



Hampshire
County Council

Bat Survey Report –
Preliminary Roost Assessment,
Hibernation Monitoring and
Emergence Surveys

Staunton Farm Potting Shed

For
Hampshire County Council
Property Services

June 2025

Hampshire County Council Ecology Team

Hampshire County Council, Elizabeth II Court, 1st Floor West, Winchester, Hampshire SO23 8UD

ecology.group@hants.gov.uk

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<i>Authorised by</i>	Adam Eggesfield	<i>Date</i>	24 June 2025
<i>Approved by Client PM</i>	Luci Clark	<i>Date</i>	24 June 2025

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Hampshire County Council Ecology Team

Hampshire County Council, Elizabeth II Court, 1st Floor West, Winchester, Hampshire SO23 8UD

ecology.group@hants.gov.uk

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Summary

A Preliminary Roost Assessment was carried out to assess the presence or likely absence of bats at the Potting Shed, Staunton Farm. This work is required to support a planning application.

Staunton Farm Potting Shed is a single storey brick and timber glasshouse structure, located in the central-northern area of the Staunton Farm complex, and at the northern elevation of Block 010. The farm site comprises built structures, areas of hardstanding, managed grassland, ornamental planting, paddock areas, mature treeline and woodland areas. The site is situated in a suburban area at the northern edge of Havant.

The proposal is for demolition of Rooms 61 and 62 of the Block 010 structure.

Visual bat survey work finds no direct evidence of bats such as droppings, staining, feeding signs. However, the structure has a number of internal and external features that are suitable for supporting bat roosts.

The Potting Shed at Staunton Farm is set within a landscape of high-quality bat habitat.

The Potting Shed at Staunton Farm was judged to potentially present moderate bat roost suitability including suitability for supporting non-classic hibernation roosts. The development works have the potential to damage or destroy any roosts and potential to harm individual bats, if present.

Winter monitoring in November and December 2024 found no bat activity. No further monitoring was carried out.

Two emergence surveys were carried out on 30 April 2025 and 20 May 2025. There were no emergences and low levels of bat activity. It is therefore considered that bat roosts are likely absent from the site.

Under the current proposals, the development will have negligible impacts on bats.

The Potting Shed is suitable for supporting nesting birds and an old Barn Swallow nest is visible inside the structure.

To avoid impacts to nesting birds, works are to be carried out outside of the nesting season. If this is not possible a nesting bird check will be carried out prior to demolition and works will not be carried out if nesting birds and/or dependent young are present.

To compensate for the loss of bird nesting locations suitable nesting features will be installed nearby.

Access and the site compound for the demolition will be entirely within hardstanding and existing access areas. There will be no impacts to habitats on site. There are therefore no requirements for Biodiversity Net Gain in relation to the proposals for the site.

1. Introduction

Objectives

- 1.1. The purpose of this study was to provide information on the possible presence or likely absence of bats at The Potting Shed, Staunton Farm, Havant, to support a planning application. Where bat roosts are identified, or where their presence cannot be confidently ruled out, the report sets out an assessment of the impacts to these and where necessary makes recommendations for measures to avoid, mitigate or compensate for impacts to bats as necessary, dependent on the nature and scale of the identified impacts.

Site Description

- 1.2. Staunton Farm is an ornamental farm covering approximately 14 hectares (ha). It is located in a suburban area on the northern edge of the town of Havant, Hampshire (National Grid Reference SU721085). Within Staunton Farm are areas of ornamental garden, farmyard grassland paddocks and historic and modern structures. Staunton Farm site is surrounded by suburban residential areas to the west, south and east, and Staunton Country Park to the north which comprises open areas of parkland and woodland with more extensive rural and agricultural areas in the wider landscape to the north and east.
- 1.3. The Potting Shed is located to the north of Block 010 and comprises rooms 61 and 62. The construction type of Block 010 is traditional load-bearing masonry and timber and dates from 1840. The building complex as a whole includes a tropical glasshouse structure, a brickwork base, with a timber window framework and central door entrance and a corrugated metal roof with lead flashing. Room 62 has two internal timber doorways leading to Rooms 63 and 60, which serves as the vinery room. Within Room 61 is an internal, shed-like room with a false-ceiling. Beneath the floor of Rooms 61 and 62 is a tanked cellar which stores water.
- 1.4. Photo 1 in the photo sheet in Appendix 3 show the main elevation of the potting shed building.

Proposed works

- 1.5. The proposal is to demolish the Potting Shed structure.
- 1.6. Appendix 1 shows the plans of the site as existing, and the development plans as proposed at the time of the surveys.

Limitations

Preliminary Roost Assessment

- 1.7. It was not possible to access and fully view the interior of the cavity of the roof above Room 61. Further winter monitoring and emergence surveys were carried out to address this limitation.
- 1.8. External evidence of bat use, such as droppings stuck to walls or roof faces, are generally rapidly washed or weathered away. However, this is a typical and common factor of visual bat surveys.

Hibernation monitoring

- 1.9. The structure is considered to offer features suitable to offer non-classic hibernation features. Static detectors were deployed for two weeks between 26 November and 10 December 2025. No bat activity was recorded.
- 1.10. The Potting Shed is a relatively light-weight construction and bat activity to the exterior of the structure could be recorded on detectors deployed within it. Due to the lack of evidence of bat activity within the structure, the lack of activity on the initial deployment and the likelihood of ambiguous results it was considered a disproportionate effort to continue the hibernation monitoring. The possibility of bat presence during the hibernation period is considered in the discussion section below.
- 1.11. The small sample of hibernation monitoring data is not considered to be a limitation to the assessment of the structure's suitability for bats.

Emergence surveys

- 1.12. The optimal period of bat activity surveys is May to August with surveys during the 'transitory' periods of April and September considered suitable for sites

where bats are likely to be present at this time. The first dusk emergence survey was carried out on 30 April 2025, one day before the 'optimal' period is considered to start. The Spring period of 2025 was characterised as warm, and temperatures were suitable for bat surveys during the later part of April. The dusk emergence survey work was therefore carried out at the optimum time of year and with a suitable minimum three-week spacing between visits. Equipment used was suitable for the survey work.

1.13. Overall, there were no significant limitations to the emergence survey work.

2. Methods

Desk-based assessment

- 2.1. A desk-based assessment was carried out by HCCET on 6 November 2024. Geographical Information Systems (GIS) mapping was used in order to identify all records of bats or bat roosts within a 1km radius of the site. Given the localised nature of the proposals this search radius was considered sufficient for assessing risk to all ecological features.
- 2.2. In addition, records were obtained on habitats of particular value to bats such as woodlands, species-rich grasslands, and waterbodies / river corridors.
- 2.3. The Ecology Team has full access to the extensive datasets maintained by the Hampshire Biodiversity Information Centre (HBIC). However, *“whilst every reasonable effort is made to validate information supplied to and by the Hampshire Biodiversity Information Centre, owing to the dynamic and judgmental nature of information relating to wildlife, HBIC disclaims any responsibility for the accuracy or comprehensiveness of the information supplied, and accepts no liability for any indirect, consequential, or incidental damages or losses arising from use of the information”* (Paragraph 4 of the HBIC Data Users Declaration).

