

# Rosefield Solar Farm

## Environmental Statement

Volume 4  
Appendix 7.10: Bat Activity Report (2024)

EN010158/APP/6.4  
September 2025  
Rosefield Energyfarm Limited

APFP Regulation 5(2)(a)  
Planning Act 2008  
Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009



## Foreword

Survey information contained within **ES Volume 4, Appendix 7.10: Bat Survey Activity Report (2024) [EN010158/APP/6.4]** forms part of the Environmental Statement for information only. The bat activity surveys detailed within this appendix were undertaken between July 2022 and September 2023 and were based on a superseded version of the Order Limits. The results detailed within this appendix were correct at the time of writing; however, this has not impacted the assessment undertaken for foraging and commuting bats, with the results of these surveys considered satisfactory to provide a sufficient baseline in which to base the assessment upon. Further details are provided within **ES Volume 2, Chapter 7: Biodiversity [EN010158/APP/6.2]**.



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# 1. Introduction

## 1.1. Introduction

1.1.1. AECOM was commissioned by Rosefield Energy Farm Ltd to undertake a series of bat activity surveys at the proposed Rosefield Solar Farm (the Site).

1.1.2. The surveys undertaken included:

- A desk study to identify records of bats within 2km of the Site, statutory site designations of relevance to bats within 10km of the Site and other statutory or non-statutory nature conservation designations within 2km of the Site, and bat designated Special Areas of Conservation (SACs) within 30km of the Site; and
- Bat activity surveys and static automated detector surveys of the Site.

## 1.2. Proposed Development

1.2.1. Rosefield Energyfarm Ltd is a proposed new solar energy farm, co-located with battery storage. The proposals include grid infrastructure to connect Rosefield Energyfarm Ltd to the National Grid via underground cable. The proposed generation capacity of the Proposed Development is above 50MW, which means it is a Nationally Significant Infrastructure Project (NSIP) and as such would require a Development Consent Order (DCO).

## 1.3. Site Description

1.3.1. The Proposed Development is located in three main sites (referred to hereafter as Parcel 1 (with a sub-site '1a'), Parcel 2 and Parcel 3) located in a triangle of Winslow, Steeple Claydon and Quanton, in the county of Buckinghamshire and in the geographical region of Aylesbury Vale. The Site is in the administrative area of Buckinghamshire Council. The location of the Site is presented in **Figure 1 (Annex A)**.

1.3.2. The Site is located at Ordnance Survey national grid reference SP7024 (Knowl Hill).

1.3.3. Parcel 1 (see **Figure 1 (Annex A)**) makes up the largest area of the Proposed Development, to the east of Calvert, and consists predominately of arable fields with livestock pasture and woodland blocks. A smaller section, referred to as Parcel 1a, lies to the south of Parcel 1. Parcel 2 contains predominantly arable fields surrounded by woodland blocks, with areas of cattle livestock pasture within the southwest. Parcel 3 contains livestock fields bounded by the Claydon Brook and tributaries along the northern and eastern boundaries and is located adjacent to the National Grid East Claydon Substation. The Sites are surrounded by arable land, grassland and woodland. Together these three sites and the grid connection cable route is referred to as the 'Site'.

- 1.3.4. A grid connection cable route (route not defined at the time of survey) will be located within and outside of these sites that will connect the Proposed Development to the National Grid.

#### 1.4. Scope of this Report

- 1.4.1. The objective of the surveys, reported in this document, is to establish the species assemblage utilising the Site.
- 1.4.2. This report includes the following information:
- Relevant legislation and policy;
  - Methodologies for desk and field-based assessments undertaken;
  - Limitations to the surveys undertaken and any assumptions made as a result of incomplete data;
  - Survey results; and
  - Conclusions.
- 1.4.3. This report is intended for the use of Rosefield Energy Farm Ltd, for future inclusion in detailed ecological assessments that may follow.

## 2. Legislative and policy framework

### 2.1. Relevant Legislative Context

- 2.1.1. All UK native bat species and their roosts (whether bats are present or not) are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) [Ref. 1] and under the Wildlife and Countryside Act 1981 (as amended) [Ref. 2].
- 2.1.2. Under the Conservation of Habitats and Species Regulations 2017 (as amended) it is an offence to:
- Deliberately capture, injure or kill a bat;
  - Deliberately disturb bats; and
  - Damage or destroy a bat breeding or resting place.
- 2.1.3. Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to:
- Disturb a bat, either intentionally or recklessly, while occupying a structure or place of shelter/protection; and
  - Intentionally or recklessly obstruct access to any structure which a bat uses for shelter or protection.
- 2.1.4. Given the above legislation the potential presence of bats at a site represents a material consideration in the planning process. Even where planning permission is not required there is still a legal responsibility placed on the developer to ensure that a Natural England European Protected Species licence is obtained to cover any works that have the potential to result in an offence under the above legislation.

### 2.2. Priority Species

- 2.2.1. The Natural Environment and Rural Communities (NERC) Act 2006 (as amended) [Ref. 3] list of Species of Principal Importance is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006 (as amended); under Section 40 every public authority (e.g. a local authority or local planning authority) must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 2.2.2. In addition, with regard to those species on the list of Species of Principal Importance listed under Section 41, the Secretary of State must:
- a) *“take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section, or*
  - b) *promote the taking by others of such steps.”*

- 2.2.3. The UK Biodiversity Action Plan (UKBAP) was launched in 1994 and established a framework and criteria for identifying species and habitat types of conservation concern. From this list, action plans for priority habitats and species of conservation concern were published and have subsequently been succeeded by the UK Post-2010 Biodiversity Framework (July 2012) [Ref. 4]. The UK Post 2010 Development Framework is relevant in the context of Section 40 of the NERC Act 2006 (as amended), meaning that Priority Species and Habitats (now known as Species and Habitats of Principal Importance) are material considerations in planning. These habitats and species are identified as those of conservation concern due to their rarity or a declining population trend.
- 2.2.4. Seven of the UK bat species are listed as species of principal importance within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (as amended): namely, the barbastelle bat (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), noctule bat (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), greater horseshoe bat (*Rhinolophus ferrumequinum*) and lesser horseshoe bat (*Rhinolophus hipposideros*), meaning that they are of material consideration in planning.

## 2.3. Local Biodiversity Action Plan

- 2.3.1. The Proposed Development is located in Buckinghamshire. The 'Forward to 2030 Buckinghamshire and Milton Keynes Biodiversity Action Plan' (BMKBAP) [Ref. 5], sets out measures that will help to reverse the decline of biodiversity within the area, although focus of the work is primarily on habitats. However, the BAP lists UK Priority species that have been recorded within the county, but does not have any species-specific action plans for Buckinghamshire.

## 3. Methods

3.1.1. This section describes the survey methods used to determine the assemblage of bat species present within the survey area, which included:

- A desk study;
- A series of walked bat activity transect surveys; and
- Automated bat detector surveys.

### 3.2. Desk Study

3.2.1. A desk study was undertaken as part of the Preliminary Ecological Appraisal (PEA) in September 2021 **[Ref. 6]**. This desk study obtained records of bats within the preceding ten years and within a 2km radius of the Site and non-statutory nature conservation designations within 2km of the Site (including those of relevance to bats from Buckinghamshire and Milton Keynes Environmental Records Centre (BMKERC) **[Ref. 7]**.

3.2.2. A search was also undertaken of freely available resources including magic.gov.uk **[Ref. 8]** for relevant statutory site designations within 10km of the Site and bat designated Special Areas of Conservation (SACs) within 30km of the Proposed Development; and granted bat mitigation licences (EPSMLs) and organisational licences issued to HS2 Ltd in relation to bats within 2km of the Site.

3.2.3. A review was also undertaken of publicly available bat radio-tracking data from between 2012 and 2014 **[Ref. 9 and Ref. 10]** collected by HS2 Ltd, which included data within the western part of the Site. It is understood that longer term radio-tracking monitoring data of the local bat population has continued since 2014, however this data was not available at the time of writing.

### 3.3. Field Survey

#### Bat Activity Walked Transect Surveys

3.3.1. The number of survey visits, transect routes and automated static detectors used was determined through consideration of the size of the Site and its relative quality, in line with the best practice survey guidance at the time of survey **[Ref. 11]**, the existing data held on the local bat populations from the HS2 Ltd radio-tracking studies and the habitats within the Site that would be affected by the Proposed Development. Following completion of the walkover surveys for the Preliminary Ecological Appraisal **[Ref. 12]**, this led to a conclusion that the habitats within Site boundary are of a mix of low quality and moderate quality, due to the majority of the Site being arable land with several hedgerows but also incorporating areas of livestock grazed pasture. High quality habitats in the form of woodland are located immediately adjacent to the Site, with the Proposed Development not including land take of any woodland habitats. As such it was considered that four activity survey

visits between May and September would be an appropriate survey effort to characterise the use of the Site by bats.

- 3.3.2. Due to the size of the Site, nine transect routes were undertaken, with two surveyors walking a pre-defined transect route which included a series of 'listening points' located at potentially important features with regards to bats. At each 'listening point', surveyors recorded bat activity for at least three minutes using bat echolocation detectors. Any additional activity encountered whilst walking between points was also noted. The survey routes were designed to include potential flight paths or foraging areas within the Site, and also mature trees, which may offer suitable roost sites. The transect routes are shown on **Figure 1 (Annex A)**.
- 3.3.3. Surveyors carried echolocation detectors (Elekon Batlogger or Petterson D240x) to identify which species were present. Bat activity was plotted in the field using ArcGIS Fieldmaps. The dusk surveys commenced at sunset and continued to at least two hours after sunset.
- 3.3.4. The time, location, number, species (where possible) and direction of flight were recorded for each bat pass (discrete burst of echolocation heard, or bat activity observed) encountered during the survey. One surveyor recorded the echolocation calls detected to an Edirol digital recorder or Elekon Batlogger to allow use of Batsound or BatExplorer analysis software to verify bat calls where required.
- 3.3.5. Survey visits were scheduled to avoid nights with cold, wet or windy conditions. All surveys were undertaken during favourable weather conditions which are summarised in **Table 3.1** below.

**Table 3.1 Activity survey weather conditions**

Site	Transect	Survey date	Start and end time	Sunset time	Temperature (°C) at start of survey	Weather conditions
<b>Parcel 1</b>	Parcel 1 West Transect	26/07/2022	21:06 – 23:06	21:07	18	60% cloud cover, still (Beaufort 0) with no rain.
		07/09/2022	19:24 – 21:38	19:38	18	10-30% clouds, light breeze (Beaufort 2) and dry.
		08/06/2023	21:20 to 23:20	21:20	14	10% cloud cover, gentle breeze (Beaufort 3) and dry

Site	Transect	Survey date	Start and end time	Sunset time	Temperature (°C) at start of survey	Weather conditions
	Parcel 1 East Transect	06/07/2023	21:24 to 23:24	21:24	19	0% cloud cover, light air (Beaufort 1) and dry
		07/09/2022	19:24 – 21:38	19:38	18	10-30% clouds, light breeze (Beaufort 2) and dry.
		08/06/2023	21:20 to 23:20	21:20	17	0% cloud cover, gentle breeze (Beaufort 3) and dry
	Parcel 1 North Transect	06/07/2023	21:24 to 23:24	21:24	19	0% cloud cover, light air (Beaufort 1) and dry
		23/05/2023	21:02 to 23:02	21:02	14	40-50% cloud cover, light breeze (Beaufort 2), dry
		10/07/2023	21:22 to 23:24	21:24	18	60-90% cloud cover, moderate breeze (Beaufort 4), dry following recent rain
		22/08/2023	20:15 to 23:15	20:15	19	10-30% cloud cover, still (Beaufort 0), dry
		07/09/2023	19:38 to 21:38	19:38	26	40-50% cloud cover, still (Beaufort 0), dry
	Parcel 1a Transect	26/07/2022	21:06 – 23:06	21:07	18	60% cloud cover, still (Beaufort 0) with no rain.
		07/09/2022	19:24 – 21:38	19:38	18	10-30% clouds, light breeze



Site	Transect	Survey date	Start and end time	Sunset time	Temperature (°C) at start of survey	Weather conditions
						(Beaufort 2) and dry.
		08/06/2023	21:20 to 23:20	21:20	14	10% cloud cover, gentle breeze (Beaufort 3) and dry
		08/08/2023	20:42 to 22:42	20:42	15	100% cloud cover, still (Beaufort 0), dry following rain prior to survey start
<b>Parcel 2</b>	Parcel 2 Northeast Transect	26/07/2022	21:06 – 23:06	21:07	17	60% cloud cover, still (Beaufort 0) with no rain. Rain recently prior to survey.
		07/09/2022	19:34 – 21:38	19:38	18	10-30% clouds, light breeze (Beaufort 2) and dry.
		17/05/2023	20:53 to 22:53	20:53	14	10-30% clouds, light breeze (Beaufort 2) and dry.
		10/07/2023	21:22 to 23:24	21:24	18	60-90% cloud cover, moderate breeze (Beaufort 4), dry following recent rain
	Parcel 2 Southwest Transect	26/07/2022	21:06 – 23:06	21:07	17	60% cloud cover, still (Beaufort 0) with no rain. Rain recently prior to survey.

Site	Transect	Survey date	Start and end time	Sunset time	Temperature (°C) at start of survey	Weather conditions
		07/09/2022	19:39 – 21:38	19:38	18	10-30% clouds, light breeze (Beaufort 2) and dry.
		17/05/2023	20:53 to 22:53	20:53	14	10-30% clouds, light breeze (Beaufort 2) and dry.
		08/08/2023	20:42 to 22:42	20:42	15	100% cloud cover, still (Beaufort 0), dry following rain prior to survey start
Parcel 2 North Transect		23/05/2023	21:02 to 23:02	21:02	14	40-50% cloud cover, light breeze (Beaufort 2), dry
		10/07/2023	21:24 to 23:24	21:24	18	60-90% cloud cover, moderate breeze (Beaufort 4), dry following recent rain
		22/08/2023	20:15 to 23:15	20:15	19	10-30% cloud cover, still (Beaufort 0), dry
		07/09/2023	19:38 to 21:38	19:38	26	40-50% cloud cover, still (Beaufort 0), dry
Parcel 2 South Transect		08/06/2023	21:20 to 23:20	21:20	14	10% cloud cover, gentle breeze (Beaufort 3) and dry
		08/08/2023	20:42 to 22:42	20:42	14	40-50% cloud cover, light breeze (Beaufort

Site	Transect	Survey date	Start and end time	Sunset time	Temperature (°C) at start of survey	Weather conditions
						2), dry following recent rain
		31/08/2023	19:55 to 21:55	19:55	15	100% cloud cover, gentle breeze (Beaufort 3), brief light drizzle at beginning and end of survey
		07/09/2023	19:37 to 21:38	19:38	26	40-50% cloud cover, still (Beaufort 0), dry
<b>Parcel 3</b>	Parcel 3 Transect	23/05/2023	21:02 to 23:02	21:02	14	40-50% cloud cover, light breeze (Beaufort 2), dry
		08/08/2023	20:42 to 22:42	20:42	14	40-50% cloud cover, light breeze (Beaufort 2), dry following recent rain
		31/08/2023	19:55 to 21:55	19:55	15	100% cloud cover, gentle breeze (Beaufort 3), brief light drizzle at beginning and end of survey
		07/09/2023	19:38 to 21:38	19:38	26	40-50% cloud cover, still (Beaufort 0), dry

## Automated Bat Detector Surveys

3.3.6. Two static automated echolocation detectors (SM4bat FS detector) were placed within each transect conducted across the Site on four occasions between September 2022 and September 2023 (i.e. a total of 18 locations for each month surveyed). The locations of the detectors are shown on **Figure 1**

**(Annex A).** The SM4bat FS detectors were left on site for a minimum of five consecutive nights for each survey occasion. Data were recorded onto an SD card in full spectrum format and subsequently converted to zero crossing format for subsequent echolocation call analysis using Analook software.

3.3.7. The SM4bat FS detectors were set up to record bat echolocation over the following periods between September 2022 and September 2023:

3.3.8. Parcel 1 West Transect:

- Location A:
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 27 June 2023 to dawn 6 July 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023; and
  - Dusk 22 August 2023 to dawn 28 August 2023.
- Location B:
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 2 June 2023 to dawn 8 June 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023; and
  - Dusk 22 August 2023 to dawn 28 August 2023

3.3.9. Parcel 1 East Transect:

- Location A
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 8 June 2023 to dawn 15 June 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023; and
  - Dusk 22 August 2023 to dawn 29 August 2023.
- Location B:
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 8 June 2023 to dawn 15 June 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023; and
  - Dusk 22 August 2023 to dawn 29 August 2023.

3.3.10. Parcel 1 North Transect

- Location A
  - Dusk 23 May 2023 to dawn 2 June 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023;
  - Dusk 22 August 2023 to dawn 29 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.

- Location B
  - Dusk 23 May 2023 to dawn 2 June 2023;
  - Dusk 6 July 2023 to dawn 11 July 2023;
  - Dusk 22 August 2023 to dawn 29 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.

#### 3.3.11. Parcel 1a:

- Location A:
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 2 June 2023 to dawn 8 June 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 9 August 2023 to dawn 14 August 2023.
- Location B:
  - Dusk 7 September 2022 to dawn 12 September 2022;
  - Dusk 2 June 2023 to dawn 8 June 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 9 August 2023 to dawn 14 August 2023.

#### 3.3.12. Parcel 2 Northeast Transect:

- Location A:
  - Dusk 12 September to dawn 20 September 2023;
  - Dusk 15 June 2023 to dawn 22 June 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 14 August 2023 to dawn 20 August 2023.
- Location B:
  - Dusk 12 September to dawn 20 September 2023;
  - Dusk 15 June 2023 to dawn 22 June 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 14 August 2023 to dawn 22 August 2023.

#### 3.3.13. Parcel 2 Southwest Transect:

- Location A:
  - Dusk 12 September to dawn 20 September 2022;
  - Dusk 2 June 2023 to dawn 9 June 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 9 August 2023 to dawn 14 August 2023.

- Location B:
  - Dusk 12 September to dawn 20 September 2023;
  - Dusk 27 June 2023 to dawn 2 July 2023;
  - Dusk 11 July 2023 to dawn 17 July 2023; and
  - Dusk 9 August 2023 to dawn 14 August 2023.

#### 3.3.14. Parcel 2 North Transect:

- Location A:
  - Dusk 23 May 2023 to dawn 31 May 2023;
  - Dusk 17 July to dawn 24 July 2023;
  - Dusk 14 August 2023 to dawn 22 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023
- Location B:
  - Dusk 23 May 2023 to dawn 29 May 2023;
  - Dusk 17 July to dawn 24 July 2023;
  - Dusk 14 August 2023 to dawn 22 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.

#### 3.3.15. Parcel 2 South Transect:

- Location A:
  - Dusk 8 June 2023 to dawn 15 June 2023;
  - Dusk 17 July 2023 to dawn 22 July 2023;
  - Dusk 9 August 2023 to dawn 14 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.
- Location B:
  - Dusk 8 June 2023 to dawn 15h June 2023;
  - Dusk 17 July 2023 to dawn 24 July 2023;
  - Dusk 9 August 2023 to dawn 14 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.

#### 3.3.16. Parcel 3:

- Location A:
  - Dusk 23 May 2023 to dawn 2 June 2023;
  - Dusk 14 August to dawn 20 August 2023; and
  - Dusk 7 September 2023 to dawn 13 September 2023.
- Location B:

- Dusk 23 May 2023 to dawn 2 June 2023;
- Dusk 17 July 2023 to dawn 24 July 2023;
- Dusk 14 August to dawn 20 August 2023; and
- Dusk 7 September 2023 to dawn 13 September 2023.

### 3.4. Assumptions and Limitations

- 3.4.1. It should be noted that ecosystems are dynamic and constantly changing, and therefore species may move, or new species may be recorded in subsequent years. In accordance with the current guidance [Ref. 13] the results of the bat surveys are considered to be valid for a period of between 12 and 24 months and after this timeframe an ecologist should be consulted to determine if updated survey and assessment is required.
- 3.4.2. The detectability of bat echolocation calls varies greatly by species. Calls of lower frequency and louder calls, such as those by noctule and pipistrelle bats, will be detected at a greater distance than calls that are quieter (such as brown long-eared bat calls) or high frequency and therefore attenuate more quickly, and as such are more likely to be under recorded.

#### Desk Study

- 3.4.3. The aim of a desk study was to help characterise the baseline context of the Proposed Development and provide valuable background information that would not be captured by a single site survey alone. Information obtained during the course of a desk study was dependent upon people and organisations having made and submitted records for the area of interest. As such, a lack of records for a particular bat species does not necessarily mean that this species does not occur in the study area. Likewise, the presence of records of bats does not automatically mean that these still occurred within the area of interest or were relevant in the context of the Proposed Development.

#### Field Survey

- 3.4.4. It should be noted that the 4th edition of the Good Practice Guidelines [Ref. 14] from the Bat Conservation Trust was issued on 15 September 2023, after surveys were completed. Surveys undertaken during the 2022 and 2023 seasons were therefore completed in accordance with the guidance at the time. While the survey methodology between the 3<sup>rd</sup> and 4<sup>th</sup> edition guidelines does vary, given the large volume of survey data collected this is not considered to be a constraint to the survey results nor alter the conclusions reached within this report.

