

1st Chandler's Ford Scout Group, Brickfield Lane, Chandler's Ford, Eastleigh, SO53 4DP

Bat Report

July 2026

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Bat Report

1st Chandler's Ford Scout Group, Brickfield Lane, Chandler's Ford, Eastleigh, SO53 4DP
for
1st Chandler's Ford Scout Group & A&A Fitness

Reference: 1st Chandler's Ford Scout Group	
Revision	Issue date:
0	19/06/26
1	10/07/26

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions, scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

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1. This report provides details from bat surveys carried out by Hampshire Ecological Services Ltd for 1st Chandler's Ford Scout Group & A&A Fitness in connection with a proposal to demolish the existing buildings and construct a new building at 1st Chandler's Ford Scout Group, Brickfield Lane, Chandler's Ford, Eastleigh, SO53 4DP (approximate Ordnance Survey Grid Reference SU 431 201). The site consists of a large building and a shed with parking and associated gardens. The location of the site is shown in *Figures 1* and *2* and a plan of the buildings surveyed is shown in *Figure 3* in *Section 6*.
2. An internal and external survey of the buildings was carried out by ecologist Finn Parker MSci (Hons) accredited under bat licence 2025-83352-CL18-BAT on the 18th May 2026.
3. The community building is a single-storey timber building with a pitched, asbestos cement roof. Full details of this building are given in *Table 4.2.1*. No bats or evidence of bats was found and the majority of the roof appears in fairly good condition. However, due to the age of the roof there are potential access points on all elevations of the roof and soffits as well as potential external roosting features where the soffits are damaged. Therefore, the building is classed as having moderate suitability to be used by roosting bats. Details of potential bat access points and external roost locations are illustrated in *Images 4.3.1.1 – 4.3.1.4*.
4. In line with Gov.uk [Bats: surveys and mitigation for development projects](#) and BCT's *Bat Surveys for Professional Ecologists Good Practice Guidelines 4th edition*, two bat activity (dusk emergence) surveys were carried out to determine the presence or likely absence of bats using the building as a roost. Details of the dates of the surveys, weather and personnel carrying out the surveys are given in *Sections 3.2.1* and *3.2.2*.
5. No bats were observed emerging and/ or re-entering the building during the bat activity (dusk emergence) surveys. Therefore, no mitigation or compensation measures are required, and works can take place on this building without further survey or constraints regarding bats (subject to any planning constraints).
6. Common pipistrelles and noctule bats were recorded flying in the vicinity of the community building and on the site indicating the weather was suitable for bat activity. The full data from the bat activity survey is given in *Appendix D* and plans illustrating the surveyor locations and bat activity (observations only) during the surveys are given in *Figures 4 & 5* in *Section 6*.
7. The shed is a single-storey concrete building with a pitched, plastic roof. No bats or evidence of bats was found and the roof appears well-sealed and in good condition. Additionally, there is no roof void and the construction of the building means it is subject to wide fluctuations in temperature. In addition, dead *Hedera helix* (Ivy) stems are obscuring any potential flight paths to the raised plastic roofing on the north elevation which provides the only roosting location on the building. Therefore, the shed is classed as having negligible suitability to be used by roosting

bats and may be demolished without survey or constraint regarding bats (subject to any planning constraints).

8. The two *Quercus robur* (Pedunculate Oak) trees will be retained under the current proposed plans, however due to their proximity to the community building set to be demolished they were surveyed as a precautionary measure. The trees were both assessed as having no potential roost features (PRFs), following the criteria in *Table 3.2.4.2*. Despite their maturity, the trees lack any crevices, delaminated bark or split branches that could provide potential roosting features for bats. Their locations are at *Target Notes 1 & 2* on *Figure 3* in *Section 6* and are shown in *Photo 1* in *Section 7*.
9. The mature *Quercus robur* (Pedunculate Oak) trees in the rear garden as well as the native hedgerow on the south boundary provide suitable bat foraging habitat in the immediate vicinity of the buildings. These connect a network of hedges and tree-lines to the east and south of the site, which in turn connect the site to areas of high-quality foraging habitat in the wider landscape such as Titlark Copse woodland c.600m west. The connectivity around the edges of the site (the trees and hedges) will be retained and as such no impact to commuting and foraging bats (and hence bat populations in the local area) is anticipated.
10. Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto vegetation (particularly the trees), and security lights should operate on a timer, to avoid any negative impact on bats. Any lighting installed should avoid spillage of greater than 0.1 lux (typical moonlight/ cloudy sky) onto any vegetation. This is because bats are very sensitive to light. However, it is in a highly lit area and as such this may not be possible due to existing light spill. If this is the case any new lighting should not increase the level currently experienced and, if at all possible, should reduce any light spill due to the type of lighting used and the use of protection such as hoods and cowls. The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.
11. All of the trees, hedges and shrubs provide suitable habitat for nesting birds, as does the building. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). No vegetation is currently proposed to be removed. Should this change, any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation. If any active nests are found during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use *i.e.* the young have fledged and left the nest). Any active nests on the buildings must be retained and work must be delayed in that area until the young have fledged and left the nest.

12. It is a requirement under national planning policy to provide ecological enhancements to sites requiring planning permission in order to provide a net gain in biodiversity. Therefore, the following enhancement measures are proposed:
- The new building will be enhanced for bats using at least one integrated bat box/ brick (*e.g.* a PRO UK Build-in WoodStone Bat Box, a Habibat™ Bat Box, an Ibstock Enclosed Bat Box, a Schwegler Bat Tube, or similar), which provides a cavity that is incorporated into the external build structure to offer roosting space for bats. This bat box will be placed as high as possible (ideally 2.5m or above, facing south or south-east) with a clear exit path.
 - A minimum of two swift boxes will be built into the walls of the new building. These boxes are also suitable for sparrows which are also an IUCN Red List Bird of Conservation Concern and listed on *Section 41* of the *Natural Environment & Rural Communities Act 2006*). External swift boxes can be supplied and installed by Hampshire Swifts <https://www.hampshireswifts.co.uk> and a new soffit design is also available.
 - A woodstone bird box suitable for use by blue tits and great tits will be erected on one of the oak trees.
 - New grassland will be created to the rear of the new building.
 - Scrub consisting of native shrubs will be created on the east and west sides of the site.
13. The bird boxes to be erected within the site, with additional details on siting them to increase chances of occupancy, are summarised in *Table 5.6.4.1*. Additional bird boxes from *Appendix C Section 11.3* can also be installed on site.
14. Other enhancements for wildlife that the owners of the site may choose to employ are given in *Appendix C*. However, these are not proposed as enhancements for the purposes of the planning application, but only for information purposes.
15. This survey data is valid for a maximum of 12 months. Bats frequently move around and adopt new roosting sites, therefore if more than 12 months elapse it may be advisable to conduct further survey work to obtain up-to-date information, thereby ensuring protected species compliance.
16. According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are designated sites nearby (see *Table 4.1.1.1* in *Section 4.1.1*). None of these will be directly affected by this small-scale development and all links will be maintained.
17. The site is within 5km of Emer Bog SAC (*c.*3200m north-west), the River Itchen SAC (*c.*2650m east), and Solent & Dorset Coast SPA (*c.*4810m south). As a result of its proximity to these designated sites, the impacts of this small-scale development on the SACs and SPA must be considered. Although works will involve replacing the existing community building with a new larger community building, it is unlikely to cause an increase in the recreational pressure, or pollution, on the internationally designated sites as it will remain a non-residential building.

18. According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been five bat European Protected Species (EPS) licences granted within c.2km of the site. Due to their location, it is unlikely that the current proposals will impact these bat populations.

INTRODUCTION

2.1 General

This report provides details from bat surveys carried out by Hampshire Ecological Services Ltd for 1st Chandler's Ford Scout Group & A&A Fitness in connection with a proposal to demolish the existing buildings and construct a new building at 1st Chandler's Ford Scout Group, Brickfield Lane, Chandler's Ford, Eastleigh, SO53 4DP (approximate Ordnance Survey Grid Reference SU 431 201). The location of the site is shown in *Figures 1 and 2 in Section 6*.

2.2 Site description

The site consists of a large building and a shed with hardstanding parking and side and rear gardens. There is amenity grassland (lawn) along the west side of the site with common species including *Agrimonia eupatoria* (Agrimony), *Plantago lanceolata* (Ribwort Plantain), *Primula vulgaris* (Primrose) and *Rumex crispus* (Curly Dock). There are two large *Quercus robur* (Pedunculate Oak) trees in the rear garden as well as a *Fraxinus excelsior* (Ash) adjacent to the west boundary. The east side of the site is strewn with debris and discarded waste with *Rubus fruticosus* agg. (Bramble) growing throughout. In addition, there is a native *Crataegus monogyna* (Hawthorn) and *Quercus robur* (Pedunculate Oak) hedge on the south boundary. The buildings surveyed are shown on the plan in *Figure 3 in Section 6*.

The site is on the north side of Brickfield Lane, on the south side of Chandler's Ford. The immediate surroundings consist of an industrial estate to the west and residential housing to the east. In the wider landscape, beyond the housing estates of Chandler's Ford, agricultural land (arable and grassland) dominates the landscape together with fragmented patches of woodland and private dwellings/ farms. This land usage continues until larger towns are reached such as Southampton to the south and Winchester to the north. In addition, the River Itchen is located c.2650m to the east.

2.3 Proposed activities

This survey was carried out in connection with a proposal to demolish the existing buildings and construct a new building.

2.4 Current planning status

Planning permission is being applied for at this site.

2.5 Objectives of the survey and report

The survey by Hampshire Ecological Services Ltd included internal and external inspections of the buildings to identify bat roost suitability and to systematically search for bats and evidence of bats. Subsequently, two bat activity survey was carried out. The aim was to identify if bats were present or likely to use the site for roosting.