Preliminary Roost Assessment

Buildings

- 2.4. A visual daytime bat survey was carried out on 5 November 2024 by Camilla Mitchell, Senior Ecologist, who holds a current licence to survey bat roosts and Jessica Forest, Assistant Ecologist. The weather was 15°C, dry, with a slight breeze (B1).
- 2.5. Survey methodology used during the work is guided by and consistent with that set out in the Bat Conservation Trust’s *‘Bat Surveys for Professional Ecologists: Good Practice Guidelines’* 4th edition, (Collins, J. (ed) 2023).

- 2.6. The building was subject to a detailed internal and external search. The aims of this were to identify evidence of bat activity and/or identify the presence of any features that could potentially support roosting bats or features through which bats could gain access to possible roost locations. External areas were inspected to identify potential bat access points and roosting features. Such features typically include missing, slipped, broken or bowed roof tiles, gaps around fascias and soffits, gaps in brickwork (such as missing mortar or expansion gaps), lifted chimney, roof, or window flashing, and gaps around window and door casements.
- 2.7. The external inspection also aimed to identify any direct evidence of bat use such as droppings adhering to walls, floors or windowsills below gaps, or staining around possible access gaps.
- 2.8. Features were inspected using Opticron Discovery 10x42 close-focusing binoculars and where necessary and safely possible, a ladder. High-powered torches (Clulite Clubman CB2 and Lenser P7.2) were used to illuminate potential roost and roost access features.
- 2.9. Where present and safely accessible, any internal voids and similar spaces were inspected for evidence of bat presence such as live bats, corpses, droppings, feeding remains and staining. The building was subsequently assessed for its suitability to support roosting bats, from 'None to 'High', in line with the survey guidelines.

Habitat quality assessment

- 2.10. An assessment was made of the suitability of the site and the surrounding landscape to support foraging, commuting and other flying behaviours such as swarming and social interactions. The assessment was based on the presence of habitat features such as woodland, scrub, hedgerows, grassland, and open water and watercourses, which are highly attractive to bats as both a foraging resource and as commuting routes. The presence of such habitats, particularly in a mosaic with other suitable habitats, typically increases the potential for structures to be exploited by bats where suitable roost and access opportunities

are present. The presence of unlit semi-natural vegetation and habitat linkages between the site and the surrounding landscape were also considered.

- 2.11. The table in Appendix 6 sets out the guidelines for assessing roost suitability and foraging habitat quality.

Hibernation Monitoring

- 2.12. Two static bat detectors, Wildlife Acoustics Song Meter Mini Bat were deployed in 2 sampling locations within the structure for a period of two weeks from 26 November 2024 to 10 December 2024. The detectors were set to record all bat activity from 30 minutes before sunset to 30 minutes after sunrise. The detectors are set to full spectrum recordings with a sample rate of 256 kHz, minimum trigger frequency of 16 kHz, 3 second trigger window with recordings up to 10 seconds long.
- 2.13. Bat call recordings were analysed using Kaleidoscope Pro software and calls were manually verified.
- 2.14. The timing and weather condition information for the static detector surveys is provided in Table 1 below.

Table 1 Static survey timing and weather conditions

Survey dates	Duration (sunset to sunrise)	Temp sunset	Temp sunrise	Min temp overnight
26/11/2024	16:04 – 07:39	7°C	10°C	4°C
27/11/2024	16:03 – 07:40	6°C	0°C	-1°C
28/11/2024	16:02 – 07:42	7°C	9°C	4°C
29/11/2024	16:02 – 07:43	10°C	13°C	10°C
30/11/2024	16:01 – 07:44	13°C	13°C	13°C
01/12/2024	16:01 – 07:46	14°C	8°C	8°C
02/12/2024	16:00 – 07:47	9°C	2°C	2°C
03/12/2024	15:59 – 07:48	4°C	1°C	-1°C
04/12/2024	15:59 – 07:50	11°C	14°C	11°C
05/12/2024	15:59 – 07:51	14°C	7°C	10°C

Survey dates	Duration (sunset to sunrise)	Temp sunset	Temp sunrise	Min temp overnight
06/12/2024	15:58 – 07:52	10°C	10°C	10°C
07/12/2024	15:58 – 07:53	9°C	7°C	7°C
08/12/2024	15:58 – 07:54	7°C	7°C	7°C
09/12/2024	15:58 – 07:55	8°C	7°C	7°C

Emergence and re-entry survey work

2.15. Two dusk emergence survey visits and one dawn re-entry visit were undertaken. The surveyors were Camilla Mitchell, Senior Ecologist, Julie Trelvellick, Ecologist and Mollie White, Assistant Ecologist, all experienced bat surveyors. Table 1 provides details of the survey visits. Emergence surveys started at least 15 minutes prior to sunset and continued for at least 1.5 hours after sunset.

2.16. Detectors used by the surveyors were Elekon BatLogger M/M2 full-spectrum bat detectors, which record bat calls directly onto an integral SD card. Survey work was supplemented by Night Vision Aids (NVAs) as detailed in Table 2 below.

Table 2 Survey timings and equipment

Date	Type	Duration	Weather conditions	Sunset / Sunrise
30/04/2025	Dusk emergence	20:07 – 21:52	<u>Start:</u> 18°C, cloud 1/8, no rain, wind F0 <u>End:</u> 12°C, cloud 1/8, no rain, wind F1	20:22
	Equipment:	2x Surveyors 4x BatLogger M/M2 bat detectors 1x Nightfox Whisker IR camera 1x Sony FDR AX53/AX55 Camcorder with supplementary IR Floodlights 2x Guide TK612 Thermal Monocular Camera – 640x480, 12µm lens, 50Hz		

20/05/2025	Dusk emergence	20:38 – 22:23	<u>Start:</u> 19°C, cloud 2/8, no rain, wind F1 <u>End:</u> 15°C, cloud 0/8, no rain, wind F0	20:53
	Equipment:	2x Surveyors 4x BatLogger M/M2 bat detectors 1x Nightfox Whisker IR camera 1x Sony FDR AX53/AX55 Camcorder with supplementary IR Floodlights 2x Guide TK612 Thermal Monocular Camera – 640x480, 12µm lens, 50Hz		

- 2.17. Calls were identified in the field where possible, and later analysed if necessary using Elekon BatExplorer software to confirm the identity of any species encountered and any relevant behaviour. Analysis of bat calls was carried out with reference to standard texts and call reference libraries (Russ, 2021 and Middleton *et al*, 2022).
- 2.18. During each survey visit, the surveyors adopted primary surveying locations to enable all visible elevations of the surveyed building to be observed. However, during survey work – particularly during the dawn visit, when bats swarm around potential roost sites – the surveyors would move within the general survey area to gain better surveillance of features of interest at particular times.