#### Bat Activity Survey

- 3.4.5. Only three walked bat activity survey visits to Parcel 1 East were completed as attempts to access the site in July 2022 were prevented by livestock presence within the field required for access and in May 2023 due to access being revoked during the survey. However, given the high level of survey

data collected across the Site this is not considered to be a constraint to the survey results.

- 3.4.6. Access to the westernmost fields of Parcel 1 West was limited due to the presence of livestock and as such the transect route varied according to the safe access available at the time of each survey.
- 3.4.7. *Myotis* bat calls can be very similar; therefore, when recorded during bat activity surveys have been classified as *Myotis* species unless call characteristics or observations of the bat and behaviour have been recorded to enable species level identification.

#### Automated Bat Detector Survey

- 3.4.8. During the automated bat detector monitoring conducted across the Site there were occasions where the full five nights of survey data were not collected due to either access constraints, damage to equipment or the detector not recording for the full time period. Given the large volume of data collected across the Site this is not considered to be a significant constraint to the survey results. Further details are provided by sub-site below.
- 3.4.9. Within Parcel 1 the automated detectors recorded for fewer than five nights at Parcel 1 East Location A during July 2023 (zero nights due to microphone malfunction), Parcel 1 East Location B during August 2023 (four nights, due to power loss) and Parcel 1 North Location A during September 2023 (zero nights due to microphone malfunction). However, since 130 nights of automated detector survey data was collected over the survey period across Parcel 1, with between five and ten nights of data collected at each surveyed location on all other occasions (and above the minimum 120 nights total for this Site), this is not considered to be a constraint to the survey results.
- 3.4.10. Within Parcel 1a the automated detectors recorded for fewer than five nights at Location A during August 2023 (three nights due to power loss) and Location B during June 2023 (two nights due to power loss). The automated detectors recorded for either five or six nights during all other monitoring occasions within Parcel 1a. Overall, 37 nights of automated detector survey data was collected within Parcel 1a, slightly lower than the 40 nights aimed for. However, this slight reduction is not considered to be a constraint to the survey results.
- 3.4.11. Within Parcel 2, the automated detectors recorded for fewer than five nights at Parcel 2 Northeast Location B during September 2022 (three nights due to power loss), June 2023 (zero nights due to detector malfunction) and July 2023 (zero nights due to memory card corruption), Parcel 2 Southwest Location A during September 2022 (one night due to power loss), June 2023 (four nights due to power loss) and July 2023 (four nights due to power loss), Parcel 2 Southwest Location B during September 2022 (three nights due to power loss) and July 2023 (two nights due to power loss), Parcel 2 North Location A during July 2023 (zero nights due to memory card corruption), Parcel 2 North Location B during July 2023 (zero nights due to microphone malfunction) and August 2023 (three nights due to power loss) and Parcel 2



South Location B during September 2023 (three nights due to power loss). All detectors on other monitoring occasions within Parcel 2 recorded for between five and ten nights. Overall, 141 nights of automated detector survey data was collected within Parcel 2, lower than the 160 nights aimed for. However, this small reduction is not considered to be a constraint to the survey results.

- 3.4.12. Within Parcel 3, the automated detectors recorded for fewer than five nights at Location B during September 2023 (four nights) due to damage by wildlife to the detector microphone during deployment. In addition, during the July 2023 planned monitoring the detector at Location A could not be deployed due to the presence of livestock preventing safe access. However, since 41 nights of automated detector survey data was collected over the survey period across Parcel 3, with between five and seven nights of data collected at each surveyed location on all other occasions (and above the minimum 40 nights total for this Site), this is not considered to be a constraint to the survey results.
- 3.4.13. A registration is a single bat species within a file. Registrations can either be from several individual bats, or from the same bat for a sustained period of activity within the range of the detector, as for extended durations (over 15 seconds) a call will be broken down across multiple files. Registrations of activity are therefore not a measure of abundance.
- 3.4.14. *Myotis* bat calls can be very similar; therefore, when recorded during automated static detector surveys have been classified as *Myotis* species unless call characteristics or observations of the bat and behaviour have been recorded to enable species level identification.
- 3.4.15. Common pipistrelle and soprano pipistrelle can be difficult to separate using a zero crossing file when calls recorded are towards the lower end of the soprano pipistrelle frequency and higher end of the common pipistrelle peak frequency. As such, any pipistrelle bat with a peak frequency between 49 kHz and 51kHz has been classified as pipistrelle bat.
- 3.4.16. Common pipistrelle and Nathusius' pipistrelle can be difficult to separate using a zero crossing file when calls recorded are towards the lower end of the common pipistrelle frequency and higher end of the Nathusius' pipistrelle peak frequency. As such, any pipistrelle bat with a peak frequency between 41 kHz and 42kHz has been classified as pipistrelle bat.
- 3.4.17. Leisler's, noctule and serotine bat can be difficult to identify accurately if only part of the call is present towards the lower end of the serotine and Leisler's bat frequency and upper end of noctule peak frequency, therefore unless the species could be clearly distinguished these have been grouped together.
- 3.4.18. *Myotis* and brown long-eared bat calls can be very similar, making them difficult to identify accurately when only part of the call is present. Therefore, unless the species could be clearly distinguished these have been grouped together.

- 3.4.19. Barbastelle calls can be difficult to identify accurately if only part of the call is present. Therefore, unless the species could be clearly identified 'possible barbastelle' has been used.

### 3.5. Quality Assurance

- 3.5.1. All AECOM Ecologists are members, at the appropriate level, of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct when undertaking ecological work.
- 3.5.2. Bat surveys were led by a licenced or suitably experienced bat ecologist as appropriate. This report has been reviewed and approved by ecologists who hold a Natural England Bat Survey Class Licence at Level 2.

## 4. Results

### 4.1. Desk Study

#### Bat Records

- 4.1.1. The data search in the Preliminary Ecological Appraisal Report (PEAR) returned 532 records of thirteen bat species within 2km, comprising, Bechstein's bat, barbastelle, noctule, Leisler's bat (*Nyctalus leisleri*), serotine (*Eptesicus serotinus*), whiskered bat (*Myotis mystacinus*), Daubenton's bat (*Myotis daubentonii*), brown long-eared bat, Natterer's bat (*Myotis nattereri*), Brandt's bat (*Myotis brandtii*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle and Nathusius' pipistrelle (*Pipistrellus nathusii*). Most of these records are from adjacent woodlands including Sheephouse Wood Site of Special Scientific Interest (SSSI) which is located immediately adjacent to Parcel 1 and Parcel 1a, Runts Wood which is located immediately adjacent to Parcel 2, Finemere Wood SSSI which is located immediately adjacent to Parcel 2, Quainton fishing lake located to the south of the Site and around Calvert landfill site located to the west.

#### Bat Mitigation Licences (EPSMLs)

- 4.1.2. Nine previous EPSML bat licences have been granted within 2km of the Site as follows:
- 2016-21778-EPS-MIT for destruction of a resting place for brown long-eared and common pipistrelle bats, located at Middle Claydon (c. 860m north of Parcel 1 and Parcel 2);
  - EPSM2012-4422 for destruction of a breeding site and resting place for brown long-eared, whiskered, Brandt's, Natterer's and common pipistrelle bats, located south of Shipdon Lee (c.1.8km south of Parcel 2);
  - EPSM2012-5021 for destruction of a resting place for brown long-eared bats, located at Botolph Claydon (immediately north of Parcel 2);
  - EPSM2010-1913 for destruction of a breeding and resting place for common pipistrelle and brown long-eared bats, located at East Claydon (c. 1325m north of Parcel 2);
  - EPSM2010-2137 for destruction of a breeding and resting place for brown long-eared bats, located at Steeple Claydon (c. 1880m north of Parcel 1);
  - EPSM2012-4743 for destruction of a resting place for common pipistrelle and brown long-eared bats, located at Greatmoor village (c.600m south of Parcel 1a);
  - 2019-43736-EPS-MIT and 2019-43736-EPS-MIT-1 for damage to a breeding and resting place for brown long-eared, common pipistrelle, soprano pipistrelle and whiskered bats, located c.300m southwest of Parcel 2 (just north of Finemere Wood SSSI);

- 2019-43897-EPS-MIT for destruction of a resting place for brown long-eared, common pipistrelle and whiskered bats, located at Shipdon Lee (c.1.4km south of Parcel 2); and
- 2020-45837-EPS-MIT for damage of a resting place of common pipistrelle bats, located west of Winslow (c. 1890m northwest of Parcel 3).

### Organisational Licences for HS2 Ltd

- 4.1.3. WML-OR32 – (c.300m southwest of Parcel 1a) The licence facilitates the enabling and construction works for a high speed rail line between London and Birmingham (Phase 1) and at Greatmoor Railway Sidings. It covers certain activities affecting Bechstein's bat, Brandt's bat, Daubenton's bat, whiskered bat, Natterer's bat, common pipistrelle bat, soprano pipistrelle bat, brown long-eared bat, and noctule bat, European Protected Species that would otherwise be unlawful.

### Radiotracking Data

- 4.1.4. The publicly available bat radio-tracking data from between 2012 and 2014 [Ref. 9 and Ref. 10] collected by HS2 Ltd includes records of Bechstein's bats roosting in the following woodlands that are adjacent or in close proximity to the Site: Decoypond Wood, Shrubs Wood, Home Wood, Romer Wood, Runts Wood, Sheephouse Wood, Finemere Wood, Greatsea Wood and Balmore Wood. Flightlines by Bechstein's bats were recorded between Finemere, Sheephouse, Romer, Greatsea, Runts and Balmore woods. A flightline between Sheephouse Wood and Romer Wood forming the southwest boundary of Parcel 1a was recorded in 2014 used by Bechstein's, Brandt's (*Myotis brandtii*) and brown long-eared bats.
- 4.1.5. It is understood that extensive radiotracking of Bechstein's bats in the wider area has been undertaken as part of the HS2 scheme since 2014, including for bats roosting within Sheephouse Wood SSSI. However, at the time of writing this data has not been available for inclusion within this report.

### Statutory Designations

- 4.1.6. There are no statutory designations for sites in relation to bats. There are three ancient woodlands within 2km of the Site that may provide habitat for roosting and foraging bats that are also designated as Sites of Special Scientific Interest (SSSI). The nationally rare Bechstein's bat is known to roost within Sheephouse Wood SSSI, located immediately adjacent to Parcel 1. It is a large, well-structured block of ancient pedunculate oak (*Quercus robur*) woodland with a diverse woodland flora and invertebrate fauna.
- 4.1.7. Two other SSSI ancient woodlands are located within 2km of the Site as follows: Finemere Wood SSSI, located immediately adjacent to Parcel 2 and Grendon and Doddershall Woods SSSI, located 1.36km to the west of Parcel 2. For the locations of designated sites please refer to Figures 2 and 3 within the Preliminary Ecological Appraisal [Ref. 12].

- 4.1.8. Natural England are proposing extensions to SSSIs in the Bernwood area, anticipated to include Sheephouse Wood SSSI and Finemere Wood SSSI located immediately adjacent to the Site. These extensions would include additional key bat habitat used by species associated with the SSSI, including Bechstein's bat.
- 4.1.9. There are no SACs designated for bats within 30km of the Site.

## 4.2. Field Survey

### Bat Activity Survey Results

- 4.2.1. The results of the bat activity walked transects at the Site are outlined by sub site below and shown on **Figures 2a** through to **10d (Annex A)**. **Figure 11 (Annex A)** illustrates the spread of all bat registrations recorded during the bat activity transects across the Site, together with locations of relatively higher levels of bat activity recorded within the Site, or where high quality bat habitat exists outside of the walked transect routes.
- 4.2.2. Due to the presence of the Annex II of the Habitats Directive listed species Bechstein's bat (a *Myotis* bat species) within the wider area, *Myotis* bat records have been illustrated on **Figure 12 (Annex A)**, which shows the locations of all *Myotis* bat species registrations recorded during the bat activity transects across the Site. *Myotis* bats cannot reliably be separated based on their calls alone, therefore all *Myotis* recordings have been grouped together.
- 4.2.3. Due to the presence of the Annex II of the Habitats Directive listed species barbastelle bat, **Figure 13 (Annex A)** illustrates the spread of all barbastelle bat registrations recorded during the bat activity transects across the Site.

### Parcel 1

- 4.2.4. A summary of the results of the walked activity transects within Parcel 1 are contained within **Table 4.1** and shown in **Figures 2a to 2d (Annex A)** for the Parcel 1 West transect, **Figures 3a to 3c (Annex A)** for the Parcel 1 East transect and **Figures 4a to 4d (Annex A)** for the Parcel 1 North transect. Full survey results are contained within **Annex B**. Sonograms of bat species recorded are contained within **Annex C**.

**Table 4.2: Bat Activity Walked Transects Results Summary – Parcel 1**

Transect	Survey Date	Summary of Results
<b>West</b>	Visit 1: Dusk 26 July 2022	During the dusk activity survey on 26 July 2022, the first bat activity recorded was a brief pass by a noctule bat at 24 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly brief passes of individual bats, and a period of foraging activity recorded between Transect Points (TP) 7 and 1 on

Transect	Survey Date	Summary of Results
		<p>the southern edge of Shrubs Wood. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Two brief passes by individual noctule bats;</li> <li>• three brief passes by individual soprano pipistrelle bats, a single brief pass by a serotine bat;</li> <li>• two brief passes of individual brown long-eared bats between TP4 and 5 along the hedgerow extending east of Shrubs Wood;</li> <li>• twenty-six registrations of common pipistrelle activity of which one was of two bats together and the remainder individual bats; and</li> <li>• a single brief pass by a <i>Myotis</i> bat species<sup>1</sup> at TP7 (at a hedgerow extending south from Shrubs Wood to Sheephouse Wood).</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around the hedgerows and woodland margins. See <b>Annex B</b> and <b>Figure 2a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 7 September 2022	<p>During the dusk activity survey on 7 September 2022, the first bat recorded was a brief pass by a noctule bat at eight minutes after sunset. The majority of activity recorded was of common pipistrelle and soprano pipistrelle bats, comprising predominantly brief passes of individual bats, and two recordings of foraging activity by soprano pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Fifteen passes of soprano pipistrelle bats (the majority of which were brief passes of individual bats, with one recording of two bats and two recordings of foraging activity);</li> <li>• fifteen brief passes of predominantly individual common pipistrelle bats;</li> <li>• four brief passes of individual noctule bats;</li> <li>• five brief passes of individual <i>Myotis</i> species bats; and</li> <li>• one brief pass of a single brown long-eared bat.</li> </ul>

<sup>1</sup> *Myotis* bat calls can be very similar; therefore have been classified as *Myotis* species unless call characteristics or observations of the bat and behaviour have been recorded to enable species level identification.

Transect	Survey Date	Summary of Results
		Activity recorded was spread across the transect route, concentrated around the hedgerows and woodland margins, however the greatest concentration of activity including for <i>Myotis</i> species bats was between TP5 and 4, along a hedgerow extending east from Shrubs Wood. See <b>Annex B</b> and <b>Figure 2b (Annex A)</b> for further details.
	Visit 3: Dusk 8 June 2023	<p>During the dusk activity survey on 8 June 2023, the first recorded bat activity was a commuting noctule at 17 minutes after sunset. The majority of activity recorded was of common pipistrelle and soprano pipistrelle bats, comprising predominantly of foraging activity between TP5,6 and 7 (hedgerows south-east of Shrubs Wood) as well and between TP4 and 3. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Three passes by commuting individual noctule bats;</li> <li>• sixteen registrations of individual common pipistrelle activity;</li> <li>• twelve registrations of individual soprano pipistrelle activity;</li> <li>• a single registration of an individual Leisler's bat between TP2 and 1 (along the southern and western margins of Shrubs Wood); and</li> <li>• five registrations of <i>Myotis</i> bat species activity, of which one registration consisted of multiple foraging <i>Myotis</i> bats.</li> </ul> <p>Activity recorded was across the transect route, however concentrated around the hedgerows (in particular extending east from Shrubs Wood), the margins of Shrubs Wood and near TP5 at the north-east corner of Sheephouse Wood. See <b>Annex B</b> and <b>Figure 2c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 6 July 2023	<p>During the dusk activity survey on 6 July 2023, the first recorded bat activity was a brief pass by a noctule bat 11 minutes after sunset. The majority of activity recorded was brief passes of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Seven records of individual noctule bat activity (of which one was foraging between TP2 and 3 along a hedgerow south of Shrubs Wood, with the other registrations consisting of brief passes);</li> </ul>



Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• sixteen records of common pipistrelle activity (of which two registrations consisted of two bats foraging between TP8 and 5 with the remainder individual bats);</li> <li>• four records of soprano pipistrelle activity (one of which was two bats foraging between TP8 and 5, one of which was an individual foraging at TP5 (at the north-east corner of Sheephouse Wood), with the others being brief passes by single bats);</li> <li>• a single observation of a brown long-eared bat foraging at TP5; and</li> <li>• two brief passes by single <i>Myotis</i> bat species.</li> </ul> <p>Activity recorded was across the transect route, however concentrated around the hedgerows (in particular extending south-east from Shrubs Wood), the southern margins of Shrubs Wood and TP5 at the north-east corner of Sheephouse Wood. See <b>Annex B</b> and <b>Figure 2d (Annex A)</b> for further details.</p>
East	Visit 1: Dusk 7 September 2022	<p>During the dusk activity survey on 7 September 2022, the first recorded bat activity was a brief pass by a noctule bat observed 15 minutes after sunset. The majority of activity recorded was foraging activity from common and soprano pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Two brief passes by individual noctule bats;</li> <li>• twenty registrations of common pipistrelle activity (of which four records consisted of two bats with the remainder single bats);</li> <li>• eight records of soprano pipistrelle activity (of which one record was of two bats foraging between TP4 and 3 (along hedgerows connected to the east of Shrubs Wood), with the others being individual bats);</li> <li>• two brief passes of a pipistrelle bat (either common or soprano, echolocating at 50KHz); and</li> <li>• two registrations of individual <i>Myotis</i> bats.</li> </ul> <p>Activity recorded was distributed across the transect route, concentrated around the hedgerows and margins of Shrubs Wood. See <b>Annex B</b> and <b>Figure 3a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 8 June 2023	<p>During the dusk activity survey on 8 June 2023, the first recorded bat activity was an individual commuting soprano pipistrelle bat observed six minutes prior to sunset,</p>



Transect	Survey Date	Summary of Results
North		<p>indicating the presence of a nearby roost potentially from the buildings at Great Pond Farm (located immediately north of Shrubs Wood), or from Shrubs Wood. The majority of activity recorded was foraging activity from common pipistrelle bats between TP5 and 6, along hedgerows within the north-east of the transect route. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• One record of an individual noctule bat commuting;</li> <li>• four records of individual foraging common pipistrelle bats;</li> <li>• three records of individual soprano pipistrelle bat activity (of which one record was of foraging at TP6 along the hedgerow forming the northern Site boundary, with the others being single commuting bats); and</li> <li>• one record of a single Leisler's bat foraging between TP6 and 7 within the north of the transect route.</li> </ul> <p>See <b>Annex B</b> and <b>Figure 3b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 6 July 2023	<p>During the dusk activity survey on 6 July 2023, the first recorded bat activity was a brief pass by an individual common pipistrelle bat one minute after sunset, indicating the presence of a nearby roost potentially from the buildings at Great Pond Farm (located immediately north of Shrubs Wood), or from Shrubs Wood. The majority of activity recorded was brief passes of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Seven registrations of brief passes by individual common pipistrelle bats;</li> <li>• two brief passes by individual soprano pipistrelle bats; and</li> <li>• four brief passes of individual <i>Myotis</i> bats.</li> </ul> <p>Activity recorded was predominantly towards the south of the transect route, concentrated around the hedgerows. See <b>Annex B</b> and <b>Figure 3c (Annex A)</b> for further details.</p>
	Visit 1: Dusk 23 May 2023	<p>During the dusk activity survey on 23 May 2023, the first recorded bat activity was foraging by an individual noctule bat nine minutes after sunset. The majority of activity recorded was brief passes of common pipistrelle bats. In total activity comprised:</p>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• Eight records of foraging and commuting of individual noctule bats between TP4 and 1 as well as at TP1 adjacent to the northern Site boundary;</li> <li>• twelve records of common pipistrelle activity (of which one record was of two bats with the rest being individuals); and</li> <li>• one brief pass by an individual soprano pipistrelle at TP3.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around the hedgerows, however the greatest concentration of noctule activity was recorded between TP4 and 1. See <b>Annex B</b> and <b>Figure 4a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 10 July 2023	<p>During the dusk activity survey on 10 July 2023, the first recorded bat activity was a brief pass by an individual noctule bat one minute after sunset. The majority of activity recorded was brief passes of common and soprano pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Four records of individual noctule bats (three brief passes and one commuting);</li> <li>• twelve records of individual common pipistrelle activity (of which three were foraging and the rest were brief passes);</li> <li>• five brief passes by soprano pipistrelle bats; and</li> <li>• one brief pass by an individual brown long-eared bat at TP8 adjacent to Three Points Lane that forms the eastern boundary of Parcel 2.</li> </ul> <p>Activity recorded was spread across the hedgerows within the transect route. See <b>Annex B</b> and <b>Figure 4b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 22 August 2023	<p>During the dusk activity survey on 22 August 2023, the first recorded bat activity was a brief pass by an individual common pipistrelle bat observed 27 minutes after sunset. The majority of activity recorded was common and soprano pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Eleven records of common pipistrelle activity (of which one record was of two bats with the rest being individuals);</li> <li>• five records of individual soprano pipistrelle bats; and</li> </ul>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>a single record of a foraging <i>Myotis</i> species bat at TP8 adjacent to Three Points Lane that forms the eastern boundary of Parcel 2.</li> </ul> <p>Activity recorded was spread across the hedgerows within the transect route. See <b>Annex B</b> and <b>Figure 4c (Annex A)</b> for further details.</p>
Visit 4: Dusk 7 September 2023		<p>During the dusk activity survey on 7 September 2023, the first recorded bat activity was an individual commuting common pipistrelle bat 19 minutes after sunset. The majority of activity recorded was common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>Sixteen registrations of individual common pipistrelle bat activity;</li> <li>five registrations of individual soprano pipistrelle bats;</li> <li>two registrations of individual noctule bats;</li> <li>three registrations of individual brown long-eared bats (one commuting at TP3, two foraging at TP7 and between TP7 and TP6 along hedgerows west of Three Points Lane forming the eastern boundary of Parcel 2); and</li> <li>a single record of a foraging <i>Myotis</i> species bat at TP8 adjacent to Three Points Lane on the eastern boundary of Parcel 2.</li> </ul> <p>Activity recorded was spread across the hedgerows within the transect route. However, several common pipistrelles were observed flying over the westernmost field of the transect. See <b>Annex B</b> and <b>Figure 4d (Annex A)</b> for further details.</p>

## Parcel 1a

- 4.2.5. A summary of the results of the walked activity transects within Parcel 1a are contained within **Table 4.2** and shown in **Figures 5a to 5d (Annex A)**. Full survey results are contained within **Annex B**. Sonograms of bat species recorded are contained within **Annex C**.

