

## **Assessment Methodology – Protected Species Surveys**

### **1.1. UK Habitat Classification Survey**

- 1.1.1. A UK Habitat Classification (UKHab) survey of the Hybrid Application site was undertaken on 4 and 5 April 2024 by Sophie Barrell MEdol (Hons) MCIEEM, Senior Ecologist. Weather conditions at the time of the survey ranged from overcast with intermittent rain showers to clear, sunny and breezy, with an ambient temperature ranging from 10 to 14°C.
- 1.1.2. A list of plant species was compiled in accordance with methodology required to establish UK habitat classification types<sup>1</sup> up to level 4. Level 5 was recorded wherever possible, with care to accurately record all habitats of priority importance (if present). Secondary codes were added to polygons where deemed appropriate, taking special care to map mandatory codes for habitat mosaic, complex and origin. Survey was undertaken at the fine scale minimum mapping unit (MMU) of 25 m<sup>2</sup> (polygons) and 1 m width / 5 m long (lines). Key ecological features below the MMU in either area or length were mapped as points.
- 1.1.3. Habitats were classified and assessed in terms of both their conservation importance and potential to support notable and/or protected species (based on habitat suitability and/or field signs). The habitat classification highlights the habitat distinctiveness and whether they reach the criteria for a priority habitat.
- 1.1.4. These habitats were also assessed using the statutory biodiversity metric condition assessments to determine whether they are in poor, moderate or good condition<sup>2</sup>.
- 1.1.5. The following was searched for and recorded if present during the survey:
  - all field signs of protected species or those of conservation interest, including burrows, droppings, footprints and hairs
  - refuges and particular habitat types to be used by certain classes of fauna
  - any mammal paths if found were noted and followed where possible
  - entry points for fauna along fence and/or hedgerow boundaries if present
  - incidental sightings of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

### **1.2. Fungi eDNA Survey**

- 1.2.1. A fungi eDNA survey was undertaken by Claudia Ferreira and Emma Howarth on 4 March 2025. Weather conditions across the survey visits were sunny, breezy, with an ambient temperature of approximately 9 °C.
- 1.2.2. Survey protocol was established following consultation with Professor Gareth W Griffith from Aberystwyth University.

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<sup>1</sup> C. A. Stace, *New Flora of the British Isles*, 3rd ed., Cambridge: Cambridge University Press, 2010.

<sup>2</sup> Department for Environment, Food & Rural Affairs, "Statutory biodiversity metric tools and guides," February 2024. <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>.

- 1.2.3. Quadrat locations were identified prior to the site visit, to ensure they were appropriately distributed across the site. Surveyors used best professional judgement during the survey to determine whether these locations were suitable, or if any should be adjusted accordingly. A total of nine quadrats were used on site, the locations of which are shown on [Figure 1](#) below.



**Figure 1.** Location of the quadrats surveyed. Map data from Google 2025: Bluesky, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies

- 1.2.4. Each quadrat measured 30 m x 30 m, and was marked out using tape. Within each quadrat, a total of 36 soil samples were collected using an 18 mm inner diameter auger, from evenly distributed points across the quadrat. Soil samples were pooled together into bags (one bag per quadrat) and stored in a fridge overnight before being posted to Aberystwyth University for eDNA analysis.

- 1.2.5. Laboratory analysis of the samples was undertaken by Aberystwyth University. Full methodology with regards to laboratory analysis can be found within [Appendix 8.7](#).

### 1.3. Bird Survey

#### Breeding Birds

- 1.3.1. The breeding bird surveys followed a set transect which aimed to include all core habitat types on and adjacent to the Site. The survey methodology was based upon the line transect survey methodology utilised by the British Trust for Ornithology (BTO) Breeding Bird Survey<sup>3</sup> and Bird

<sup>3</sup> BTO, "Breeding Bird Survey Instructions," 2018. [www.bto.org/bbs](http://www.bto.org/bbs)

Survey Guidelines produced by the Bird Survey & Assessment Steering Group, as per CIEEM good practice guidelines<sup>4 5 6</sup>.