3. Results

Desk-based assessment

- 3.1. Appendix 2 shows the location of the site and its surrounding relevant ecological interest features produced during the desk-based assessment.

Designated sites and notable habitats

- 3.2. The map in Appendix 2 shows that Staunton Farm Potting Shed lies in the central-northern area of Staunton Farm. It is situated on the northern edge of a suburban area with surrounding residential dwellings and associated gardens, leading to the wider landscape of Staunton Country Park and agricultural/rural land-use to the north.
- 3.3. There are nine locally designated Sites of Importance for Nature Conservation (SINCs) within the 1km search area. These are primarily sites that support woodland habitats and semi-improved grasslands, the closest of which is High Lawn SINC located approximately 75m north-west of the site, together with the Thicket Lawn SINC, this links to several connected SINCs which forms a medium-sized woodland block comprised of Ancient Semi-Natural Woodland (ASNW) as listed on the Ancient Woodland Inventory.
- 3.4. Priority and notable habitats within the search area are largely areas of woodland with the closest approximately 25m north of the site, as well as much neighbouring the woodland SINCs, and open marsh and meadows skirting these. Supplementary to these are hedgerows and treelines providing connecting habitat to the wider landscape and a large inland waterbody acting as a lake.

Bat records

- 3.5. There are several records of recorded bat roosts and bat activity within the search area. These are set out in Appendix 2. In summary there are several roost records of Common Pipistrelle *Pipistrellus pipistrellus* and Pipistrelle species *Pipistrellus* sp. with the closest records 300m west and 325m north-east respectively, both common species, and Bechstein's Bat *Myotis*

bechsteinii with the closest record 575m north-west; this is of particular importance as the Bechstein's Bat is one of the rarest species in the UK.

- 3.6. There are records of activity for a diverse assemblage of bats, likely reflecting the high bat suitability of the area; these comprise at least 11 species of bat including those aforementioned, as well as Serotine *Eptesicus serotinus*, Soprano Pipistrelle *P. pygmaeus*, Whiskered Bat *Myotis mystacinus*, Natterer's Bat *M. nattereri*, Brown Long-eared Bat *Plecotus auritus*, Barbastelle *Barbastellus barbastella*, Nathusius' Pipistrelle *P. nathusii*, Daubenton's Bat *M. daubentonii* and Noctule *Nyctalus noctula*.

Preliminary Roost Assessment

- 3.7. The following sections describe the findings of the visual survey work. Photos of relevant features described below are shown in Appendix 3.

Internals

- 3.8. Internally, the structure has two sections which are divided by a fibreboard partition which has gaps at the top and a door (Photo 2). The walls are brick with timber framed glass windows on the northern elevation which allows light into the interior. The roof is sloped upwards towards the interior wall on the southern elevation.
- 3.9. Room 61, located to the west, has fibre boarding on the eastern interior wall and lining the roof (Photo 3). There is a cavity above the false ceiling which has an open hatch. Above this the underside of the corrugated roofing material, the timber frame and the brick interior wall is visible (Photo 4). The interior has some debris and insulation materials inside and there is dust, cobwebs and debris. There was no visible evidence of bats; however, it was not possible to fully view the interior. There is a timber support frame inside the room and some stored items inside the room which is otherwise uncluttered. The surfaces had a light covering of dust and no evidence of bats was observed.
- 3.10. Under Room 61 is a tanked cellar which appears to have a smooth metal interior (Photo 5). This appears to be fully sealed from the exterior apart from allowing

water ingress. At the time of the survey there was approximately 1m depth of water in the cellar.

3.11. Room 62 is located to the east of the structure. The roof has a timber frame and is unlined with the underside of the corrugated material roof visible (Photo 6). The corrugated roof material has some translucent sections. There are gaps in the timber frame and between the timber frame and brickwork at the southern internal wall (Photos 7 and 8). The southern interior wall has exposed brickwork and there is a door with a timber frame which opens into the adjacent glasshouse to the south. At the western interior wall, there is a timber framed door and some boarding to the upper section of the wall (Photo 9). There are gaps between the timber door frame and the brickwork, and between the timber boarding and brickwork which may be suitable for bats (Photos 10 and 11). There is a timber frame, shelving and stored materials within Room 62 which is generally more cluttered than Room 61.

3.12. The crevices, surfaces and walls were examined for evidence of bats, no droppings, staining or feeding signs were observed.

Externals

3.13. Externally, the Potting Shed is a lean-to structure located on the northern elevation of the exterior wall of the glasshouses (Photo 1). The exterior walls are brick, and the northern elevation has a timber framed glazed section (Photo 12). The roof is corrugated roofing material and there is flashing at the apex of the roof where it ties into the adjacent wall. There is some lifting at the edges of the flashing which may be suitable for bats (Photo 13). There is some lifting between the sections of corrugated roofing materials which may also allow access for bats (Photos 13 and 14). There are gaps and crumbled sections of brickwork at the eastern and western elevations (Photos 14 and 15), and gaps between the timbers and brickwork at the north-western corner of the structure (Photo 16) which may be suitable for bats. There was no visible evidence of bats on the exterior of the structure.

Habitat quality assessment

- 3.14. The Potting Shed is located to the centre of Staunton Farm, the Farm as a whole has high quality habitat for bats including historic structures, mature trees, woodland and parkland habitats. Staunton Farm is located to the north of Havant adjacent to extensive areas of high-quality bat habitat within and around the area of Staunton Country Park.

Summary of Preliminary Roost Assessment

- 3.15. The Potting Shed at Staunton Farm is located in an area of high-quality bat habitat. With known populations of a diverse assemblage of species including rarer species.
- 3.16. The internal and external survey work found several suitable bat roost features in the structure. These features are potentially suitable for day roosts of small numbers of bats and is considered to potentially have suitability for supporting bats during the winter period as a non-classic hibernation site. No direct evidence of bats such as droppings, feeding signs, urine staining or fur rubbing were found.
- 3.17. Due to the location of the structure in an area of high-quality bat habitat, the presence of more than one feature features and the suitability for supporting bats during winter in non-classic hibernation roost features the structure was considered to have moderate suitability for bats:

“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.”

Other ecological considerations

- 3.18. An old Barn Swallow *Hirundo rustica* nest is visible within the Potting Shed located above the interior wall in Room 62 (Photo 17). The building also has suitability for supporting other common species which regularly nest in buildings such as House Sparrow *Passer domesticus*, Blue Tit *Cyanistes caeruleus* and Robin *Erithacus rubecula*.