**Table 4.3: Bat Activity Walked Transects Results Summary – Parcel 1a**

Transect	Survey Date	Summary of Results
<b>Parcel 1a</b>	Visit 1: Dusk 26 July 2022	<p>During the dusk activity survey on 26 July 2022, the first recorded bat activity was a brief pass by an individual noctule bat at four minutes after sunset. The majority of activity recorded was of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Twelve registrations of brief passes by noctule bats (two registrations consisted of two bats with the remainder being individuals),</li> <li>• thirteen registrations of individual common pipistrelle activity (of which one was foraging, and the rest were brief passes);</li> <li>• five registrations of soprano pipistrelle activity (of which one record was of two bats, with the rest being individuals); and</li> <li>• three registrations of individual <i>Myotis</i> species bats.</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Romer Wood and Sheephouse Wood. See <b>Annex B</b> and <b>Figure 5a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 7 September 2022	<p>During the dusk activity survey on 7 September 2022, the first recorded bat activity was a brief pass by an individual noctule bat 14 minutes after sunset. The majority of activity recorded was foraging common and soprano pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Six registrations of individual common pipistrelle activity;</li> <li>• five registrations of soprano pipistrelle foraging activity (of which one registration was of two bats, with the rest being individuals); and</li> <li>• one brief pass by an individual <i>Myotis</i> species bat.</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Romer Wood. See <b>Annex B</b> and <b>Figure 5b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 8 June 2023	<p>During the dusk activity survey on 8 June 2023, the first recorded bat activity was an individual commuting soprano pipistrelle bat 34 minutes after sunset. The majority of activity recorded was common and soprano pipistrelle bat activity. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Nine records of individual common pipistrelle activity;</li> </ul>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• five records of soprano pipistrelle activity (of which one registration was of two bats, with the rest being individuals);</li> <li>• three brief passes by individual noctule bats;</li> <li>• one brief pass by a brown long-eared bat at TP6 (located between Romer Wood and Sheephouse Wood);</li> <li>• three records of <i>Myotis</i> species; and</li> <li>• one brief pass by an individual barbastelle bat at TP6.</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Romer Wood and Sheephouse Wood. See <b>Annex B</b> and <b>Figure 5c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 8 August 2023	<p>During the dusk activity survey on 8 August 2023, the first recorded bat activity was a brief pass by an individual soprano pipistrelle bat 30 minutes after sunset. The majority of activity recorded was soprano pipistrelle bat activity. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• One record of an individual common pipistrelle bat;</li> <li>• five brief passes by individual soprano pipistrelle bats;</li> <li>• three brief passes by individual noctule bats;</li> <li>• three records of individual <i>Myotis</i> species activity; and</li> <li>• two brief passes by individual brown long-eared bats at TP5 (located at the hedgerow within the north of Parcel 1a between Sheephouse Wood and Romer Wood).</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Romer Wood and Sheephouse Wood. See <b>Annex B</b> and <b>Figure 5d (Annex A)</b> for further details.</p>

## Parcel 2

- 4.2.6. A summary of the results of the walked activity transects within Parcel 2 are contained within **Table 4.3** and shown in **Figures 6a to 6d (Annex A)** for the Parcel 2 Northeast transect, **Figures 7a to 7d (Annex A)** for the Parcel 2 Southwest transect, **Figure 8a to 8d (Annex A)** for Parcel 2 North transect and **Figures 9a to 9d (Annex A)** for the Parcel 2 South transect. Full survey results are contained within **Annex B**. Sonograms of bat species recorded are contained within **Annex C**.

**Table 4.4: Bat Activity Walked Transects Results Summary – Parcel 2**

Transect	Survey Date	Summary of Results
<b>Northeast</b>	Visit 1: Dusk 26 July 2022	<p>During the dusk activity survey on 26 July 2022, the first recorded bat activity was a brief pass from an individual common pipistrelle bat 37 minutes after sunset. The majority of activity recorded was of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Nine registrations of common pipistrelle activity (one of which was two bats, the rest being individuals);</li> <li>• a single brief pass of an individual barbastelle bat at TP6 (located at the intersection of a small copse and hedgerow, linked to Runts Wood); and</li> <li>• a single brief pass of an individual soprano pipistrelle.</li> </ul> <p>Activity recorded was spread throughout the transect, concentrated around the hedgerows and margin of Runts Wood. See <b>Annex B</b> and <b>Figure 6a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 7 September 2022	<p>During the dusk activity survey on 7 September 2022, the first recorded bat activity was a brief pass from an individual soprano pipistrelle bat 32 minutes after sunset. The majority of activity recorded was of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Eleven registrations of individual common pipistrelle activity;</li> <li>• three brief passes of individual soprano pipistrelle bats;</li> <li>• a single brief pass of an individual noctule bat; and</li> <li>• two brief passes of individual <i>Myotis</i> species bats (one recorded at TP7 on the edge of Runts Wood, and one adjacent to a watercourse between TP4 and 5).</li> </ul> <p>Activity was recorded throughout the transect; however, the majority of bat activity was recorded along the margins of Runts Wood and the hedgerows and watercourse between TP4 and 5. See <b>Annex B</b> and <b>Figure 6b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 17 May 2023	<p>During the dusk activity survey on 17 May 2023, the first recorded bat activity was a brief pass from an individual common pipistrelle bat observed 37 minutes after sunset. The majority of activity recorded was of common pipistrelle bats. In total activity comprised:</p>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• Twelve records of individual common pipistrelle activity;</li> <li>• two records of individual commuting noctule bats; and</li> <li>• a single brief pass of an individual brown long-eared bat.</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Runts Wood. See <b>Annex B</b> and <b>Figure 6c (Annex A)</b> for further details.</p>
Southwest	Visit 4: Dusk 10 July 2023	<p>During the dusk activity survey on 10 July 2023, the first recorded bat activity was a brief pass from an individual common pipistrelle bat 43 minutes after sunset. The majority of activity recorded was of common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Twelve brief passes of individual common pipistrelle activity;</li> <li>• three brief passes of individual soprano pipistrelle bats;</li> <li>• a single brief pass of an individual serotine bat between TP6 and 7 (along the northeast margin of Runts Wood); and</li> <li>• two brief passes of individual <i>Myotis</i> species bats between TP6 and 7.</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Runts Wood. See <b>Annex B</b> and <b>Figure 6d (Annex A)</b> for further details.</p>
	Visit 1: Dusk 26 July 2022	<p>During the dusk activity survey on 26 July 2022, the first bat activity recorded was a brief pass by a soprano pipistrelle bat at 7 minutes after sunset. The majority of activity recorded was of brief passes by individual common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Two brief passes of individual soprano pipistrelle bats, as well as one period of foraging activity recorded between TP3 and 4 (along the eastern margin of Runts Wood);</li> <li>• one brief pass by an individual noctule bat;</li> <li>• nine registrations of <i>Myotis</i> species bats, of which eight comprised brief passes and one comprised a period of foraging activity between TP4 and 5 (along a hedgerow extending southeast from Runts Wood), all of individual bat; and</li> </ul>



Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• twenty-six brief passes by individual common pipistrelle bats.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around hedgerows throughout the transect, and the margins of Runt's Wood in the north and north-west of the transect route. See <b>Annex B</b> and <b>Figure 7a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 7 September 2022	<p>During the dusk activity survey on 7 September 2022, the first bat activity recorded was a noctule bat, recorded commuting along a hedgerow between TP1 and 2 (along a double hedgerow extending south from Runts Wood), 17 minutes after sunset. The majority of activity recorded comprised periods of common pipistrelle foraging between TP5 and 6 (along hedgerows along the south of the transect), TP6 and 7 (along hedgerows along the south of the transect) and at TP1 (at the southwest corner of the transect), by individual bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• A single noctule commuting;</li> <li>• two instances of individual soprano pipistrelle bats foraging; and</li> <li>• nine registrations of common pipistrelle, comprising eight periods of foraging activity and one bat commuting.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated along hedgerows and the margins of Runt's Wood although the majority of activity was recorded along the hedgerow in the south of the transect route. See <b>Annex B</b> and <b>Figure 7b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 17 May 2023	<p>During the dusk activity survey on 17 May 2023, the first bat activity recorded was a brief pass by a common pipistrelle bat at 21 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly brief passes by an individual bat, with periods of foraging also recorded between TP1 and 2 (along a double hedgerow extending south from Runts Wood), TP3 and 4 (along the eastern margin of Runts Wood), and TP4 and 5 (along a hedgerow extending southwest of Runts Wood). In total activity comprised:</p>



Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• Five brief passes by individual noctule bats;</li> <li>• one brief pass by an individual brown long-eared bat;</li> <li>• two brief passes by individual soprano pipistrelle bats;</li> <li>• three brief passes by individual <i>Myotis</i> species bats; and</li> <li>• 15 registrations of common pipistrelle bat, comprising 10 brief passes by individual bats, and five periods of foraging activity.</li> </ul> <p>Activity recorded was spread throughout the transect route, with the majority of activity in the west of the transect route along hedgerows and the margin of Runt's Wood. See <b>Annex B</b> and <b>Figure 7c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 8 August 2023	<p>During the dusk activity survey on 8 August 2023, the first bat activity recorded was a commuting soprano pipistrelle bat between TP2 and 3 (along the southern margin of Runt's Wood), 18 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly commuting activity throughout the transect route, with brief passes and two periods of foraging activity also recorded, all by individual bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• A single soprano pipistrelle bat commuting;</li> <li>• four registrations of noctule bats, comprising two brief passes and two instances of commuting by individual bats;</li> <li>• two instances of <i>Myotis</i> species bats commuting, one between TP3 and 4 (along the eastern margin of Runt's Wood) and one at TP4 (on the eastern corner of Runt's Wood);</li> <li>• a single serotine recorded commuting;</li> <li>• three instances of individual brown long-eared bats commuting;</li> <li>• sixteen registrations of common pipistrelle bats, comprising nine instances of commuting individuals, five brief passes by individuals, and two periods of foraging by individuals; and</li> <li>• a single barbastelle brief pass was recorded between TP1 and 2 (along a double hedgerow extending south</li> </ul>

Transect	Survey Date	Summary of Results
		<p>from Runts Wood), two hours and 5 minutes after sunset.</p> <p>Activity recorded was spread throughout the transect route, concentrated around hedgerows throughout the transect, and the margins of Runt's Wood. <b>See Annex B and Figure 7d (Annex A)</b> for further details.</p>
North	Visit 1: Dusk 23 May 2023	<p>During the dusk activity survey on 23 May 2023, the first bat activity recorded was a common pipistrelle commuting along a hedgerow in the south of the transect at 27 minutes past sunset. The majority of activity recorded was of common pipistrelle bats, comprising foraging activity predominantly between TP4, 5, 6 and 7 in the south and east of the transect route, with commuting common pipistrelle bats also recorded between TP7 and 1. In total, activity comprised:</p> <ul style="list-style-type: none"> <li>• One <i>Myotis</i> bat recorded foraging between TP6 and 7;</li> <li>• two registrations of individual soprano pipistrelle bats commuting between TP7 and 1,</li> <li>• one bat not echolocating, considered likely to be an individual brown long-eared bat foraging at TP4 (adjacent to a small copse in the south of the transect route); and</li> <li>• twenty-one registrations of common pipistrelle activity, comprising five instances of two bats together, one instance of four bats together, with the remainder comprising individual bats.</li> </ul> <p>Activity recorded was predominantly concentrated along hedgerows in the north, south and east of the transect route. No bats were recorded in the east of the transect route. <b>See Annex B and Figure 8a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 10 July 2023	<p>During the dusk bat activity survey on 10 July 2023, the first bat activity recorded was a brief pass by a common pipistrelle at 35 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly brief passes of individual bats with four instances of foraging activity; one between TP6 and 7 (comprising two bats together), two at TP7, one between TP7 and 1, and one between TP1 and 2. In total activity comprised:</p>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• One brief pass and one period of foraging activity by individual soprano pipistrelle bats;</li> <li>• a single brief pass by an individual Nathusius' pipistrelle bat;</li> <li>• a single brief pass by a brown long-eared bat;</li> <li>• a single brief pass by a serotine bat; and</li> <li>• twenty-one registrations of common pipistrelle activity, of which one was of two bats together and the remainder individual bats.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around hedgerows with the majority of activity recorded in the north of the transect route. See <b>Annex B</b> and <b>Figure 8b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 22 August 2023	<p>During the dusk bat activity survey on 22 August 2023, the first bat activity recorded was a brief pass by a common pipistrelle at 42 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly brief passes of individual bats and periods of foraging activity recorded between TP7 and 1. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• A single instance of foraging activity and a single brief pass individual soprano pipistrelle bats;</li> <li>• a single brief pass by an individual noctule bat; and</li> <li>• seventeen registrations of common pipistrelle activity of which two were two bats together, one was three bats together and the remainder individual bats.</li> </ul> <p>Activity recorded was predominantly in the north and east of the transect route, concentrated along hedgerows. See <b>Annex B</b> and <b>Figure 8c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 7 September 2023	<p>During the dusk bat activity survey on 7 September 2023, the first bat activity recorded was a common pipistrelle bat foraging at TP4 between 27 and 28 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly of brief passes of individual bats, with periods of foraging activity at TP4, between TP4 and 5, between TP5 and 6, and between TP7 and 1. In total, activity comprised:</p> <ul style="list-style-type: none"> <li>• Five brief passes and one social call of individual soprano pipistrelle bats;</li> </ul>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• a single brief pass of an individual <i>Myotis</i> bat;</li> <li>• a single brief pass of an individual brown long-eared bat;</li> <li>• a single brief pass of an individual noctule bat; and</li> <li>• thirty-one registrations of common pipistrelle activity of which two were two bats together and the remainder individual bats. Of the 31 registrations of common pipistrelle activity, 23 comprised brief passes with the remainder comprising foraging activity.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around hedgerows. See <b>Annex B</b> and <b>Figure 8d (Annex A)</b> for further details.</p>
<b>Southern</b>	Visit 1: Dusk 8 June 2023	<p>During the dusk activity survey on 8 June 2023, the first recorded bat activity was a foraging common pipistrelle bat at 38 minutes after sunset. The majority of activity recorded was of common pipistrelle bats foraging. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Fifteen records of individual common pipistrelle bats (of which two were commuting, five were a brief pass and the remainder were foraging); and</li> <li>• a single record of an individual foraging soprano pipistrelle at TP3 (adjacent to Finemere Wood).</li> </ul> <p>Activity recorded was concentrated around the hedgerows and margins of Finemere Wood, predominantly in the south of the transect route. See <b>Annex B</b> and <b>Figure 9a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 8 August 2023	<p>During the dusk activity survey on 8 August 2023, the first bat recorded was a foraging common pipistrelle between TP6 and 7 (along hedgerows within the north of the transect route) at 50 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly foraging activity by individual bats between TP6 and 7, TP5 and 6 (hedgerows within the east of the transect route), and TP3 and 4 (margins of Finemere Wood, and hedgerows extending east), with a single brief pass of an individual common pipistrelle bat also recorded. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Two brief passes and two periods of foraging activity by individual soprano pipistrelle bats;</li> </ul>

Transect	Survey Date	Summary of Results
		<ul style="list-style-type: none"> <li>• a single brief pass by an individual <i>Myotis</i> species bat between TP2 and 3 along the edge of Finemere Wood;</li> <li>• a single brief pass by an individual noctule bat; and</li> <li>• nine registrations of common pipistrelle activity of which eight comprised foraging activity, and one comprised a brief pass all from individual bats.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around hedgerows and along the edge of Finemere Wood with the majority of activity recorded in the north-east of the transect route. See <b>Annex B</b> and <b>Figure 9b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 31 August 2023	<p>During the dusk activity survey on 31 August 2023, the first bat recorded was a foraging soprano pipistrelle at TP7, 13 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly foraging activity by individual bats between TP6 and 7 (hedgerows within the east of the transect route), TP5 and 6 (hedgerows within the east of the transect route), and at TP1 (to the north of Finemere Wood), with two brief passes of individual common pipistrelle bats also recorded. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Three periods of foraging by individual soprano pipistrelle bats;</li> <li>• three brief passes by individual <i>Myotis</i> species bats between TP2 and 3, and TP3 and 4 with two of these brief passes along the edge of Finemere Wood; and</li> <li>• fourteen registrations of common pipistrelle activity of which 12 registrations comprised foraging activity, and two comprised brief passes all of individual bats.</li> </ul> <p>Activity recorded was spread across the transect route around hedgerows and the margin of Finemere Wood, although the majority of activity was recorded along hedgerows in the north-east of the transect route. See <b>Annex B</b> and <b>Figure 9c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 7 September 2023	<p>During the dusk activity survey on 7 September 2023, the first bat recorded was a brief pass by a common pipistrelle bat 27 minutes after sunset. The majority of activity recorded was of common pipistrelle bats, comprising predominantly foraging activity across the</p>

Transect	Survey Date	Summary of Results
		<p>transect route with four brief passes of individual bats also recorded. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• One brief pass by an individual serotine bat;</li> <li>• three brief passes by individual soprano pipistrelle bats; and</li> <li>• twelve registrations of common pipistrelle activity of which eight registrations comprised foraging activity, predominantly of individual bats with two bats together recorded on two occasions, and the remaining registrations comprising brief passes of individual common pipistrelle bats.</li> </ul> <p>Activity recorded was spread across the transect route around hedgerows and the margin of Finemere Wood. See <b>Annex B</b> and <b>Figure 9d (Annex A)</b> for further details.</p>

### Parcel 3

4.2.7. A summary of the results of the walked activity transects within Parcel 3 are contained within **Table 4.4** and shown in **Figures 10a to 10d (Annex A)**. Full survey results are contained within **Annex B**. Sonograms of bat species recorded are contained within **Annex C**.

