

Billingshurst

784-B031362

Appendix 9.1E: Roosting Bat Report

Highwood Ventures 5 Limited and Vivid Housing Limited

January 2026

Document prepared on behalf of Tetra Tech Limited.



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APPENDICES

Appendix E.1 - Preliminary Roost Assessment and Daytime Bat Walkover Results

Appendix E.2 - Dusk Emergence Survey Results

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this report is to:

- Describe the methods used to carry out the desk and field-based assessments for bats;
- Provide any records of bats on or within 5 kilometres (km) of the site;
- Assess suitability of buildings/structures/habitats on site for roosting bats;
- Determine the presence or likely absence of roosting bats;
- Ascertain the number and species of bat roosting within the buildings/structures to determine the roost assemblage present;
- Identify if any additional surveys are required to inform this assessment.

Bats are protected in the UK under the Conservation of Habitat and Species Regulations 2017, as amended, the Wildlife and Countryside Act 1981, as amended, and seven species are Species of Principal Importance (SPIs) under the Natural Environment and Rural Communities (NERC) Act 2006.

This report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 DESK STUDY

The desktop study comprised two elements completed in January 2026:

- A data search obtained from Sussex Biological Records Centre (SxBRC) of records of bats within 5 km of the site boundary; and
- Online element including a search using DEFRA's Multi Agency Geographic Information for the Countryside (Magic) (<https://magic.defra.gov.uk>) website and Ordnance Survey (OS) and Aerial Imagery (<https://www.bing.com/maps>). This included a search for any designated sites within 10 km supporting bats, and 2 km for records of bat roosts or European Protected Species Licenses (EPSLs).

2.2 FIELD SURVEYS

2.2.1 Biosecurity

All surveys were conducted in accordance with Tetra Tech Biosecurity Policy (2023).

2.2.2 Daytime Bat Walkover

Buildings

A Preliminary Roost Assessment (PRA) of one building on site, the Jubilee Field Pavilion, was conducted during habitat assessments in 2023 by Senior Ecologist Jon D’Arcy (Natural England level 2 bat licence number: 2018-37285-CLS-CLS), to determine its suitability to support roosting and hibernating bats, following Bat Conservation Trust (BCT) guidance, detailed in **Table 1**.

On 27th June 2025, this PRA was updated by Senior ecologist Georgina Davey (Natural England level 1 bat licence number 2021-10128-CL17-BAT) and Project ecologist Katie Hepburn (Natural England level 1 bat licence number 2025-85170-CL17-BAT).

The building was systematically inspected during daylight, and any features suitable for bats were noted such as weatherboarding, soffit boxes, gaps in brickwork, cracks, crevices, lifted lead flashing, slipped or broken tiles and missing mortar below ridge tiles. Features located at height were viewed from the ground using binoculars. Any Potential Roost Features (PRFs) were inspected for signs of bat presence such as:

- Bat droppings on the ground outside, on the floor inside or stuck to walls;
- Other evidence of bats such as feeding remains;
- Suitable entry and exit points around cladding, eaves, flashing, under tiles or gaps in mortar;
- Live bats, bat corpses or skeletons; and
- Oily marks (from fur) or localised clean spots around possible access points and roost areas.

Table 1: Categories of bat roost suitability in buildings (Collins, J, 2023)

Suitability	Description
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However these roost sites do not provide enough space, shelter, protection, appropriate conditions (for example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation - the categorization described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation site.

Trees

A DBW was conducted on 27th June 2025 to assess trees within the site for their suitability to support roosting bats. The DBW used the methodology from the BCT 4th edition guidelines (Collins, J, 2023). Trees were inspected systematically and surveyed consistently around all parts of the tree (from all angles and from both close to the trunk and further away) using binoculars and high-powered torch. The surveys were completed in daylight hours and not during poor light conditions.

All trees were categorised to highlight whether additional assessment is required referring to the categories in **Table 2**. Professional judgement was used to identify trees where features were obscured by foliage or other branches.

Table 2: Categorisation of trees on site (Collins, J, 2023)

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
PRF	A tree with at least one PRF present

Categorisation of PRFs

Where noted, PRFs were categorised in accordance with Table 3.

Table 3: Categorisation of sub features on a tree (Collins, J, 2023)

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

Habitat value

An assessment of the value of the site was undertaken following the classifications listed in Table 4.

Table 4: Categories of potential suitability of habitats for foraging and commuting bats (Collins, J, 2023)

Suitability	Description
Negligible	No obvious habitat features on site are likely to be used as flightpaths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape

Suitability	Description
	by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to known roosts.

2.2.3 Dusk Emergence Surveys

2023 Survey Effort

In accordance with BCT guidelines for buildings with low suitability to support roosting bats, one dusk emergence survey was undertaken on the 31st of August 2023, which fell within the optimum survey period (May to August).

2025 Survey Effort

In accordance with BCT guidelines for buildings with moderate suitability to support roosting bats, two dusk emergence surveys were undertaken on the Jubilee Field Pavillion, within the optimum survey period on the 25th of June and 9th of September 2025.