The surveys and the report writing were carried out in accordance with *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition* (Collins, 2023). Any deviations from the guidelines are justified in the relevant sections.

Additionally, all ecological surveys should be completed in line with Natural England's *Standing Advice for Local Authorities*

(<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/advice.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (i.e. in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

2.6 *Structure of this report*

This report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* contains the figures including:
 - *Figure 1* gives aerial photographs showing the site location;
 - *Figure 2* gives an Ordnance Survey map showing the location of the site;
 - *Figure 3* gives a site plan showing the buildings surveyed; and
 - *Figures 4 & 5* illustrate the surveyor locations and the bat activity recorded during the bat activity survey.
- *Section 7* gives photographs of the site;
- *Section 8* lists the references;
- *Appendix A* gives information on relevant legislation;
- *Appendix B* gives information on bat ecology; and
- *Appendix C* lists other enhancements for wildlife (for information, not part of the planning application); and
- *Appendix D* gives the data from the bat activity surveys.

METHODS

3.1 Desk study

The *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for designated sites on or adjacent to the site including Local Nature Reserves (LNRs), National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. The search area was 5km for SAC and SPA sites and 2km for LNRs, NNRs, Ramsar sites and SSSIs, as specified in Hampshire's *Biodiversity Checklist*. The search area is also 500m for Sites of Importance to Nature Conservation (SINCs) and ancient semi-natural and ancient replanted woodlands.

In addition, the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for granted European Protected Species (EPS) licences in relation to bats within 2km of the site.

A data search from the Hampshire Biodiversity Information Centre (HBIC) has not been commissioned by the client in relation to this site.

3.2 Field survey

3.2.1 Date, time and weather

An external and internal inspection of the buildings was carried out during the daytime on the 18th May 2026. The weather conditions during the survey were 12°C and damp with 100% cloud cover and no breeze (Beaufort scale 0).

Subsequently, one bat activity (dusk emergence) survey was carried out. Details of the weather, date and times of this survey are given in *Table 3.2.1.1*.

Table 3.2.1.1. Date, times and weather conditions during the bat activity surveys.

Date	Start time	End time	Sunset/ sunrise	Temperature at start & end (°C)	Wind (Beaufort scale)	Cloud Cover (%)
25/05/26	20:47	22:32	21:02	24 & 18	2	0
15/06/26	21:06	22:51	21:21	16 & 15	2	100

3.2.2 Personnel

The internal and external inspections were carried out by Finn Parker MSci (Hons) who is a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), is experienced in undertaking bat roost surveys and is accredited under Bat Class Licence Registration number 2025-86835-CL18-BAT.

The first bat activity (dusk emergence) survey was carried out by Bailey Riches and Seth Winter. Bailey is accredited under Bat Class Licence Registration number 2025-83352-CL18-BAT. The second bat activity (dusk emergence) survey was carried out by Rachel Major and Madeline Hawke. Rachel Major is accredited under Bat Class Licence Registration number 2025-83352-CL18-BAT. All surveyors are experienced in carrying out bat surveys using detectors and in using night-vision aids (NVAs).

This report was reviewed by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with 25 years of experience in ecological consultancy and Victoria Russell MCIEEM who is also a full member of the CIEEM and multi-species licence holder with over 28 years of experience in ecological consultancy.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

3.2.3 *Assessment of current bat roost suitability*

Because bats are crevice-dwelling mammals it is often difficult to thoroughly inspect buildings for bats and evidence of bats. Examples are where bats roost between the roofing felt and tiles or slates, around window frames and behind bargeboards. These areas cannot be inspected, but a surveyor would know that bats might roost here because there are places where bats could gain entry. A pipistrelle bat is small enough to fit into a match box and can roost in gaps just 14-20mm wide.

The buildings were assessed for their **bat roost suitability** according to the following factors that influence the likelihood of bat roosting:

- Surrounding habitat: whether there are potential flight-lines and bat foraging areas nearby.
- Construction detail: the type and construction of architectural features such as attics, bargeboards, soffit boxes, lead-flashing, cavity walls and hanging tiles that could be used by roosting bats. Some construction details and materials are more favourable to bat occupation than others.
- Building condition: whether the building has no roof or has a sound roof without any potential bat access points.
- Internal conditions: bats favour sheltered locations with a stable temperature regime, protection from the elements and little wind/light/rain penetration.
- Potential bat access points: whether there is flight and crawl access.
- Potential roosting locations: the presence of bat-accessible voids, cracks and crevices.

The risk of bat roosts being present will be lower where structures have:

- Urban setting with little greenspace.
- Heavy disturbance.
- Small, cluttered roof void (particularly for brown long-eared bats).

- Modern construction with few gaps or crevices that bats can fly or crawl through (although pipistrelles may still be present).
- Prefabricated steel or sheet materials.
- Active industrial premises.

The above list provides generic criteria and there are exceptions to consider. For example, pipistrelle roost sites are often found in modern housing estates and therefore the absence of bats from such locations should not always be assumed.

Some information on bat ecology is included in *Appendix B*.

3.2.4 *Systematic inspection for bats or evidence of bats*

The buildings were assessed for their suitability to support roosting bats using the following access and inspection equipment: high-quality 10x42 binoculars; a 1,000,000 candlepower Clulite™ CB2 torch; an LED pen torch; and a 3.8m surveyors' ladder. Binoculars were employed to view higher areas such as potential access points on the outside of the buildings. A description of the buildings was recorded on a survey sheet and digital photographs were taken as a permanent record.

Visual, systematic examinations were made for bats and evidence of bats in the buildings, both internally and externally, of the following:

- roof beams, especially the ridge beam;
- cracks, crevices and sheltered voids;
- the floors and stored items;
- external features such as cracks and holes in the walls;
- wall and door surfaces;
- window and door frames; and
- wall bases.

Evidence of roosting bats includes droppings, feeding remains and dead bats, but also staining from urine and fur-oils, scratch marks, odour, the presence of bat-fly (Nycteribiid) pupal cases, and in some cases, the absence of cobwebs.

Bat droppings can prove beyond doubt that bats use a building and can help to identify roosting locations because piles often accumulate beneath roosting sites or entrance points. The location, size, shape, texture and colour of the droppings can be used to aid species identification. DNA analysis of droppings is also possible and samples are taken where necessary. The number and condition (age) of droppings can indicate the size of the roost and when it was last used.

Following the internal and external inspections, the buildings were assigned a level of suitability for being used by roosting bats. This was based on the criteria in *Table 3.2.4.1* (Collins, 2023).

Table 3.2.4.1. Bat Roost Suitability.

Suitability	Description of roosting habitats	Description of commuting and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (<i>i.e.</i> a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (<i>i.e.</i> no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).
Negligible*	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/ or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (<i>i.e.</i> unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, <i>i.e.</i> not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths, such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.

Suitability	Description of roosting habitats	Description of commuting and foraging habitats
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.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
*Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).		

Tree assessment

Detailed surveys of individual trees were not carried out. However, features such as holes and crevices that could be used by roosting bats were noted and their overall bat roost suitability was assessed. If any mature trees are subsequently to be removed or if tree surgery (*e.g.* crown-lifting) is required, then a bat survey at an appropriate time of year may be required.

Following the visual inspections, the trees are assigned a level of suitability for being used by roosting bats, depending on the presence of potential roost features (PRFs). This is based on the criteria in *Table 3.2.4.2* (Collins, 2023).

Table 3.2.4.2. Suitability of trees to be used by roosting bats.

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF1	A tree with at least one PRF present where the PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat
PRP2	A tree with at least one PRF present where the PRF is suitable for multiple bats and may therefore be used by a maternity colony.
PRF = potential roost feature	

Assessment of commuting and foraging habitat

Bats use a variety of habitats for foraging, in particular hedgerows, woods and waterbodies, and roost in a range of structures including buildings, trees, bridges and caves. Areas that could be used for foraging were noted.

The vegetation within the site is assigned a level of suitability for being used by commuting and foraging bats. This is based on the criteria in *Table 3.2.4.3* (Collins, 2023).

Table 3.2.4.3. Bat commuting and foraging habitat suitability.

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

3.2.5 Bat activity surveys

The bat activity surveys followed standard survey protocol in *Bat Surveys – Good Practice Guidelines, 4th edition* (Collins, 2023).

The surveyors were located with good views of the potential bat access points identified during the initial site visit. The timing of the visit, from early evening until after dark, was aimed at detecting active bats in the vicinity. When it was too dark for visual observation, electronic bat detectors were

used to listen for the ultrasonic sounds produced by bats either flying in the vicinity or emerging from the building. Surveyors were also equipped with Nightfox Whisker Night Vision Binoculars to supplement observations when light levels were too low for human eyesight. This detects heat and is more effective than standard night-vision equipment.

The surveyors recorded all bat activity encountered, but particular attention was focused on any bats emerging or re-entering. The results were documented by noting the time, bat species and behaviour (*e.g.* commuting, foraging, social interaction *etc.*). The surveyors were in constant contact via hand-held radios so that information could be easily exchanged regarding bat activity. The time between all surveyors' devices was synchronised so time data was recorded precisely.

Bat detectors are used so that surveyors can identify most bat species in the field, using the heterodyne output in combination with bat shape, flight pattern and behaviour. Surveyors were equipped with Echo Meter Touch™ detectors for real-time analysis. Bat calls were recorded using the Echo Meter app for later sonogram analysis using BatSound™ computer software (should it be required). Frequency-division, whereby the ultrasound is divided by 10 into an audible range, has a considerable advantage over time-expansion for survey work as it allows recordings to be taken in real time. This ensures that all bat activity is recorded.