**Table 4.5: Bat Activity Walked Transects Results Summary – Parcel 3**

Transect	Survey Visit Number and Date	Summary of Results
<b>Parcel 3</b>	Visit 1: Dusk 23 May 2023	<p>During the dusk activity survey on 23 May 2023, the first recorded bat activity was a brief pass by an individual common pipistrelle bat 27 minutes after sunset. The majority of activity recorded was brief passes by common pipistrelle bats between TP1 and 2 (along the eastern boundary of the Site, on the western side of the watercourse along this boundary known as the Claydon Brook). In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Seventeen registrations of individual common pipistrelle bat activity (of which 13 were between TP1 and 2 with another three at TP1);</li> <li>• two registrations of brief passes by individual soprano pipistrelle bats;</li> </ul>

Transect	Survey Visit Number and Date	Summary of Results
		<ul style="list-style-type: none"> <li>• three registrations of brief passes by individual noctule bats;</li> <li>• one brief pass by a Leisler's bat at TP2; and</li> <li>• three brief passes by an individual <i>Myotis</i> species bat (considered most likely to be a Daubenton's bat) between TP2 and 3 (along the west of the Claydon Brook).</li> </ul> <p>Activity recorded was predominantly between TP1 and 2 with the remaining activity detected between TP2 and 3, concentrated adjacent to the Claydon Brook watercourse forming the eastern boundary of Parcel 3. See <b>Annex B</b> and <b>Figure 10a (Annex A)</b> for further details.</p>
	Visit 2: Dusk 8 August 2023	<p>During the dusk activity survey on 8 August 2023, the first recorded bat activity was a commuting noctule at 29 minutes after sunset. The majority of activity recorded was of foraging common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• One pass by an individual commuting noctule bat;</li> <li>• seventeen registrations of individual common pipistrelle bats (of which one was a brief pass, two were commuting and the remainder were foraging);</li> <li>• two registrations of individual soprano pipistrelle bats; and</li> <li>• a single brief pass of a brown long-eared bat between TP3 and TP4 (west of the Claydon Brook).</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around the hedgerows, woodland margins and Claydon Brook watercourse forming the eastern boundary of Parcel 3. See <b>Annex B</b> and <b>Figure 10b (Annex A)</b> for further details.</p>
	Visit 3: Dusk 31 August 2023	<p>During the dusk activity survey on 31 August 2023, the first recorded bat activity was an individual common pipistrelle bat observed foraging at 28 minutes after sunset. The majority of activity</p>



Transect	Survey Visit Number and Date	Summary of Results
		<p>recorded was foraging by common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Fifteen registrations of individual common pipistrelle bat activity (of which two were brief passes, with the others being foraging activity); and</li> <li>• Five records of foraging activity by individual soprano pipistrelle bats.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around the hedgerows and woodland margins. See <b>Annex B</b> and <b>Figure 10c (Annex A)</b> for further details.</p>
	Visit 4: Dusk 7 September 2023	<p>During the dusk activity survey on 7 September 2023, the first bat recorded was an individual soprano pipistrelle bat foraging at 28 minutes after sunset. The majority of activity recorded was foraging by common pipistrelle bats. In total activity comprised:</p> <ul style="list-style-type: none"> <li>• Twenty-one registrations of individual common pipistrelle bat activity;</li> <li>• a single registration of an individual foraging soprano pipistrelle bat between TP1 and 2 (to the west of the Claydon Brook); and</li> <li>• two brief passes from an individual <i>Myotis</i> species bat, considered most likely to be a Daubenton's bat.</li> </ul> <p>Activity recorded was spread across the transect route, concentrated around the hedgerows, woodland margins, and Claydon Brook watercourse. See <b>Annex B</b> and <b>Figure 10d (Annex A)</b> for further details.</p>

## Automated Detector Survey

- 4.2.8. The results of the static automated detector surveys at the Site are outlined by sub site below. Full survey data can be found in **Annex D**, including the number of bat registrations per hour at each monitored location. Examples of sonograms in **Annex E**. The locations of the automated detectors during each survey visit are shown on **Figure 1 (Annex A)**.



## Parcel 1

4.2.9. A summary of the results of the static automated detector surveys within Parcel 1 are contained within **Table 4.5**. Full survey results are contained within **Annex D**. Sonograms of bat species recorded are contained within **Annex E**.

**Table 4.6: Automated Detector Results Summary – Parcel 1**

Transect	SM4 Location	Survey Dates	Summary of Results
West	A	September 2022	A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's, serotine, barbastelle (three registrations) and brown long-eared bats. In addition, registrations were made of <i>Nyctalus</i> species <sup>2</sup> , <i>Myotis</i> species (83 registrations), pipistrelle species (common or soprano) <sup>3</sup> , pipistrelle species (common or Nathusius') <sup>4</sup> and <i>Nyctalus Eptesicus</i> species <sup>5</sup> that could not be identified to species level.

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<sup>2</sup> Leisler's and noctule bats can be difficult to identify accurately when calls are recorded towards to lower end of the Leisler's peak frequency and higher end of the noctule peak frequency, therefore unless the species could be clearly distinguished have been grouped together.

<sup>3</sup> Common pipistrelle and soprano pipistrelle can be difficult to separate using a zero crossing file when calls recorded are towards the lower end of the soprano pipistrelle frequency and higher end of the common pipistrelle peak frequency. As such, any pipistrelle bat with a peak frequency between 49 kHz and 51kHz has been classified as pipistrelle bat.

<sup>4</sup> Common pipistrelle and Nathusius' pipistrelle can be difficult to separate using a zero crossing file when calls recorded are towards the lower end of the common pipistrelle frequency and higher end of the Nathusius' pipistrelle peak frequency. As such, any pipistrelle bat with a peak frequency between 41 kHz and 42kHz has been classified as pipistrelle bat.

<sup>5</sup> Leisler's, noctule and serotine bat can be difficult to identify accurately if only part of the call is present towards the lower end of the serotine and Leisler's bat frequency and upper end of noctule peak frequency, therefore unless the species could be clearly distinguished these have been grouped together.

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>The detector recorded for five nights, during which registrations<sup>6</sup> of bat echolocation were made on all five nights. Soprano pipistrelle bats were the most frequently recorded with a total of 254 registrations over the five nights and peak registrations during a single night of 140 registrations of soprano pipistrelle on the 11th of September 2022. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of two confirmed species were recorded, comprising common pipistrelle and noctule. In addition, registrations were made of <i>Nyctalus</i> species, <i>Myotis</i> species (eight registrations) and either <i>Myotis</i> or brown long-eared bat<sup>7</sup> that could not be identified to species level.</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on six nights. Common pipistrelle was the most frequently recorded species with a total of 16 registrations over the six nights and peak registrations during a single night were five registrations on each of the 8 June 2023 and the 11th of June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's and brown long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or <i>Nathusius'</i> pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (20 registrations) and <i>Myotis</i>/brown long-eared bat.</p>

<sup>6</sup> A registration is a single bat species within a file. Registrations can either be from several individual bats, or from the same bat for a sustained period of activity within the range of the detector, as for extended durations (over 15 seconds) a call will be broken down across multiple files.

<sup>7</sup> *Myotis* and brown long-eared bat calls can be very similar, making them difficult to identify accurately when only part of the call is present. Therefore, unless the species could be clearly distinguished these have been grouped together.

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle bats were the most frequently recorded with a total of 67 registrations over the five nights. Peak registrations during a single night were 27 registrations on the 9 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's, serotine and brown long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, possible barbastelle<sup>8</sup> (two registrations) and <i>Myotis</i> species (42 registrations).</p> <p>The detector recorded for six nights during which registrations of bat echolocation were made over four nights. <i>Myotis</i> species were the most frequently recorded with a total of 42 registrations over the four nights. Peak registrations during a single night were 14 registrations on the 24 August 2023. See <b>Annex D</b> for full details.</p>
	B	September 2022	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, barbastelle (one registration) and brown long-eared bat. In addition, registrations were made of <i>Nyctalus</i> species and <i>Myotis</i> species (13 registrations) that could not be identified to species level.</p> <p>The detector recorded for five nights, during which low levels of registrations of bat echolocation were made over three nights and no registrations on the other two nights. Common pipistrelle bats were the most</p>

<sup>8</sup> Barbastelle calls can be difficult to identify accurately if only part of the call is present. Therefore, unless the species could be clearly identified 'possible barbastelle' has been used.

Transect	SM4 Location	Survey Dates	Summary of Results
			frequently recorded species with a total of 49 registrations over the five nights and a peak of 47 registrations during a single night on the 10 September 2023. See <b>Annex D</b> for full details.
		June 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine and barbastelle (one registrations). In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (35 registrations) and <i>Myotis</i>/brown long eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 436 registrations over the six nights. Peak registrations of common pipistrelle during a single night were 153 registrations on the 5 June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's and serotine. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius'), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (17 registrations), possible barbastelle (one registration) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 2,470 registrations over the five nights. Peak registrations during a single night were 1,425 registrations on the 9 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (five

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i>, possible barbastelle (six registrations) and <i>Myotis</i> species (ten registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Soprano pipistrelle were the most frequently recorded with a total of 221 registrations over the five nights. Peak registrations during a single night were 99 registrations of soprano pipistrelle bats on the 26 August 2023. See <b>Annex D</b> for full details.</p>
East	A	September 2022	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (nine registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species and <i>Myotis</i> species (29 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 547 registrations over the five nights. Peak registrations during a single night were 191 registrations of common pipistrelle on the 9 September 2022. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of four confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle and noctule. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (15 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all seven nights. Common pipistrelle</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			were the most frequently recorded with a total of 240 registrations over the seven nights. Peak registrations during a single night were 114 registrations of common pipistrelle bats on the 11th of June 2023. See <b>Annex D</b> for full details.
		July 2023	Void. No data recorded.
		August 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's, serotine, barbastelle (two registrations) and brown long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Myotis</i> species (two registrations) and possible barbastelle (four registrations).</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all seven nights. Common pipistrelle were the most frequently recorded with a total of 94 registrations over the seven nights. Peak registrations during a single night were 44 registrations of common pipistrelle on the 24 September 2023. See <b>Annex D</b> for full details.</p>
		September 2022	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (one registration) and brown long-eared bat. In addition, registrations were made of <i>Myotis</i> species (three registrations), pipistrelle species (common or soprano) and <i>Nyctalus</i> species.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made over four nights. Common pipistrelle were the most frequently recorded with a total of 29 registrations over the four nights. Peak registrations during a single night were 14 registrations of common pipistrelle on the 10 September 2022. See <b>Annex D</b> for full details.</p>
	B	June 2023	A total of five confirmed species were recorded, comprising common pipistrelle, soprano

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>pipistrelle, Nathusius' pipistrelle, noctule and Leisler's bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (31 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 241 registrations over the six nights. Peak registrations during a single night were 53 registrations of common pipistrelle on the 12<sup>th</sup> of June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (one registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (15 registrations), possible barbastelle (two registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for five nights, during which 46 registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 85 registrations over the five nights. Peak registrations during a single night were 29 registrations of common pipistrelle on the 7 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (two registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or</p>



Transect	SM4 Location	Survey Dates	Summary of Results
			<p>Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Myotis</i> species (six registrations) and possible barbastelle (one registration).</p> <p>The detector recorded for four nights, during which registrations of bat echolocation were made on three nights. Common pipistrelle were the most frequently recorded with a total of 99 registrations over three nights. Peak registrations during a single night were 68 common pipistrelle registrations on the 24 August 2023. See <b>Annex D</b> for full details.</p>
North	A	May 2023	<p>A total of five confirmed species were recorded comprising, common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (11 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for ten nights, during which registrations of bat echolocation were made on all ten nights. Common pipistrelle were the most frequently recorded with a total of 47 registrations over the ten nights. Peak registrations during a single night were 17 registrations of common pipistrelle on the 23 May 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and serotine. In addition, registrations were made of pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Myotis</i> species (one registration) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 247 registrations over the five nights. Peak registrations during a single night were 110</p>



Transect	SM4 Location	Survey Dates	Summary of Results
			registrations of common pipistrelle on the 6 July 2023. See <b>Annex D</b> for full details.
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (13 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (24 registrations) and <i>Myotis</i> species (18 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 138 registrations over the six nights. Peak registrations during a single night were 41 registrations of common pipistrelle on the 26 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	Void. No data recorded.
B		May 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (three registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (five registrations), <i>Myotis</i> species (171 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for ten nights, during which registrations of bat echolocation were made on all ten nights. Common pipistrelle were the most frequently recorded with a total of 1227 registrations over the ten nights. Peak registrations during a single night were 196 registrations of common pipistrelle on the 26 May 2023. <b>Annex D</b> for full details.</p>

Transect	SM4 Location	Survey Dates	Summary of Results
		July 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's and brown long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i>, <i>Myotis</i> species (27 registrations) and possible barbastelle (one registration).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 562 registrations over the five nights. Peak registrations during a single night were 289 registrations of common pipistrelle bats on the 7 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (five registrations) and brown long-eared bat. In addition, registrations were made of <i>Nyctalus</i> species, possible barbastelle (34 registrations) and <i>Myotis</i> species (three registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 164 registrations over the six nights. Peak registrations during a single night were 71 registrations of common pipistrelle on the 23 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (30 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus</i> or <i>Eptesicus</i> species,</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>possible barbastelle (5 registrations) and <i>Myotis</i> species (eight registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 461 registrations over the five nights. Peak registrations during a single night were 150 registrations of common pipistrelle on the 7 September 2023. See <b>Annex D</b> for full details.</p>

## Parcel 1a

4.2.10. A summary of the results of the static automated detector surveys within Parcel 1a are contained within **Table 4.6**. Full survey results are contained within **Annex D**. Sonograms of bat species recorded are contained within **Annex E**.

**Table 4.7: Automated Detector Results Summary – Parcel 1a**

Transect	SM4 Location	Survey Dates	Summary of Results
<b>Parcel 1a</b>	A	September 2022	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Nathusius' pipistrelle, Leisler's bat, barbastelle (32 registrations) and brown long-eared bat. In addition, registrations were made of <i>Myotis</i> species (30 registrations), pipistrelle species (common or soprano), <i>Nyctalus</i> species and <i>Nyctalus/Eptesicus</i> species.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 563 registrations over the five nights. Peak registrations during a single night were 228 registrations of common pipistrelle on the 10 September 2022. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>pipistrelle, noctule, Leisler's bat and barbastelle (five registrations). In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, possible barbastelle (18 registrations) and <i>Myotis</i> species (145).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 162 registrations over the five nights. Peak registrations during a single night were 66 registrations of common pipistrelle on the 5 June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of three confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle and noctule. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species and <i>Myotis</i> species (35 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 711 registrations over the six nights. Peak registrations during a single night were 286 registrations of common pipistrelle on the 13<sup>th</sup> of July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (three registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), possible barbastelle (one registration) and <i>Myotis</i> species (six registrations).</p> <p>The detector recorded for three nights, during which registrations of bat echolocation were</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			made on all three nights. Common pipistrelle were the most frequently recorded with a total of 97 registrations over the three nights. Peak registrations during a single night were 68 registrations of common pipistrelle on the 24 August 2023. See <b>Annex D</b> for full details.
	B	September 2022	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Daubenton's bat, Leisler's bat, barbastelle (15 registrations) and brown long-eared bat. In addition, registrations were made of <i>Myotis</i> species (64 registrations), pipistrelle species (common or soprano) and <i>Nyctalus</i> species.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 121 registrations over the five nights. Peak registrations during a single night were 74 registrations of common pipistrelle on the 11th of September 2022. Moderate numbers of <i>Myotis</i> registrations were made with a total of 64 over five nights, and a peak of 18 during a single night. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of three confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle and noctule. In addition, registrations were made of pipistrelle species (common or Nathusius' pipistrelle) and <i>Myotis</i> or brown long-eared bat species.</p> <p>The detector recorded for two nights, during which registrations of bat echolocation were made on both nights. Common pipistrelle were the frequently recorded with a total of 36 registrations over the two nights. Peak registrations during a single night were 36 registrations of common pipistrelle on the 3 June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	A total of eight confirmed species were recorded, comprising common pipistrelle, soprano

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (14 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i>, possible barbastelle (57 registrations), <i>Myotis</i> species (252 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 1964 registrations over the six nights. Peak registrations during a single night were 497 on the 14 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (28 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (22 registrations) and <i>Myotis</i> species (180 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 718 registrations over the five nights. Peak registrations during a single night were 273 of common pipistrelle on the 10 August 2023. See <b>Annex D</b> for full details.</p>

## Parcel 2

- 4.2.11. A summary of the results of the static automated detector surveys within Parcel 2 are contained within **Table 4.7**. Full survey results are contained within **Annex D**. Sonograms of bat species recorded are contained within **Annex E**.

Table 4.8: Automated Detector Results Summary – Parcel 2

Transect	SM4 Location	Survey Dates	Summary of Results
Northeast	A	September 2022	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (two registrations) and brown long-eared bat. In addition, registrations were made of <i>Myotis</i> species (62 registrations), pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species and possible barbastelle (two registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 118 registrations over the five nights. Peak registrations during a single night were 99 registrations of common pipistrelle on the 12<sup>th</sup> of September 2022. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of four confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule and Leisler's bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (one registrations) and <i>Myotis</i> species (61 registrations).</p> <p>The detector recorded for eight nights, during which registrations of bat echolocation were made on all eight nights. Common pipistrelle were the most frequently recorded with a total of 152 registrations over the eight nights. Peak registrations during a single night were 39 registrations of common pipistrelle on the 19 June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and serotine. In addition, registrations were made</p>



Transect	SM4 Location	Survey Dates	Summary of Results
			<p>of pipistrelle species (common or soprano), <i>Myotis</i> species (133 registrations) and <i>Myotis</i>/brown long eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Soprano pipistrelle were the most frequently recorded with a total of 1480 registrations over the five nights. Peak registrations during a single night were 425 registrations of soprano pipistrelle on the 16 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (three registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (one registration) and <i>Myotis</i> species (105 registrations).</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on six nights. Common pipistrelle were the most frequently recorded with a total of 282 registrations over six nights. Peak registrations during a single night were 143 registrations of common pipistrelle on the 18 August 2023. See <b>Annex D</b> for full details.</p>
	B	September 2022	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, barbastelle (seven registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or Nathusius') and <i>Myotis</i> species (45 registrations).</p> <p>The detector recorded for three nights, during which registrations of bat echolocation were made on two nights. Common pipistrelle were the most frequently recorded with a total of</p>



Transect	SM4 Location	Survey Dates	Summary of Results
			400 registrations over the two nights. Peak registrations during a single night were 389 registrations of common pipistrelle on the 12th of September 2022. See <b>Annex D</b> for full details.
		June 2023	Void. No data recorded.
		July 2023	Void. No data recorded.
		August 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (13 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (5 registrations) and <i>Myotis</i> species (62 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on four nights. Common pipistrelle were the most frequently recorded with a total of 720 registrations over the four nights. Peak registrations during a single night were 358 registrations of common pipistrelle on the 16 August 2023. See <b>Annex D</b> for full details.</p>
Southwest	A	September 2022	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, serotine, Leisler's bat and brown long-eared bat. In addition, registrations were made of <i>Myotis</i> species (33 registrations) and pipistrelle species (common or Nathusius' pipistrelle).</p> <p>The detector recorded for one night, during which registrations of bat echolocation were made. Common pipistrelle were the most frequently recorded with a total of 129 registrations, all recorded on the 12th of</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>September 2022. See <b>Annex D</b> for full details.</p>
		<p>June 2023</p>	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and serotine. In addition, registrations were made of pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (90 registrations) and <i>Myotis</i> or brown long-eared bat.</p> <p>The detector recorded for four nights, during which registrations of bat echolocation were made on all four nights. Common pipistrelle were the most frequently recorded with a total of 395 registrations over the four nights. Peak registrations during a single night were 147 registrations of common pipistrelle on the 3 June 2023. See <b>Annex D</b> for full details.</p>
		<p>July 2023</p>	<p>A total of four confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus/Eptesicus</i> species and <i>Myotis</i> species (75 registrations).</p> <p>The detector recorded for four nights, during which registrations of bat echolocation were made on all four nights. Common pipistrelle were the most frequently recorded with a total of 952 registrations over the four nights. Peak registrations during a single night were 534 registrations of common pipistrelle on the 13th of September 2023. See <b>Annex D</b> for full details.</p>
		<p>August 2023</p>	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (20 registrations) and brown long-eared bat. In</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (15 registrations) and <i>Myotis</i> species (67 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 705 registrations over the six nights. Peak registrations during a single night were 279 registrations of common pipistrelle on the 9 August 2023. See <b>Annex D</b> for full details.</p>
	B	September 2022	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (1 registration) and brown long-eared bat. In addition, registrations were made of <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (six registrations) and <i>Nyctalus</i> species.</p> <p>The detector recorded for three nights, during which registrations of bat echolocation were made on two nights. Common pipistrelle were the most frequently recorded with a total of 27 registrations over the two nights. Peak registrations during a single night were 25 registrations of common pipistrelle on the 12th of September 2022. See <b>Annex D</b> for full details.</p>
		June 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (one registration), <i>Myotis</i> species (29 registrations) and <i>Myotis</i>/brown long-eared bat.</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 1887 registrations over the five nights. Peak registrations during a single night were 825 registrations of common pipistrelle on the 1 June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (one registration) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (30 registrations) and <i>Myotis</i>/brown long eared bat.</p> <p>The detector recorded for two nights, during which registrations of bat echolocation were made on both nights. Common pipistrelle were the most frequently recorded with a total of 1387 registrations over the two nights. Peak registrations during a single night were 919 registrations of common pipistrelle on the 16 September 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (12 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (24 registrations), <i>Myotis</i> species (32 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			were the most frequently recorded with a total of 2,692 registrations over the six nights. Peak registrations during a single night were 807 registrations of common pipistrelle on the 12th of August 2023. See <b>Annex D</b> for full details.
North	A	May 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species and <i>Myotis</i> species (three registrations).</p> <p>The detector recorded for nine nights, during which registrations of bat echolocation were made on all nine nights. Common pipistrelle were the most frequently recorded with a total of 63 over the nine nights. Peak registrations during a single night were 14 registrations of common pipistrelle on the 23 and 25 May 2023. See <b>Annex D</b> for full details.</p>
		July 2023	Void. No data recorded.
		August 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (32 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (15 registrations) and <i>Myotis</i> species (17 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on four nights. Common pipistrelle were the most frequently recorded with a total of 667 registrations over the four nights. Peak registrations during a single night were 278</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			registrations of common pipistrelle on the 15 August 2023. See <b>Annex D</b> for full details.
		September 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (44 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (eight registrations) and <i>Myotis</i> species (13 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Noctule were the most frequently recorded with a total of 413 registrations over the five nights. Peak registrations during a single night were 205 registrations of noctule on the 9 September 2023. See <b>Annex D</b> for full details.</p>
	B	May 2023	<p>A total six of confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (three registrations) and <i>Myotis</i> species/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 526 registrations over the six nights. Peak registrations during a single night were 183 registrations of common pipistrelle on the 23 May 2023. See <b>Annex D</b> for full details.</p>
		July 2023	Void. No data recorded.