As recommended for trees with PRF-M suitability, three surveys were undertaken on T1 and T2 (on the 7th and 27th of August and 18th of September 2025). T1 was subject to dusk emergence surveys, and the PRF-M feature on T2 (Pruning cut on the stem) was able to be inspected via an endoscopic camera from the ground so this method was used in lieu of a dusk emergence. Surveys on each location were spaced at least three weeks apart, with all surveys conducted in the optimum survey period, which also helps to detect maternity roosts (May to August).

Survey Methods

The survey lead was experienced in bat surveys and all bat surveyors had bat survey training in line with BCT Professional Training Standards for Professional Ecologists Working with Bats (BCT, 2020) Level 1 in line with BS42020.

Despite differences in the survey effort between 2023 and 2025 due to a change in roost suitability classification, the survey methodology for dusk emergence surveys remained the same as Tetra Tech had adopted the BCT 4th edition guidelines (Collins, J, 2023) approach using Night-Vision Aids (NVAs).

Dusk emergence surveys began at least 15 minutes before sunset and continued for 1.5 hours after sunset. Bat surveys were completed during the period when bats are active, within the optimum survey season and within suitable weather conditions (above 10°C, dry, and with calm winds). Further information related to survey dates, timings, and weather conditions are detailed in **Appendix E.1**.

During the surveys, NVAs in the form of infra-red (IR) cameras (and associated IR lights) were positioned to view the PRFs identified on the building for any bats emerging from (or returning to) the roost. The IR

cameras used were Canon XA40 or XA60 cameras. Cameras were positioned in such a way to viably cover the PRFs of the buildings and were paired with a bat detector to record bat calls. Cameras were set to record the duration of the survey, with the same timings as stated in **Appendix E.1**. Surveyor and IR positions were kept consistent between the three surveys and are shown in **Figure 2**.

During the surveys, IR cameras were paired with Elekon Batlogger M or M2 detectors. These detectors use a broad-spectrum microphone and a heterodyne mode to make bat calls audible while recording full spectrum data for subsequent analysis. Bat calls were analysed, where necessary, using BatExplorer version (Version 2.2) in 2023 and Kaleidoscope Pro software (Version 5.7.0) in 2025.

Camera footage was analysed using Motion Meerkat (Weinstein, 2015) to identify motion events at each survey position, which were subsequently analysed manually. The following settings were used: background variation 3; organism speed 3; minimum object size 0.01% (parameters were tested against known activity before analysis). The subsequent images were reviewed and cross referenced with time of the movement to the sound files obtained by the Elekon Batlogger M detector.

2.2.4 Endoscope Inspection of Tree

During the 2025 surveys, endoscope inspections were carried out by principal ecologist Joe Salkeld (Natural England level 2 bat licence number 2019-43538-CLS-CLS).

During close inspection surveys, trees with a PRF-M's features were subjected to an endoscope inspection by Natural England Class 2 licenced bat ecologists. Each PRF-M feature was surveyed using an endoscope to check for bats and/or evidence of roosting bats such as droppings, staining or feeding remains. The internal size and condition of each feature was recorded. If during a climb a feature was considered unsuitable or not PRF-M, this would be downgraded and no further surveys would be completed.

All features that continued to be PRF-M were surveyed a further two times (total of three presence / likely absence inspections). All surveys were completed between July and September with at least two of the surveys taking place in the optimal period between May and August (as per Collins, 2023). A three week gap was left between assessments to allow for an extensive spread throughout the maternity period. The surveys were completed within the optimal survey window and are therefore compliant with the levels of survey effort required for the suitability assigned to these trees. Each survey was separated by a period of at least three weeks and PRFs were able to be fully inspected. Therefore, there were not any constraints with these surveys.

2.3 LIMITATIONS

DBW assessments of trees can be undertaken any time of year, however it is generally noted that PRFs are less likely to be obscured by foliage during the winter and this is the optimal time of year to undertake these surveys. The 2025 DBW was completed in June which is outside the optimal survey window. Weather conditions were suitable for surveyors to sufficiently view PRFs from the ground using binoculars and it is considered that survey timing is not a significant limitation to the survey.

The optimal period to undertake bat presence/likely absence surveys is between May and August, although surveys in April, September, and October may aid in identifying pre-maternity gathering roosts or transitional roosts. Dusk emergence surveys were completed between April and October, which is

inside the optimal survey window and are therefore compliant with the levels of survey effort required for all surveys completed.

All surveys were undertaken in suitable weather conditions, therefore there are no significant limitations to the survey effort with regard to weather.

Dusk emergence surveys were completed with the assistance of bat detectors. All survey techniques are subject to bias, and bat detector surveys may under-record species with weak echolocation calls, such as brown long-eared bats. However, these biases were considered when interpreting the results. Some bat calls are variable dependent on the habitats they fly in and on their activity (commuting, foraging, social interaction, etc) and extremely similar between species. In these cases, it is accepted that species are identified to genus level or group level (e.g. *Myotis*, *Myotis* / *Plecotus* and *Nyctalus* / *Eptesicus*) (Collins, J, 2023). Where call parameters are inconclusive the species has been labelled as 'unknown'. This allows the dataset to be interpreted accurately and transparently.

