suitable weather conditions (temperature $\geq 10^{\circ}\text{C}$ at start of survey, little or no rain and no strong winds over Beaufort 3). The surveys commenced at sunset and continued up to 2hrs thereafter.

Table 3.2: Night-time Bat Walkover Survey Details and Weather Conditions

Survey No.	Date	Sunset (start/finish)	No. of surveyors	Weather Conditions			
				Temp. ($^{\circ}\text{C}$)	Beaufort	Rain	Cloud Cover (%)
1	23/04/2024	20:19 (20:19 – 22:19)	2	9.3 – 5.7	0 – 1	None	0
2	23/05/2024	21:05 (21:05 – 23:05)	1	12 – 10	1 – 2	None	90
3	26/06/2024	21:29 (21:29 – 23:29)	1	19.7 – 16.6	0 – 1	None	0
4	18/07/2024	21:15 (21:00 – 23:15)	1	20 – 18	0	None	5 – 10
5	05/08/2024	20:48 (20:48 – 22:48)	2	18.9 – 18.3	1 – 2	Light rain for ~10 mins	100
6	21/08/2024	20:17 (20:17 – 22:17)	2	16 – 15	2 – 3/4	None	20 – 80
7	04/09/2024	19:47 (19:47 – 21:47)	1	17 – 16	1	None	100
8	26/09/2024	18:57 (18:57 – 20:57)	1	13.1 – 11.9	0 – 3	None	50 – 100
9	14/10/2024	18:17 (18:17 – 20:17)	1	13	1	None	100
10	24/10/2024	17:56 (17:56 – 19:56)	1	14.5 / 14.6	1 – 2	None	95 – 100

⁴ Russ, J. (ed.) (2021) *Bat Calls of Britain and Europe: A Guide to Species Identification (Bat Biology and Conservation)*. Pelagic Publishing, Exeter.

Automated/Static Detector Surveys

- 3.18 9 No. automated/static bat detectors (Anabat Rangers) were deployed across the Site (see Figure 1 for detector locations) on a monthly basis from April – October 2024, and for at least 5 nights in each month. In accordance with the guidelines set out within the Trowbridge Bat Mitigation Strategy Supplementary Planning Document, a minimum of 50 nights were analysed over the course of the survey season and Table 3.3 below shows the selected nights that were analysed.
- 3.19 The automated detectors were programmed to turn on 30 minutes before sunset and turn off 30 minutes after sunrise.

Table 3.3: Automated Detector Deployment Dates

Month	Number of nights analysed	Dates analysed
April	8	18 – 25
May	8	17, 20 – 25, 27
June	10	21 – 30
July	9	19 – 27
August	5	19 – 23
September	5	20 – 21, 24, 26 – 27
October	5	22 – 26
Total no. of nights:	50	

- 3.20 To help determine the night-roosting potential of structures on Site and understand how the bat activity was affected by the presence of GHS and LHS roosts within the disused stables, an automated detector was deployed in each stable block on four separate occasions over the course of the survey season (see Table 3.4 below for deployment dates).

Table 3.4: Automated Detector Deployment Dates (Stables Only)

Month	Deployment Dates (Total No. of Nights)	
	Active Stables	Disused Stables
June	21 – 30 (10 nights)	21 – 30 (10 nights)
July	19 – 30 (12 nights)	19 – 30 (12 nights)
August	-	19 (Aug) – 01 (Sep) (14 nights)
September	20 – 29 (10 nights)	20 – 29 (10 nights)
October	22 (Oct) – 03 (Nov) (13 nights)	-

- 3.21 Identification of bat species was gained through use of the automated species identification feature within Kaleidoscope Pro (Version 5.6.6). Based on a review of historic data collected on other projects

using the AnaBat Rangers, the automated species identification in Kaleidoscope Pro works well for certain species (e.g. Pipistrelles) but is less accurate for others (e.g. identification of a particular Myotis species). As such the following protocols were followed:

- Myotis bats were grouped together;
- The larger bat species; Noctule *Nyctalus noctula*, Leisler's Bat *Nyctalus leisleri* and Serotine *Cnephaeus serotinus* (NLS) were grouped together;
- Pipistrelle species were grouped together;
- Files labelled as Barbastelle *Barbastella barbastellus* and Long-eared bats *Plecotus sp.* were analysed manually;
- Files labelled as No ID (*i.e.* what Kaleidoscope identifies as a bat but is unsure of what species) were analysed manually;
- Files labelled as Noise (*i.e.* what Kaleidoscope does not identify as a bat) that passed a scan for bat calls within AnaLookW, based on the two filter parameters shown in Table 3.5 below, were analysed manually; and
- Where a call was of insufficient quality to determine a particular bat species/group, but it was clear it was not a horseshoe species it was labelled as Vespertilionidae/Vesper.
- Files that were labelled as Noctule, Leisler's or Serotine (which Kaleidoscope can mistakes as insect noise) for the timecodes 0-3 and 11-14 (when insects are most active) were manually analysed.

Table 3.5: Higher & Lower Frequency Filter Parameters

	HF20	LF (Fc Max 35)
Characteristic Frequency (KHz)	29-150	16-35
Call Duration (ms)	1-100	3-70
Smoothness	20	20
Body Over (microseconds)	1,000	1,000

3.22 Recorded echolocation calls were run through filters for both horseshoe bat species within AnaLookW to identify likely horseshoe bat calls (see Table 3.6 below for filter parameters). These were then analysed manually to verify if they were attributable to either Lesser *Rhinolophus hipposideros* (LHS) or Greater *Rhinolophus ferrumequinum* Horseshoe bats (GHS).

Table 3.6: Horseshoe Filter Parameters

	GHS	LHS
Characteristic Frequency (KHz)	75-90	95-120
Call Duration (ms)	0.2-100	0.2-100
Smoothness	100	100
Body Over (microseconds)	1,000	1,000

- 3.23 To help understand the likely presence of roosts on/adjacent to Site and when in the night bat activity occurred the data were split into 15 different time periods for analysis as per Table 3.7 below.