Transect	SM4 Location	Survey Dates	Summary of Results
		August 2023	<p>A total of four confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule and brown long-eared bat. In addition, registrations were made of possible barbastelle (one registration).</p> <p>The detector recorded for three nights, during which registrations of bat echolocation were made on two nights. Common pipistrelle were the most frequently recorded with a total of 40 registrations over the two nights. Peak registrations during a single night were 36 registrations of common pipistrelle on the 15 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (30 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (five registrations) and <i>Myotis</i> species (eight registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights, Common pipistrelle were the most frequently recorded with a total of 461 registrations over the five nights. Peak registrations during a single night were 150 registrations of common pipistrelle on the 7 September 2023. See <b>Annex D</b> for full details.</p>
South	A	June 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat and serotine. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i></p>



Transect	SM4 Location	Survey Dates	Summary of Results
			<p>species (172 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 544 registrations over the five nights. Peak registrations during a single night were 228 registrations of common pipistrelle on the 12<sup>th</sup> of June 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of seven confirmed common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (12 registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus/Eptesicus</i> species, possible barbastelle (six registrations), <i>Myotis</i> species (296 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 2389 registrations over the six nights. Peak registrations during a single night 623 registrations of common pipistrelle on the 18 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (three registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, possible barbastelle (five registrations) and <i>Myotis</i> species (66 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle</p>



Transect	SM4 Location	Survey Dates	Summary of Results
			<p>were the most frequently recorded with a total of 102 registrations over the six nights. Peak registrations during a single night were 42 registrations of common pipistrelle on the 9 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, barbastelle (one registration) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, possible barbastelle (two species) and <i>Myotis</i> species (13 registrations).</p> <p>The detector recorded for three nights, during which registrations of bat echolocation were made on all three nights. Common pipistrelle were the most frequently recorded with a total 547 registrations over the three nights. Peak registrations during a single night were 214 registrations of common pipistrelle on the 8 September 2023. See <b>Annex D</b> for full details.</p>
	B	June 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's, serotine and brown long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), possible barbastelle (five registrations), <i>Nyctalus/Eptesicus</i> species, <i>Myotis</i> species (287 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all seven nights. Common pipistrelle were the most frequently recorded with a total of 927 registrations over the seven nights. Peak registrations during a single night were 210 registrations of common pipistrelle</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			on the 14 June 2023. See <b>Annex D</b> for full details.
		July 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (two registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (five registrations), <i>Myotis</i> species (294 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all seven nights. Common pipistrelle were the most frequently recorded with a total of 423 registrations over the seven nights. Peak registrations during a single night were 126 registrations of common pipistrelle on the 19 July 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and brown long-eared bat. In addition, registrations were made of <i>Nyctalus</i> species and <i>Myotis</i> species (54 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 508 registrations over the six nights. Peak registrations during a single night were 184 registrations of common pipistrelle on the 10 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle,</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>noctule, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or Nathusius' pipistrelle), possible barbastelle (three registrations), <i>Myotis</i> species (38 registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 120 registrations over the five nights. Peak registrations during a single night were 37 registrations of common pipistrelle on the 9 September 2023. See <b>Annex D</b> for full details.</p>

### Parcel 3

- 4.2.12. A summary of the results of the static automated detector surveys within Parcel 3 are contained within **Table 4.8**. Full survey results are contained within **Annex D**. Sonograms of bat species recorded are contained within **Annex E**.

**Table 4.9: Automated Detector Results Summary – Parcel 3**

Transect	SM4 Location	Survey Dates	Summary of Results
<b>Parcel 3</b>	<b>A</b>	<b>May 2023</b>	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, serotine and brown long-eared bat. In addition, registrations were made of pipistrelle (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (one registration), <i>Myotis</i> species (four registrations) and <i>Myotis</i>/brown long-eared bat.</p> <p>The detector recorded for six nights, during which registrations of bat echolocations were made on five nights. Common pipistrelle were the most frequently recorded with a total of 548 registrations over the five nights. Peak registrations during a single night were 253</p>

Transect	SM4 Location	Survey Dates	Summary of Results
			registrations of common pipistrelle on the 24 May 2023. See <b>Annex D</b> for full details.
		July 2023	No data recorded – no access.
		August 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (five registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, possible barbastelle (11 registrations) and <i>Myotis</i> species (95 registrations).</p> <p>The detector recorded for five nights, during which registrations of bat echolocation were made on all five nights. Common pipistrelle were the most frequently recorded with a total of 1,287 registrations of bat echolocation were made on all five nights. Peak registrations during a single night were 799 registrations of common pipistrelle on the 26 August 2023. See <b>Annex D</b> for full details.</p>
		September 2023	<p>A total of eight confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, barbastelle (two registrations) and brown long-eared bat. In addition, registrations were made of <i>Nyctalus</i> species, <i>Nyctalus</i> or <i>Eptesicus</i> species, possible barbastelle (eight registrations) and <i>Myotis</i> species (84 registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 1744 registrations over the six nights. Peak registrations during a single night were 717 registrations of common pipistrelle on the 10 September 2023. See <b>Annex D</b> for full details.</p>
B		May 2023	A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's and brown long-

Transect	SM4 Location	Survey Dates	Summary of Results
			<p>long-eared bats. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus/Eptesicus</i> and <i>Myotis</i> species (nine registrations).</p> <p>The detector recorded for six nights, during which registrations of bat echolocation were made on all six nights. Common pipistrelle were the most frequently recorded with a total of 511 registrations over the six nights. Peak registrations during a single night were 189 registrations of common pipistrelle on the 26 May 2023. See <b>Annex D</b> for full details.</p>
		July 2023	<p>A total of five confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), pipistrelle species (common or Nathusius' pipistrelle), <i>Nyctalus</i> species and <i>Myotis</i> species (22 registrations).</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all nights. Common pipistrelle were the most frequently recorded with a total of 2363 registrations over the seven nights. Peak registrations during a single night were 493 registrations of common pipistrelle on the 17 September 2023. See <b>Annex D</b> for full details.</p>
		August 2023	<p>A total of six confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, barbastelle (five registrations) and brown long-eared bat. In addition, registrations were made of pipistrelle species (common or soprano), <i>Nyctalus</i> species, <i>Nyctalus/Eptesicus</i> species, possible barbastelle (one registration) and <i>Myotis</i> species (126 registrations).</p> <p>The detector recorded for seven nights, during which registrations of bat echolocation were made on all seven nights. Common pipistrelle</p>

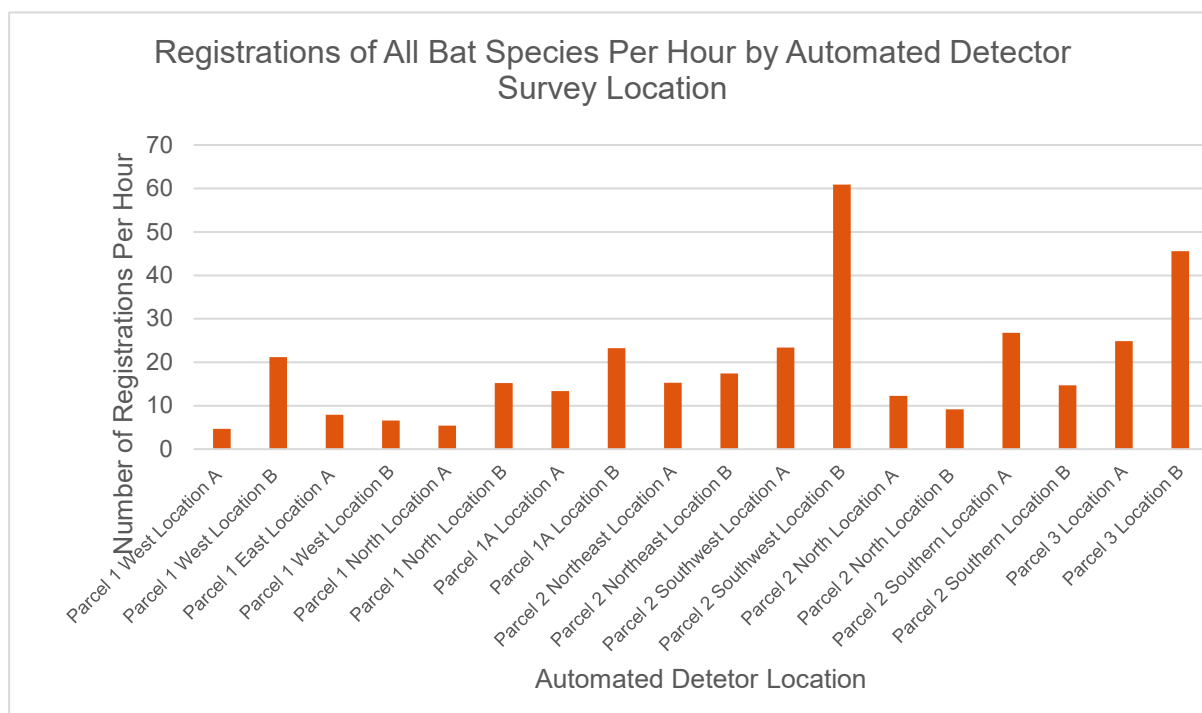
Transect	SM4 Location	Survey Dates	Summary of Results
			were the most frequently recorded with a total of 2,685 registrations over the seven nights. Peak registrations during a single night were 1,105 registrations of common pipistrelle bats on the 18 August 2023. See <b>Annex D</b> for full details.
		September 2023	<p>A total of seven confirmed species were recorded, comprising common pipistrelle, soprano pipistrelle, noctule, Leisler's bat, serotine, barbastelle (three registrations) and brown long-eared bat. In addition, registrations were made of either common or soprano pipistrelle, either common or Nathusius' pipistrelle, <i>Nyctalus</i> species, <i>Nyctalus</i> or <i>Eptesicus</i> species, possible barbastelle (two registrations), <i>Myotis</i> species (243 registrations) and <i>Myotis</i> species or brown long-eared bat.</p> <p>The detector recorded for four nights, during which registrations of bat echolocation were made on all four nights. Common pipistrelle was the most frequently recorded with a total of 2929 registrations over the four nights. Peak registrations during a single night were 827 registrations of common pipistrelle on the 8 September 2023. See <b>Annex D</b> for full details.</p>

### 4.3. Synthesis

#### All Bat Activity Recorded

- 4.3.1. It is important to note that all bat survey techniques provide a snapshot of bat activity and that can vary (sometimes considerably) between months and years in any location. In addition, statements of where activity was higher/highest reflect only the locations where detectors were present, not all parts of every land parcel within the study area; and louder bats (pipistrelles, noctule) are registered over much greater distances (up to 50-100 m, dependent on species) than quieter calling species (such as Bechstein's and brown long-eared bats), which are generally not detected beyond 5m.
- 4.3.2. The majority of activity recorded during the transects was of common pipistrelle bats across all parcels, followed by soprano pipistrelle, in line with the relative abundance of these species as well as the relative detectability of their calls. Higher levels of bat activity were recorded in the following locations, as shown on **Figure 11 (Annex A)**:

- Within Parcel 1 along the margins of Shrubs Wood, a hedgerow extending east from Shrubs Wood, the margins of Sheephouse Wood and the hedgerows connecting Shrubs Wood and Sheephouse Wood.
  - Within Parcel 1a activity was distributed across the site, recorded along all hedgerows and the margins of Sheephouse Wood and Romer Wood.
  - Within Parcel 2 activity was predominantly concentrated around the margins of Runts Wood and Finemere Wood, and a hedgerow extending southwest from Runts Wood and the hedgerows extending east from Finemere Wood.
  - Within Parcel 3 activity was predominantly concentrated along the eastern margin of the Site, along the western boundary of the Claydon Brook that forms the eastern Site boundary.
- 4.3.3. In the majority of the locations surveyed using static automated detectors, common pipistrelle was the most frequently recorded species; however on three monitoring occasions, soprano pipistrelle was the most frequently recorded species (at Parcel 1 west transect location A in September 2022, location B in September 2023 and Parcel 2 northeast location A July 2023) and on two occasions noctule was the most frequently recorded species (at Parcel 1 west location A in August 2023 and Site 2 North location A in September 2023). The number of registrations per hour for each surveyed location and month are contained within **Annex F**.
- 4.3.4. The highest levels of overall bat activity recorded within the Site from the automated detector surveys were at Parcel 2 Southwest location B, followed by Parcel 3 location B September 2023 (see **Plate 1**).



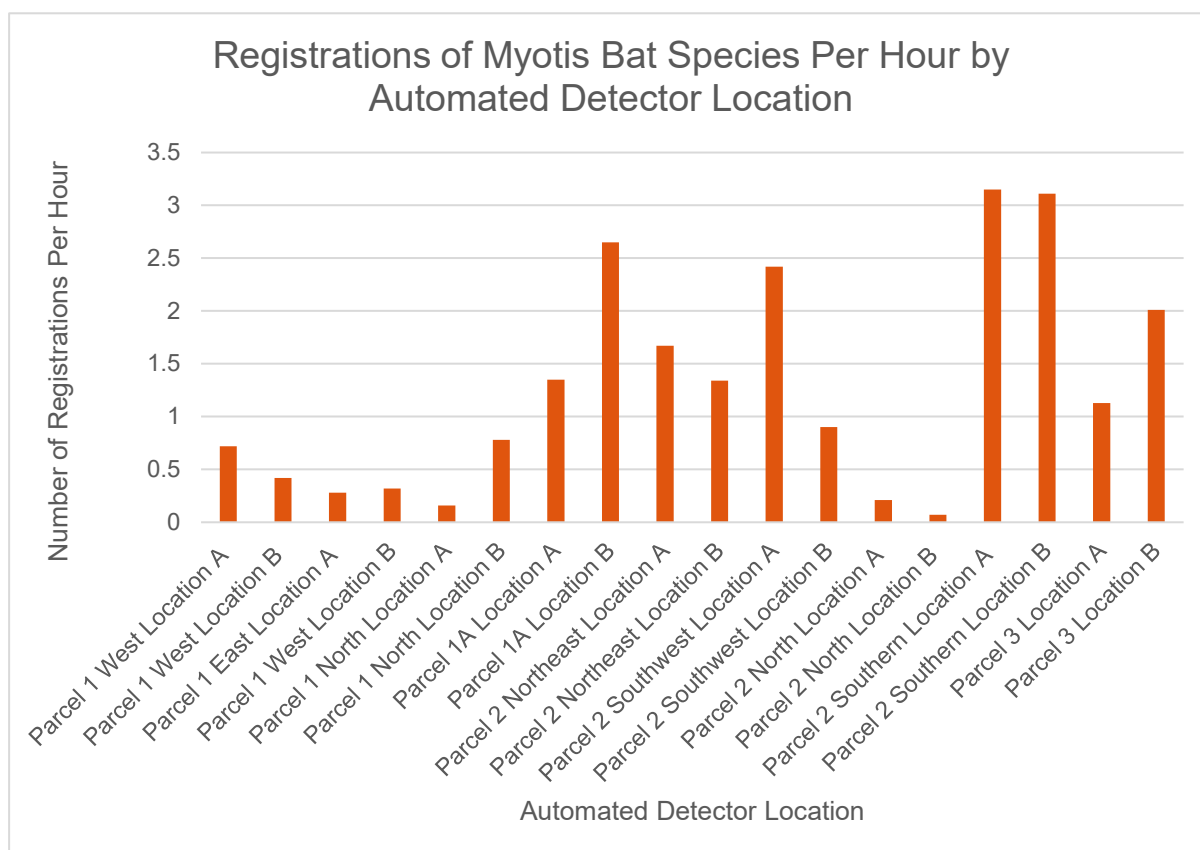
**Plate 1 Registrations of all species of bats per hour, by automated detector location**



## Myotis Bat

- 4.3.5. Activity by *Myotis* bats was recorded on 59 occasions in total during the following walked transect surveys. Calls could not be separated to species level and therefore are likely to include registrations of Bechstein's bat, known to roost within several woods adjacent to Parcels 1 and 2. Activity by *Myotis* bats was as follows:
- Parcel 1 West with one registration of a brief pass on 26 July 2022, five registrations of brief passes on 7 September 2022, five registrations of brief passes on 8 June 2023 and two registrations on 6 July 2023;
  - Parcel 1 East with two registrations (one brief pass and one of foraging activity) on 7 September 2022, and four registrations of brief passes on 6 July 2023;
  - Parcel 1 North with one registration of foraging activity on 22 August 2023 and one registration of foraging activity on 7 September 2023;
  - Parcel 1a with three registrations (two brief passes and one of foraging activity) on 26 July 2022, one registration of a brief pass on 7 September 2022, three registrations (two brief passes and one of foraging activity) on 8 June 2023 and three registrations (one brief pass and two of foraging activity) on 8 August 2023;
  - Parcel 2 Northeast with two registrations (brief passes) on 7 September 2022 and two registrations (brief passes) on 10 July 2023;
  - Parcel 2 Southwest with nine registrations (eight brief passes and one of foraging activity) on 26 July 2022, three registrations (brief passes) on 17 May 2023 and two registrations of commuting bats on 8 August 2023;
  - Parcel 2 North with one registration of a foraging bat on 23 May 2023 and one registration of a brief pass on 7 September 2023;
  - Parcel 2 South with one registration of a brief pass on 8 August 2023 and three registrations of brief passes on 31 August 2023; and
  - Parcel 3 with three registrations of brief passes on 23 May 2023 and two registrations of brief passes on 7 September 2023.
- 4.3.6. *Myotis* bat registrations were made at all of the automated static detector locations during each monitoring occasion except for Parcel 1 West location A in June 2023, Parcel 1a location B in June 2023, Parcel 2 Northeast location B in August 2023, Parcel 2 Southwest location B in September 2022 and Parcel 2 North location B in August 2023.
- 4.3.7. The highest numbers of *Myotis* registrations in registrations per hour on the automated detectors were recorded at Parcel 2 South locations A and B, followed by Parcel 1a location B (see **Plate 2**). **Figure 12 (Annex A)** shows the locations where higher levels of *Myotis* bat activity were recorded.





**Plate 2 Registrations of Myotis bats per hour, by automated detector location**

### Barbastelle Bat

4.3.8. Activity by barbastelle was recorded on three occasions during the walked transect surveys as follows:

- Parcel 1a with one registration of a brief pass on 8 June 2023;
- Parcel 2 Northeast transect with one registration of a brief pass on 26 July 2022; and
- Parcel 2 Southwest transect with one registration of a brief pass on 8 August 2023.

4.3.9. Barbastelle bat confirmed or possible registrations were made at all automated static detector locations (see **Plate 3**), although not during every monitoring occasion. Registrations of barbastelle and possible barbastelle were highest at Parcel 2 North location A, followed by Parcel 1a location B. **Figure 13 (Annex A)** shows the locations where higher levels of barbastelle bat activity were recorded; however, overall, barbastelle activity was considered very low.