Winter hibernation monitoring

- 3.19. The Potting Shed structure is not considered to be suitable as a classic hibernation site as it would not offer enough shelter or a stable enough temperature for supporting a significant number of hibernating bats for a long period of time. The features were considered to be suitable for supporting small numbers of bats in non-classic hibernation roosts. Two static detectors were deployed into Room 61 and Room 62 for a period of 2 weeks between 26 November and 10 December 2025.
- 3.20. No bats were recorded.
- 3.21. Winter monitoring was discontinued as it was considered to be unlikely that bats were present. Furthermore, due to the light-weight construction of the structure it would be difficult to differentiate recordings of bats from within and to the exterior of the structure. See Limitations in Section 1 above.

Emergence and re-entry surveys

- 3.22. As discussed in the previous section, Staunton Farm Potting Shed was judged to present moderate bat roost suitability. Therefore, in line with the established survey methods, a suite of two dusk emergence surveys was carried out. This level of survey work is enough to clarify those areas of the site where bat roosts are present / absent and to properly characterise any roosts identified.
- 3.23. The following sections describe the survey findings. Appendix 4 shows the key results.

Visit 1 – 30 April 2025 (dusk emergence)

- 3.24. The first bat recorded was a Common Pipistrelle heard foraging on the northern side of the structure at 20:55 (32 minutes after sunset), it was not observed or recorded on the cameras. Following this a Soprano Pipistrelle was seen foraging over the gardens to the south of the structure from 21:00 (37 minutes after sunset) with occasional passes until 21:07. It was also recorded on the northern side.

- 3.25. A Brown Long-eared Bat was recorded to the north of the structure near position 3 between 21:08 and 21:11 (46 – 49 minutes after sunset). It was not recorded emerging from the structure.
- 3.26. Following this there were occasional Noctule, Serotine, Common and Soprano Pipistrelle passes recorded on both sides of the structure, with more Long-eared activity near position 3 to the north of the structure between 21:55 and 21:59.
- 3.27. No bats were seen to emerge from or re-enter the surveyed buildings.

Visit 2 – 20 May 2024 (dusk emergence)

- 3.28. The first bat recorded was a Serotine pass at 21:14 (19 minutes after sunset) recorded to the north and south of the structure. Following this there was a commuting Noctule at 21:18 (23 minutes after sunset).
- 3.29. Common Pipistrelles were recorded passing to the north of the structure at 21:28 (33 minutes after sunset) and 21:37 (42 minutes after sunset).
- 3.30. Generally, activity was very low with occasional passes of Common Pipistrelle, Soprano Pipistrelle, Serotine and Noctule with a single Long-eared Bat registration to the north of the building at 21:42 (47 minutes after sunset).
- 3.31. No bats were seen to emerge from or re-enter the surveyed buildings.

4. Discussion

Interpretation of survey results

- 4.1. The findings of the PRA indicated that the structure has moderate suitability for supporting roosting bats. However, no bats or evidence of bats were found during internal inspection of the structure.
- 4.2. Static detector monitoring found no bats present during the early Winter period 2024.
- 4.3. Emergence surveys found no bats to emerge from or enter the structure.
- 4.4. Bat roosts are therefore considered to be likely absent from the Potting Shed.

Impact assessment

- 4.5. The proposals seek to demolish the Potting Shed structure to the north of the internal wall.
- 4.6. As bats and bat roosts are likely absent there will be no negative impacts to bats.

Legislation and planning policy

- 4.7. Bats are legally protected under both domestic and international law (the Wildlife and Countryside Act 1981 (as amended)¹ and the Conservation of Habitats and Species Regulations 2017² respectively). This legislation makes it an offence to kill, injure or disturb bats, or to destroy or damage their roosts, even when the bats are not present. It is also an offence to ‘take’ a bat – in the context of development work, this would include moving a bat out of harm’s way and transferring it to a new, safe location.
- 4.8. For such work to legally proceed, Natural England (the Government’s statutory nature conservation agency) will issue a European Protected Species

¹ <http://www.legislation.gov.uk/ukpga/1981/69>

² <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

Mitigation Licence (EPSML), subject to the proposals meeting three ‘derogation’ tests:

1. the consented operation must be for ‘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’; (Regulation 53(2)(e))
2. there must be ‘no satisfactory alternative’ (Regulation 53(9)(a)); and
3. 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’ (Regulation 53(9)(b)).

4.9. Case-law (*Morge vs. Hampshire County Council*)³ has clarified that planning authorities are able to grant permission for developments that may affect a European protected species to the extent that a breach of the Conservation of Habitats and Species Regulations is likely (i.e. in the case of this proposal, destruction of bat roosts), provided that sufficient information is provided to give the planning authority assurance that the relevant EPSM licence is not unlikely to be granted - i.e. planning authorities also have a duty to assess planning applications against these tests.

4.10. In view of the survey results, it can be concluded that the development proposals will not affect bats or bat roosts and would not be considered likely to result in a breach of the legislation.

4.11. The survey results also demonstrate that the development would not result in the loss of any key areas of foraging or commuting habitat.

Other ecological considerations

4.12. The structure is suitable for supporting nesting birds. Barn Swallow nests are present in the structure and there are features suitable for common nesting birds such as Sparrow and Blue Tit.

³ <https://www.supremecourt.uk/cases/docs/uksc-2010-0120-judgment.pdf>

- 4.13. Demolition of the Potting Shed structure is likely to have negative impacts to nesting birds if carried out during the nesting season (indicatively March to August). This could result in destruction of nests and killing of birds and young.

5. Recommendations

Bats

- 5.1. As bat roosts are not considered to be present the demolition of the structure will not impact bats and there are no recommendations in relation to bats.

Nesting Birds

- 5.2. The structure is suitable for supporting nesting birds. In order to avoid impacts to nesting birds it is recommended to carry out the demolition outside of nesting bird season (indicatively from March to end of August).
- 5.3. If demolition is to take place during the nesting period a pre-works check of the structure is to be carried out within 24 hours of works to ensure that no nesting birds are present. This may entail a nesting birds survey in the morning to observe any birds with dependent young utilising the structure and/or a careful examination of the structure and all features suitable for supporting nesting birds.
- 5.4. If nesting birds are present works must not take place until the young have fledged and left of their own accord.
- 5.5. It is recommended that suitable bird nesting features are installed in suitable locations nearby. Features such as a Swallow nest cup and/or a House Sparrow terrace would offer suitable features to replace the features available in the demolished structure.

Biodiversity Net Gain

- 5.6. No habitats will be impacted by the demolition work. All access to the structure is via existing access tracks and hardstanding features. There is no requirement for Biodiversity Net Gain.