- 1.3.2. The surveys were undertaken by the experienced ornithologists, Sophie Barrell and Joshua Stafford BSc (Hons) MRSB. The surveys were undertaken during suitable weather conditions as summarised in **Table 1** below.

**Table 1: Breeding Bird Survey Conditions**

Survey	Date	Time		Temperature (°C)		Wind (Beaufort Scale)		Cloud Cover (Oktas)		Precipitation (mm)	
	2024	Start	End	Start	End	Start	End	Start	End	Start	End
1	27 March	05:30	11:00	10	12	1	1	5	6	0	0
2	11 April	15:45	19:45	14	11	2	2	7	8	0	0
3	24 April	05:40	11:30	10	13	2	3	8	5	0	0
4	24 May	05:15	11:00	14	15	1	1	1	2	0	0
5	18 June	05:00	11:00	10	12	1	1	5	3	0	0
6	18 July	04:20	08:30	15	16	2	3	8	7	0	0

- 1.3.3. All field boundaries were walked slowly and birds were identified by both sight and sound, with records of their behaviour taken and mapped onto plans. Standard BTO species codes and symbols were used to record bird species<sup>7</sup>. Activity and direction of flight where appropriate were used as recommended for the Bird Census Techniques<sup>8</sup>. The breeding bird surveys followed a set transect which aimed to include all core habitat types on and adjacent to the Site, as shown on **Figure 2** below.

<sup>4</sup> Bird Survey & Assessment Steering Group, "Bird Survey Guidelines for assessing ecological impacts, v.1.1.0.," 2023.

<https://birdsurveyguidelines.org>.

<sup>5</sup> CIEEM, "Good Practice Guidance for Habitats and Species," 2021. <https://cieem.net/wp-content/uploads/2021/05/Good-Practice-Guide-2023-edit.pdf>

<sup>6</sup> CIEEM, "Guidelines for use by ornithologists and ecological consultants who engage in bird surveys for the purpose of assessing ecological impacts including Ecological Impact Assessments (EclA) and Environmental Impact Assessments," 2023. <https://cieem.net/resource/bird-survey-guidelines-for-assessing-ecological-impacts/>

<sup>7</sup> BTO, "BTO Species Codes," [www.bto.org/bbs](http://www.bto.org/bbs)

<sup>8</sup> C. B. N. H. D. & M. S. Bibby, Bird Census Technique - Second Edition, Academic Press, London, England, 2000.



**Figure 2.** Transect route followed during the breeding bird surveys (purple line). The blue line shows the extent of the Hybrid Application site, which encompasses the Detailed Application site (red line)). Map data from Google 2025: Bluesky, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies

- 1.3.4. Species and activity data were analysed spatially to compare where species were identified during more than one survey visit and therefore are likely to be holding a territory and/or actively breeding in the area. If a bird exhibited breeding activity, such as commuting with nesting material or singing for example, it was judged to be breeding or attempting to breed on site. The survey analysis did not include mapping of territories.
- 1.3.5. Field maps and notes of bird sightings were analysed to determine the approximate locations of likely breeding sites and the numbers of birds encountered, and whether they were likely to be breeding on site, using the following criteria:
  - 1.3.6. Possible:
    - species (male/female) observed within possible nesting habitat on site; or
    - a male singing in the breeding season but only encountered on one survey visit.
  - 1.3.7. Probable:
    - same species of male singing in approximate same location on site for more than one survey visit;
    - singing male in the breeding season exhibiting territorial behaviour;
    - visiting probable nest site; or
    - individuals exhibiting agitated behaviour (e.g. alarm calls).

1.3.8. Confirmed:

- observed building a nest or with nesting material in beak;
- active nest observed;
- adults entering/leaving nest site regularly;
- used nest or eggshells noted on site;
- distraction display or injury feigning; or
- adult with dependant young.

1.3.9. Locations of sightings and analysis of activity/behaviour was used to estimate the numbers of pairs present where breeding was probable or confirmed. Incidental sightings of birds noted by ecologists during other site visits were also described.