Table 3.7: Timecode and Period

	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Timecode	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Limitations

- 3.24 Given the openness of the Active Stable and available positions to deploy the automated detector, it is likely that bat activity (*i.e.* incidental passes outside of the stable) would have been recorded, and therefore, this data alone could not be relied upon alone to determine the presence of a night roost. As such the patterns of any records and the searches for evidence on the floor were used to determine likely presence/absence.

4.0 Results

Ground-Level Tree Assessment

- 4.1 9 No. trees were recorded as containing PRFs, the results of which are provided in Table 4.1 below, with tree locations are provided in Figure 1. No evidence of roosting bats was recorded on any of the tree inspections.

Table 4.1: Ground-Level Tree Assessment Results

Tree No.	Description/Evidence	Further Inspection Undertaken	Suitability
T1 Elder <i>Sambucus nigra</i>	1 No. south facing knot hole on southern stem, with a cavity extending to approximately 2ft (Appendix 1; Photo 5). 1 No. south-facing knot holes on southern stem, with a cavity	3 No. endoscope inspections	PRF-M

	extending to approximately 1.5ft. 1 No. upwards facing tear-out on southern stem. Single rot hole on dead limb on east side of tree.		
T2 Elder <i>Sambucus nigra</i>	Fallen tree with south-facing pruning cut on dead stem.	3 No. endoscope inspections	PRF-I
T3 Purging Buckthorn <i>Rhamnus cathartica</i>	Compression fork.	N/A	Negligible
T43 Hornbeam <i>Carpinus betulus</i>	Low-level / open fissure on main stem.	N/A	Negligible
T54 Red Oak <i>Quercus rubra</i>	Lifting bark.	No further inspection required	PRF-I
T56 Ash <i>Fraxinus excelsior</i>	Pruning cut on main stem.	No further inspection required	PRF-I
T57 Elder <i>Sambucus nigra</i>	South-facing knot hole.	3 No. endoscope inspections	PRF-I
T58 Ash <i>Fraxinus excelsior</i>	Wound feature with exposed heartwood on west side of main stem (Appendix 1; Photo 6).	3 No. endoscope inspections	PRF-I
T59 Standing dead tree	Loose/lifting bark around entire main stem. 3 No. woodpecker holes (Appendix 1; Photo 7): 1 No. woodpecker hole (6 x 6cm; narrowing to 3 x 3cm) on main stem (6m high / east facing) with a depth of approximately 10cm, 1 No. woodpecker hole (2 x 3cm) on main stem (6.5m high / north-east facing) with a depth of approximately 2cm, and 1 No. woodpecker hole (4 x 3cm) on main stem (7m high / north facing) with a depth of approximately 2cm. All woodpecker holes were open, clean and dry.	1 No. endoscope inspections via MEWP. Confirmed as PRF-I so no further endoscope inspection undertaken.	PRF-I

Preliminary Roost Assessment of Structures

- 4.2 Table 4.2 below describes the features of the structures and any evidence of suitability for roosting bats.

Table 4.2: Assessment of Buildings Potential to Support Roosting Bats

Overview
Three structures on Site were subject to a Preliminary Roost Assessment. These include 2 No. stable blocks; one to the north (Active Stables) and one to the south (Disused Stables), and a Hay Store to the north of the Site. Disused Stables (Appendix 1; Photos 8 and 9) The structure comprised two elements; a stable block and stable kitchen to the west, and an attached house/living quarters to the east. The stable block comprises a total of 6 stable units (Appendix 1; Photo 10). <u>Walls</u> – Constructed from a mix of brick and breeze blocks, with a textured render. All stable units have timber stable doors and windows. The windows and doors on the main house have been built from a mix of timber and plastic. The attached house is partly timber clad on its east-facing elevation and there is a metal garage door and a decorative metal balcony on its west-facing elevation.

Roof – The roof of the stable block and attached house has been constructed from timber trusses (standard fink), with a reinforced plastic membrane overlay. Double roman common roof tiles and clay ridge tiles used throughout. Extending from the south side of the stable units is a thin canopy, supported by timber pillars. Clay vertical wall tiles are present at the ends of this canopy. To the underside of the canopy, there is plaster boarding with circular lights along its length. At the apex of the attached house, there is a timber louvre vent with lead flashing (part of roof void).

Floor – The floor of the stable blocks have been constructed from concrete. The canopy floor has been constructed from brick.

Roof voids – The roof void above the attached house measures approx. 12m x 10.5m (Appendix 1; Photo 11). The attached house has a cold roof void with soft insulation at floor level. All of the stable units are open to each other through the roof void of the southern canopy, providing a flight path from one end to the other (Appendix 1; Photo 12). 4 No. stable units are open to the ridge, and 2 No. units have a tarpaulin 'false' ceiling. There is a roof void above the stable kitchen to the west, which is open on one end allowing bat access via the stable units / southern canopy void (Appendix 1; Photo 13).

Active Stables (Appendix 1; Photo 14 and 15)

The stable block comprises a total of 4 stable units (approx. 5m x 4m). At the northern side of the stable units, there is a storage unit with a single glass window and a flat roof. An open, timber lean-to is present at the northern end of the storage unit.

Walls – Timber clad with timber stable doors and mesh windows.

Roof – Constructed largely from timber, with corrugated metal roofing sheets. Extending from the west elevation of the stables is a thin timber canopy with timber support pillars.

Floor – Constructed from concrete.

Hay Store (Appendix 1; Photo 16)

Hay store (approx. 16m x 7m) constructed from timber cladding and corrugated metal roofing sheets.