In total eight trees were recorded with suitable PRFS for bats, however, further surveys were only carried out on two trees T1 and T2. This is based off the illustrative masterplan '*1345 Illustrative Layout V11 A2 5k - with movement routes*' (Drawing no: SK002), which indicates direct impact to these trees only. Once the design and Arboricultural Impact Assessment (AIA) is finalised, and / or there are changes to the impacts to trees, further surveys may be required on trees that have PRFs but have not been subject to further dusk emergence surveys.

Notwithstanding the limitations highlighted above, the survey effort applied is considered sufficient to meet the aims of the survey and this report, in accordance with the guidelines.

3.0 RESULTS

3.1 DESK STUDY

The SxBRC returned recent bat records for at least 13 species within a 5 km radius of the site boundary, as shown in **Table 5**.

Table 5. Bat records within 5 km radius of the site boundary

Species	Number of records	Recorded individuals	Latest recorded year	Closest record
Alcathoe Bat <i>Myotis alcathoe</i>	7	10	2015	3.1 km west
Barbastelle, <i>Barbastella barbastellus</i>	18	24	2024	1.6 km north
Bechstein's Bat, <i>Myotis bechsteinii</i>	11	14	2018	3.2 km west
Brandt's Bat, <i>Myotis brandtii</i>	4	4	2015	3.3 km west
Brown Long-eared Bat, <i>Plecotus auritus</i>	53	125	2024	Onsite (2023)
Common Pipistrelle, <i>Pipistrellus pipistrellus</i>	84	458	2024	Onsite (2023)
Daubenton's Bat, <i>Myotis daubentonii</i>	7	10	2024	2.7 km west
Long-eared Bat species, <i>Plecotus sp.</i>	21	24	2024	1.5 km west
Myotis Bat, <i>Myotis sp.</i>	7	7	2023	Onsite (2020)
Nathusius's Pipistrelle, <i>Pipistrellus nathusii</i>	1	1	2023	2.8 km west
Natterer's Bat, <i>Myotis nattereri</i>	16	18	2024	2.3 km west
Noctule, <i>Nyctalus noctula</i>	30	43	2024	<0.1km east (2019)
Nyctalus Bat species, <i>Nyctalus sp.</i>	1	2	2019	<0.1km east (2019)

Species	Number of records	Recorded individuals	Latest recorded year	Closest record
Pipistrelle, <i>Pipistrellus</i> sp.	6	7	2024	1.6 km north
Serotine, <i>Cnaepheus serotinus</i>	21	25	2023	1.6 km north
Soprano Pipistrelle, <i>Pipistrellus pygmaeus</i>	53	136	2024	Onsite (2023)
Whiskered Bat, <i>Myotis mystacinus</i>	11	14	2023	Onsite (2023)
Whiskered/Brandt's	2	2	2020	4.2 km northeast

Specification of the type of record is not provided by the SxBRC; therefore, it is unknown whether these records pertain to field observations or roosts.

A review of Magic identified two statutory sites designated for bats within 10 km of the site. These are the Mens SAC (located 2.9 km west of the site), which lists barbastelle bat as a primary reason for selection of the site, and Ebernoe Common SAC (located 8.4 km west of the site) which lists both barbastelle and Bechstein's bat as primary features for the selection of the site.

Magic returned one EPSL granted for bats within a 2 km radius of the site boundary. This licence (2016-24415-EPS-MIT) permits the damage and destruction of a breeding and resting place for common pipistrelle, soprano pipistrelle and whiskered bat.

3.2 FIELD SURVEYS

3.2.1 Daytime Bat Walkover

Buildings

During the PRA conducted in 2023, the Jubilee Pavilion was assessed as having low suitability to support roosting bats and no hibernation suitability. The PRFs noted were gaps in the wooden soffit at the eastern and western gables, and these were subject to further survey as per Sections 2.2.3 and 3.2.2.

On 25th June 2025, the PRA was updated and the building suitability was increased to moderate suitability to support roosting bats, due to a gaps now present within wooden soffits and bargeboards on all aspects of the building (see **Figure 1**).

Trees

During the DBW on 25th June 2025, a total of eight trees were considered to provide features suitable for roosting bats and classified as PRF (according to Table 2: **Categorisation** of trees on site). Suitable features for bats were then further categorised and the tree assigned an overall bat roost suitability classification in line with the highest value PRF. Six trees are considered PRF-M and two are considered PRF-I. A summary of the DBW results for trees are presented in Table 6, with details of PRFs provided in **Appendix E.1**.

Table 6: Summary of DBW assessment of trees

Tree ID	Grid Reference	Species	Bat Roost Suitability	Tree to be impacted Y/N?
T1	TQ 07464 25476	Pedunculate oak <i>Quercus robur</i>	PRF-M	Y
T2	TQ 07454 25475	Pedunculate oak	PRF-M	Y
T3	TQ 07296 25344	Pedunculate oak	PRF-M	N
T4	TQ 07275 25333	Pedunculate oak	PRF-M	N
T5	TQ 08456 26519	Pedunculate oak	PRF-M	N
T6	TQ 08530 26510	Pedunculate oak	PRF-M	N
T7	TQ 08259 26280	Pedunculate oak	PRF-I	N
T8	TQ 08265 26301	Pedunculate oak	PRF-I	N

Based on the iterative master plan available at the time of writing this report - '1345 Illustrative Layout V11 A2 5k - with movement routes' (Drawing no: SK002) it has been assessed that only T1 and T2 will be directly impacted (i.e. removed) as part of the development.