1.3.10. The conservation status of species is based on evidence of population declines and restriction of range on a local and international scale, as listed on the Conservation Designations for UK Taxa list published by the JNCC<sup>9</sup>. The Birds of Conservation Concern (BoCC) allocates species into the green, amber or red list corresponding to a low to high level of conservation concern respectively. Species accounts for priority NERC species are obtained from the JNCC<sup>10</sup>.

1.3.11. The Suffolk Birds 2023 report<sup>11</sup> has been used to estimate county population sizes and assess the status of species of conservation concern within the county.

#### Stone Curlew

1.3.12. Sweco undertook an initial desk-based assessment of the Site and surrounding land within 1.5 km in terms of its suitability to support stone curlew (see [Appendix 8.10](#)).

1.3.13. The RSPB was also contacted for records of stone curlew from within a 2 km-radius search around points at either end of the Site (grid reference TL 68863 65942 in the west; and TL 69982 66310 in the east).

1.3.14. In 2025, Graham Riley BSc ACIEEM of Wild Frontier Ecology, who has over 17 years of experience working in commercial consultancy and 14 years working for the RSPB on the Stone Curlew Recovery Project, was commissioned to undertake a field assessment of all land within 1.5 km of the Hybrid Application site for its ability to support stone curlew. The full methodology with regards to the field assessment can be found within [Appendix 8.11](#).

### **1.4. Bat Survey**

#### Habitat Suitability Assessment

1.4.1. A bat commuting and foraging habitat suitability assessment of all habitats on the Site was undertaken on 4 and 5 April 2024 by Sophie Barrell.

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<sup>9</sup> JNCC, "Conservation Designations for UK Taxa," 2020. <https://jncc.gov.uk/our-work/conservation-designations-for-uk-taxa/>

<sup>10</sup> JNCC, "UK BAP priority bird species," 2007. <https://jncc.gov.uk/our-work/uk-bap-priority-species/>

<sup>11</sup> Suffolk Ornithologist's Group, Suffolk Birds 2022, Suffolk Naturalist's Society, 2022



- 1.4.2. The scoping criteria for commuting and foraging habitat suitability has been taken from the best practice guidance<sup>12</sup>, summarised in **Table 3** below.

**Table 3: Suitability of Commuting and Foraging Habitats for Bats**

Suitability	Foraging Habitats
<b>None</b>	No habitat features on site likely to be used by any commuting or foraging bats at any time of year (i.e. no habitats that provide continuous lines of shade / protection for flight-lines, or generate /shelter insect populations available to foraging bats).
<b>Negligible</b>	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
<b>Low</b>	Habitat that could be used by small numbers of bats as flight-paths such as a defunct 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.
<b>Moderate</b>	Continuous habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
<b>High</b>	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.

#### Preliminary Roost Assessment - Buildings

- 1.4.3. A Preliminary Roost Assessment (PRA) of all buildings within the Hybrid Application site was conducted on 4 and 5 April 2024 by Sophie Barrell, to assess their potential to support roosting bats.
- 1.4.4. Survey evidence of bats was searched for. This includes:
- Bat droppings (if found these were collected for eDNA analysis);
  - Staining around potential roosting feature (PRF) entrances;
  - Feeding remains (such as moth wings);

<sup>12</sup> Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed., J. Collins, Ed., London: The Bat Conservation Trust, 2023.

- Scratch marks around PRF entrances; and
- Live/dead bats.

1.4.5. The scoping criteria for roost habitat on buildings has been taken directly from best practice guidance and are summarised in [Table 4](#). Where a feature could not be definitively assessed due to lack of internal access or use of endoscope, a precautionary higher classification has been assumed.