6. Conclusions

- 6.1. Visual bat survey work at Staunton Potting Shed found the structure to have moderate suitability for supporting roosting bats.
- 6.2. Winter monitoring carried out in November – December 2024 recorded no bats within the structure.
- 6.3. Dusk emergence survey work carried out in the active bat season in 2025 found no bats to emerge from or re-enter the structure and low levels of bat activity in the vicinity of the structure overall.
- 6.4. Bats and bat roosts are considered to be likely absent from the Potting Shed and therefore the demolition of the Potting Shed will not impact bats.
- 6.5. The Potting Shed is suitable for supporting nesting birds such as Barn Swallows and common nesting birds.
- 6.6. To avoid impacts to nesting birds it is recommended that demolition takes place outside of nesting bird season.
- 6.7. If it is not possible to carry out the demolition outside of nesting season a pre-works nesting bird survey will be carried out. If nesting birds are present demolition will not be carried out until the nests and young have left the structure of their own accord.
- 6.8. Suitable replacement nest features are to be installed nearby to compensate for the loss of bird nesting locations.
- 6.9. The works will not impact any habitats therefore there are no requirements for Biodiversity Net Gain.
- 6.10. Overall it is concluded that if the mitigation strategy is implemented, the development will comply with relevant legislation and planning policy.
- 6.11. Unless otherwise advised, the findings and recommendations in this report are solely based on the plans and brief provided to HCCET. The results and findings are valid for two years from the date of the initial field survey. HCCET

should be contacted if this report is to be used after this period to check if any updating work needs to be undertaken.

References

- Chartered Institute of Ecology and Environmental Management (CIEEM). (2013), *Guidelines for Preliminary Ecological Appraisal*. CIEEM; Winchester.
- Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3th edn). Bat Conservation Trust; London.
- MHCLG, (2024). *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government; London.
- Middleton, N., Froud, A., and French, K. (2022). *Social Calls of the Bats of Britain and Ireland*. Pelagic Publishing; Exeter.
- Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.
- Russ, J. (2021). *Bat Calls of Britain and Europe*. Pelagic Publishing; Exeter.