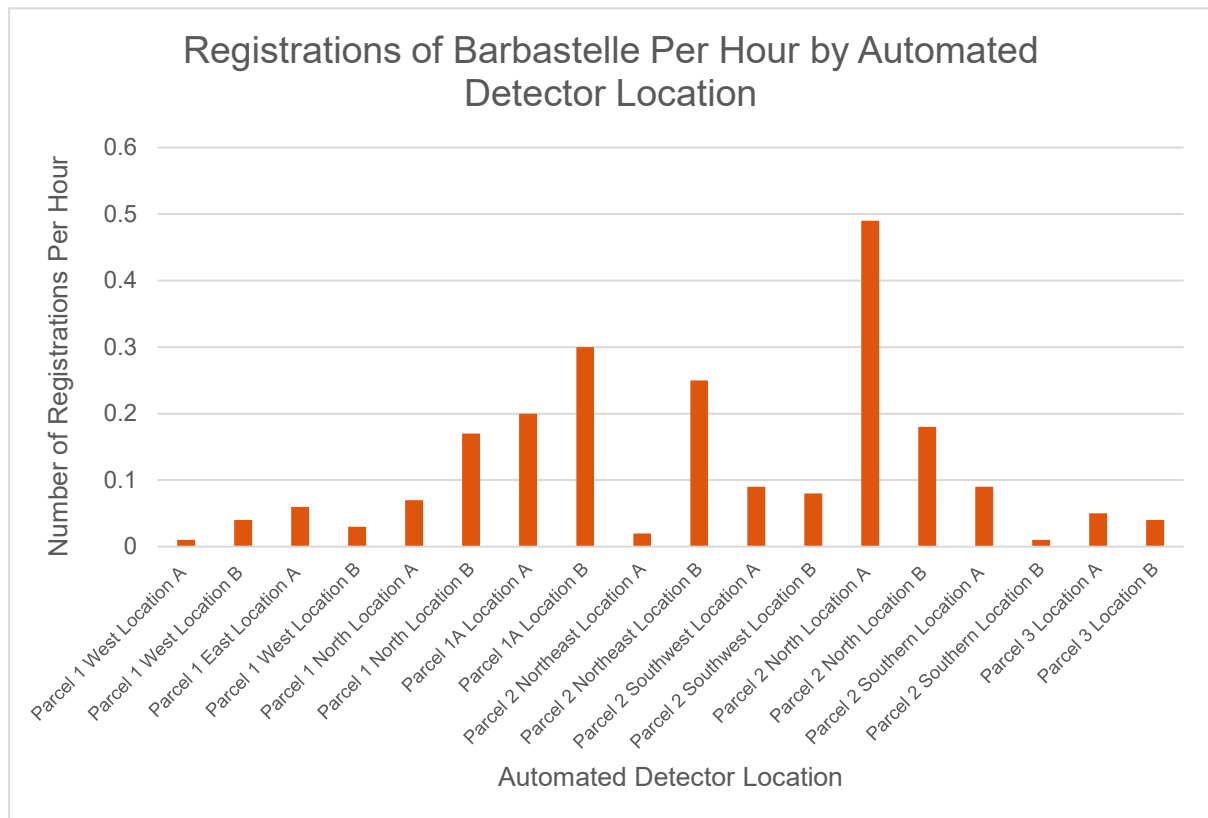


Plate 3 Registrations of barbastelle bats per hour, by automated detector location

## 5. Conclusions

### 5.1. Bat Assemblage

- 5.1.1. The desk study identified confirmed bat roosts close to the Site (including roosts of rare species such as Bechstein's bat and barbastelle) within adjacent areas of ancient woodland; and the presence within the wider area of at least 13 species of bat comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's bat, serotine, brown long-eared bat, barbastelle, Daubenton's bat, Bechstein's bat, whiskered bat, Brandt's bat and Natterer's bat.
- 5.1.2. Based on the walked transect surveys and the static automated detector surveys undertaken between July 2022 and September 2023, the Site is confirmed to support an assemblage of at least ten species comprising common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Leisler's, serotine, brown long-eared bat, barbastelle, Daubenton's bat and *Myotis* species that could not be identified to species level. Key areas of bat activity have been identified as follows:
- Within Parcel 1 along the margins of Shrubs Wood, a hedgerow extending east from Shrubs Wood, the margins of Sheephouse Wood and the hedgerows connecting Shrubs Wood and Sheephouse Wood.
  - Within Parcel 1a activity was distributed across the site, recorded along all hedgerows and the margins of Sheephouse Wood and Romer Wood, including the southwest boundary of Parcel 1a that links the two woodlands.
  - Within Parcel 2 activity was predominantly concentrated around the margins of Runts Wood and Finemere wood, and a hedgerow extending southwest from Runts Wood and the hedgerows extending east from Finemere Wood.
  - Within Parcel 3 activity was predominantly concentrated along the eastern margin of the site, along the western boundary of the Claydon Brook that forms the eastern parcel boundary.
- 5.1.3. Both *Myotis* and barbastelle activity was recorded at all automated detector locations monitored across the Site. The highest levels of *Myotis* activity were recorded at Parcel 2 South adjacent to Finemere Woods (which supports many Bechstein's bat roosts) and Parcel 1a along the hedgerow linking Romer Wood to Sheephouse Wood (both of which support Bechstein's bat roosts). The highest levels of barbastelle activity were recorded at the north of Parcel 2 and at Parcel 1a, though activity of this species was generally low, consistent with the results of extensive surveys undertaken by HS2 (Paola Reason, pers. comm.).
- 5.1.4. Based on the rarity categories within the UK Bat Mitigation Guidelines 2023 [Ref. 15], common pipistrelle, soprano pipistrelle and brown long-eared bats are widespread in Southern and Central England. Noctule and Daubenton's

bats are considered to be widespread, but not abundant. Serotine and Leisler's bat have a rarer or restricted distribution. The Annex II listed Bechstein's and barbastelle bats are considered to be very rare and in particular, the Site is at the northern edge of the Bechstein's bat species range.

- 5.1.5. Table 3.3 '*Assessing the importance of a bat assemblage*' within the Bat Mitigation Guidelines 2023 [Ref. 15] has been used to provide an assessment of the importance of the bat assemblage present. There is no formal distinction between the geographic areas listed within the table. However, the Site has been determined to be within either 'Central England' or 'Southern England'. As the Site is beyond or at the very edge of the typical range of rarer species found within 'Southern England', such as Bechstein's bat, the 'Central England' region was used to provide an accurate reflection of the importance of a species population at the edge of its range.
- 5.1.6. In accordance with guidance in Paragraph 3.4.5 of the Bat Mitigation Guidelines 2023, Bechstein's bat has been considered a rarity within 'Central England'. Therefore, while not listed in Table 3.3 for this geographic region, Bechstein's bat has been included in the calculation under the '*Rarest Annex II species and very rare*' category with a score of 4.
- 5.1.7. Using a combination of both survey and desk study data for the Site, common pipistrelle, soprano pipistrelle and brown long-eared bat have been assigned a score of 1, noctule, whiskered, Brandt's, Daubenton's and Natterer's bats have been assigned a score of 2, serotine, Leisler's bat and Nathusius' pipistrelle have been assigned a score of 3, and Bechstein's and barbastelle bat have been assigned a score of 4. In total, the bat assemblage has a score of 30. On this basis, Table 3.3 of the Bat Mitigation Guidelines 2023 returns a result of 'National' importance for the bat assemblage present.

## 5.2. Additional Data Collection

- 5.2.1. This report includes a review of publicly available bat radio-tracking data from between 2012 and 2014 [Ref. 9 and Ref. 10] collected by HS2 Ltd. It is understood that longer term radio-tracking monitoring data of the local bat population has continued since 2014; however, these data were not available at the time of writing.

## 6. References

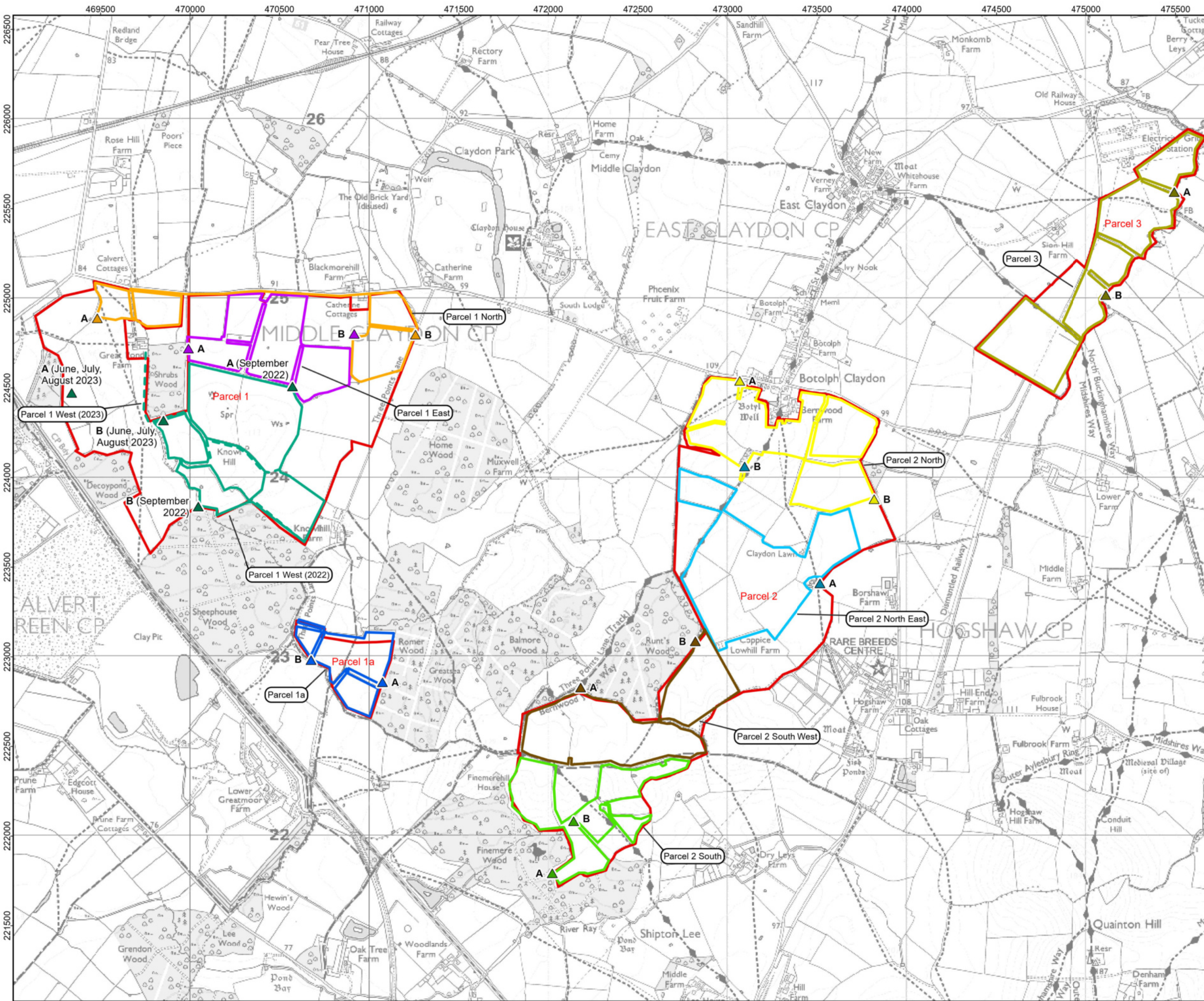
- Ref. 1** HMSO. 2018. Conservation of Habitats and Species Regulations 2017 (as amended). HMSO, London.
- Ref. 2** HMSO. 1981. The Wildlife & Countryside Act 1981. HMSO, London.
- Ref. 3** HMSO. 2006. The Natural Environment and Rural Communities Act 2006 (as amended). HMSO, London.
- Ref. 4** JNCC, UK Post-2010 Biodiversity Framework. 2012. Available at <http://jncc.defra.gov.uk/page-6189> (Accessed July 2022).
- Ref. 5** Forward to 2030: Biodiversity Action Plan for Buckinghamshire and Milton Keynes. Available at: <https://bucks.mknep.co.uk/forward-to-2030/>
- Ref. 6** AECOM (2022) Rosefield Solar Farm: Preliminary Ecological Appraisal.
- Ref. 7** Buckinghamshire and Milton Keynes Environmental Records Centre (BMKERC) (2021) BMERC Environmental Information Search BM/E01190 East Claydon
- Ref. 8** Department for Environment, Food and Rural Affairs (DEFRA) Multi-Agency Geographic Information for the Countryside. [www.magic.gov.uk](http://www.magic.gov.uk)
- Ref. 9** HS2 (November 2013) London – West Midlands Environmental Statement Volume 5 Technical Appendices. CFA 12 – 13 Waddeson to Chetwode. Bat trapping/radio tracking study – Bernwood Forest (EC-006-002) Ecology. ES 3.5.2.12 – 13.1. Available at: [https://assets.publishing.service.gov.uk/media/5a7ef8d8ed915d74e33f3963/Vol5\\_CFA12\\_13\\_Ecology\\_Bat\\_trapping\\_radio\\_tracking\\_study\\_EC-006-002.pdf](https://assets.publishing.service.gov.uk/media/5a7ef8d8ed915d74e33f3963/Vol5_CFA12_13_Ecology_Bat_trapping_radio_tracking_study_EC-006-002.pdf)
- Ref. 10** HS2 (July 2015) High Speed Rail (London- West Midlands) Supplementary Environmental Statement and Additional Provision 2 Environmental Statement Volume 5 Technical Appendices Ecology CFAs 7-15. SES and AP2 ES 3.5.5.2. AP2 and SES ES Appendix EC-004-002 (1) Volume 5 Technical Appendices CFA 12 and 13: Bat Trapping/Radiotracking Study 2014: Bernwood Forest. Available at: [https://assets.publishing.service.gov.uk/media/5a816833e5274a2e87dbd75f/Volume\\_5\\_Ecology\\_CFAs\\_7-15\\_low.pdf](https://assets.publishing.service.gov.uk/media/5a816833e5274a2e87dbd75f/Volume_5_Ecology_CFAs_7-15_low.pdf)
- Ref. 11** Collins, J. (ed) (2016) Bat Surveys For Professional Ecologists: Good Practice Guidelines (3rd edition). Bat Conservation Trust: London
- Ref. 12** AECOM (2022) Custodian Solar Farm Preliminary Ecological Appraisal Report, Custodian Energy Ltd May 2022
- Ref. 13** Chartered Institute of Ecology and Environment Management (CIEEM). (2019) Advice Note on the lifespan of ecological surveys and reports. Available at: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>.
- Ref. 14** Collins, J. (ed) (2023) Bat Surveys For Professional Ecologists: Good Practice Guidelines (4th edition). Bat Conservation Trust: London

- Ref. 15** 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

# Annex A: Figures







**LEGEND:**

**Site Boundary**

**Survey Transect Route**

- Parcel 1 West (2022)
- Parcel 1 West (2023)
- Parcel 1 East
- Parcel 1 North
- Parcel 1a
- Parcel 2 North East
- Parcel 2 South West
- Parcel 2 North
- Parcel 2 South
- Parcel 3

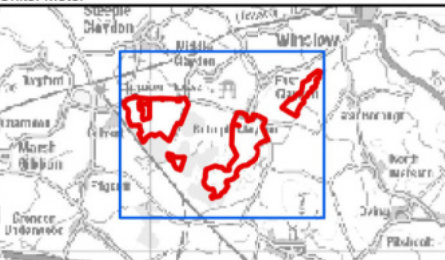
**Automated Detector Location**

- Parcel 1 West
- Parcel 1 East
- Parcel 1 North
- Parcel 1a
- Parcel 2 North East
- Parcel 2 South West
- Parcel 2 North
- Parcel 2 South
- Parcel 3

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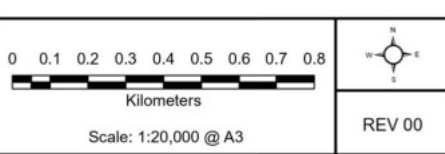
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Rev	Date	Description	Drm	Chk	App

**Rosefield Solar Farm**

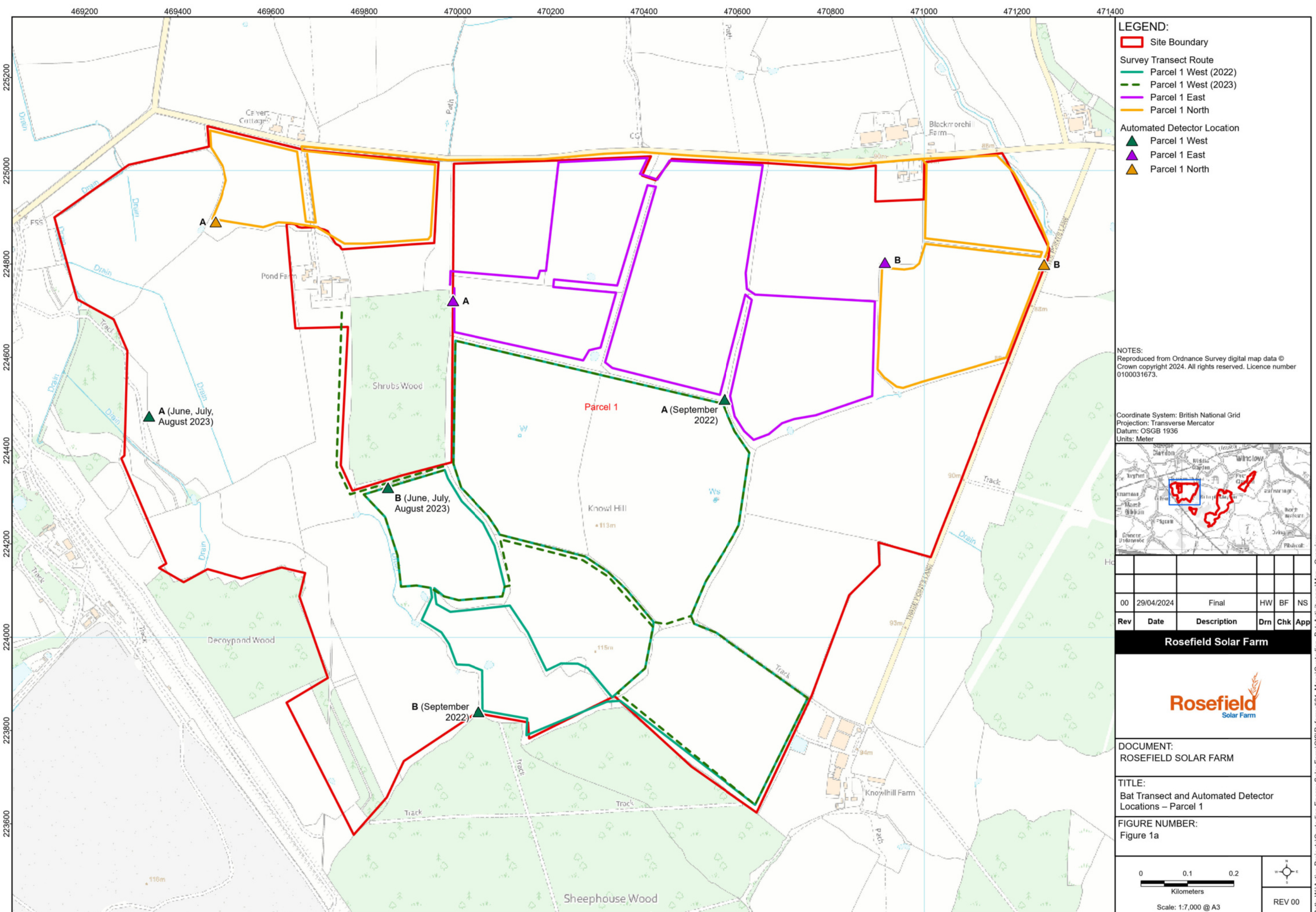
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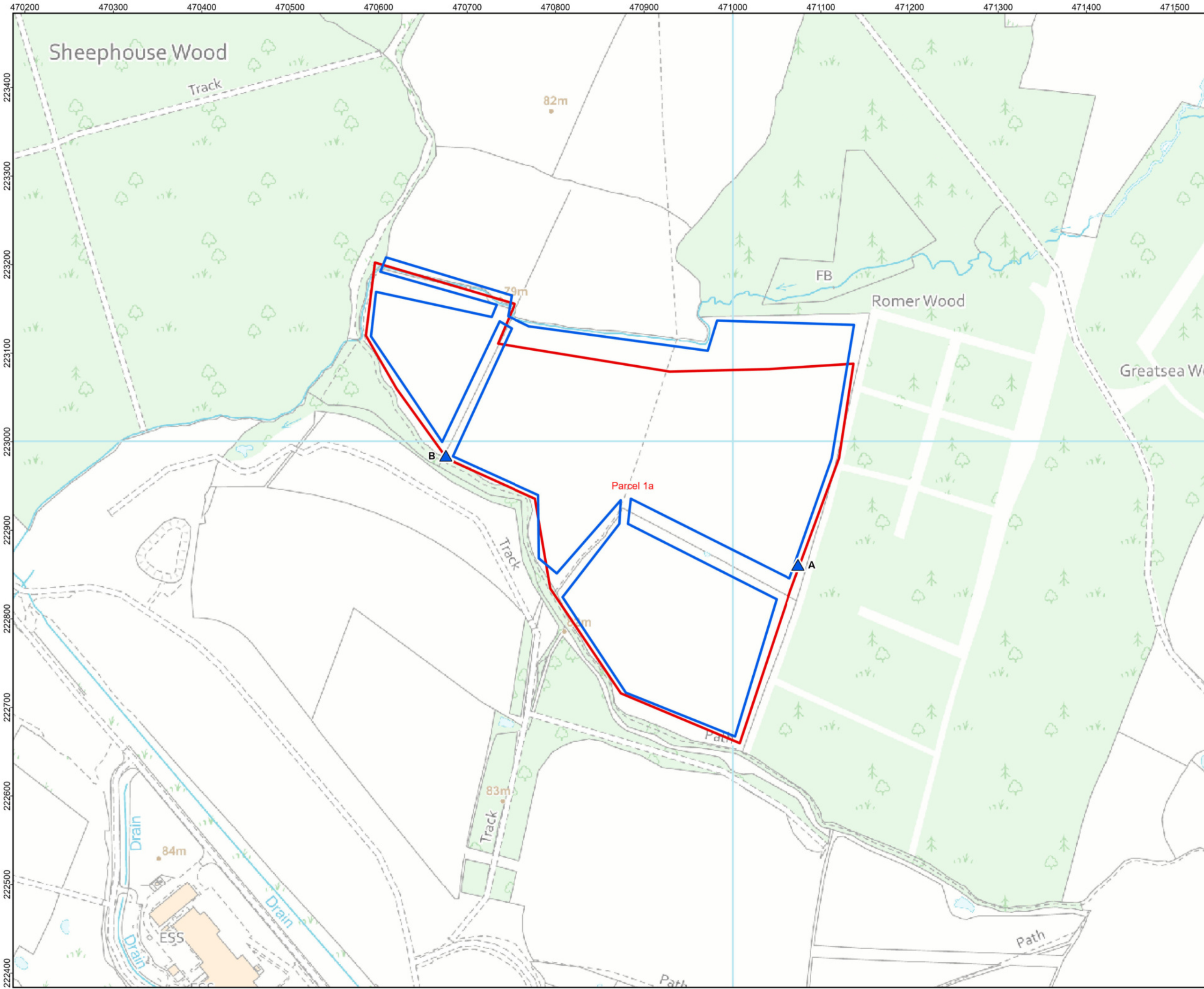
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Figure 1