**Table 4: Suitability of Roosting Habitats for Bats – Buildings/Structures**

Suitability	Roosting Habitats
<b>None</b>	No habitat features on site likely to be used by any roosting bats at any time of year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
<b>Negligible</b>	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.
<b>Low</b>	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year.  However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
<b>Moderate</b>	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 irrespective of species conservation status, which is established after presence is confirmed.
<b>High</b>	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

#### Dusk Emergence Surveys – Buildings

1.4.6. In line with current Bat Conservation Trust (BCT) survey guidance for buildings with moderate suitability for roosting bats, two dusk emergence surveys were carried out on 28 August and

23 September 2024. The emergence surveys started 15 minutes prior to sunset and 1.5 hours after sunset.

- 1.4.7. Surveyors were each equipped with an Elekon Batlogger M bat detector and were strategically positioned around each building so as to maximise visual coverage. Surveyors were supported by a thermal imaging camera rig (Pulsar Helion 2 XP50 Pro Thermal Monocular) capable of filming bats flying in complete darkness, in order to monitor the buildings. A record was made of all bats emerging from the buildings, along with the time, direction of travel and suspected species. Details of general bat activity observed or heard during the survey were also noted down, to gather additional information about how bats make use of the site.
- 1.4.8. The buildings surveyed are shown on Sweco drawing 65210959-SWE-XX-XX-D-J-0002 (see Appendix 8.1).
- 1.4.9. The survey teams comprised:
- Sophie Barrell;
  - Joshua Stafford;
  - Emma Howarth; and
  - Emily Chubb (BSc (Hons) QCIEEM).
- 1.4.10. The surveys were undertaken during suitable weather conditions and are summarised in Table 5 below.

**Table 5: Emergence Survey Conditions**

Survey no.	Date (2024)	Times	Temp (°C) Start	Temp (°C) End	Cloud Cover (oktas) Start	Cloud Cover (oktas) End	Wind (BF) Start	Wind (BF) End	Rain (mm) Start	Rain (mm) End
1	28 Aug	19:39 – 21:24	22	20	6	6	1	1	0	0
2	23 Sep	18:38 – 20:23	18	18	7	8	2	3	0	0

Ground Level Tree Assessment

- 1.4.11. A Ground Level Tree Assessment (GLTA) of the Detailed Application Site was conducted on 9 and 10 December 2024 by Claudia Ferreira BSc (Hons) (Level 1 Class Licence: 2024-12308-CL17-BAT) and Eleanor Unsworth MSc, BSc (Hons). A GLTA of the western portion of the



Hybrid Application Site was conducted on 12, 13 and 14 March 2025 by Claudia Ferreira and Emma Howarth BSc (Hons) ACIEEM.

1.4.12. The surveyors used binoculars and high powered torches to identify and assess any PRFs from ground level. The surveys were conducted in line with current BCT survey guidance<sup>13</sup>.

1.4.13. The following data were recorded:

- The location and ID of the tree in which the PRF is located;
- the location of the PRF;
- the elevation and orientation of the PRF;
- the internal size of the PRF (if this can be determined from ground level);
- a description of the PRF; and
- the BRP level assigned to the PRF.

1.4.14. The scoping criteria for roost habitat on trees have been taken directly from best practice guidance and are summarised in [Table 6](#) below.

**Table 6: Suitability of Roosting Habitats for Bats on Trees**

Suitability	Description
None	Either no PRF 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.
<b>Where PRFs were identified on trees, these were categorised as:</b>	
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to the size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

#### Tree Scoping Exercise

1.4.15. As the GLTAs identified a very large number of trees within the Hybrid Application site that support PRFs, including a large number of FAR trees, a scoping exercise will be undertaken to confirm the exact number of PRF-M and PRF-I trees that will be directly impacted by the Project through pruning or felling (for both the Detailed Application and the Hybrid Application).

1.4.16. In the first instance, an exercise will be undertaken to determine the number of retained PRF trees for which impacts can be avoided through implementation of a bat-sensitive lighting strategy. By designing an appropriate strategy, lighting impacts to these trees can be avoided, thereby removing the need to survey them.

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<sup>13</sup> Bat Conservation Trust, Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed., J. Collins, Ed., London: The Bat Conservation Trust, 2023.