3.2.2 Dusk Emergence Surveys / Endoscope Inspection

The results of the nocturnal surveys completed in 2022 and 2025 are summarised in **Table 7** below. Detailed survey records can be found in **Appendix E.2**.

Table 7: Dusk emergence survey results

Location	2023 Survey Visit 1	2025 Survey Visit 1	2025 Survey Visit 2	2025 Survey Visit 3
Jubilee Fields Pavillion	No bats were recorded emerging from the building.	No bats were recorded emerging from the building.	No bats were recorded emerging from the building.	N/A
Tree 1 (T1)	N/A	No bats were recorded emerging from the tree.	No bats were recorded emerging from the tree.	No bats were recorded emerging from the tree.
Tree 2 (T2)	N/A	No bats, or evidence of bats, were seen inside PRF.	No bats, or evidence of bats, were seen inside PRF.	No bats, or evidence of bats, were seen inside PRF.
Summary				

No roosts were recorded. Low levels of soprano pipistrelle bat activity was recorded during all three surveys.

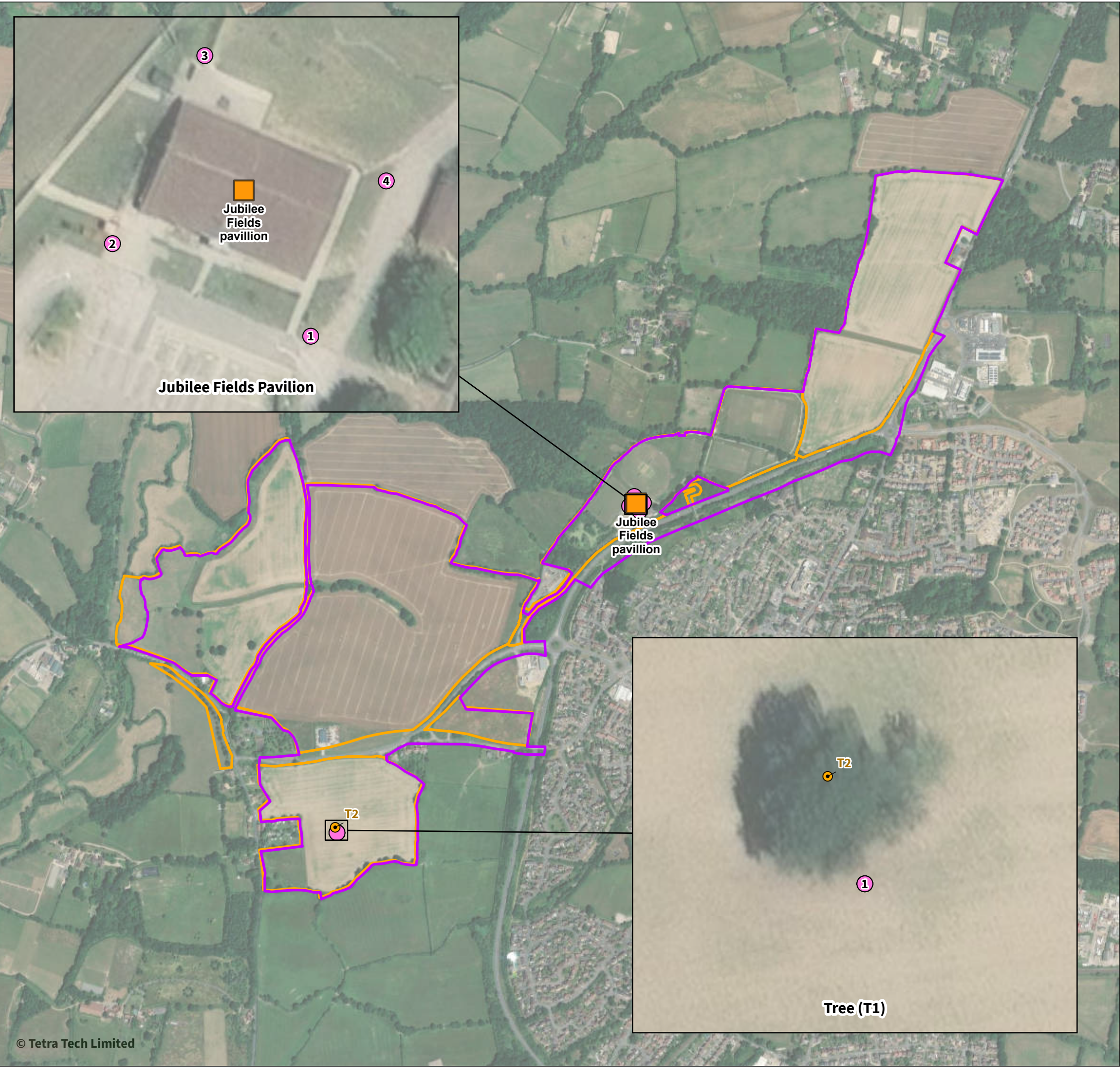
4.0 REFERENCES

- BCT. (2020). *Professional Training Standards for Professional Ecologists Working with Bats*. Bat Conservation Trust.
- Collins, J. (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. London: Bat Conservation Trust.
- Weinstein, B. (2015). Motion Meerkat. Florida, USA.