Structure	Elevation/element	Description/evidence
Disused Stables	North elevation	Gap where drainage pipe exits exterior wall.
	East elevation	Linear gaps in mortar below ridge tiles. Numerous linear gaps behind overlapping timber cladding. Gap below roof tiles where mortar has fallen out. Hole at end of soffit board on attached house. Gap where soffit board has loosened/dropped on southern canopy. Linear gap where fascia board has snapped on canopy.
	South elevation	Hole in mortar at end of ridge tile. Linear gaps between soffit and fascia boards. Single stable door permanently open, allowing bat access into roof void above stables/southern canopy. Holes in plaster boarding on underside of canopy. Gap where soffit board has loosened/dropped. Gaps between fascia board and lead flashing. Gap where hanging tile is missing (Appendix 1; Photo 17). Gap in mortar below eaves. Gaps at edge of roof, between mortar and roof tiles. Gaps under lead flashing (cobwebbed present around entrance). Hole (Approx. 8" x 8") where end of fascia board is missing (Appendix 1; Photo 18). Gaps between canopy wall and fascia board. Gap under lead flashing where hanging tile is missing. Linear gap where ridge tiles has loosened from mortar. Gap below lead flashing in roof valley.

	West elevation	Hole (approx. 15" x 6") where soffit board is missing on attached house. Hole in broken roof tile. Gap between mortar and lead flashing. Gap at side of fascia board. Hole in fascia board above metal garage door. Gap between external wall and fascia board. Linear gaps behind overlapping timber cladding. Gaps below lead flashing between attached house wall and canopy.
	Internal	During the internal inspection, a single Lesser Horseshoe bat <i>Rhinolophus hipposideros</i> was recorded hanging from the ridge beam within one of the stable units. Bat droppings were recorded on the floor of two of the stable units and within the roof void above the stable kitchen.
Active Stables	North elevation	Opening in roof where corrugated metal roofing sheet is missing.
	South elevation	Linear gap above doorway of store. Numerous gaps in broken canopy support brackets. Hole where timber cladding has snapped, leading to cavity behind.
	West elevation	Linear gap behind barge board (heavily cobwebbed). Hole in cladding on gable end. Gap at side of fascia board leading into cavity behind cladding (Appendix 1; Photo 19).
Hay Store		No features suitable for day roosting bats identified.

- 4.3 A single Lesser Horseshoe bat (with no ring) was recorded hanging from the ridge beam above one of the stable units of the Disused Stable block, confirming it as a day roost for at least one Lesser Horseshoe bat.
- 4.4 Multiple bat droppings were also recorded within the stable units and within the roof void above the stable kitchen. These were sent off for DNA analysis and came back positive for Greater Horseshoe bat *Rhinolophus ferrumequinum* (see Appendix 3 for results).
- 4.5 The Active Stable to the north was considered to offer 'Low' potential to support day roosting bats.
- 4.6 Given the absence of suitable roosting features, the hay store was considered 'Negligible' for roosting bats.

Bat Emergence/Re-entry Surveys

Greater Horseshoe

- 4.7 On the 19 June 2024, a single horseshoe bat was seen (i.e. no echolocation recorded) light-sampling from the open stable unit of the Disused Stable at 22:03 (35 minutes after sunset). Based on a review of automated detector data (i.e. which recorded early records of GHS bats in June), this was attributed to Greater Horseshoe bat. See Image 4.1 below for emergence/entry point (in red).

- 4.8 On the 18 July 2024, 2 No. Greater Horseshoe bats were recorded entering the Disused Stable through the open stable unit at 22:23 (68 minutes after sunset). See Image 4.1 below for emergence/entry point (in red).
- 4.9 On the 24 September 2024, a single horseshoe bat was seen (i.e. no echolocation recorded) light sampling beneath the southern canopy of the Disused Stable between 19:25 – 19:27. Based on the time recorded (i.e. 24 minutes after sunset) and records of GHS bats recorded around the same time on the automated detector deployed in the stable block, this was attributed to Greater Horseshoe bat. See Image 4.1 below for location (in red).



Image 4.1 Greater Horseshoe Emergence Point Through Open Stable Door - Disused Stable; South Elevation)

Common Pipistrelle

- 4.10 On the 18 July 2024, a single Common Pipistrelle *Pipistrellus pipistrellus* emerged from under a roof tile on the northern elevation of the Disused Stable at 21:57 (42 minutes after sunset), heading north. See Image 4.2 below for emergence/entry point (in red).



Image 4.2: Common Pipistrelle Emergence Point – Disused Stable; North Elevation

- 4.11 On the 24 September 2024, a single Common Pipistrelle emerged from beneath the canopy on the southern elevation of the Disused Stable at 19:21 (20 minutes after sunset), heading south. See Image 4.3 below for emergence/entry point (in red).



Image 4.3: Common Pipistrelle Emergence Point – Disused Stable; Southern Canopy

Camera Trap and Internal Statics

Disused Stables

- 4.12 The trap camera in August recorded low numbers (max. 2 No.) of Horseshoe bats using the stable for roosting.
- 4.13 The automated detector deployed internally recorded early GHS records (*i.e.* suggestive of day roosting) on 39 occasions and late GHS records (*i.e.* suggestive of night roosting) on 7 occasions (see Appendix 4 for further detail).
- 4.14 The automated detector deployed internally recorded early LHS records (*i.e.* suggestive of day roosting) on 4 occasions, late LHS records (*i.e.* suggestive of night roosting) on 20 occasions and no records on 22 occasions (see Appendix 4 for further detail).

Active Stables

- 4.15 A total of 27 GHS and 379 LHS records were recorded on the internal automated detector. Given the lack of droppings/feeding remains recorded within the stable and short periods of activity, this suggests that the Active Stables is not a GHS or LHS night roost.