**LEGEND:**  

Site Boundary

Survey Transect Route

Parcel 1a

Automated Detector Location

Parcel 1a

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Rev	Date	Description	Drn	Chk	App

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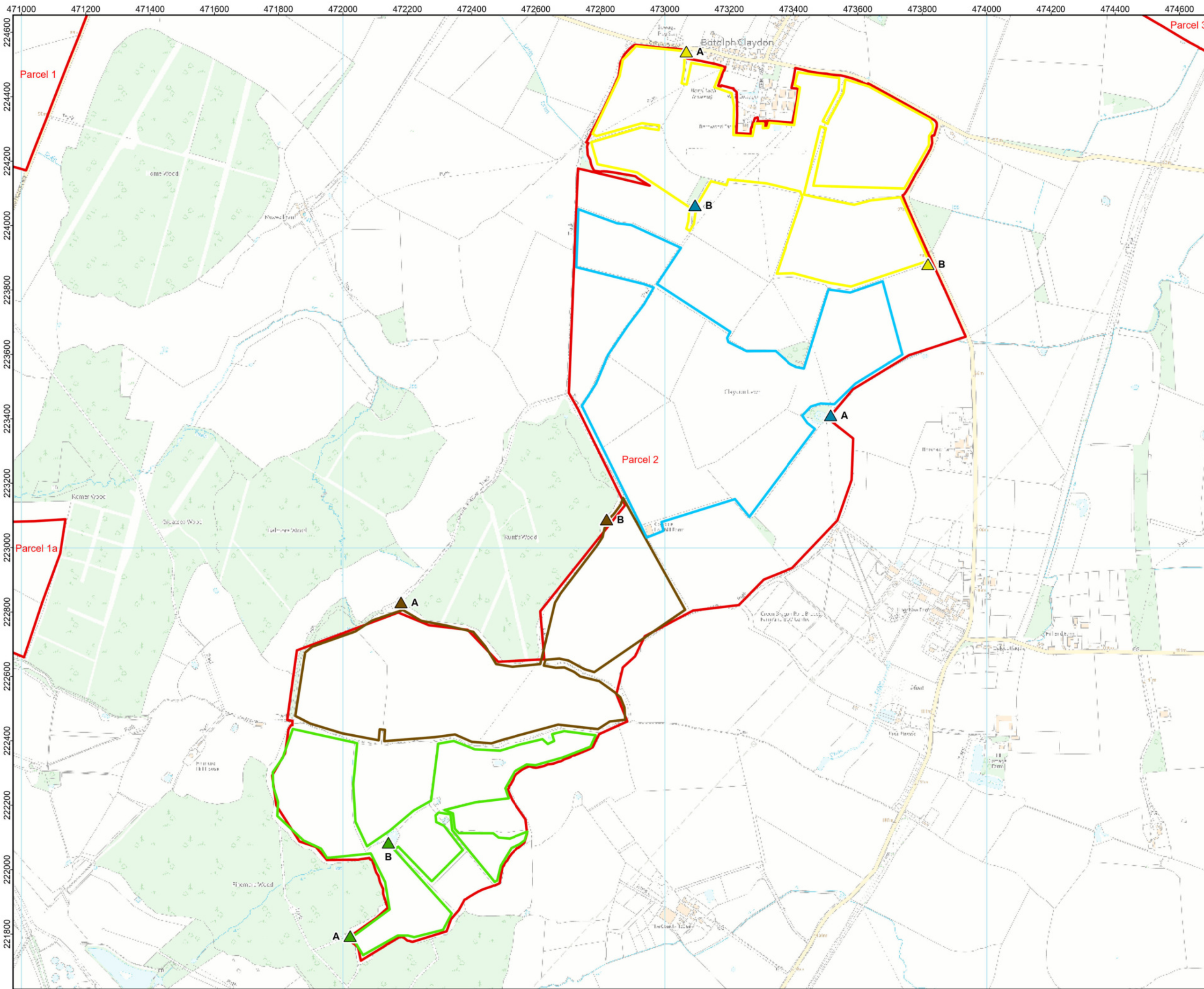
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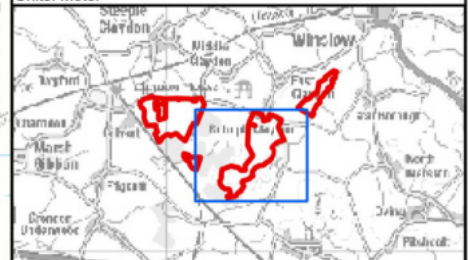




- LEGEND:**
- Site Boundary
  - Survey Transect Route
    - Parcel 2 North East
    - Parcel 2 South West
    - Parcel 2 North
    - Parcel 2 South
  - Automated Detector Location
    - Parcel 2 North East
    - Parcel 2 South West
    - Parcel 2 North
    - Parcel 2 South

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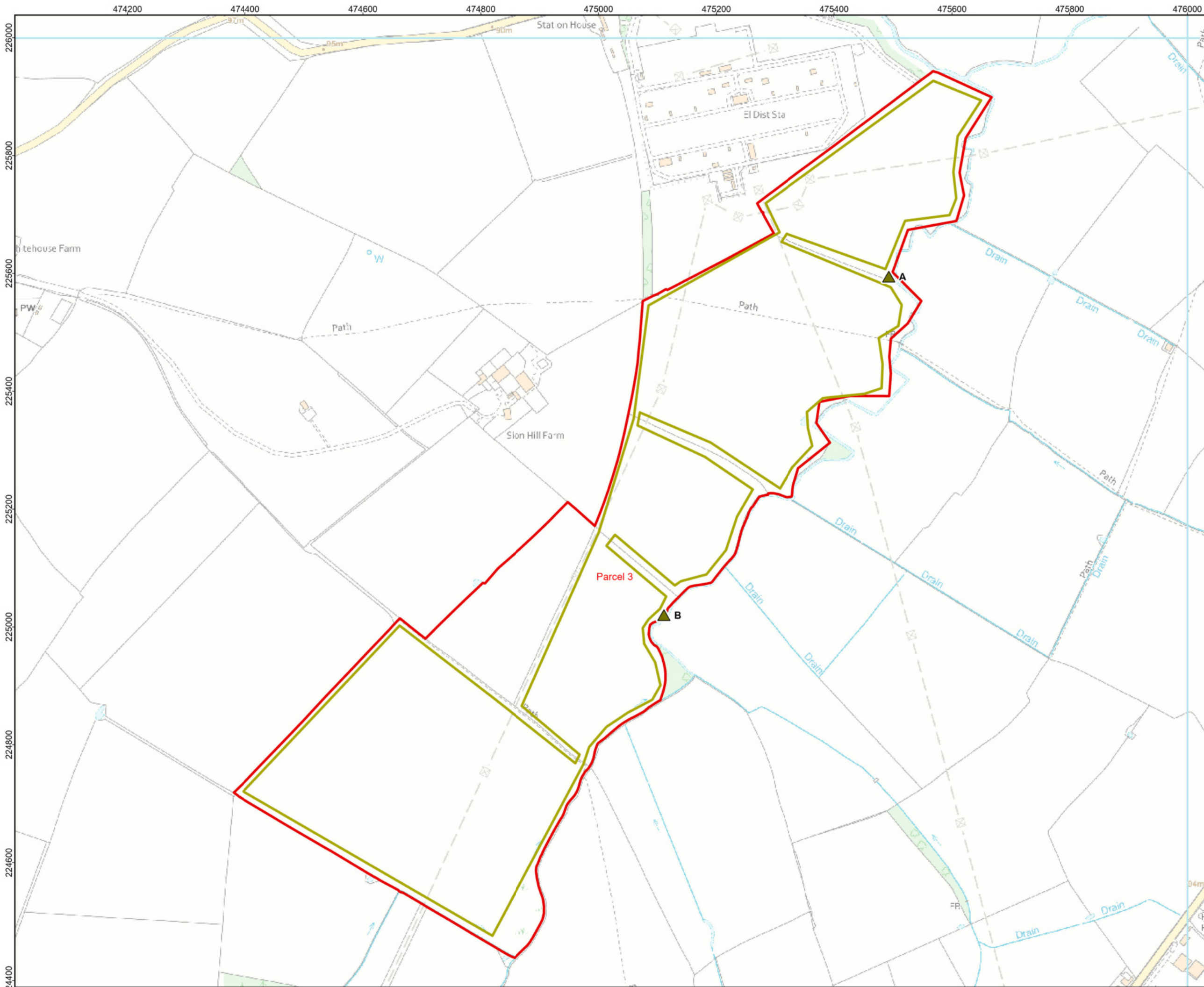
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**FIGURE NUMBER:**  
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**LEGEND:**  

Site Boundary

Survey Transect Route

Parcel 3

Automated Detector Location

Parcel 3

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Rev	Date	Description	Drn	Chk	App

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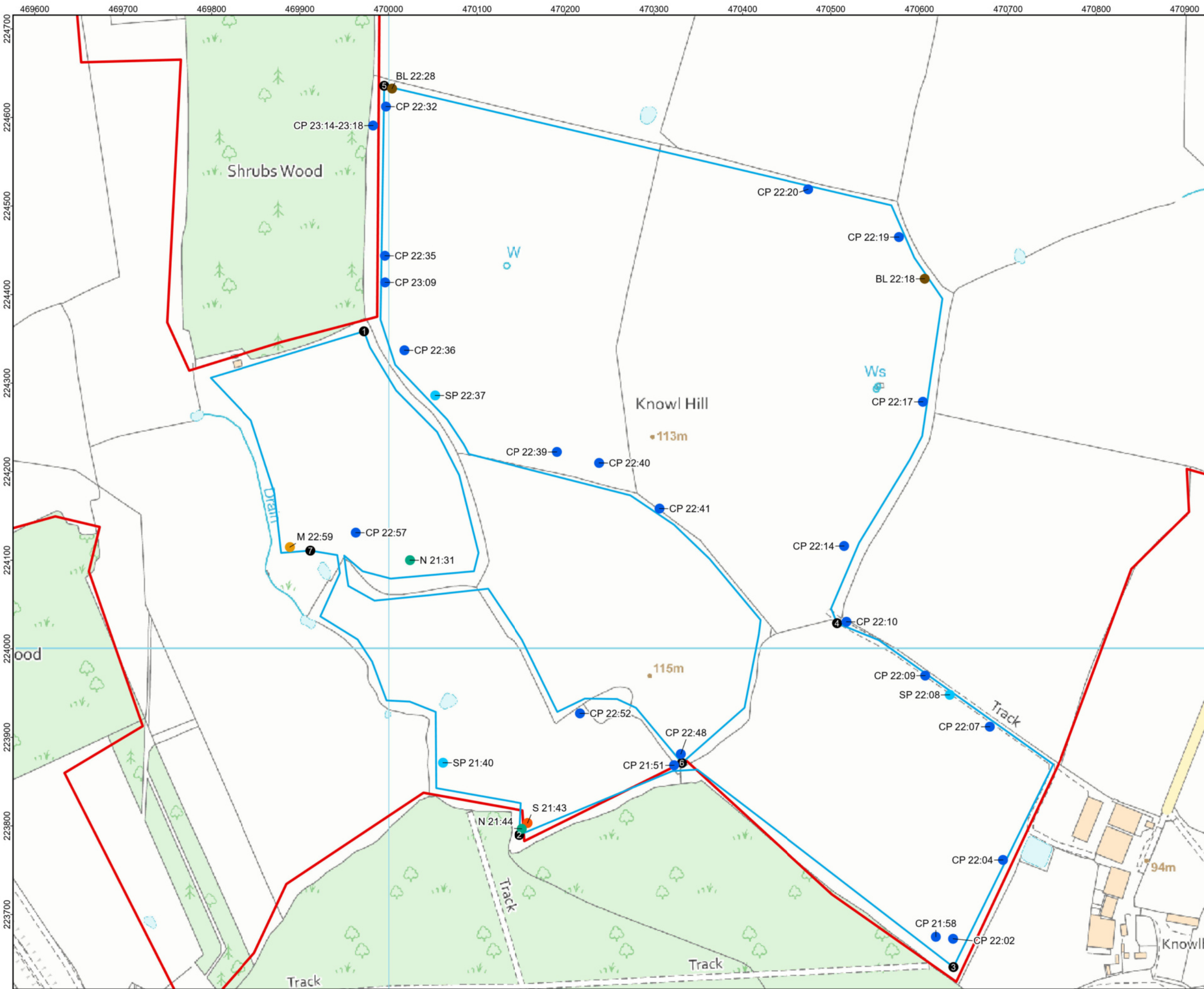
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Kilometers

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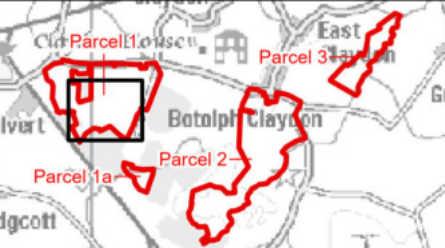


**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Serotine (S)
  - Soprano pipistrelle (SP)

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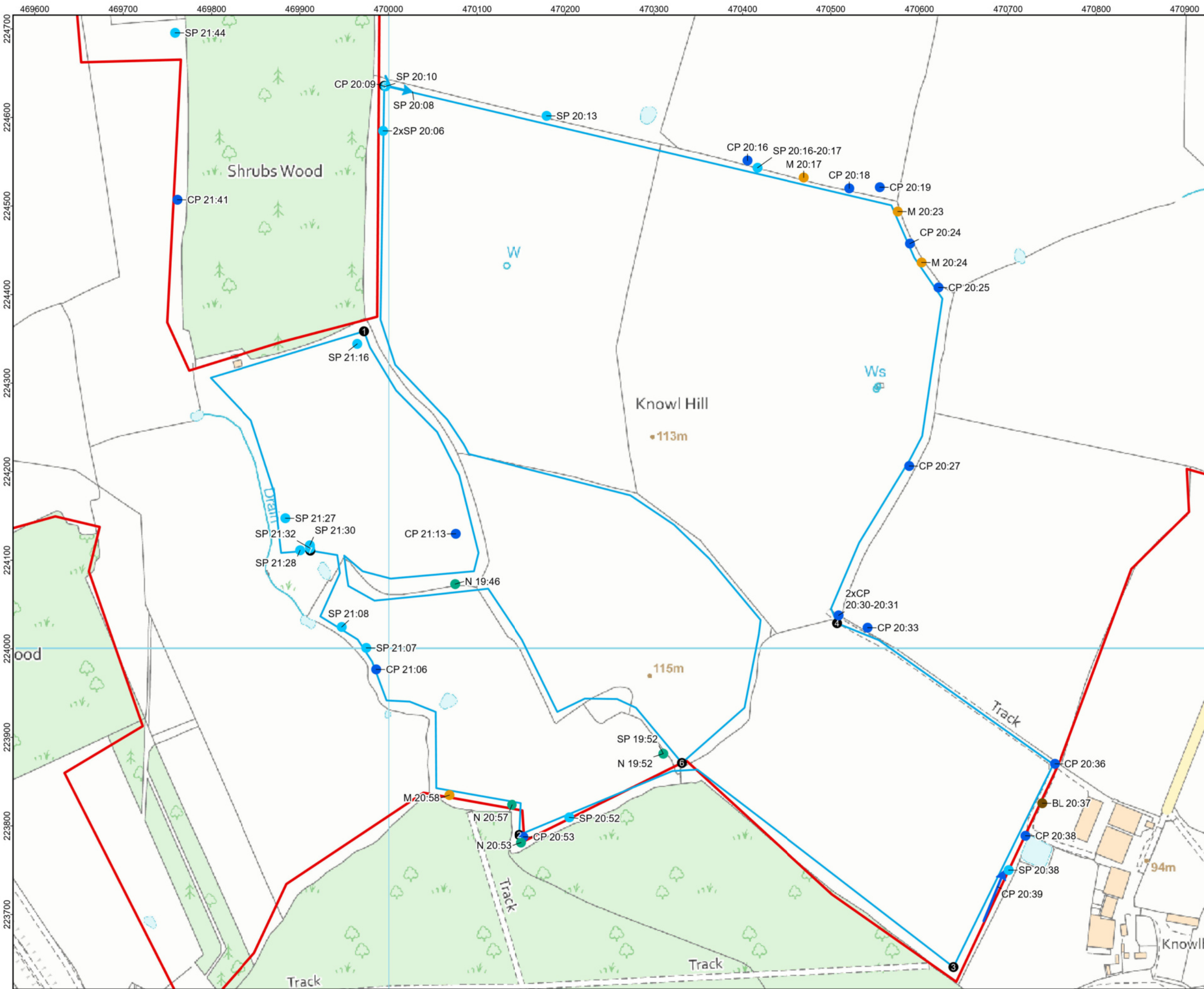
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Transect Visit 1 - 26th July 2022

**FIGURE NUMBER:**  
Figure 2a





**LEGEND:**  

Site Boundary

Transect Route

Stopping Point

Bat Record (Heard not seen)

Brown long-eared (BL)

Common pipistrelle (CP)

Myotis (M)

Noctule (N)

Soprano pipistrelle (SP)

Bat Record (Heard and Seen)

Common pipistrelle (CP)

Soprano pipistrelle (SP)

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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

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Bat Activity Survey Results Parcel 1 West  
Transect Visit 2 - 7th September 2022

FIGURE NUMBER:  
Figure 2b

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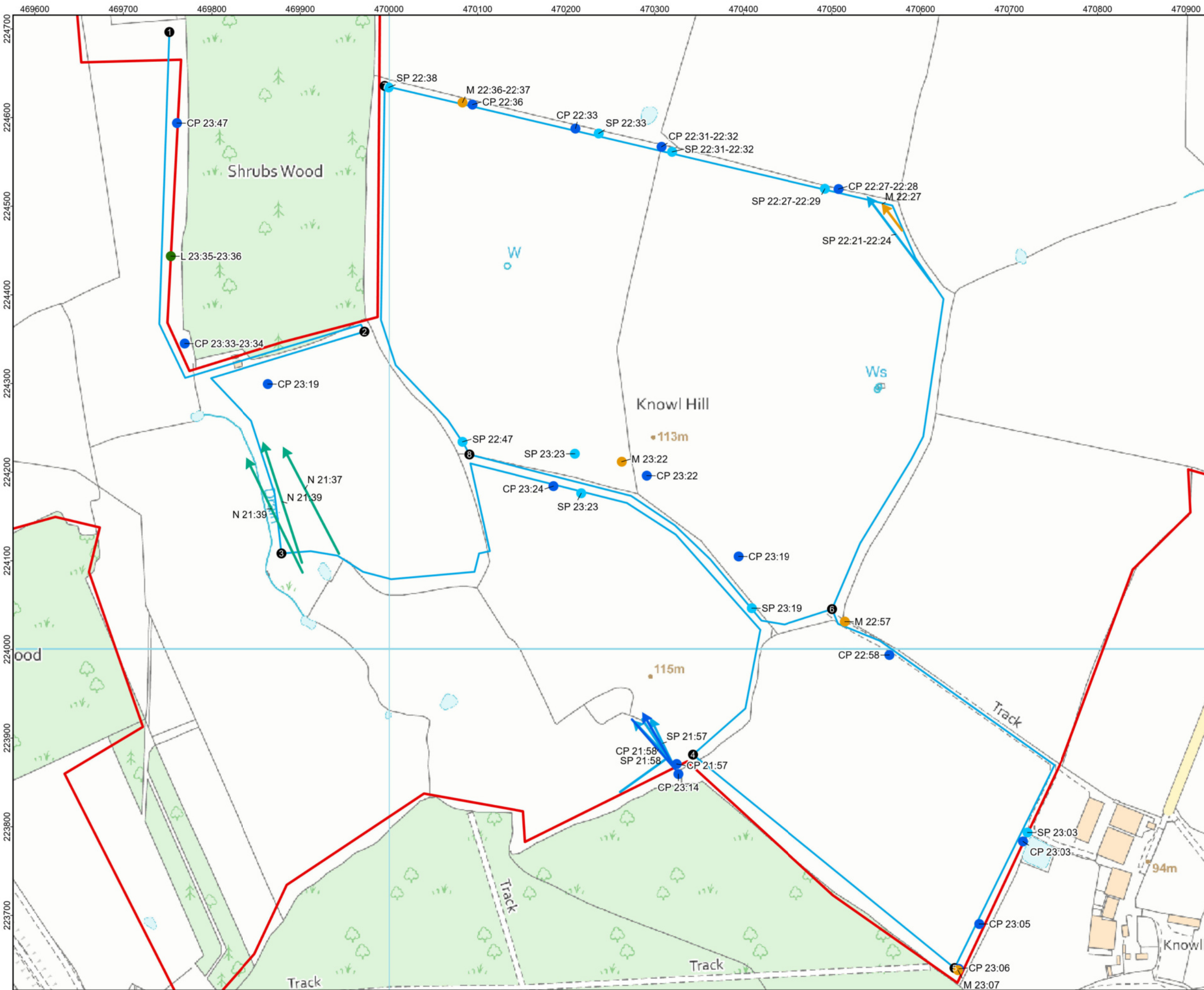
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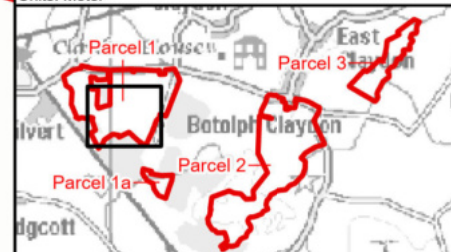