Appendix 1 – Existing and proposed plans

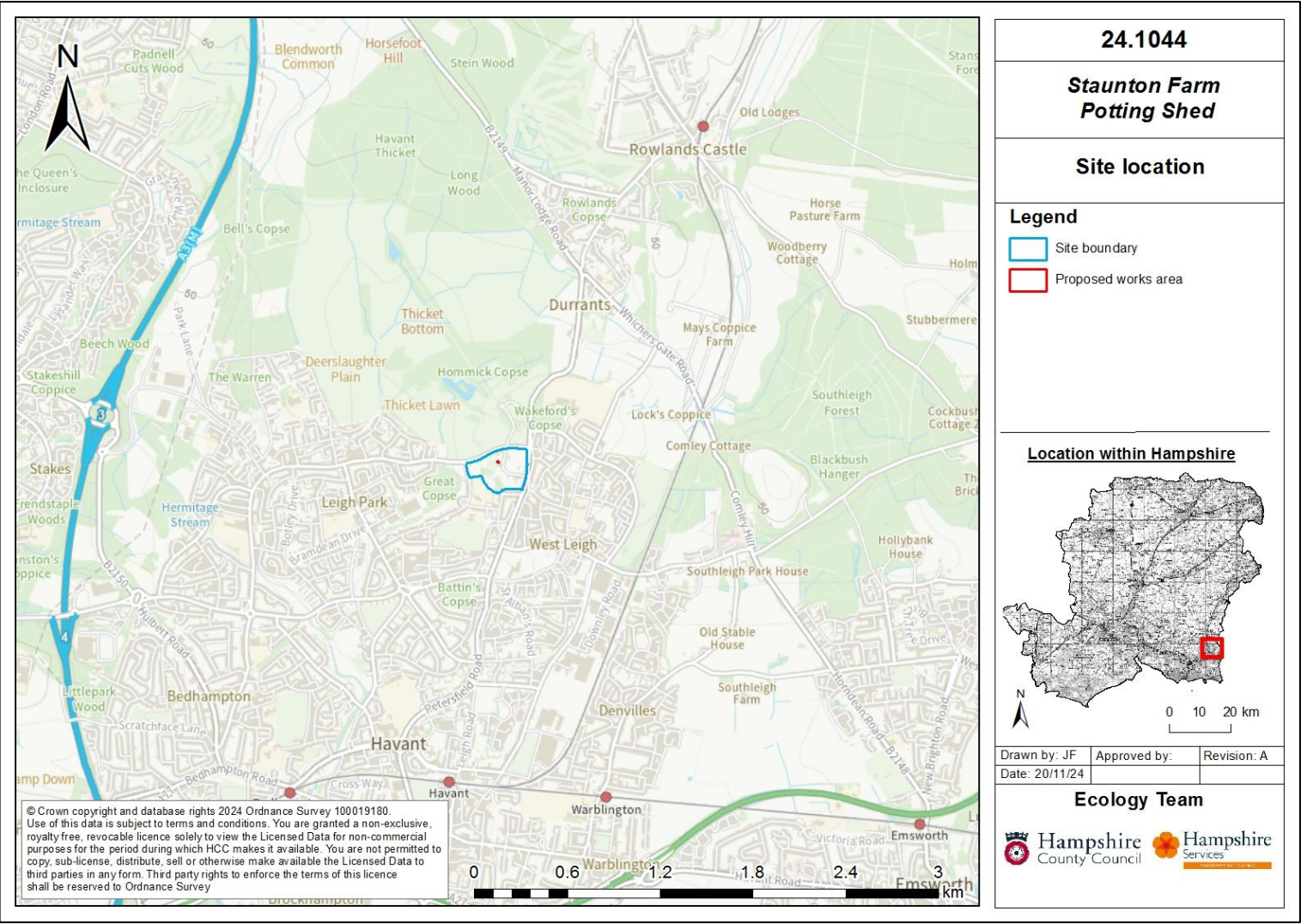


Figure A1.1 Site location

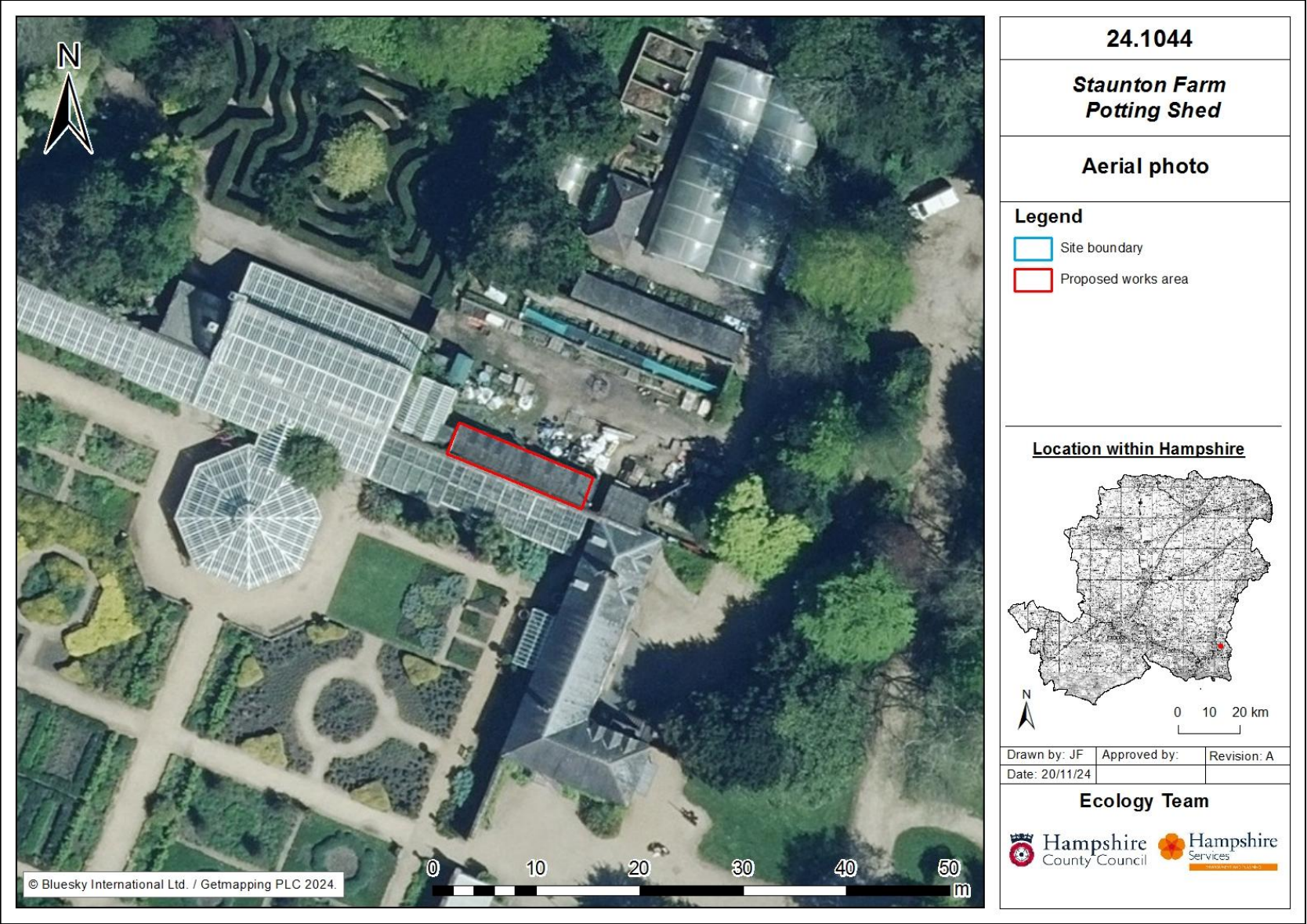
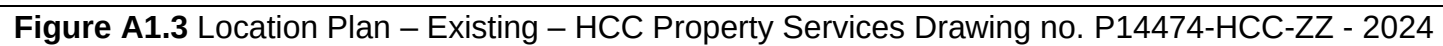


Figure A1.2 Aerial image



Appendix 2 – Desk based assessment results

Table A2.1 Bat records within 1km of site **roosts indicated in bold**

Common Name	Taxon name	Details	Distance/ bearing from site
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	2015; bat detector; Nik Knight 2019; bat detector 2021; bat detector 2021; bat detector 2016; bat detector; Nik Knight, HaS 2019 and 2021; Bat detector 2017 and 2022; bat detector 2008; in hand, Nik Knight; injured bat 2007 and 2010; roost visit 2021; bat detector 2007; roost visit 2013; bat detector 2017 and 2022; bat detector 2017; bat detector 2017; bat detector 2017; bat detector 2014 and 2017; bat detector 2021; mist netting with acoustic lure; female adult parous 2019; bat detector 2022; bat detector 2021; bat detector 2017; bat detector 2022; bat detector 2005; bat detector 2021; bat detector 2017; bat detector 2022; bat detector	25m N 100m W 100m NE 100m E 175m NE 200m W 200m SW 225m E 300m E 300m W 325m E 350m N 350m SW 400m W 425m SW 500m NW 525m W 625m N 700m E 750m SW 825m S 925m SW 925m S 950m N 950m SW 1000m SW 1000m S
Serotine	<i>Eptesicus serotinus</i>	2021; bat detector 2021; bat detector 2016; bat detector; Nik Knight, HaS 2021; bat detector 2021; bat detector	100m NE 100m E 175m NE 200m SE 225m NE

Common Name	Taxon name	Details	Distance/ bearing from site
		2021; bat detector; Bats (3-4) observed flying around trees 2017; bat detector; Fmax 27.2 kHz	800m S 1125m SW
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	2015; Bat detector; Nik Knight, HaS 2017; bat detector 2022; bat detector 2022; bat detector 2017; bat detector 2014; bat detector 2022; mist netting with acoustic lure; 1 adult male 2022; Harp trapping with acoustic lure 2005; bat detector 2022; bat detector	175m NE 350m SW 400m and 425m SW 450m N 500m NW 525m W 750m NW 800m N 950m N 1050m SW
Pipistrelle Bat species	<i>Pipistrellus</i> sp.	2010; Roost visit 2018; One parous female captured 2018; Capture survey	325m NE 800m NW 850m N
Myotis Bat species	<i>Myotis</i> sp.	2017; bat detector; Fmax 45.8 kHz 2017; bat detector; Fmax 65-25 kHz. Likely to be Daubenton's, not seen. 2019; bat detector; Fmax 44.0 kHz 2017; bat detector; Fmax 42.0 kHz 2017; bat detector; Fmax 45.0 kHz 2020; bat detector	350m SW 500m NW 525m W 625m SW 750m SW 950m NW
Bats	Chiroptera species	2018; roost 1996; roost	375m NW 625m SW
Whiskered Bat	<i>Myotis mystacinus</i>	2017; mist netting with acoustic lure; Adult male 2018; mist netting with acoustic lure 2019; bat droppings with DNA analysis; Catted; male bat in care 2018; mist netting with acoustic lure; 1 male 1 female	425m N 725m N 725m E 850m N
Noctule Bat	<i>Nyctalus noctula</i>	2022; bat detector; foraging over lake	450m N

Common Name	Taxon name	Details	Distance/ bearing from site
		2003; in hand; injured bat collected	575m NW
Bechstein's Bat	<i>Myotis bechsteinii</i>	2018; Several records; radio tracked to roost; 2 tree roosts 2018; radio tracked to roost 2021; mist netting with acoustic lure 2018; radio tracked to roost 2023; mist netting with acoustic lure 2018; mist netting with acoustic lure; female nulliparous, radio tracked to roosts 2018; mist netting with acoustic lure; male radio tracked to two roosts 2018; radio tracked to tree roost 2020; mist netting with acoustic lure; adult male bat 2008; radio tracked to roost; including juveniles	575m NW 625m N 625m N 675m NW 800m N 800m N 850m N 875m NW 950m NW 975m N
Natterer's Bat	<i>Myotis nattereri</i>	2018; One nulliparous female captured 2018; couple of records; mist netting with acoustic lure; 1 female parous and 1 female lactating 2018; mist netting with acoustic lure; 2 females, 1 parous + 1 nulliparous	700m NW 800m N 850m N
Western barbastelle	<i>Barbastella barbastellus</i>	2018; mist net with acoustic lure; 2 males	725m N
Brown Long-eared Bat	<i>Plecotus auritus</i>	2022; mist netting with acoustic lure; adult male 2021; mist netting with acoustic lure; female adult parous	750m NW 800m NW
Daubenton's Bat	<i>Myotis daubentonii</i>	2022; mist netting with acoustic lure; 1 adult male 2018; mist netting with acoustic lure	750m NW 800m NW
Whiskered/Brandt's Bat	<i>Myotis mystacinus/brandtii</i>	2018; Captured one parous female.	800m N
Nathusius' Pipistrelle	<i>Pipistrellus nathusii</i>	2017; bat detector; Fmax 40.9 kHz	1050m SW