Bat Activity Surveys

- 4.16 The NBW surveys recorded at least 8 bat species using the Site for foraging/commuting, these being Common Pipistrelle, Noctule, Myotis Sp., Serotine, Soprano Pipistrelle *Pipistrellus pygmaeus*, Greater Horseshoe, Brown Long-eared *Plecotus auritus*, and Lesser Horseshoe. The automated detectors also recorded the presence Barbastelle.
- 4.17 As shown in Table 4.3 below, the majority of these records came from Pipistrelle species (57.67%) and NLS (33.39%), with all other species combined accounting for <10%.

Table 4.3: Total Bat Passes Recorded

Species / Species Group	% Total of Passes
Pip Sp	57.67
NLS	33.39
Myotis Sp	4.82
GHS	2.70
LHS	1.25
Barbastelle	0.14
Vesper	0.04

Pipistrelle Species

- 4.18 A total of 22,974 Pipistrelle passes were recorded across 50 nights analysed. Table 4.4 below shows records within the early and late time periods (periods 1 and 14) which suggests there are roosts for Pipistrelle bats within the vicinity of the Site, which corresponds with a Common Pipistrelle day roost being recorded at the disused stables during the bat emergence/re-entry surveys.

Table 4.4: Pipistrelle Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	471	2,886	1,468	1,009	1,326	1,350	10,579	369	362	537	910	1,545	162	0

- 4.19 Table 4.5 below shows the average number of Pipistrelle passes by month / location. It shows that the highest Pipistrelle activity occurred to the west of the Site (location A5), with an average of 173.98 passes per night over the course of deployment period. This is partly due to the higher activity recorded in August, with an average of 620.6 passes per night (3,103 passes overall). The vast majority of these records are suggestive of foraging behaviour (*i.e.* belts of consecutive passes made by a single/low No. of bat/s).
- 4.20 Common Pipistrelle bats were occasionally recorded across the Site during the NBW surveys, including foraging along the western boundary.

Table 4.5: Average Pipistrelle Passes/ Night

Location	April	May	June	July	August	September	October	Average
A1	7.75	6.38	21.20	12.33	10.80	5.40	1.40	10.48
A2	7.63	26.38	12.20	13.56	9.20	8.00	61.60	18.20
A3	0.88	1.13	4.50	2.67	1.20	1.40	1.00	2.06
A4	14.13	50.63	91.50	123.44	86.20	77.60	12.60	68.52
A5	19.88	173.50	151.40	202.56	620.60	128.80	13.60	173.98
A6	14.38	31.38	23.90	35.56	123.20	26.00	5.20	33.94
A7	9.38	82.75	15.60	13.11	14.00	5.80	12.80	23.48
A8	9.75	22.13	21.90	17.22	13.60	14.80	5.60	15.98
A9	125.63	153.25	164.50	82.22	149.00	46.00	10.20	112.84
Average	23.26	60.83	56.30	55.85	114.20	34.87	13.78	51.05

Noctule, Leisler's, Serotine (NLS)

- 4.21 A total of 13,300 NLS passes were recorded across 50 nights of deployment. Table 4.6 below shows 73 records before sunset and 1 record after sunset, with the majority of these passes recorded at location A1 (western boundary of northern field) and A3 (centre of northern field). Which suggest a NLS roost is present within the vicinity of the Site / to the north.

Table 4.6: NLS Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	73	1,119	2,692	1,801	1,071	709	340	3,341	129	113	213	578	765	355	1

- 4.22 Table 4.7 below shows the average number of NLS passes by month / location. It shows that the highest average NLS activity occurred in June (81.02 passes per night), with the highest average passes by location recorded within the centre of the southern field / location A7 (115.4 passes per night). The majority of these passes are associated with commuting behaviour (*i.e.* single passes), with records suggestive of foraging activity recorded only occasionally. Both foraging and commuting activity by Noctule and Serotine were recorded during the NBW surveys.

Table 4.7: Average NLS Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	6.38	4.88	74.40	75.00	5.80	8.80	1.60	31.80
A2	0.88	4.88	32.40	24.22	5.60	4.20	0.80	12.82
A3	3.50	5.63	71.10	27.33	4.80	8.00	1.00	21.98
A4	17.75	31.75	43.50	31.33	17.20	10.60	1.40	25.18
A5	4.00	17.88	104.60	53.00	22.20	14.40	2.20	37.84
A6	4.00	19.50	81.00	38.89	18.00	13.80	0.80	30.22
A7	4.88	10.50	115.40	50.11	8.60	5.60	3.20	36.30
A8	11.88	12.63	101.30	44.67	14.40	29.40	0.80	36.68
A9	8.63	10.88	105.50	28.44	12.80	22.80	2.80	33.18
Average	6.88	13.17	81.02	41.44	12.16	13.07	1.62	29.56

Myotis Species

- 4.23 A total of 1,921 Myotis passes were recorded across 50 nights of deployment. Table 4.8 below shows that Myotis activity was recorded in timecodes 2 (21 – 40 minutes after sunset) and 12 (40 – 21 minutes before sunrise), which suggests there are roosts for Myotis bats within the vicinity of the Site.
- 4.24 Whilst detector A1 recorded the highest records within timecode 2 (14/39), typically the earliest records were made by detectors A4 and A6. This is also the case for all the records within timecodes 2 and 3, with A4 and A6 recording the first Myotis record on Site on 28 out of 38 nights (i.e. no records within these time periods on 12 nights), with the earliest record being at timecode A2 on 5 occasions, timecode 5 on 4 occasions and timecode 1 on 1 occasion. This suggest that Myotis are not commuting into the Site early from the south, certainly not on the western side of the Site (on the basis the detector at A5 would otherwise have recorded the earliest record more often).