5.0 FIGURES

Figure 1 - Preliminary Roost Assessment and Daytime Bat Walkover Results

Figure 2 - Dusk Emergence Survey Results



Dusk Emergence Results

Billingshurst



Highwood Homes Ltd

Legend

EclA boundary

Survey area

Bat Building Roost Suitability

Moderate

Bat Tree Roost Suitability

PRF-M

Surveyor position

Drawn by: CHRIS.DAWE

Checked by: Georgie Davey

Figure No. 2

Revision No. A

23 January 2026

0 100 200 300 400 500 Meters

Scale 1:10,000 @A3

British National Grid

NGR: 508054E 126260N

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6.0 APPENDICES

Appendix E.1 - Preliminary Roost Assessment and Daytime Bat Walkover Results

Appendix E.2 - Dusk Emergence Survey Results

APPENDIX E.1: PRELIMINARY ROOST ASSESSMENT RESULTS

BUILDING ASSESSMENT - 25 JUNE 2025

Jubilee Pavilion

PRF DESCRIPTION	ASPECT	PHOTOGRAPH
Large gaps in weathered wooden bargeboard located on the eastern gable.	Southeast	
Gap behind wooden bargeboard on the eastern gable, NE corner of building	Northeast	
Gap behind wooden bargeboard and into wooden soffit on western gable, NW corner of building.	Northwest	
Gap behind wooden bargeboard on western gable.	Southwest	

BAT TREE ASSESSMENT - 25 JUNE 2025

Tree No: T1	
British National Grid (m): 507464E, 125476N	WGS84 (Lat/Long): 51.0186°N, -0.4692°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Dead
Tree Height: 15 m	Tree DBH (diameter at Breast Height): 50 cm
Tree Suitability: PRFM	Is the Tree Safe to Climb?: No
Hibernation Potential: No	Barn Owl Potential: No
Notes: Dead tree in middle of field, next to healthy oak	

Feature ID: T1_F1

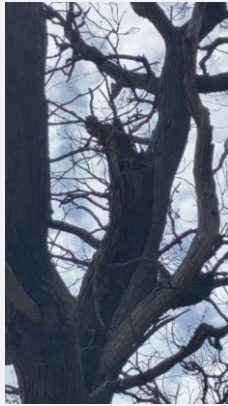
Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 2.5	DPH (Diameter at PRF Height) (cm) 50	Feature on Stem or Limb Stem

PRF Category PRFI	Sub Feature Type Pruning Cut	Aspect of Feature North
----------------------	---------------------------------	----------------------------

Feature Notes: Pruning cut with gap around collar

Does the feature require a detailed assessment: No

Feature ID: T1_F2

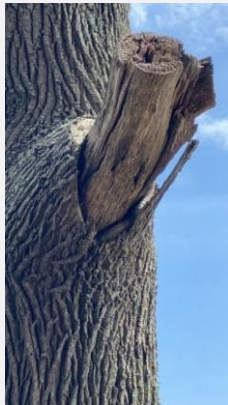
Overview Photograph	Detail Photograph(s)
	

Height of Feature (m) 7	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb
PRF Category PRFI	Sub Feature Type Transverse Snap	Aspect of Feature North

Feature Notes: Broken end of limb with lots of splintered wood

Does the feature require a detailed assessment: No

Feature ID: T1_F3

Overview Photograph	Detail Photograph(s)
	

Height of Feature (m) 3	DPH (Diameter at PRF Height) (cm) 50	Feature on Stem or Limb Stem
PRF Category PRFI	Sub Feature Type Pruning Cut	Aspect of Feature West

Feature Notes: Pruning wound with gaps around collar

Does the feature require a detailed assessment: No

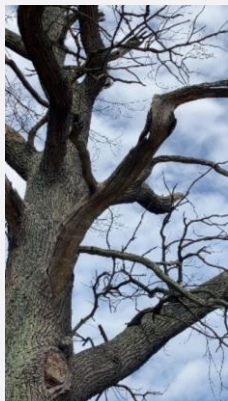
Feature ID: T1_F4

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 8	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb	
PRF Category PRFM	Sub Feature Type Knot Hole	Aspect of Feature West	

Feature Notes: Knot hole with small bit of wood poking out. Appears to have hole into dead limb

Does the feature require a detailed assessment: Yes

Feature ID: T1_F5

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 5	DPH (Diameter at PRF Height) (cm) 40	Feature on Stem or Limb Stem	
PRF Category PRFI	Sub Feature Type Desiccation Fissure	Aspect of Feature South	