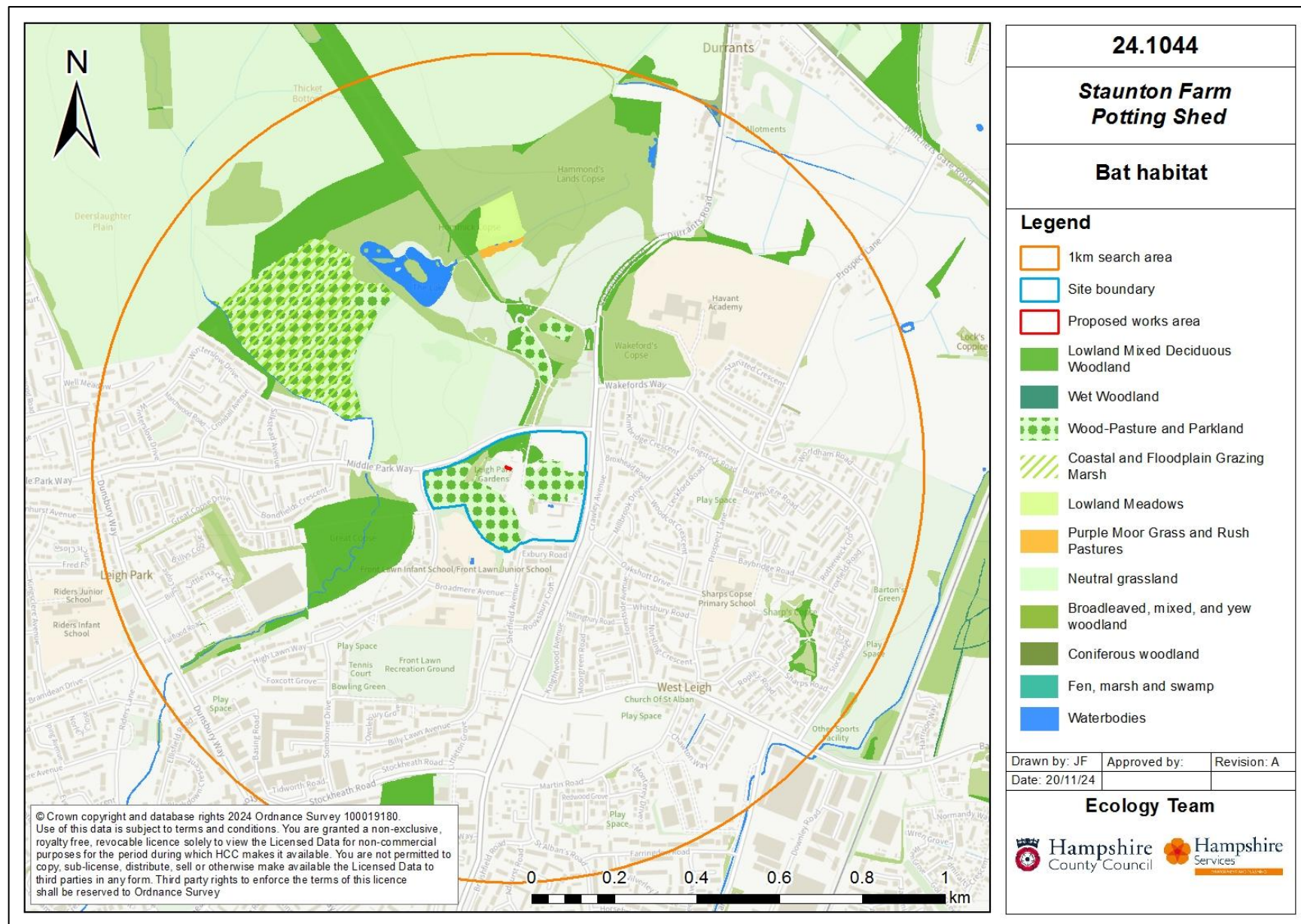


Figure A2.2 Site and surrounding key bat foraging and commuting habitat

Appendix 3 – Photos



Photo 1 Potting Shed – view from north-east



Photo 2 View from west to east showing partition wall



Photo 3 Room 61 view east showing boarded ceiling and hatch



Photo 4 Room 61, interior of roof cavity



Photo 5 Room 61 – view into tanked cellar with water storage



Photo 6 Room 62, view towards west



Photo 7 Room 62, south-western corner. Gaps between timber and brickwork.



Photo 8 Room 62, southern elevation. Gaps between timbers and brickwork

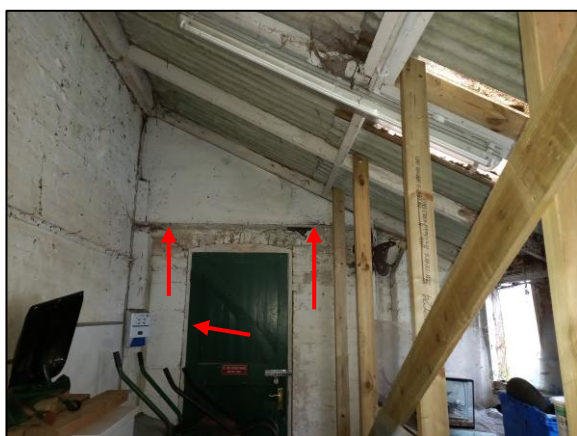


Photo 9 Room 62 – western internal wall – door and boarding, locations of gaps indicated



Photo 10 Room 62 – gaps around door at western end



Photo 11 Room 62 – gaps between boarding and wall



Photo 12 General view of Potting Shed externals



Photo 13 *Lifted flashing indicated with circle, gaps in corrugated roofing material indicated with arrows*



Photo 14 *Lifted corrugated roof materials indicated with arrow, area of crumbled brickwork in circle.*



Photo 15 *North-eastern corner of Potting Shed, crumbled brickwork*



Photo 16 *North-eastern corner of Potting Shed Gap between timbers and brickwork.*