Table 4.8: Myotis Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	39	135	163	161	83	1,086	57	38	81	68	10	0	0

- 4.25 Table 4.9 below shows the average number of Myotis passes by month / location. It shows that the highest Myotis activity was recorded in August (9.98 passes per night) and September (11.87 passes per night). The higher September average is partly due to the higher Myotis activity recorded at location A9 (23.6 passes per night). The majority of these records are suggestive of commuting behaviour. The NBW surveys recorded both foraging and commuting activity by Myotis, with the vast majority recorded close to the eastern boundary of the Site.
- 4.26 On average the detectors at A6 and A5 recorded the highest Myotis activity. The higher activity recorded at location A5 in August (40.8 passes per night) is due to a single night (20 August 2024) of higher foraging activity (as suggested by 122 continuous records between 21:31-21:50, with no corresponding records at detectors A4 or A6). On this night Myotis activity was recorded much earlier on Site at detectors A6, A1, A2 and A9 (in order from earlier-later). Which all suggests this higher activity is not evidence that the western boundary of the Site is a significant/landscape commuting corridor for

Myotis bats. Throughout the NBW surveys no Myotis records were made at locations 3 or 10 on the Southern transect.

- 4.27 The higher activity recorded at location A6 in September (18.0 passes per night) is as a result of 28 passes on the 20th and 32 passes on the 21st. These were sporadic records not suggestive of foraging behaviour. With there being no corresponding records prior at detector A5 on either night, this also suggests this higher activity is not from Myotis bats commuting up from the south and heading north.
- 4.28 The higher activity recorded at location A6 in August (17.8 passes per night) is due to 48 passes being recorded on the 22nd during 2 likely foraging bouts. Again with no corresponding earlier records at A5.
- 4.29 The higher activity recorded at location A5 in September (12.6 passes per night) is as a result of 18 passes on the 20th and 22 passes on the 21st. These were sporadic records not suggestive of foraging behaviour. With there being no records recorded prior at detector A5 on either night, this also suggests this higher activity is not from Myotis bats commuting up from the south and heading north.

Table 4.9: Average Myotis Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.75	1.88	1.10	1.44	8.40	10.80	3.40	3.16
A2	0.50	1.50	1.40	1.44	3.00	7.80	3.60	2.30
A3	0.63	0.63	0.50	0.33	1.40	4.80	4.20	1.40
A4	3.00	4.25	5.00	5.11	5.60	7.60	4.00	4.80
A5	1.13	1.13	2.20	3.78	40.80	12.60	6.20	7.44
A6	3.50	2.63	6.60	8.78	17.80	18.00	6.60	8.12
A7	0.50	1.75	1.40	2.78	4.20	5.00	6.20	2.68
A8	1.00	1.50	1.20	4.56	4.60	16.60	3.40	3.92
A9	1.88	2.75	1.40	1.78	4.00	23.60	5.00	4.60
Average	1.43	2.00	2.31	3.33	9.98	11.87	4.73	4.27

Greater Horseshoe

- 4.30 A total of 1,074 GHS passes were recorded across 50 nights of deployment. Table 4.10 below shows records within the early and late time periods (periods 2 and 12). The first or last record of the night was always recorded at detectors A4, A5 or A6, which all corresponds with a GHS roost being recorded at the disused stables.

Table 4.10: GHS Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	82	141	65	46	43	419	14	27	57	127	53	0	0

4.31 Table 4.11 below shows the average number of GHS passes by month / location. It shows that the highest activity was recorded in October (5.22 passes per night) and May (4.01 passes per night). The higher October and May averages is partly due to the higher activity recorded at location A6 in October (11.00 passes per night) and in May (13.25 passes per night). This also resulted in location A6 having the highest overall average activity. These higher averages appear likely as result of GHS foraging activity shortly after/before GHS would have been expected to emerge/return to roost at the disused stables. This also appears to be reason for the higher averages at A5 in May, June and July.

Table 4.11: Average GHS Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.00	0.13	0.40	0.22	1.40	0.20	8.60	1.16
A2	0.00	1.13	1.10	0.56	3.00	0.60	5.00	1.36
A3	0.00	0.38	0.30	0.67	0.40	0.80	0.60	0.42
A4	0.50	5.75	2.60	1.56	2.40	1.40	3.40	2.52
A5	0.63	6.63	9.20	8.89	1.20	4.80	2.80	5.48
A6	0.25	13.25	4.10	3.00	4.40	6.00	11.00	5.66
A7	0.38	0.63	0.50	1.00	0.60	0.40	6.60	1.20
A8	0.25	6.50	0.20	1.11	1.20	2.80	7.20	2.44
A9	0.13	1.75	1.70	0.33	0.80	2.80	1.80	1.24
Average	0.24	4.01	2.23	1.93	1.71	2.20	5.22	2.39

4.32 Only 2 No. GHS bats were observed during the NBW surveys; one approximately 30m south of the Disused Stable on the 05 August 2024 (28 minutes after sunset) and one at listening point 5 (north transect; 38 minutes after sunset) on the 24 October 2024.

Lesser Horseshoe

4.33 A total of 497 LHS passes were recorded across 50 nights of deployment. Table 4.12 below shows records within the early and late time periods (periods 2 and 12). The first or last record of the night

was recorded at A4 on 4 occasions, A6 on 2 occasions, A1 on 1 occasion and at A2 on 1 occasion, which all corresponds with a LHS roost being recorded at the disused stables.

Table 4.12: LHS Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	19	10	14	41	29	356	10	4	5	5	4	0	0

- 4.34 Table 4.13 below shows the average number of LHS passes by month / location. It shows that the highest activity was recorded in September (3.47 passes per night) and the highest average activity recorded at A6 and A9. This is in part due to the higher averages recorded at location A9 (10.2 passes per night) and location A6 (7.2 passes per night) in September.
- 4.35 The higher activity recorded at A9 in September is due 22 records on the 20th and 14 records on the 21st. The higher activity recorded at A6 in September is due 15 records on the 21st. These all appear due to a combination of foraging and commuting activity. This is also the case for the activity at A4 in October.
- 4.36 At A4 in October, and at A6 in May and September, there are rarely any corresponding records at A5, which suggests (along with lower average recorded at A5) that the western boundary of the Site is not a significant/landscape commuting corridor.