Feature Notes: Dead and rotten limb with gaps at the collar where it joins stem. Rotten at end and has holes

Does the feature require a detailed assessment: Yes

Feature ID: T1_F6

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 1.5	DPH (Diameter at PRF Height) (cm) 50		Feature on Stem or Limb Stem
PRF Category PRFI	Sub Feature Type Frost Crack		Aspect of Feature South
Feature Notes: Gap in bark at base of stem			
Does the feature require a detailed assessment: Yes			

Tree No: T2	
British National Grid (m): 507454E, 125475N	WGS84 (Lat/Long): 51.0186°N, -0.4694°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 15 m	Tree DBH (diameter at Breast Height): 80 cm
Tree Suitability: PRFM	Is the Tree Safe to Climb?: Yes
Hibernation Potential: No	Barn Owl Potential: No
Notes: In middle of field next to dead tree	

Feature ID: T2_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 5	DPH (Diameter at PRF Height) (cm) 60	Feature on Stem or Limb Limb
PRF Category PRFI	Sub Feature Type Desiccation Fissure	Aspect of Feature North

Feature Notes: Fissure in rotten limb

Does the feature require a detailed assessment: No

Feature ID: T2_F2

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 2.5	DPH (Diameter at PRF Height) (cm) 80	Feature on Stem or Limb Stem	
PRF Category PRFM	Sub Feature Type Pruning Cut	Aspect of Feature South	

Feature Notes: Pruning cut just above head height, can see with torch that it leads upwards into stem. Endo with ladder required

Does the feature require a detailed assessment: Yes

Feature ID: T2_F3

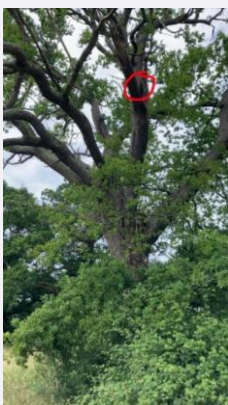
Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 12	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb	
PRF Category PRFI	Sub Feature Type Tear Out	Aspect of Feature West	

Feature Notes: Tear out in canopy, appears to go into limb but difficult to tell due to splintered wood

Does the feature require a detailed assessment: Yes

Tree No: T3	
British National Grid (m): 507297E, 125344N	WGS84 (Lat/Long): 51.0175°N, -0.4717°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 15 m	Tree DBH (diameter at Breast Height): 80 cm
Tree Suitability: PRFM	Is the Tree Safe to Climb?: Yes
Hibernation Potential: No	Barn Owl Potential: No
Notes: Within field, bramble growth at base	

Feature ID: T3_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 8	DPH (Diameter at PRF Height) (cm) 40	Feature on Stem or Limb Limb
PRF Category PRFM	Sub Feature Type Knot Hole	Aspect of Feature East

Feature Notes: Knot hole with water staining beneath

Does the feature require a detailed assessment: Yes

Feature ID: T3_F2

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 7.5	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb	
PRF Category PRFM	Sub Feature Type Pruning Cut	Aspect of Feature East	

Feature Notes: Just below knot hole, broken limb has gaps around the collar of rotten wood

Does the feature require a detailed assessment: Yes

Feature ID: T3_F3

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 4	DPH (Diameter at PRF Height) (cm) 80	Feature on Stem or Limb Stem	
PRF Category PRFI	Sub Feature Type Pruning Cut	Aspect of Feature South	

Feature Notes: Pruning wound with gap around collar

Does the feature require a detailed assessment: No

Feature ID: T3_F4

Overview Photograph 		Detail Photograph(s) 	
Height of Feature (m) 2	DPH (Diameter at PRF Height) (cm) 80	Feature on Stem or Limb Stem	
PRF Category PRFM	Sub Feature Type Pruning Cut	Aspect of Feature West	

Feature Notes: Large pruning wound at head height, has cavity on left hand side. Endoscope

Does the feature require a detailed assessment: Yes

Feature ID: T3_F5

Overview Photograph 		Detail Photograph(s) 	
Height of Feature (m) 6.5	DPH (Diameter at PRF Height) (cm) 40	Feature on Stem or Limb Limb	
PRF Category PRFM	Sub Feature Type Transverse Snap	Aspect of Feature West	

Feature Notes: Impact shatter / broken limb, upward growing. Cavity at bottom of where dead wood sticks out

Does the feature require a detailed assessment: Yes

Feature ID: T3_F6

Overview Photograph 		Detail Photograph(s) 	
Height of Feature (m) 7	DPH (Diameter at PRF Height) (cm) 40	Feature on Stem or Limb Limb	
PRF Category PRFM	Sub Feature Type Frost Crack	Aspect of Feature West	
Feature Notes: Horizontal limb with crack in it, growing southwards but visible from west. Bit of rotten wood still sticking out where a branch has snapped.			
Does the feature require a detailed assessment: Yes			

Feature ID: T3_F7

Overview Photograph 		Detail Photograph(s) 	
Height of Feature (m) 3	DPH (Diameter at PRF Height) (cm) 70	Feature on Stem or Limb Stem	
PRF Category PRFM	Sub Feature Type Wound	Aspect of Feature West	
Feature Notes: Large scar at fork in trunk, possibly goes down and then into the stem but need a ladder or climb to see			
Does the feature require a detailed assessment: Yes			