- 1.4.17. All remaining trees identified as FAR, PRF-I or PRF-M will be subject to a single aerial inspection survey (or ladder-based inspection, where the PRF is low enough to enable this to be carried out safely), the aim of which will be to ensure that all trees are either correctly assigned to PRF-I or PRF-M, or removed from the scope of assessment, as this will inform the survey and mitigation approach.
- 1.4.18. Aerial (climbing) inspection surveys will be undertaken during the period May-July inclusive by a team of suitably qualified tree climbers who either hold Level 2 bat survey licences (enabling the use of endoscopes for PRF inspection), or who are acting as an Accredited Agent under a Level 2 bat licence-holder and supervised by a suitably qualified ecologist.
- 1.4.19. Any droppings found within PRFs during the aerial inspection will be collected and sent to a laboratory for DNA analysis, to identify the species present and aid in roost characterisation (see below).
- 1.4.20. Any trees found to be unsuitable to support roosting bats (i.e. features that look like PRFs from the ground but upon aerial inspection offer no roosting opportunity) will be removed from the scope.
- 1.4.21. Note that impacts to any retained trees with PRFs resulting from artificial illumination are to be avoided through implementation of a bat-sensitive lighting plan – see section 8.8.24. As such those trees have been scoped out of any further investigation.

#### *Roost Characterisation of PRF-I Trees*

- 1.4.22. Where clear evidence of bat roosting is identified in PRF-I trees, these trees will be subject to two further surveys (either aerial inspection, dusk emergence, or a combination of both) between May and September. As with the PRF-M trees below, the aim of these surveys will be to confirm the presence/likely absence of bat roosts and, where present, confirm the species and number of bats involved, to inform an application to Natural England for a bat mitigation licence.
- 1.4.23. Aerial inspections will follow the method described at 1.4.18 above.
- 1.4.24. Dusk emergence surveys will start 15 minutes prior to sunset and continue until at least 1.5 hours after sunset. Surveyors will each be equipped with an Elekon Batlogger M bat detector and be strategically positioned around the tree so as to maximise visual coverage. They will be supported by a Sony Handycam AX53 Nightshot enabled infrared camera, capable of filming bats flying in complete darkness.
- 1.4.25. A record will be made of all bats emerging from any PRFs, along with the time, direction of travel and suspected species. Details of general bat activity observed or heard during the survey will also be noted down, to gather additional information about how bats make use of the site.
- 1.4.26. All recorded bat calls will be analysed using BatExplorer (Version 2.1.11.2) and all camera footage will be reviewed using appropriate software.
- 1.4.27. Any PRF-I trees where the features remain suitable for individual bats to roost, but where no evidence of bat roosting is found, will be added into the mitigation licence application to enable

these trees to be felled/pruned under a precautionary method of works, to avoid any delays associated with finding bats in these trees at the time of felling/pruning.

#### *Roost Characterisation of PRF-M trees*

- 1.4.28. Following the scoping exercise, all PRF-M trees will be subject to two further surveys (either aerial inspection, dusk emergence, or a combination of both) between May and August to coincide with the maternity season. The aim of these surveys will be to confirm the presence/likely absence of bat roosts and, where present, confirm the species and number of bats involved, to inform an application to Natural England for a bat mitigation licence.

Aerial inspections will follow the method described at 8.5.45. above. Dusk emergence surveys will follow the method described at 8.5.51. above.

- 1.4.29. Any PRF-M trees where the features remain suitable for individual bats to roost, but where no evidence of bat roosting is found, will be added into the mitigation licence application to enable these trees to be felled/pruned under a precautionary method of works, to avoid any delays associated with finding bats in these trees at the time of felling/pruning.

#### *Automated/Static Surveys*

- 1.4.30. To gain an initial understanding of the local bat assemblage that makes use of the Detailed Application site, automated/static surveys were conducted. Three Anabat Express static detectors were deployed in different locations to record for a minimum of five nights in suitable weather conditions, over three seasonal monitoring periods, during the active bat season (April to October). The use of three monitoring periods aligns with the recommendations of the BCT survey guidelines for low suitability habitat. The detectors were programmed to record bat calls from 30 minutes before dusk to 30 minutes after dawn each night over the duration of their deployment. The locations of these are shown on **Figure 3** below.