Table 4.13: Average LHS Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.25	0.00	0.00	0.22	0.00	0.60	1.00	0.24
A2	0.38	0.75	0.40	0.00	2.60	5.80	0.40	1.14
A3	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.02
A4	0.13	0.38	0.30	1.56	3.40	1.60	6.80	1.60
A5	0.00	0.50	0.30	1.00	0.80	3.00	1.20	0.82
A6	1.50	5.25	1.40	2.11	4.80	7.20	1.00	3.04
A7	0.00	0.13	0.10	0.44	0.00	0.00	0.20	0.14
A8	0.00	0.00	0.30	0.11	0.20	2.60	2.60	0.62
A9	1.63	0.75	0.50	0.44	2.00	10.20	5.40	2.32
Average	0.43	0.86	0.37	0.65	1.53	3.47	2.07	1.10

4.37 A single LHS bat was recorded commuting along the eastern boundary during one of the NBW surveys.

Barbastelle

4.38 A total of 56 Barbastelle passes were recorded across 50 nights of deployment. Table 4.14 below shows that the 44 of these occurred during the middle of the night / timecode 7, with them rarely recorded in the other timecodes. This suggests there is no significant roost within the vicinity of the Site.

Table 4.14: Barbastelle Passes / Timecode

Timecode	Before sunset	0-20 after sunset	21-40 after sunset	41-60 after sunset	61-80 after sunset	81-100 after sunset	101-120 after sunset	Middle of the Night	120-101 before sunrise	100-81 before sunrise	80-61 before sunrise	60-41 before sunrise	40-21 before sunrise	0-20 before sunrise	After sunrise
Count	0	0	0	3	1	1	2	44	5	0	0	0	0	0	0

4.39 Table 4.15 below shows the average number of Barbastelle passes by month / location. It shows that the highest activity occurred in June (0.29 average passes per night). This is in part due to the higher averages recorded at location A5 (0.8 average passes per night) and A7 (0.8 average passes per night), which are mostly associated with commuting.

Table 4.15: Average Barbastelle Passes / Night

Location	April	May	June	July	August	September	October	Average
A1	0.00	0.13	0.00	0.11	0.00	0.20	0.00	0.06
A2	0.13	0.13	0.10	0.22	0.00	0.40	0.00	0.14
A3	0.00	0.00	0.30	0.00	0.00	0.20	0.00	0.08
A4	0.13	0.00	0.00	0.00	0.00	0.20	0.00	0.04
A5	0.00	0.00	0.80	0.11	0.20	0.00	0.00	0.20
A6	0.00	0.00	0.30	0.44	0.20	0.20	0.00	0.18
A7	0.00	0.00	0.80	0.00	0.00	0.00	0.20	0.18
A8	0.00	0.00	0.20	0.11	0.00	0.60	0.20	0.14
A9	0.00	0.00	0.10	0.22	0.20	0.00	0.20	0.10
Average	0.03	0.03	0.29	0.14	0.07	0.20	0.07	0.12

4.40 No Barbastelle were recorded during the NBW surveys.

Brown Long-eared

- 4.41 The NBW surveys recorded low number of Brown Long-eared bat using the Site for foraging and commuting, with none recorded on the automated detectors.

5.0 Conclusions

- 5.1 Over the course of the survey season, the bat surveys confirmed that the Disused Stable supports roosts for Greater Horseshoe and Lesser Horseshoe bats. A review of the automated data and trail camera footage identified that the Disused Stable was frequently used by low numbers (at least 2 No. individuals) of Greater Horseshoe bats for day roosting (as evidenced by early automated records around sunset, light sampling during emergence surveys) and occasionally used by Greater Horseshoe bats for night-roosting (as evidenced by first detection late into night, re-entry by 2 no. GHS bats during emergence survey). During the internal inspection, a single Lesser Horseshoe bat was recorded day roosting within the Disused Stable. This was confirmed by the automated data, which recorded that the Disused Stable was used occasionally by LHS bats for day roosting (as evidenced by early automated records around sunset). The automated data also recorded late records of LHS bats frequently within the disused stable (*i.e.* suggestive of night roosting).
- 5.2 The bat emergence/re-entry Surveys also confirmed that the Disused Stable supports day roosts (low numbers / non-maternity) for Common Pipistrelle bats.
- 5.3 There were no bat roosts recorded at the Active Stable.
- 5.4 The bat activity surveys suggested there are also likely roosts for NLS and Myotis within the vicinity of the Site.
- 5.5 Overall bat activity was dominated by Pipistrelle bats and NLS, with all other species combined accounting for <10% of the recorded activity.
- 5.6 With regards the three species covered by the Trowbridge Bat Mitigation Strategy they were all recorded foraging and commuting across the Site, but there was no evidence to suggest the western boundary of the Site is a significant/landscape commuting corridor for any of these species (as had been suggested in consultation responses for planning application PL/2022/07977).



Key

- Automated Detector Locations
- Tree GLTAs
- Transect North
- Transect South
- Listening Points - Transect South
- Listening Points - Transect North

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Appendix 1: Photographs

Photo No.	
1.	 View looking west across northern field
2.	 View looking north-east across northern field

3.



View looking south-east across southern field

4.



View looking south-west across southern field

5.



South facing knot hole on southern stem of T1.

6.



Wound feature with exposed heartwood on west side of main stem of T58

7.



Woodpecker holes on main stem of T59

8.



North view of Disused Stable

9.



South view of Disused Stable

10.



View looking into the open stable unit of the Disused Stable

11.	 Roof void above attached house of Disused Stable
12.	 View looking down southern canopy void of Disused Stable

13.



Open roof void above stable kitchen of Disused Stable

14.



North-west view of Active Stable

15.



Internal view of Active Stable

16.