Queried recordings were later replayed and analysed through BatSound™ software to ensure that any activity accidentally missed during the survey was recorded and times and location calculated. The species of bat was confirmed at this stage where possible. Bat detector surveys provide one of the most effective methods of identifying bat species and activity patterns. However, it is not always possible to identify bats down to species level, even with subsequent sound analysis.

Sufficient survey effort has been gathered through the activity survey, which have given us a full appreciation of the bat species using the site. No further bat activity (dusk emergence) surveys are considered necessary.

The latest *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition* (Collins, 2023) removes the need for pre-dawn surveys and supports the use of night-vision equipment as used above.

RESULTS**4.1 Desk study****4.1.1 Designated sites**

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is not designated or immediately adjacent to any designated areas of nature conservation. However, there are designated sites nearby. These are listed in *Table 4.1.1.1*.

Table 4.1.1.1. Statutory designated sites; non-statutory designated sites and ancient semi-natural and ancient replanted woodlands within the designated search areas of the site.

Level of designation	Designation	Name	Distance & direction from site
International	SPA	Solent & Dorset Coast	c.4810m south
	Ramsar	-	-
	SAC	River Itchen	c.2650m east
		Emer Bog	c.3200m north-west
National	SSSI	-	-
	NNR	Valley Park Woodlands	c.970m west
County	LNR	-	-
Local	SINC	-	-
	Ancient woodland	-	-

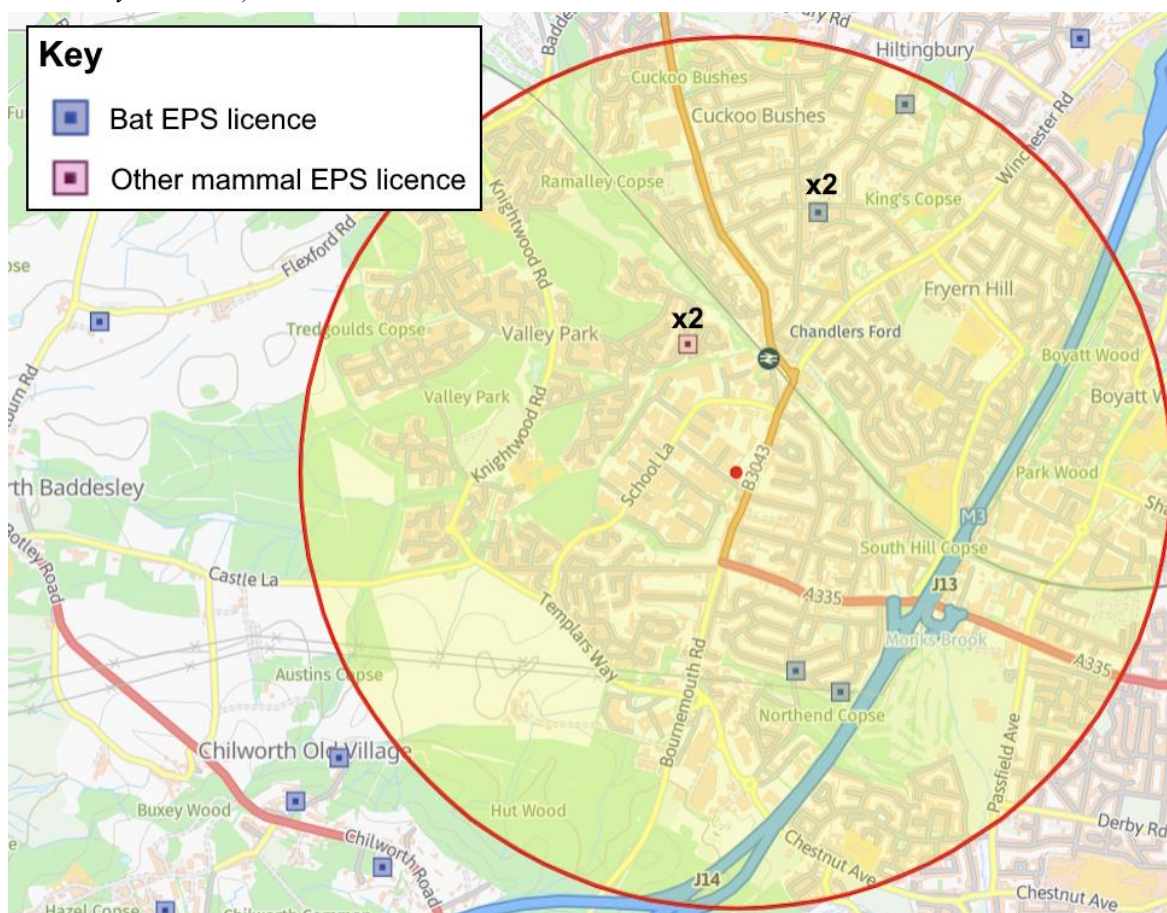
4.1.2 Bats

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been seven European Protected Species (EPS) licences granted within 2km of the site, five of which were for bats. These are listed in *Table 4.1.2.1* and their locations are shown in *Figure 4.1.2.1*.

Table 4.1.2.1. Granted European Protected Species (EPS) licences within 2km of the site.

Species subject of licence	Type of habitat effected	Date licence was granted	Distance & direction from site
Common pipistrelle	Resting place	02/05/2014	c.950m south
Common pipistrelle	Resting place	13/11/2009	c.1125m south-east
Common pipistrelle, soprano pipistrelle, brown long-eared bat, serotine bat	Resting place	22/03/2017	c.1250m north-east
		04/01/2018	
Soprano pipistrelle	Resting place	02/01/2021	c.1850m north-east
Dormouse	Resting place and breeding site	13/11/2014	c.620m north-west
		02/04/2013	

Figure 4.1.2.1. Location of sites with granted bat EPS licences within 2km of the site (site location marked by a red dot).



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4.2 Survey of buildings

The construction details and photographs of the buildings are summarised in Table 4.2.1. Additional photographs showing the gardens are given in Section 7.

Table 4.2.1. Summary of the buildings' construction details.

Type/Name	Community building	Shed
Description	A single-storey timber building with a pitched, asbestos concrete roof.	A single-storey concrete shed with a pitched, plastic roof.
No. of storeys	1	1
Roof type	Pitched	Pitched
Roof cladding	Asbestos concrete	Plastic
Ridge	Tile	None
Wall type	Timber cladding	Concrete
Exterior	Soffits (all elevations), timber lean-to with a plastic roof on the north-east corner.	Dead ivy stems (north elevation)
Photos	North elevation 	North elevation 
	East elevation 	East elevation N/A – adjacent to site boundary
	South elevation 	South elevation 

	West elevation 	West elevation N/A – adjacent to other building
Building dimensions	c.11m wide x c.30m long	c.2.5m wide x c.4.5m long
Roof void description	Large but cluttered with stored items. The floor is lined with wooden boards.	N/A – no roof void present
Frame	Wooden rafters and ridge beam	Unknown – no access
Roof lining	None	Unknown – no access
Roof void dimensions	c.8m wide x c.30m long 	N/A – no roof void present
Roof void height	c.2m	N/A – no roof void present
Potential roosting locations	Against the ridge beam 	None
Bat evidence	None	None
Bat suitability	Moderate	Negligible

4.3 *Potential bat access points and potential external roost locations*

4.3.1 *Community building*

The majority of the roof appears in fairly good condition, although due to the age of the roof there are potential access points on all elevations of the roof and soffits as well as potential external roosting features where the soffits are damaged. Therefore, the building is classed as having moderate suitability to be used by roosting bats, following the criteria in *Table 3.2.4.1*.

The locations and details of the potential bat access points and potential external roosting features are illustrated in *Images 4.3.1.1 – 4.3.1.4*.

Image 4.3.1.1. Location of potential bat access points on the north elevation of the community building.



Image 4.3.1.2. Location of potential bat access points on the east elevation of the community building.



Image 4.3.1.3. Location of potential bat access points and potential external roost locations on the south elevation of the community building.