Photo 17 *Room 62, Barn Swallow nest*

Night Vision Aid Images

NVA locations are shown in the Survey Results Plan in Appendix 4 below

Start of Survey**Darkest Point****Survey 1 – 30/04/2025**

No darkest point picture as thermal imager is not dependent on light levels

Photo 1

NVA Position 1

View: western end of northern elevation from north-west

NVA type: Guide TK612 Thermal Monocular Camera - 640x480, 12μm, 10mm lens, 50Hz

**Photo 2**

NVA Position 2

View: western end of northern elevation from north

NVA type: Nightfox Whisker IR camera

**Photo 3****Photo 4**

NVA Position 3

View: eastern end of northern elevation from north-east

NVA type: Sony FDR-AX33 camcorder with infrared illuminators

**Photo 5**

Survey 2 – 20/05/2025

No darkest point picture as thermal imager is not dependent on light levels

Photo 6

NVA Position 1

View: western end of northern elevation from north-west

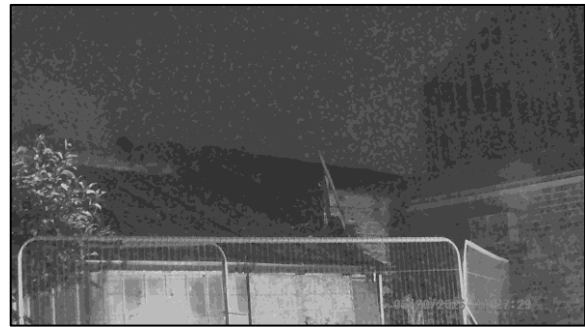
NVA type: Guide TK612 Thermal Monocular Camera - 640x480, 12 μ m, 10mm lens, 50Hz

**Photo 7**

NVA Position 2

View: western end of northern elevation from north

NVA type: Nightfox Whisker IR camera

**Photo 8****Photo 9**

NVA Position 3

View: eastern end of northern elevation from north-east

NVA type: Sony FDR-AX33 camcorder with infrared illuminators

**Photo 10**



No darkest point picture as thermal imager is not dependent on light levels

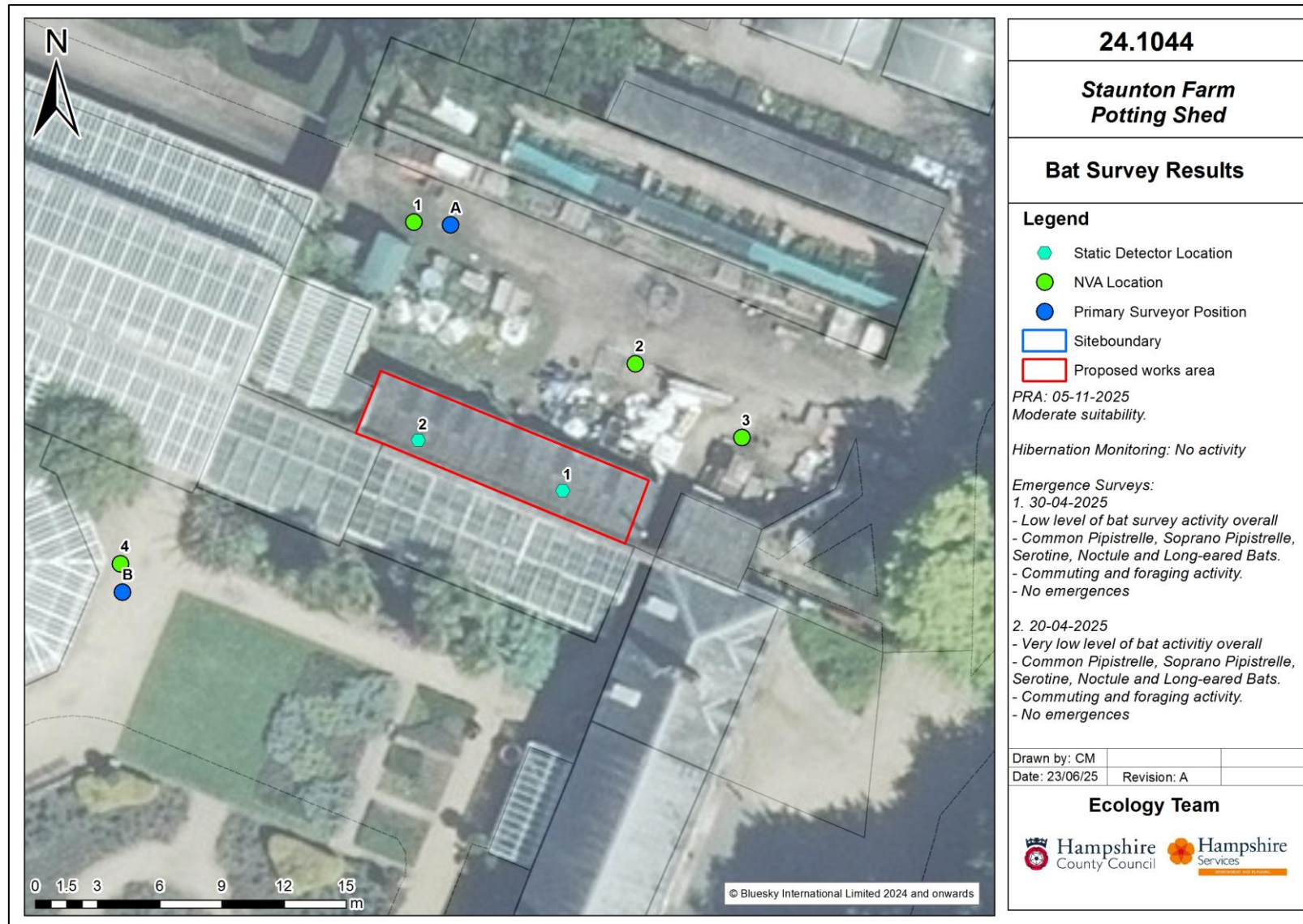
Photo 11

NVA Position 4

View: southern elevation from south-west

NVA type: Guide TK612 Thermal Monocular Camera - 640x480, 12µm, 10mm lens, 50Hz

Appendix 4 – Survey results



Appendix 5 – Roost and activity habitat suitability criteria

Table A5.1 BCT guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape.

Potential Suitability	Roosting habitats in structures	Potential flight-paths and foraging habitats
<i>None</i>	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices / suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any foraging or commuting 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 for foraging bats).
<i>Negligible^a</i>	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, small element of uncertainty remains in order to account for non-standard bat behaviour.
<i>Low</i>	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 ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream but isolated i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
<i>Moderate</i>	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity or hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat 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	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 ^b and surrounding habitat. These structures have the potential to support high conservation roosts, e.g., maternity or classic cool/stable hibernation site.	<p>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.</p> <p>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.</p> <p>Site is close to and connected to known roosts.</p>
<p>^a Negligible is defines 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).</p> <p>^b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.</p> <p>^c Evidence from the Netherlands shows mass swarming events of Common Pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common Pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.</p>		