South-east view of Hay Store

17.



Gap where vertical wall tile is missing on southern elevation of Disused Stable

18.



Hole where end of fascia board is missing at south-west corner of Disused Stable

19.



Gap at side of fascia board on west elevation of Active Stable

Appendix 2: Camera Coverage

Survey No. (Date)	Description/Evidence
Survey 1 (29/05/2024)	 Active Stable; north-west view
	 Active Stable; south-west view

Disused Stable; south view (West)

	 Disused Stable; south-west view
Survey 3 (18/07/2024)	 Disused Stable; north view



Disused Stable; south view



Disused Stable; south-west view

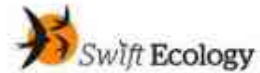
Survey 4 (24/09/2024)	 Disused Stable; north view
	 Disused Stable; south view



Disused Stable; south-west view

Appendix 3: DNA Analysis Results

Order Number: 2881



Samples submitted

Sample Code	Multi-species?	Sample Type	Date Sample Found	Species Group	Site postcode/ post town /grid ref	Site description / comments (Optional)	Suspected identity of species
SEL-2881-1	Yes	Faecal	18/04/2024	C. Bats	BA14 7QS		

Analysis Results

Sample Code	DNA Extraction Code	Species Identified	ID Method	Ct value	% match
SEL-2881-1	EG-2024-1353	Rhinolophus ferrumequinum (Greater horseshoe bat) Note: All UK bat species tested for - only a single species detected in this sample.	qPCR	20	

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Appendix 4: Disused Stable Automated Detector Deployment Dates and Horseshoe Bat Activity

Deployment Dates	Greater Horseshoe	Lesser Horseshoe
June		
21	D	A
22	D	N
23	D	N
24	D	N
25	D	N
26	D	N
27	D	A
28	N	N
29	D	N
30	D	N
July		
19	N	A
20	D	A
21	D	N
22	N	A
23	D	A
24	D	A
25	D	A
26	N	A
27	N	A
28	D	A
29	N	A
30	N	A
August		
19	D	D
20	D	A
21	D	D
22	D	D
23	D	D
24	D	A
25	D	N
26	D	N
27	D	A
28	D	N
29	D	N
30	D	A
31	D	N
September		
01	D	N
20	D	N
21	D	N
22	D	N
23	D	A
24	D	N
25	D	A
26	D	N
27	D	A
28	D	A
29	D	A