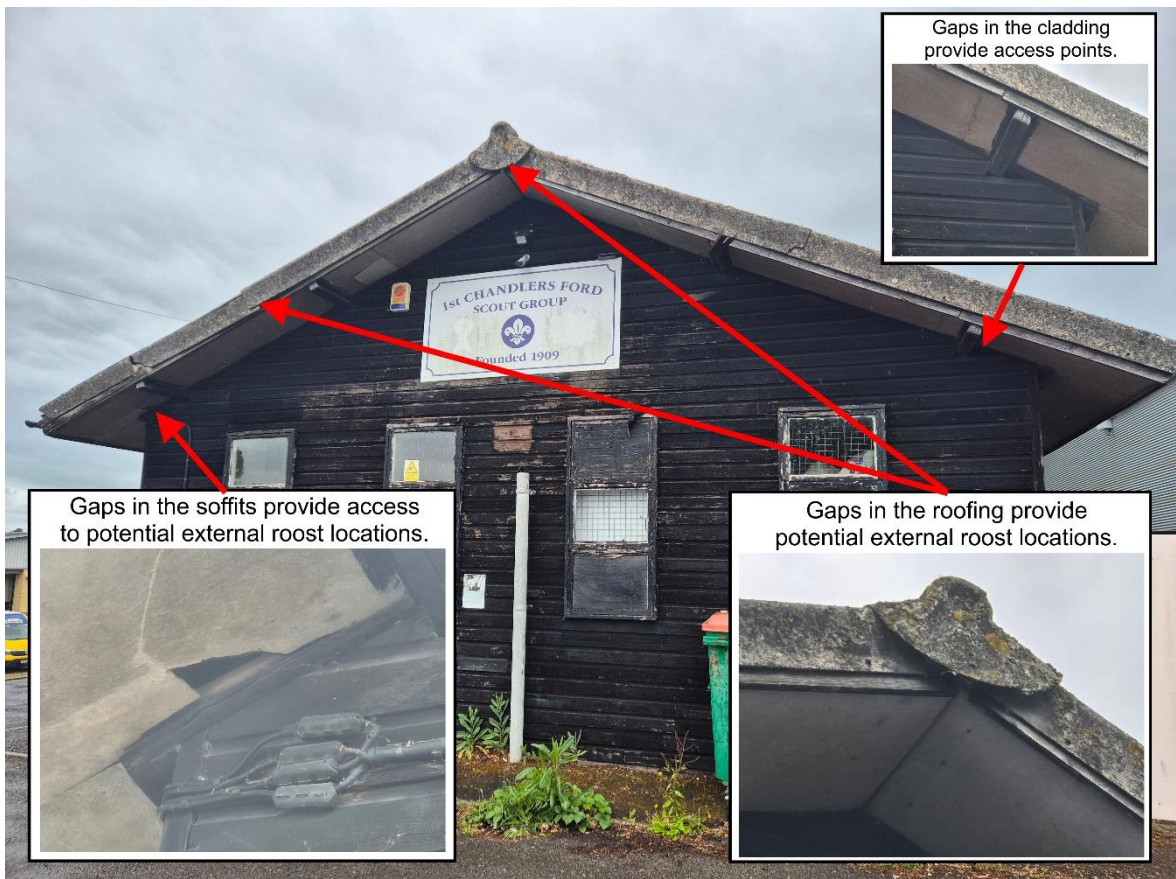


Image 4.3.1.4. Location of potential bat access points on the west elevation of the community building.



4.3.2 *Shed*

The roof appears well-sealed and in good condition. Additionally, there is no roof void and the construction of the building means it is subject to wide fluctuations in temperature. In addition, dead *Hedera helix* (Ivy) stems are obscuring any potential flight paths to the raised plastic roofing on the north elevation which provides the only roosting location on the building. Therefore, the building is classed as having negligible suitability to be used by roosting bats, following the criteria in *Table 3.2.4.1*.

4.4 *Bat roost suitability of trees*

Two *Quercus robur* (Pedunculate Oak) trees were both assessed as having no potential roost features (PRFs), following the criteria in *Table 3.2.4.2*. Despite their maturity, the trees lack any crevices, delaminated bark or split branches that could provide potential roosting features for bats. Their locations are at *Target Notes 1 & 2* on *Figure 3* in *Section 6* and they are shown in *Photo 1* in *Section 7*.

4.5 *Commuting and foraging habitat*

The mature *Quercus robur* (Pedunculate Oak) trees in the rear garden as well as the native hedgerow on the south boundary provide suitable bat foraging habitat in the immediate vicinity of the buildings. These connect a network of hedges and tree-lines to the east and south of the site, which in turn

connect the site to areas of high-quality foraging habitat in the wider landscape such as Titlark Copse woodland c.600m west. Therefore, the site has low-moderate commuting and foraging habitat, following the criteria in *Table 3.2.4.3*.

Bats follow linear landscape features such as lines of trees, hedges, buildings and waterways in order to commute from their roost sites to their feeding grounds. Likewise they use these features to navigate between feeding areas and alternative roosts.

4.6 *Evidence of bats*

No bats or evidence of bats was found.

4.7 *Bat activity surveys*

No bats were observed emerging from or re-entering the building.

Common pipistrelles and noctule bats were recorded flying in the vicinity of the building and on the site indicating the weather was suitable for bat activity. The full data from the bat activity survey is given in *Appendix D* and plans illustrating the surveyor locations and bat activity (observations only) during the surveys are given in *Figures 4 & 5* in *Section 6*.

4.8 *Other ecological constraints*

4.8.1 *Birds*

All trees, hedges and shrubs on site provide suitable nesting habitat for birds, as does the building.

5 ***INTERPRETATION AND EVALUATION***

5.1 ***Constraints***

5.1.1 *Constraints on survey data*

Detailed searches often result in the discovery of evidence of bats. However, although such surveys can identify the presence of bats it is more difficult to prove absence due to the crevice-dwelling nature of these elusive mammals. Bat droppings may be missed where there is debris to obscure them (and also, very old droppings generally crumble away to dust).

Evidence of crevice-dwelling bats, such as pipistrelles, is often not discovered on preliminary roost appraisals.

It is often difficult to thoroughly inspect buildings for bats and evidence of bats without a destructive search, which is not generally legal, practical or acceptable.

Assessing external roost features at height is often difficult without scaffolding or mobile elevated working platforms.

The shed was partially inaccessible due to permanent fencing east of the community building. However, it was possible to assess the building for suitable exterior roosting features and access points from a distance. In addition, there is no roof void requiring internal inspections and in the highly unlikely event the shed is being used by roosting bats the building will be visible during the bat activity (dusk emergence) surveys (see *Section 5.5*).

5.1.2 *Constraints on the mitigation, compensation and enhancement measures*

There is a limit to the amount of enhancement measures that are possible (and reasonable) on a small site.

As the bat survey (internal, external and bat activity survey) showed no evidence of bats using the building, no mitigation or compensation measures are needed.

5.2 ***Potential impacts of the proposed development on bat roosts***

5.2.1 *Desk study*

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), the site is neither designated nor immediately adjacent to any designated areas of nature conservation. However, there are designated sites nearby (see *Table 4.1.1.1* in *Section 4.1.1*). None of these will be directly affected by this small-scale development and all links will be maintained.

The site is within 5km of Emer Bog SAC (c.3200m north-west) and the River Itchen SAC (c.2650m east). The River Itchen SAC is designated because it is a watercourse with *Ranunculus fluitantis* as well as the presence of otter and of several protected invertebrates, fish including southern damselfly, freshwater crayfish, brook lamprey, Atlantic salmon and bullhead. Emer Bog is designated due to the presence of transition mires and quaking bogs.

The site is also within 5km of Solent & Dorset Coast SPA (c.4810m south). The SPA overlaps and shares boundaries with many other designated sites within the Solent, Southampton Water, Portsmouth Harbour, Christchurch Harbour, Poole Bay and West Sussex. These areas support important breeding colonies of terns at existing SPAs which include Poole Harbour SPA, Solent & Southampton Water SPA, Chichester & Langstone Harbours SPA and Pagham Harbour SPA. The Solent and Dorset Coast SPA protects the surrounding waters of these sites as they are used by the terns for foraging and maintenance activities, such as bathing and preening. The SPA supports over 12% of UK's tern breeding population, specifically, 4.92% of the common tern (*Sterna hirundo*), 4.01% of sandwich tern (*Sterna sandvicensis*), and 3.31% of little tern (*Sternula albifrons*) populations.

As a result of its proximity, the impacts of this small-scale development on the SPA and SACs must be considered.

Although works will involve replacing the existing community building with a new larger community building, it is unlikely to cause an increase in the recreational pressure, or pollution, on the internationally designated sites as it will remain a non-residential building.

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been five bat European Protected Species (EPS) licences granted within c.2km of the site. Due to their location, it is unlikely that the current proposals will impact these bat populations.

5.2.2 *Commuting and foraging bats*

The mature *Quercus robur* (Pedunculate Oak) trees in the rear garden as well as the native hedgerow on the south boundary provide suitable bat foraging habitat in the immediate vicinity of the buildings. These connect a network of hedges and tree-lines to the east and south of the site, which in turn connect the site to areas of high-quality foraging habitat in the wider landscape such as Titlark Copse woodland c.600m west. Therefore, the site has low-moderate commuting and foraging habitat. Woodland provides high-quality foraging habitat for a number of different species of bat. These areas will be unaffected and all links will be maintained. The connectivity around the edges of the site (the trees and hedges) will be retained and as such no impact to commuting and foraging bats (and hence bat populations in the local area) is anticipated.

Changes in lighting can affect foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained vegetation (particularly the trees), and security lights should operate on a timer, to avoid any negative impact on bats.

Any lighting installed should avoid spillage of greater than 0.1 lux (typical moonlight/ cloudy sky) onto retained vegetation. This is because bats are very sensitive to light.

The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.2.3 *Buildings*

Community building

No bats or evidence of bats was found, and the majority of the roof appears in fairly good condition. However, due to the age of the roof there are potential access points on all elevations of the roof and soffits as well as potential external roosting features where the soffits are damaged. Therefore, the building is classed as having moderate suitability to be used by roosting bats. In line with Gov.uk [Bats: surveys and mitigation for development projects](#) and BCT's *Bat Surveys for Professional Ecologists Good Practice Guidelines 4th edition*, two bat activity (dusk emergence) surveys were carried out to determine the presence or likely absence of bats using the building as a roost.

No bats were observed emerging and/ or re-entering the building during the bat activity (dusk emergence) surveys. Therefore, no mitigation or compensation measures are needed, and this building can be demolished without further survey or constraints regarding bats (subject to any planning constraints).

Enhancement measures will be required to be incorporated into the new building and/ or wider site to comply with national and local planning policy that requires a net gain in biodiversity. The proposed enhancement measures are given in *Section 5.6*.

Shed

No bats or evidence of bats was found, and the roof appears well-sealed and in good condition. Additionally, there is no roof void and the construction of the building means it is subject to wide fluctuations in temperature. In addition, dead *Hedera helix* (Ivy) stems are obscuring any potential flight paths to the raised plastic roofing on the north elevation which provides the only roosting location on the building. Therefore, the shed is classed as having negligible suitability to be used by roosting bats and may be demolished without further survey or constraint regarding bats (subject to any planning constraints).