**Figure 3.** Location of the statics placed within the site across the different survey periods. Map data from Google 2025: Bluesky, CNES / Airbus, Getmapping plc, Infoterra ltd & Bluesky, Maxar Technologies

1.4.31. Bat calls recorded during the best five nights in terms of weather were analysed using BatExplorer. The weather conditions for the five nights analysed during each of the automated/static survey periods are presented in [Table 7](#) below.

**Table 7:** Bat Automated/Static Survey Conditions

Night	Temp (°C) Start	Temp (°C) End	Rain (mm) Start	Rain (mm) End	Wind (Beaufort) Start	Wind (Beaufort) End	Cloud Cover (oktas) Start	Cloud Cover (oktas) End
<b>Spring 2024</b>								
<b>2 May</b>	15	12	0	0	3	3	7	8
<b>3 May</b>	11	10	0.3	0	4	3	8	8
<b>4 May</b>	14	12	0	0	3	3	5	4
<b>5 May</b>	15	14	0	0	3	3	7	8
<b>6 May</b>	16	14	0	0	3	3	6	6
<b>Summer 2024</b>								
<b>25 Aug</b>	18	17	0	0	4	4	4	4
<b>26 Aug</b>	19	18	0	0	3	2	3	4
<b>27 Aug</b>	22	19	0	0	3	3	4	4

Night	Temp (°C) Start	Temp (°C) End	Rain (mm) Start	Rain (mm) End	Wind (Beaufort) Start	Wind (Beaufort) End	Cloud Cover (oktas) Start	Cloud Cover (oktas) End
28 Aug	24	23	0	0	2	1	3	3
29 Aug	18	17	0	0	3	2	3	3
<b>Autumn 2024</b>								
23 Sep	17	17	0	0	4	4	5	5
24 Sep	15	15	0	0	3	3	4	4
25 Sep	15	14	0.3	0.3	3	3	8	8
26 Sep	14	13	0.5	0.3	3	4	8	8

- 1.4.32. Note that further automated/static surveys covering the Hybrid Application site will be conducted from April to October 2025. In line with the current BCT survey guidelines for moderate suitability habitat, nine Anabat Express statics will be deployed in different locations across the Hybrid Application site to record for a minimum of five consecutive nights per month (April to October) in appropriate (or the best available) weather conditions for bats.

#### Night-time Bat Walkover Survey

- 1.4.33. In line with the BCT survey guidelines, three night-time bat walkover (NBW) surveys will be undertaken to cover spring, summer and autumn. The purpose of these surveys will be to record a representative sample of the bats on site during each NBW and gather useful data on how bats use the habitats on site.
- 1.4.34. A team of two ecologists equipped with Elekon Batlogger M full spectrum detectors will walk separate pre-determined routes around the Hybrid Application site. The routes will be designed to enable sampling of all habitats on site. Surveyors will arrive on site before sunset and start the survey at sunset. Surveyors will start at opposite sides of the site and will remain stationary for the first 30 minutes of the survey to observe any bat commuting behaviour that might identify the location of roosts. They will then walk the route making time-stamped notes about any bat activity they observe. The survey will continue for a minimum of two hours from sunset.

### **1.5. Badger Survey**

- 1.5.1. The detailed methodology and results of badger surveys undertaken at the Site are presented in a separate report (– see [Appendix 8.13](#)).

### **1.6. Limitations**

- 1.6.1. At the time of writing, bat automated/static surveys have only been conducted within the Detailed Application Site (Eastern Parcel) to inform general usage of the area. Additional automated/static surveys will be conducted across the Hybrid Application Site (Whole site)

during the 2025 survey season (April to October inclusive), which will allow for a complete baseline with respect to the use of the both the Detailed and Hybrid Application site by bats, and the species that make up the local assemblage.

- 1.6.2. Due to a technical failure, the static bat detector only recorded data from four nights during the autumn 2024 survey period, instead of the requisite five.
- 1.6.3. Bat surveys are ongoing in 2025, this includes both tree surveys for roosting bats and activity surveys for the Western Parcel. IT is expected that a supplementary submission will be submitted following completion of these surveys to include details of survey methodology and results, any change in baseline conditions, any change in the level of impact on bats, and any changes to agreed mitigation.