Tree No: T4

British National Grid (m): 507275E, 125334N		WGS84 (Lat/Long): 51.0174°N, -0.472°E	
Location Map 		Photograph 	
Species: <i>Quercus robur</i> - pedunculate oak		Tree Age: Mature	
Tree Height: 15 m		Tree DBH (diameter at Breast Height): 120 cm	
Tree Suitability: PRFM		Is the Tree Safe to Climb?: Yes	
Hibernation Potential: No		Barn Owl Potential: No	
Notes: Next to public footpath			

Feature ID: T4_F1

Overview Photograph 	Detail Photograph(s) 
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Height of Feature (m) 6.5	DPH (Diameter at PRF Height) (cm) 40	Feature on Stem or Limb Limb
PRF Category PRFM	Sub Feature Type Woodpecker Hole	Aspect of Feature Northeast
Feature Notes: Woodpecker hole, slightly upward facing entrance		
Does the feature require a detailed assessment: Yes		

Feature ID: T4_F2

Overview Photograph 		Detail Photograph(s) 
Height of Feature (m) 4	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb
PRF Category PRFM	Sub Feature Type Transverse Snap	Aspect of Feature North
Feature Notes: On end of rotten limb, hole in dead wood.		
Does the feature require a detailed assessment: Yes		

Feature ID: T4_F3

Overview Photograph 		Detail Photograph(s) 
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Height of Feature (m) 3	DPH (Diameter at PRF Height) (cm) 100	Feature on Stem or Limb Stem
PRF Category PRFI	Sub Feature Type Subsidence Crack	Aspect of Feature South
Feature Notes: Cavity where splintered dead wood meets trunk, ladder and endo required		
Does the feature require a detailed assessment: Yes		

Tree No: T5	
British National Grid (m): 508456E, 126519N	WGS84 (Lat/Long): 51.0278°N, -0.4548°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 14 m	Tree DBH (diameter at Breast Height): 50 cm
Tree Suitability: PRFM	Is the Tree Safe to Climb?: Yes
Hibernation Potential: No	Barn Owl Potential: No
Notes: Tree at end of hedgerow, at cross footpath junction	

Feature ID: T5_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 3	DPH (Diameter at PRF Height) (cm) 50	Feature on Stem or Limb Limb
PRF Category PRFI	Sub Feature Type Knot Hole	Aspect of Feature South

Feature Notes: Hole at end of branch

Does the feature require a detailed assessment: Yes

Feature ID: T5_F2

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 3	DPH (Diameter at PRF Height) (cm) 50	Feature on Stem or Limb Stem	
PRF Category PRFM	Sub Feature Type Knot Hole	Aspect of Feature West	

Feature Notes: Knot hole, needs ladder and endo or climb

Does the feature require a detailed assessment: Yes

Feature ID: T5_F3

Overview Photograph		Detail Photograph(s)	
			
Height of Feature (m) 6	DPH (Diameter at PRF Height) (cm) 20	Feature on Stem or Limb Limb	
PRF Category PRFM	Sub Feature Type Knot Hole	Aspect of Feature North	

Feature Notes: Knot hole

Does the feature require a detailed assessment: Yes

Feature ID: T5_F4		
Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 5.5	DPH (Diameter at PRF Height) (cm) 30	Feature on Stem or Limb Limb
PRF Category PRFM	Sub Feature Type Knot Hole	Aspect of Feature North
Feature Notes: Knot hole or pruning cut at end of branch		
Does the feature require a detailed assessment: Yes		

Tree No: T6	
British National Grid (m): 508530E, 126510N	WGS84 (Lat/Long): 51.0277°N, -0.4537°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 14 m	Tree DBH (diameter at Breast Height): 80 cm
Tree Suitability: PRFM	Is the Tree Safe to Climb?: Yes
Hibernation Potential: No	Barn Owl Potential: No
Notes: Oak tree in middle of hawthorn hedge behind football goals	

Feature ID: T6_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 8	DPH (Diameter at PRF Height) (cm) 20	Feature on Stem or Limb Stem

PRF Category PRFM	Sub Feature Type Tear Out	Aspect of Feature North
Feature Notes: Tear out in canopy of oak, has bark plate hanging loose and appears to have gap behind but unsure how deep		
Does the feature require a detailed assessment: Yes		

Tree No: T7	
British National Grid (m): 508259E, 126281N	WGS84 (Lat/Long): 51.0257°N, -0.4577°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 15 m	Tree DBH (diameter at Breast Height): 100 cm
Tree Suitability: PRFI	Is the Tree Safe to Climb?: Yes
Hibernation Potential: No	Barn Owl Potential: No
Notes: Tree in corner of sports car park	

Feature ID: T7_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 6	DPH (Diameter at PRF Height) (cm) 70	Feature on Stem or Limb Limb
PRF Category PRFI	Sub Feature Type Frost Crack	Aspect of Feature North

Feature Notes: Horizontal crack on underneath of branch, has a bit of black water staining. Possibly goes into the limb. Climb if required.