5.2.4 *Trees*

The two *Quercus robur* (Pedunculate Oak) trees will be retained under the current proposed plans, however due to their proximity to the community building set to be demolished they were surveyed as a precautionary measure. The trees were both assessed as having no potential roost features (PRFs), despite their maturity.

5.2.5 *Alternative roosting potential*

There are buildings nearby that could provide alternative roosting for bats (see *Figure 1* in *Section 6*). In addition, there are several mature trees in the vicinity which could provide bat roosting opportunities.

5.3 *Other ecological constraints*

5.3.1 *Birds*

All of the trees, hedges and shrubs provide suitable habitat for nesting birds. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). No vegetation is currently proposed to be removed. Should this change, any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation.

If any active nests are found prior to or during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use *i.e.* the young have fledged and left the nest). Any active nests on the buildings must be retained and work must be delayed in that area until the young have fledged and left the nest.

5.4 *Survey report expiry*

This survey data is valid for a maximum of 12 months. Bats frequently move around and adopt new roosting sites, therefore if more than 12 months elapse it may be advisable to conduct further survey work to obtain up-to-date information to advise work, thereby ensuring protected species compliance.

Given the mobility of bats, it is recommended that a walkover of the site to update the survey information is undertaken prior to the development commencing if this does not occur before the end of July 2027.

5.5 *Further survey*

No further surveys are proposed on the site.

5.6 *Enhancement measures*

5.6.1 *General*

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or ‘LNRS’.

From the December 2024, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024). The document sets out the government’s planning policies for England and how these are expected to be applied. This replaces a previous version which was published in July 2021. It states: *"at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11)."*

It also states *"opportunities to incorporate biodiversity in and around developments should be encouraged"* as part of the consideration for *"presumption in favour of sustainable development"*.

The updated National Planning Policy Framework (NPPF) also states (paragraph 170) that: *"Planning Policies and decisions should contribute to and enhance the natural and local environment by... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."*

The updated Planning Policy Guidance (PPG) for the Natural Environment, updated in July 2019 states (paragraph 020) that:

"Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand."

The updated PPG provides examples of how biodiversity net gain can be achieved. Measures suggested include “creating new habitats” and “enhancing existing habitats”.

It is proposed that the enhancements to provide biodiversity net gain will also be in the form of the following:

- new bat roost provision;
- sensitive lighting (for bats and other wildlife);
- new bird nesting provision and
- new habitat (grassland and scrub).

These enhancements are detailed in the following sections.

Other enhancements for wildlife that the owners of the site may choose to employ are given in *Appendix C*. However, these are not proposed as enhancements for the purposes of the planning application, but only for information purposes.

All proposed enhancement measures are subject to supplied plans.

5.6.2 Bats

The new building will be enhanced for bats using at least one integrated bat box/ brick (*e.g.* a PRO UK Build-in WoodStone Bat Box, a HabitatTM Bat Box, an Ibstock Enclosed Bat Box, a Schwegler

Bat Tube, or similar), which provides a cavity that is incorporated into the external build structure to offer roosting space for bats. This bat box will be placed as high as possible (ideally 2.5m or above, facing south or south-east) with a clear exit path.

5.6.3 Lighting

Changes in lighting can affect roosting, foraging and commuting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto the new bat box exit point (see *Section 5.6.2*) and retained vegetation (particularly the trees). However, it is in a highly lit area and as such this may not be possible due to existing light spill. If this is the case any new lighting should not increase the level currently experienced and, if at all possible, should reduce any light spill due to the type of lighting used and the use of protection such as hoods and cowls. This is because lighting can impact bat populations directly by disturbing roosts and reducing their foraging area, or indirectly by severing commuting routes from roosts. Therefore, the following (modified from *Bats and lighting in the UK* (ILP 2023)) should be undertaken:

- **Aim of light** The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any retained vegetation. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats, as well as people and other wildlife.

For any security lighting, the following should also apply:

- **Power** It is rarely necessary to use a lamp of greater than 2000 lumens (150W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- **Movement sensors** Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed.
- **Timers** If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- **Alternatives** The requirement for security lighting in each instance should be carefully considered and only used where absolutely necessary to deter crime.

The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.6.4 Birds

The site will be enhanced for birds. A minimum of two swift boxes will be built into the external walls of the new building. These boxes are also suitable for sparrows which are also an IUCN Red List Bird of Conservation Concern and listed on *Section 41* of the *Natural Environment & Rural Communities Act 2006*). External swift boxes can be supplied and installed by Hampshire Swifts <https://www.hampshireswifts.co.uk> and a new soffit design is also available. In addition, a

woodstone bird box suitable for use by blue tits and great tits will be erected on one of the oak trees. These bird boxes will provide new nest sites. The proposed bird boxes are summarised in *Table 5.6.4.1*. Additional bird boxes from *Appendix C Section 11.3* can also be installed on site.

Table 5.6.4.1. Bird boxes to be erected within the site with additional details on siting them to increase chances of occupancy.

Type & quantity	Typical species	No.	Height	Additional information
Vivara Pro Seville 32mm Woodstone Nest Box 	Blue tits, great tits	1	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
Options below: Vivara Pro UK visible build-in swift box  Vivara Pro UK rendered build-in swift box  Swift box – brick facing  Ibstock Eco- habitat 	Swifts	2	≥ 5m	- Can either be incorporated into the build structure or mounted onto a building. - Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. - Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

5.6.5 New habitats

New grassland will be created to the rear of the new building. The aim will be to create neutral grassland with a mixture of species. The seed mixes in *Table 11.1.1* are from Emorsgate Seeds and are suitable for lawns. Emorsgate are only given as an example and a local supplier is preferable. The mixes contain slow growing grasses, some with a selection of wildflowers that respond well to

regular short mowing. The seed mixtures in *Table 11.2.3* contains species that are tolerant of a degree of shade. These will be used immediately beneath the trees where the shade is deepest. The seed mixes are given in *Appendix C*. The grassland will be managed in accordance with the instructions on the Emorsgate website.

Scrub consisting of a mixture of native shrubs will be created on the east and west sides of the site. Species will include at least six of the following *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), *Prunus spinosa* (Blackthorn), *Quercus robur* (Pedunculate Oak), *Viburnum lantana* (Wayfaring-tree) and *Viburnum opulus* (Guelder-rose). These species will provide a mixture of leaf shapes and colours through the seasons. In addition, the hedges will contain *Ilex aquifolium* (Holly) and *Taxus baccata* (Yew) to provide an evergreen component for the winter months, and to provide a contrast to the colours of the other plants during the spring, summer and autumn.

The shrubs will be under-sown with Emorsgate seed mix EH1 Hedgerow mixture (or equivalent) to provides cover for wildlife such as hedgehogs as well as providing an attractive feature while the new shrubs become established. Seed mixes suitable for shade are given in *Table 11.2.3*. Once they shrubs are established, they will be managed with an annual cut (if appropriate) outside the bird nesting period. Should any individual plants die before becoming established they will be replaced immediately (provided the weather conditions are suitable).

5.7 ***Requirement for Habitats Regulations licence***

A bat European Protected Species (EPS) licence or Bat Earned Recognition (BER) licence or Bat Mitigation Class Licence (if qualifying) site registration from Natural England is not necessary before work commences on the house. In the unlikely event that bats are found during works, work will stop immediately and a bat licence will be applied for.

A licence from Natural England permits activities that may otherwise be offences under *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*, such as the destruction of roost sites. It cannot be applied for on a precautionary basis.

Figure 1. Aerial photographs showing the location of the site.



Figure 2. An Ordnance Survey map showing the site location, as indicated by the red arrow.



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Figure 3. Plan showing the indicative locations of the proposed enhancement measures (not to scale).

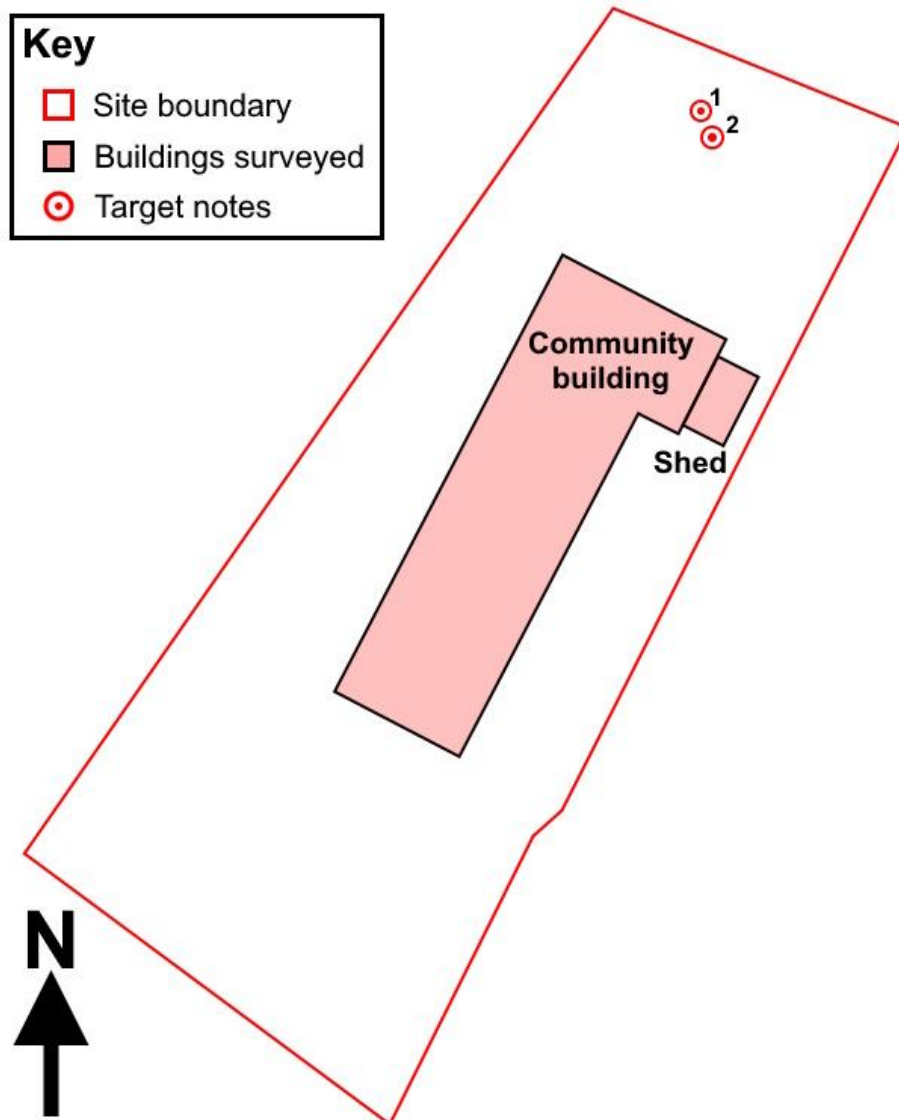


Figure 4. Plan showing surveyor locations for the bat activity survey carried out on the 25th May 2026.