*D = Day Roosting, N = Night Roosting, A = Absent

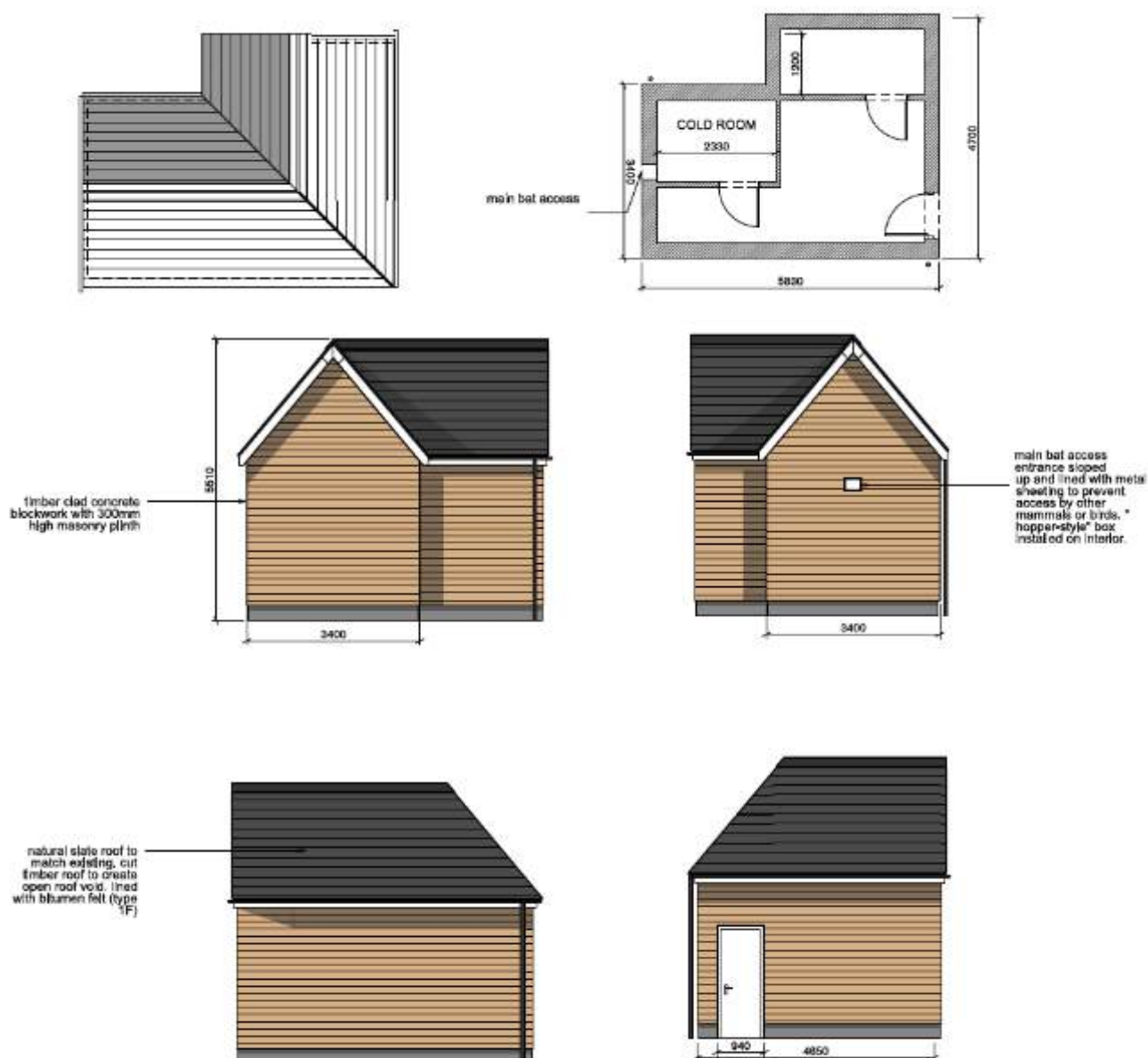
NICHOLAS PEARSON ASSOCIATES

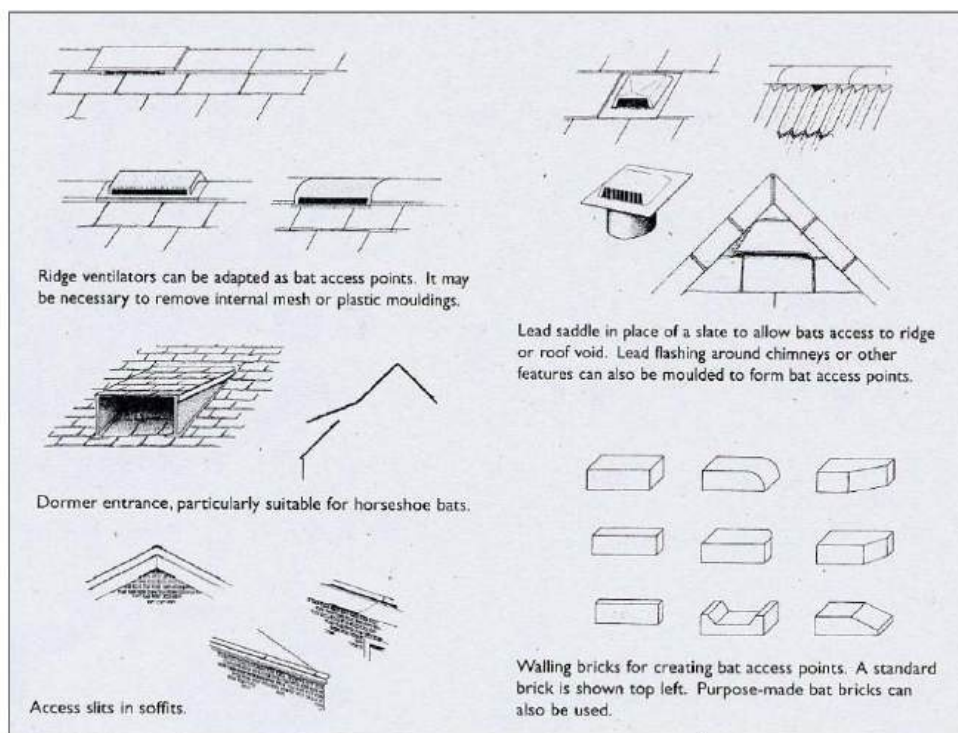
ENVIRONMENTAL DESIGN | LANDSCAPE ARCHITECTURE | ECOLOGY | VISUALISATION

npaconsult.co.uk npavisuals.co.uk +44 (0)1225 876990

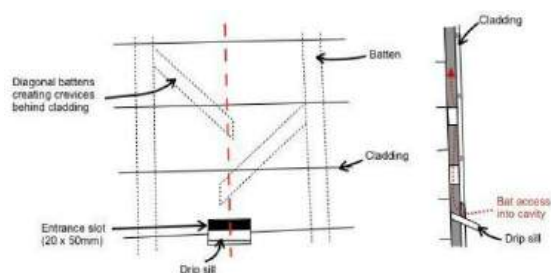
The Farm House, Church Farm Business Park, Corston, Bath BA2 9AP

Appendix 9 – Example Bat Mitigatory Roost and Enhancement Features





Examples of Bat Access Features



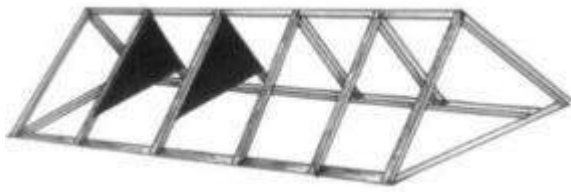
Example of cladding based crevice roost



Examples of externally mounted and integrated features



Example of bat access slot



Internal 'Baffle Boards'



Example of 'Hot Box'

Appendix 10 – Works That May Impact Roosting Bats

This form should be completed prior to commencing any works on the building and prior to applying for a licence. It does not relate directly to the planning process and is included in this report for information only.

As part of the bat licence process, it is important for the ecologist to have a detailed understanding of the works involved with the development. An ecologist must be contacted to seek further advice before undertaking any of these works to ensure no adverse impacts occur to roosting bats. The table below gives a summary of these works, please fill out this table and return to the Ecologist before works commence.

Type/ location of works	Impacted/ required?	Brief description of works	Time schedule
For example: Soffits	✓	Soffits to be removed and replaced	Winter 202X
Soffits/ barge boards			
Wall tops/ eaves			
Lead flashing			
Windows and doors			
Guttering			
Porch			
Wood/ tile cladding			
Chimney			
Tiles e.g. repair/ removal/ replacement			
Re-thatching			
Felt/ lining removal/ replacement			
Mortar repair/ replacement			
Repairs to walls, shingles and weatherboards, and other gaps			
Installing insulation including cavity wall insulation			
Roof joists			
Timber treatment			
Dry rot treatment			
Controlling flies, other insects and 'pests'			
Rewiring, plumbing and other service work within cellars and/ or loft void			
Removing internal ceilings			
Any other works within the cellar/ loft void			
Use of scaffolding poles, plastic sheeting or mesh			
Works that cause vibration/ noise near the roost			
Existing bat features e.g. bat boxes			
Building site lighting			
Vegetation removal within proximity of works			
Any other works you may feel are relevant			

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