Does the feature require a detailed assessment: No

Feature ID: T7_F2

Overview Photograph



Detail Photograph(s)



Height of Feature (m)
6

DPH (Diameter at PRF Height) (cm)
40

Feature on Stem or Limb
Limb

PRF Category
PRFI

Sub Feature Type
Pruning Cut

Aspect of Feature
North

Feature Notes: Pruning cut with vertical crack, likely would fill with rain. Climb if required.

Does the feature require a detailed assessment: No

Tree No: T8	
British National Grid (m): 508265E, 126301N	WGS84 (Lat/Long): 51.0259°N, -0.4576°E
Location Map 	Photograph 
Species: <i>Quercus robur</i> - pedunculate oak	Tree Age: Mature
Tree Height: 15m	Tree DBH (diameter at Breast Height): cm
Tree Suitability: PRFI	Is the Tree Safe to Climb?: No
Hibernation Potential: No	Barn Owl Potential: No
Notes: Large oak adjacent to sports car park, lots of hawthorn and bramble at base until about 3m. Scrub at base of tree would make tree climbing difficult.	

Feature ID: T8_F1

Overview Photograph		Detail Photograph(s)
		
Height of Feature (m) 6	DPH (Diameter at PRF Height) (cm) 50	Feature on Stem or Limb Limb
PRF Category	Sub Feature Type	Aspect of Feature

PRFI	Knot Hole	East
Feature Notes: Knot hole about 3m out from trunk on limb.		
Does the feature require a detailed assessment: No		

APPENDIX E.2: BAT EMERGENCE SURVEY METADATA

Wind speed uses Beaufort scale. Cloud cover uses Oktas Scale

2023

Survey 1: Jubilee Fields Pavillion

Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
31/08/2023	19:50	19:35	21:20	17/17	None	1/1	10/10

Surveyor names and survey licence number where applicable

Felicity Andruszko (Natural England level 1 bat licence: 2019-39766-CLS-CLS) and Marisa Costa

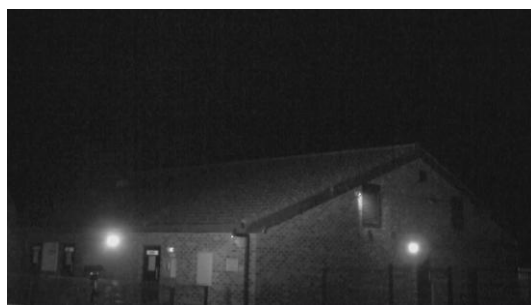
Survey Point Locations (darkest point)

Survey Point 1

Note: darkest image photo not available



Survey Point 2



Survey Point 3

Note: darkest image photo not available



Survey Point 4



2025

Survey 1: Jubilee Fields Pavillion

Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
25/06/2025	21:20	21:05	22:50	21/16	None	1/1	4/4

Surveyor names and survey licence number where applicable

Georgie Davey (Natural England level 1 bat licence: 2021-10128-CL17-BAT) and Katie Hepburn (Natural England level 1 bat licence: 2025-85170-CL17-BAT)

Survey Point Locations (darkest point)

Survey Point 1



Survey Point 2



Survey Point 3



Survey Point 4



2025							
Survey 2: Jubilee Fields Pavillion							
Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
09/09/2025	19:31	19:00	21:01	16/14	None	0/0	6/6
Surveyor names and survey licence number where applicable			Katie Mazalova, Kirsten Oberholzer				
Survey Point Locations (darkest point)	Survey Point 1						
							
	Survey Point 2						
							
	Survey Point 3						
							
Survey Point 4							



Survey 1: Tree T1							
Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
07/08/2025	20:37	20:22	22:07	20/18	None	2/1	10/10
Surveyor names and survey licence number where applicable			Joe Salkeld (Natural England level 2 bat licence: 2019-43538-CLS-CLS) and Felicity Andruszko (Natural England level 1 bat licence: 2019-39766-CLS-CLS)				
Survey Point Locations (darkest point)	Survey Point 1 						

Survey 2: Tree T1							
Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
27/08/2025	19:57	19:42	21:27	19/17	None	2/2	8/8
Surveyor names and survey licence number where applicable			Joe Salkeld (Natural England level 2 bat licence: 2019-43538-CLS-CLS) and Felicity Andruszko (Natural England level 1 bat licence: 2019-39766-CLS-CLS)				
Survey Point Locations (darkest point)	Survey Point 1						
							

Survey 3: Tree T1							
Date of survey	Sunrise / sunset	Start (S) time	Finish (F) time	Temperature (in °C) S/F	Rain S/F	Wind speed S/F	Cloud cover S/F
18/09/2025	19:08	18:53	20:38	19/15	None	4 - moderate breeze	8 / 10
Surveyor names and survey licence number where applicable			Joe Salkeld (Natural England level 2 bat licence: 2019-43538-CLS-CLS) and Felicity Andruszko (Natural England level 1 bat licence: 2019-39766-CLS-CLS)				
Survey Point locations (darkest point)	Survey Point 1						
							