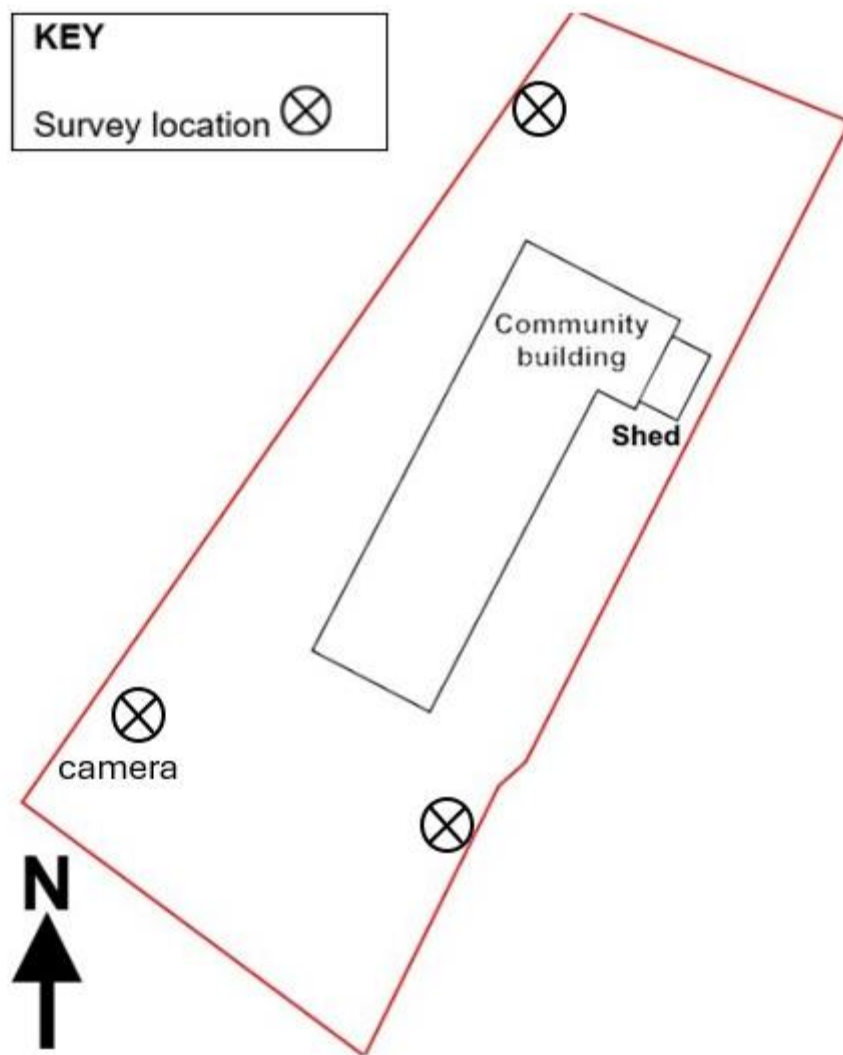
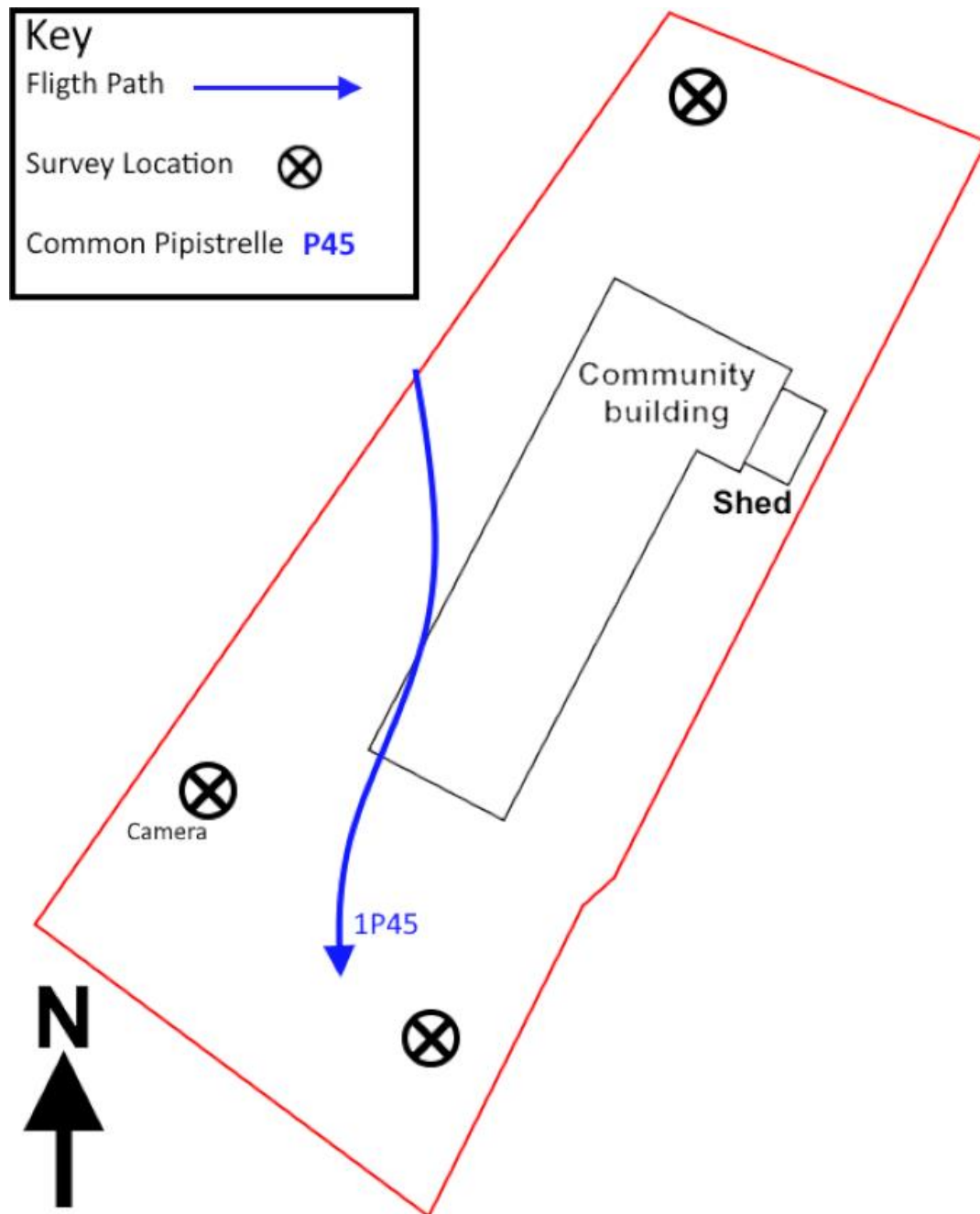


Figure 5. Plan showing bat activity (observations only) for the bat activity survey carried out on the 15th June 2026. Arrows show direction of flight (where known).



PHOTOGRAPHS

Photo 1. Mature Quercus robur (Pedunculate Oak) trees to the rear of the building. These provide foraging habitat for bats and suitable nesting habitat for birds. Their location is at Target Notes 1 & 2 on Figure 3 in Section 6.

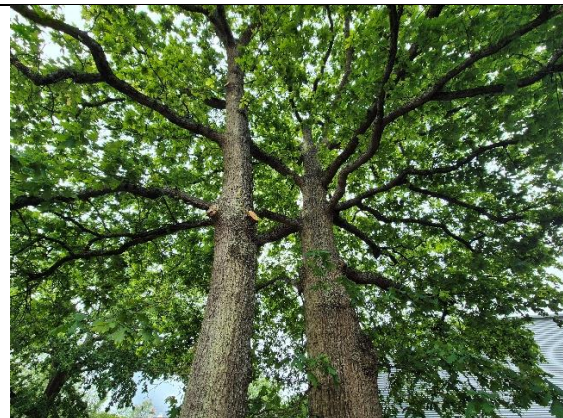


Photo 2. A native hedgerow on the south boundary. This provides commuting and foraging habitat for bats and suitable nesting habitat for birds.



Photo 3. Amenity grassland (lawn) west of the community building.



Photo 4. Debris and Rubus fruticosus agg. (Bramble) east of the community building.



Photo 5. Fraxinus excelsior (Ash) trees adjacent to the west boundary. These provide foraging habitat for bats and nesting habitat for birds.



Photo 6. A coniferous tree adjacent to the west boundary. This provides foraging habitat for bats and nesting habitat for birds.



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9.1 Legal context

All species of British bat are protected by the *Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000*. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European Protected Species listed on the *Conservation of Habitats & Species Regulations 2017*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat (in such a way as to be likely to significantly affect: (i) the ability of a significant group of bats to survive, breed or rear/nurture their young; or (ii) the local distribution or abundance of the species concerned);
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present (bats tend to reuse the same roost).

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats & Species Regulations 2017* it is possible to apply for a European Protected Species (EPS) licence from Natural England. Licences are only issued where Natural England are satisfied that three derogation tests are met. These are: that the activity is for **imperative reasons of overriding public interest**; that there must be **no satisfactory alternative**; and that **favourable conservation status of the species must be maintained**.

Consideration of these three derogation tests was previously left to Natural England as part of their deliberations on whether to grant a licence for the development activity after a planning consent has been issued. However, the regulations now require that **all** public bodies, i.e. **Local Planning Authorities** (LPAs), have regard to the requirements of the European Habitats Directive when carrying out their functions. As a result, LPAs **must** address the three derogation tests when considering a planning application that could impact upon any European Protected Species (EPS).

9.2 *National planning context*

9.2.1 *General*

Surveys should be completed in line with Natural England's *Standing Advice for Local Authorities* (<http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/default.aspx>), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (*i.e.* in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

In addition to the above, *Section 40* of the *Natural Environment and Rural Communities Act* (2006) imposes a new duty on all public authorities to have regard for biodiversity.

9.2.2 *Biodiversity Net Gain (BNG)*

Under the Environment Act 2021, all planning permissions granted in England (with a few exemptions) have to deliver at least 10% biodiversity net gain (BNG) (required since January 2024 and since April 2024 for small sites). BNG will be measured using Defra's biodiversity metric and habitats will need to be secured for at least 30 years. This sits alongside:

- a strengthened legal duty for public bodies to conserve and enhance biodiversity,
- new biodiversity reporting requirements for local authorities, and mandatory spatial strategies for nature: Local Nature Recovery Strategies or 'LNRS'.

From the December 2024, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024). The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in July 2021. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

- an economic objective;
- a social objective; and
- an environmental objective.

The environmental objective is to "*contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*".

Planning policies and decisions should contribute to and enhance the natural and local environment by "*protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils*

(in a manner commensurate with their statutory status or identified quality in the development plan)” and “minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.

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.

Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted.

Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

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

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

The NPPF also encourages *"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 aims to *“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”*. This applies to non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and equivalent county wildlife sites.

Early engagement with all necessary stakeholders, including expert bodies, is encouraged by the NPPF.

Bats use different roosting sites throughout the year according to their life cycle requirements.

Hibernation during the winter months requires roosting sites that are cool and humid. As conditions improve through the spring, bats become increasingly active and tend to use transitional roosting sites. During the summer months, females give birth in maternity roosts. Maternity roosts tend to be warm and temperature-stable, which aids rapid development of the young, which are weaned in late summer. In the autumn, adult bats congregate in mating roosts and also use transitional roosting sites. Autumn is the time when both adults and juveniles have to build up fat reserves in preparation for hibernation through the winter months.

Bats also use roosts during the night as feeding perches. Species that catch large prey items such as moths (*e.g.* brown long-eared bat) often enter buildings to hang up and eat their prey before emerging again to forage. Such feeding perches tend to be obvious from scatterings of bat droppings with moth wings, which the bats discard.

Bats are at their most vulnerable during the summer in their maternity roosts, when disturbance can jeopardise their breeding success. Bats give birth to only one pup per year and young do not breed until the second or third year after birth. This means that if maternity colonies are disturbed there can be serious implications for the conservation status of populations.

Bats are also vulnerable during the winter hibernation period, when disturbance can reduce their chance of survival through the winter at a time when food is in short supply.

This is why there are often only narrow timeframes for bat survey and mitigation work.

These are not proposed as enhancements for the purposes of the planning application, but only for information purposes.

11.1 Lawn seed mix composition

The seed mixes in *Table 11.1.1* are from Emorsgate Seeds and are suitable for lawns. Emorsgate are only given as an example and a local supplier is preferable. The mixes contain slow growing grasses, some with a selection of wildflowers that respond well to regular short mowing. The EG9 grass mixture for hedges and woodland contains a selection of grasses that are tolerant of a degree of shade.

Table 11.1.1. Emorsgate seed mix species composition.

EL1	
Species	Common Name
Flowering Species	
<i>Galium verum</i>	Lady's Bedstraw
<i>Leontodon hispidus</i>	Rough Hawkbit
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Lotus corniculatus</i>	Birdsfoot Trefoil
<i>Primula veris</i>	Cowslip
<i>Prunella vulgaris</i>	Selfheal
<i>Ranunculus acris</i>	Meadow Buttercup
<i>Trifolium pratense</i>	Wild Red Clover
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Phleum bertolonii</i>	Smaller Cat's-tail
EG1	
Species	Common Name
<i>Agrostis capillaris</i>	Common Bent
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Phleum bertolonii</i>	Smaller Cat's-tail
<i>Poa pratensis</i>	Smooth-stalked Meadow-grass
EG9	
Species	Common Name
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogtail

<i>Deschampsia cespitosa</i>	Tufted Hair-grass
<i>Festuca rubra</i>	Red Fescue
<i>Poa nemoralis</i>	Wood Meadow-grass

11.2 Ornamental planting to attract wildlife

Plants that attract insects are generally helpful and trees, shrubs and flowering plants can provide cover for wildlife. Therefore, to enhance the ecological value of the site, any replacement landscaping in the gardens should incorporate a mixture of native and non-native species of value to wildlife. This mixture will be planted to encourage a diversity of insects, which in turn will attract different species. Flowers that bloom throughout the year, including both annuals and herbaceous perennials, are beneficial. Night-flowering blossoms attract night-flying insects, which in turn provide prey for bats. Examples of suitable plant species that could be planted to encourage wildlife include those in *Tables 11.2.1* and *11.2.2*. Approximate flowering periods are listed in the tables.

Table 11.2.1. Native and non-native species that could be incorporated into the landscaping.

Species	Common Name	Approximate flowering period
<i>Achillea millefolium</i>	Yarrow	Early summer
<i>Aubretia</i> species	Aubretia	Spring to early summer
<i>Berberis darwinii</i>	Darwin's Barberry	Spring
<i>Iberis sempervirens</i>	Candytuft	Summer to autumn
<i>Centaurea montana</i>	Cornflower	Spring to summer
<i>Centaurea scabiosa</i>	Knapweed	Summer to autumn
<i>Centranthus ruber</i>	Red valerian	Summer to autumn
<i>Cornus sanguinea</i>	Dogwood	Summer
<i>Dianthus barbatus</i>	Sweet William	Summer
<i>Echinacea</i> species	Echinacea	Summer to autumn
<i>Erysimum</i> species	Wallflowers	Spring to early summer
<i>Glebionis segetum</i>	Corn marigold	Spring to summer
<i>Hebe</i> species	Hebes	Summer to autumn
<i>Hedera helix</i>	Ivy	Autumn
<i>Hesperis matronalis</i>	Dame's-violet	Spring to summer
<i>Hyacinthoides non-scripta</i>	English Bluebell	Spring
<i>Hylotelephium spectabile</i>	Ice plant 'Pink lady'	Early autumn
<i>Hypericum</i> species	St John's wort	Spring
<i>Ilex aquifolium</i>	Holly	Spring to summer
<i>Jasminum officinale</i>	Common White Jasmine	Summer to autumn
<i>Lavandula angustifolia</i>	Garden Lavender	Summer
<i>Leucanthemum vulgare</i>	Ox-eye daisy	Summer
<i>Limnanthes douglasii</i>	Poached egg plant	Summer
<i>Lonicera caprifolium</i>	Perfoliate Honeysuckle	Summer
<i>Lonicera etrusca</i>	Italian Honeysuckle	Summer to autumn
<i>Lonicera japonica</i>	Japanese Honeysuckle	Spring

<i>Lonicera periclymenum</i>	Honeysuckle	Summer to autumn
<i>Lunaria annua</i>	Honesty	Spring
<i>Malus domestica</i>	Apple	Spring
<i>Malus sylvestris</i>	Crab Apple	Spring
<i>Malva</i> species	Mallow	Summer to autumn
<i>Matthiola longipetala</i>	Night-scented stock	Summer
<i>Myosotis sylvatica</i>	Wood forget-me-not	Spring
<i>Nicotiana</i> species	Tobacco plant	Summer
<i>Oenothera</i> species	Evening primroses	Summer to autumn
<i>Papaver rhoeas</i>	Corn poppy	Summer
<i>Phacelia</i> species	Phacelia	Summer to autumn
<i>Primula vulgaris</i>	Primrose	Spring
<i>Rosa</i> species	Rose	Summer
<i>Rubus fruticosus</i> agg.	Bramble	Spring to summer
<i>Saponaria officinalis</i>	Soapwort	Summer
<i>Saxifraga fortunei</i>	Cherry pie	Summer to autumn
<i>Scabiosa</i> species	Scabious	Summer
<i>Silene dioica</i>	Red campion	Spring
<i>Silene noctiflora</i>	Night-scented Catchfly	Summer to autumn
<i>Silene vulgaris</i>	Bladder Campion	Summer
<i>Verbena</i> species	Vervain	Summer to autumn
<i>Viburnum lantana</i>	Wayfaring-tree	Spring to summer
<i>Viburnum opulus</i>	Guelder-rose	Summer

Table 11.2.2. Examples of suitable garden herbs that could be planted in and around the site to encourage wildlife.

Species	Common Name	Approximate flowering period
<i>Angelica</i> species	Angelica	Summer to autumn
<i>Borago officinalis</i>	Borage	Spring to early autumn
<i>Calendula officinalis</i>	English marigolds	Summer to autumn
<i>Foeniculum vulgare</i>	Fennel	Summer to early autumn
<i>Hesperis matronalis</i>	Dame's-violet, often sold as Sweet Rocket	Spring to summer
<i>Hyssopus officinalis</i>	Hyssop	Summer to early autumn
<i>Matthiola bicornis</i>	Night-scented Stock	Spring to autumn
<i>Melissa officinalis</i>	Lemon balm	Summer
<i>Monarda</i> species	Bergamot	Summer to early autumn
<i>Nicotiana</i> species	Tobacco-plant	Spring to autumn
<i>Oenothera</i> species	Evening-primroses	Summer
<i>Origanum vulgare</i>	Marjoram	Summer
<i>Rosmarinus officinalis</i>	Rosemary	Spring
<i>Saponaria officinalis</i>	Soapwort	Summer to autumn
<i>Silene noctiflora</i>	Night-scented Catchfly	Summer to autumn

<i>Silene vulgaris</i>	Bladder Campion	Spring to summer
<i>Tanacetum parthenium</i>	Feverfew	Summer to early autumn
<i>Thymus</i> species	Thyme	Summer

New hedges could be planted around the edges of the site. These should consist of a mixture of native species such as *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), *Prunus spinosa* (Blackthorn), *Quercus robur* (Pedunculate Oak), *Viburnum lantana* (Wayfaring-tree) and *Viburnum opulus* (Guelder-rose). These species will provide a mixture of leaf shapes and colours through the seasons. In addition, the hedges will contain *Ilex aquifolium* (Holly) and *Taxus baccata* (Yew) to provide an evergreen component for the winter months, and to provide a contrast to the colours of the other plants during the spring, summer and autumn.

Under-sowing new hedges with Emorsgate seed mix EH1 Hedgerow mixture (or equivalent) provides cover for wildlife such as hedgehogs as well as providing an attractive feature while the new hedges become established. Seed mixes suitable for shade are given in *Table 11.2.3*.

Table 11.2.3. Seed mixes suitable for shaded areas.

EH1	
Species	Common Name
Wild Flowers	
<i>Alliaria petiolate</i>	Garlic Mustard
<i>Arctium minus</i>	Lesser Burdock
<i>Centaurea nigra</i>	Common Knapweed
<i>Chaerophyllum temulum</i>	Rough Chervil
<i>Galium album</i>	Hedge Bedstraw
<i>Geum urbanum</i>	Wood Avens
<i>Lathyrus sylvestris</i>	Narrow-leaved Everlasting-pea
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Primula veris</i>	Cowslip
<i>Prunella vulgaris</i>	Selfheal
<i>Saponaria officinalis</i>	Soapwort
<i>Silene dioica</i>	Red Campion
<i>Silene latifolia</i>	White Campion
<i>Silene vulgaris</i>	Bladder Campion
<i>Torilis japonica</i>	Upright Hedge-parsley
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogtail
<i>Deschampsia cespitosa</i>	Tufted Hair-grass

<i>Festuca rubra</i>	Slender-creeping Red-fescue
<i>Poa nemoralis</i>	Wood Meadow-grass
EW1	
Species	Common name
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Allium ursinum</i>	Ramsons
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arctium minus</i>	Lesser Burdock
<i>Arum maculatum</i>	Lords-and-Ladies
<i>Chaerophyllum temulum</i>	Rough Chervil
<i>Cruciata laevipes</i>	Crosswort
<i>Digitalis purpurea</i>	Foxglove
<i>Filipendula ulmaria</i>	Meadowsweet
<i>Geum urbanum</i>	Wood Avens
<i>Hyacinthoides non-scripta</i>	Bluebell
<i>Iris foetidissima</i>	Gladdon
<i>Prunella vulgaris</i>	Selfheal
<i>Silene dioica</i>	Red Campion
<i>Teucrium scorodonia</i>	Wood Sage
<i>Torilis japonica</i>	Upright Hedge-parsley
Grasses	
<i>Agrostis capillaris</i>	Common Bent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass
<i>Brachypodium sylvaticum</i>	False Brome
<i>Cynosurus cristatus</i>	Crested Dogstail
<i>Deschampsia cespitosa</i>	Tufted Hair-grass
<i>Festuca rubra</i>	Red Fescue
<i>Poa nemoralis</i>	Wood Meadow-grass

11.3 Bird boxes

It is not advisable to place many boxes with identical dimensions, because individuals of the same species may not tolerate each other's presence, especially in built-up areas with limited food resources.

Table 11.3.1. Bird boxes with additional details on siting them to increase chances of occupancy.

Type/ example	Typical species	Height	Additional information
Vivara Pro WoodStone House Sparrow Nest Box 	House sparrows	$\geq 2\text{m}$	• Can either be incorporated into the build structure or mounted onto a building. • Should be fixed onto a sturdy building, not onto fences or garden sheds due to its weight. • Position away from windows. • Position out of direct sunlight (below eaves on the north elevation), especially if not built into the build structure.
Options below: Vivara Pro UK visible build-in swift box  Vivara Pro UK rendered build-in swift box  Swift box – brick facing  Ibstock Eco-habitat  Woodstone swift façade nest box  Swift boxes from Hampshire Swifts 	Swifts	$\geq 5\text{m}$	• Can either be incorporated into the build structure or mounted onto a building. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

Vivara Pro Seville 32mm Woodstone Nest Box 	Blue tits, great tits	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
Vivara Pro Barcelona WoodStone Open Nest Box 	Robins, wrens	$\leq 2m$	- Mount on a tree or large shrub - Conceal amongst foliage to keep well-hidden from predators.
Vivara Pro Seville 28mm Woodstone Nest Box 	Blue tits, coal tits	2-4m	- Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. - Chances of occupation can be increased by positioning boxes near vegetation.
WoodStone Swallow Nest Bowl (Plywood board mounted) 	Swallows	$\geq 2m$	- Mount within a building with an open door or window - Leave a distance of at least 6cm between the top of the nest and the ceiling.
Vivara Pro WoodStone House Martin Nest 	House martins	$\geq 5m$	- Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. - Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

Integrated barn owl roost/ false dormer box 	Barn Owl	$\geq 3\text{m}$	• Integrated into the sloped roof ideally as a false dormer. • The base of the internal space must be flat and at least 45cm below the entrance hole. • There must be an easy-to-grip platform outside the hole for fledglings to stand. • The box must not allow owls access into the garage/ carport inside the building to prevent disturbance by human activity. • A closed access hatch into the box from inside the building is advised, to allow essential clearance of built up nest material or waste.
Barn Owl Trust Nest Box 	Barn Owl	$\geq 5\text{m}$	• Mounted on a 'telegraph style' pole. • Best positioned facing open grassland for foraging opportunities and away from the prevailing weather.

11.4 Insects

Insect boxes (hotels or towers) and bricks should be installed in a sunny location close to vegetation. Bee-friendly and insect friendly plants should be located nearby so that the bees and insects using the boxes have food. Lavender, honeysuckle and buddleia are all pollinator-friendly plants. The boxes suggested in *Table 11.4.1* (especially the BeePot planter) have been chosen so that they form an attractive feature as part of the landscaping. Solitary bees are non-aggressive and as such are suitable for gardens with pets and children.

Table 11.4.1. Examples of insect boxes that could be erected on site.

Type	Species	Height	Additional information
	Solitary bees	>1m from the ground	The Bee Brick should be positioned in a warm sunny spot, in a south-facing wall, with no vegetation in front of the holes
	Solitary bees	>1m from the ground	The BeePot should be positioned in a warm sunny spot, preferably on a south-facing wall, with no vegetation in front of the holes
	Butterflies, solitary bees, lacewings and ladybirds	>1m from the ground	The different sections of the Insect Tower have been designed to provide a habitat for a variety of insect species. Suitable for mounting on buildings, trees or fences.
	Solitary bees and a range of other insects	Between 0.75m and 1.5m above ground	The selected canes and the holes are the optimum size for solitary bees but other insects may overwinter in the nester.
	A wide range of insects	Between 0.75m and 1.5m above ground	Adding natural materials such as drilled canes, hollow stems or bark in the triangular spaces will encourage more insects to the hotel.
	A wide range of insects	>1m from the ground	Best placed near vegetation. Provides plenty of nooks and crannies for insects such as ladybirds, earwigs and lacewings.

Table 1. Data from first bat activity (dusk emergence) survey.

Date	25/05/2026				
Temp (°C)	Start: 24	End: 18			
Weather	Clear (0% cloud), light breeze ESE (Beaufort 2), warm, bright				
Ecologists	Bailey Riches, Seth Winter				
Observer	Time	No.	Species	Behaviour	Observation
-	20:47	-	-	-	Ecologists commenced observations
-	21:02	-	-	-	Sunset
SW, BR	21:43	1	Common pipistrelle	Commuting	Commuting south
SW	22:06	1	Common pipistrelle	Heard not seen	
BR	22:09	1	Common pipistrelle	Heard not seen	
-	22:32	-	-		Ecologists ceased observations

Table 2. Data from second bat activity (dusk emergence) survey.

Date	15/06/2026				
Temp (°C)	Start: 16		End: 15		
Weather	overcast, light breeze (Beaufort 2)				
Ecologists	Rachel Major, Madeline Hawke				
Observer	Time	No.	Species	Behaviour	Observation
-	21:06	-	-	-	Ecologists commenced observations
-	21:21	-	-	-	Sunset
RM	21:52	1	Noctule	Heard not seen	Heard not seen
MH	22:08	1	Noctule	Heard not seen	Heard not seen
RM	22:14	1	Common pipistrelle	Heard not seen	Heard not seen
-	22:51	-	-		Ecologists ceased observations