LEGEND:

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- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Leisler's (L)
  - Myotis (M)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Rosefield Solar Farm



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TITLE:  
Bat Activity Survey Results Parcel 1 West  
Transect Visit 3 - 8th June 2023

FIGURE NUMBER:  
Figure 2c

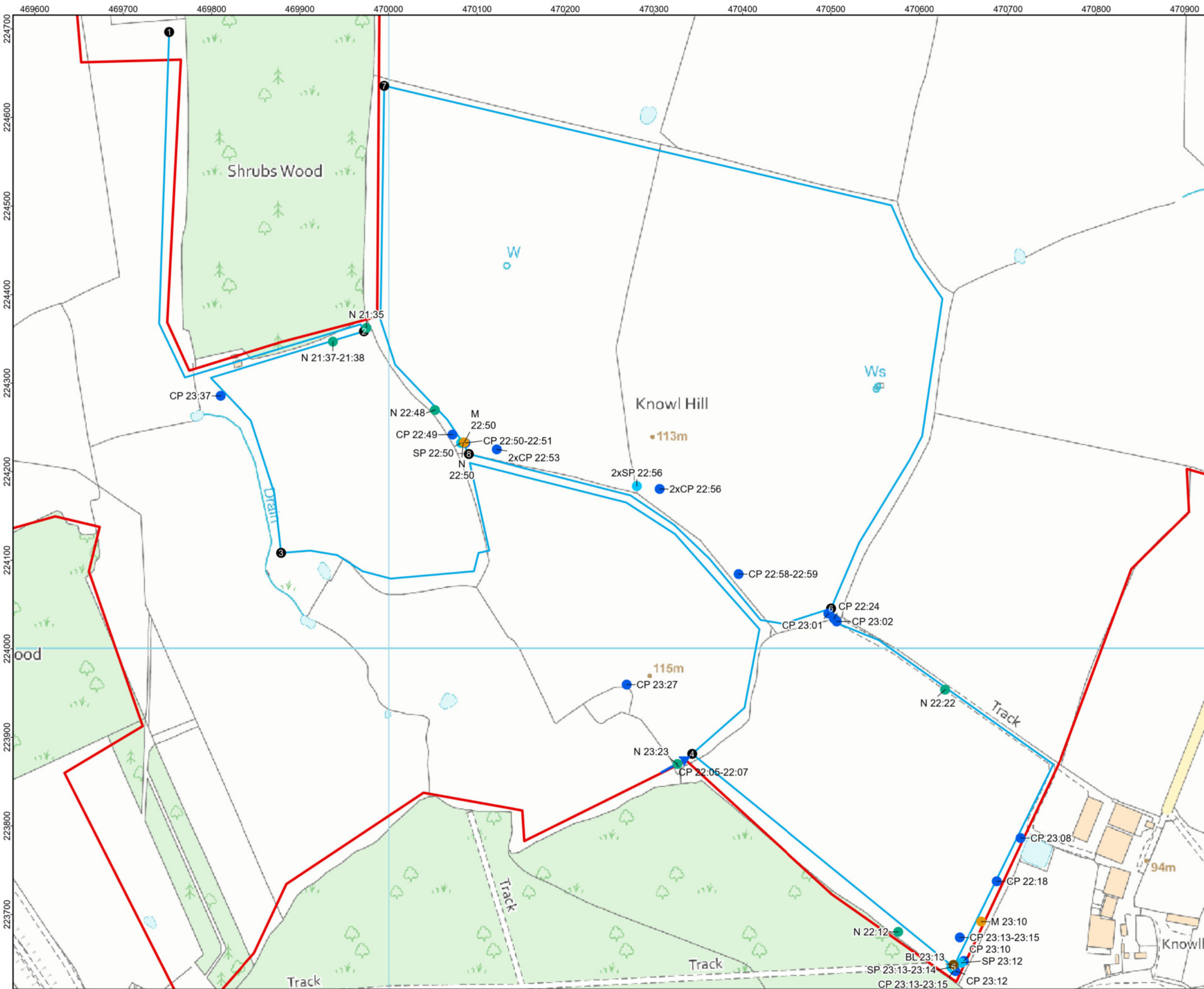
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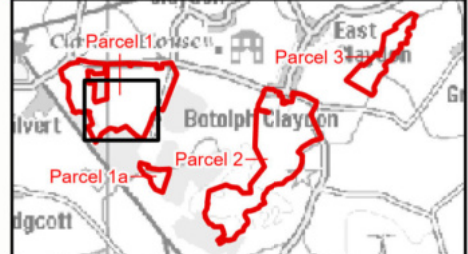




- LEGEND:**
- Site Boundary
  - Transect Route
  - Stopping Point
  - Bat Record (Heard not seen)
    - Brown long-eared (BL)
    - Common pipistrelle (CP)
    - Myotis (M)
    - Noctule (N)
    - Soprano pipistrelle (SP)
  - Bat Record (Heard and Seen)
    - Common pipistrelle (CP)

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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

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Bat Activity Survey Results Parcel 1 West  
Transect Visit 4 - 6th July 2023

FIGURE NUMBER:  
Figure 2d

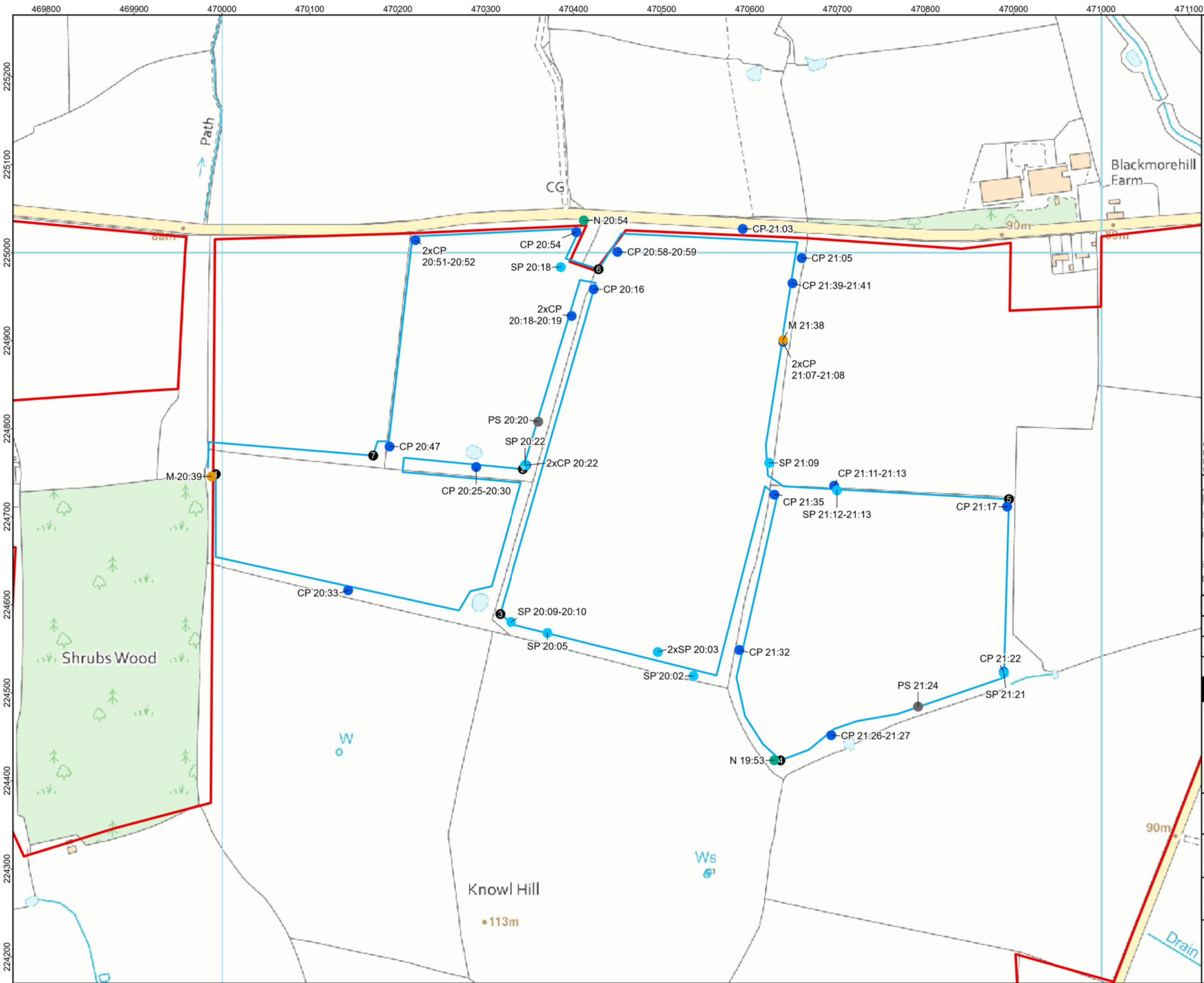
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Meters

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REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Pipistrelle species (PS)
  - Soprano pipistrelle (SP)

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Rev	Date	Description	Drn	Chk	App

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ROSEFIELD SOLAR FARM

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Bat Activity Survey Results Parcel 1 East  
Transect Visit 1 - 7th September 2022

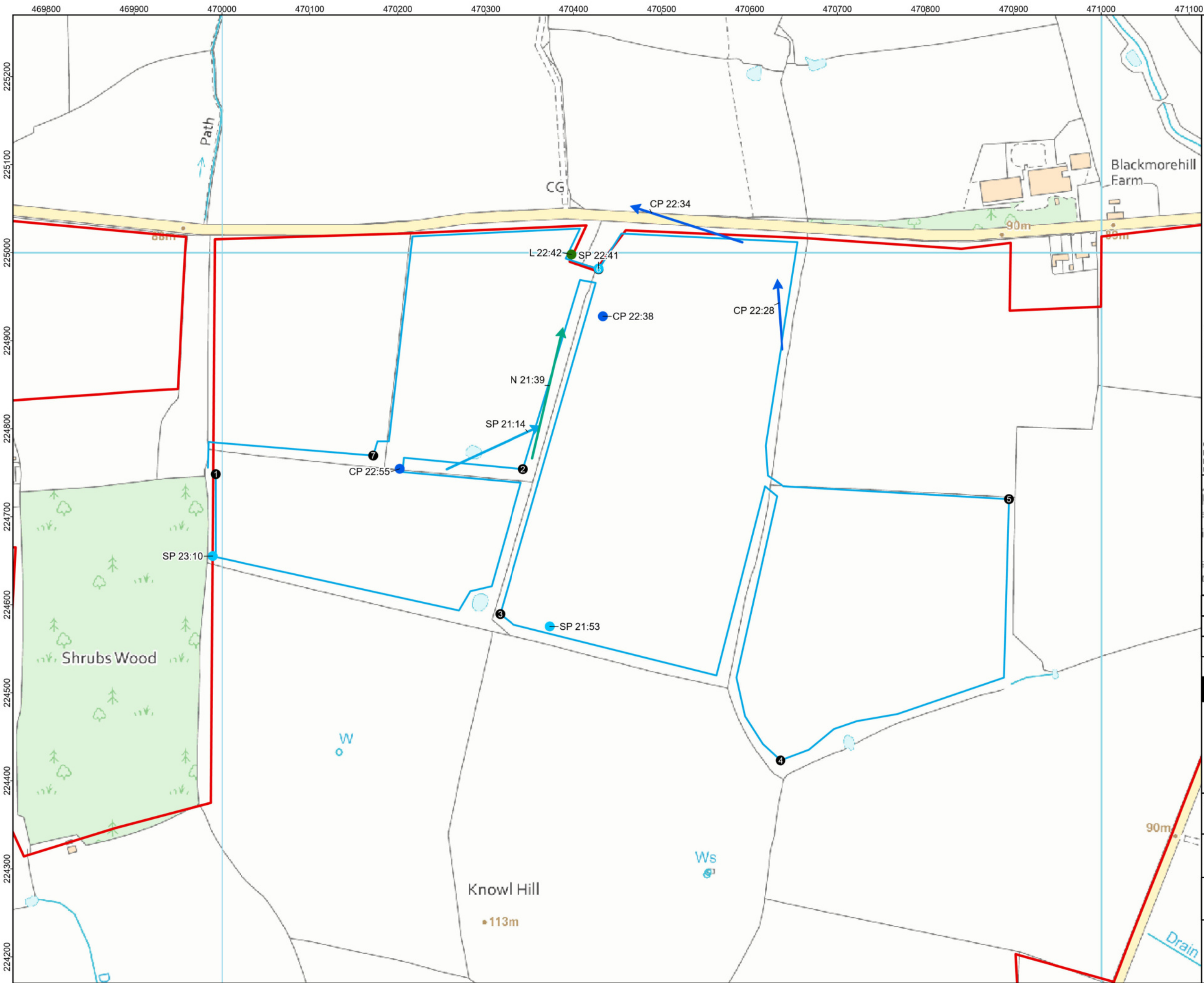
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**LEGEND:**  

Site Boundary

Transect Route

Stopping Point

Bat Record (Heard not seen)

Common pipistrelle (CP)

Leisler's (L)

Soprano pipistrelle (SP)

Bat Record (Heard and Seen)

Common pipistrelle (CP)

Noctule (N)

Soprano pipistrelle (SP)

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Rosefield Solar Farm

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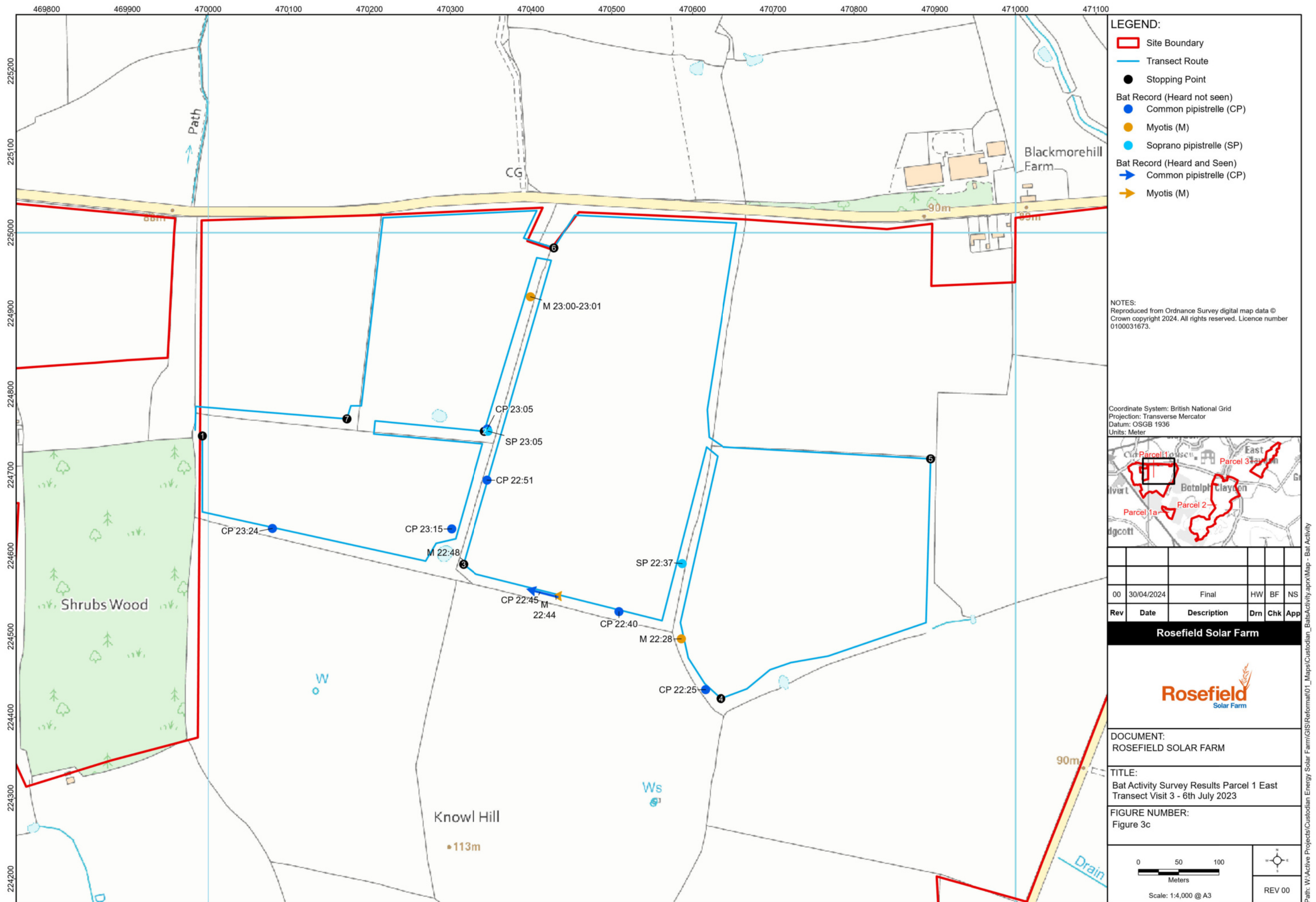
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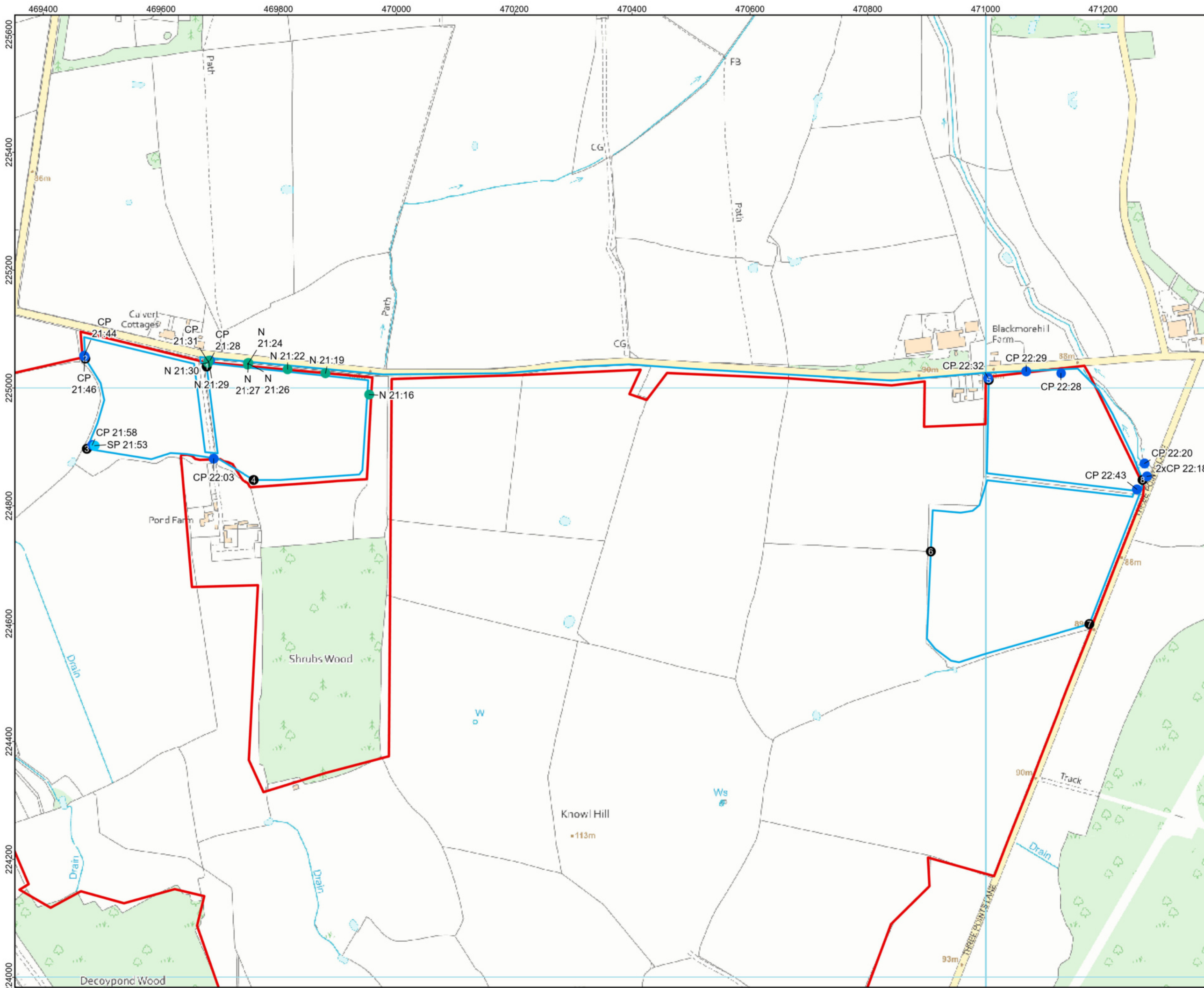
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**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Bat Activity Survey Results Parcel 1 North  
Transect Visit 1 - 23rd May 2023

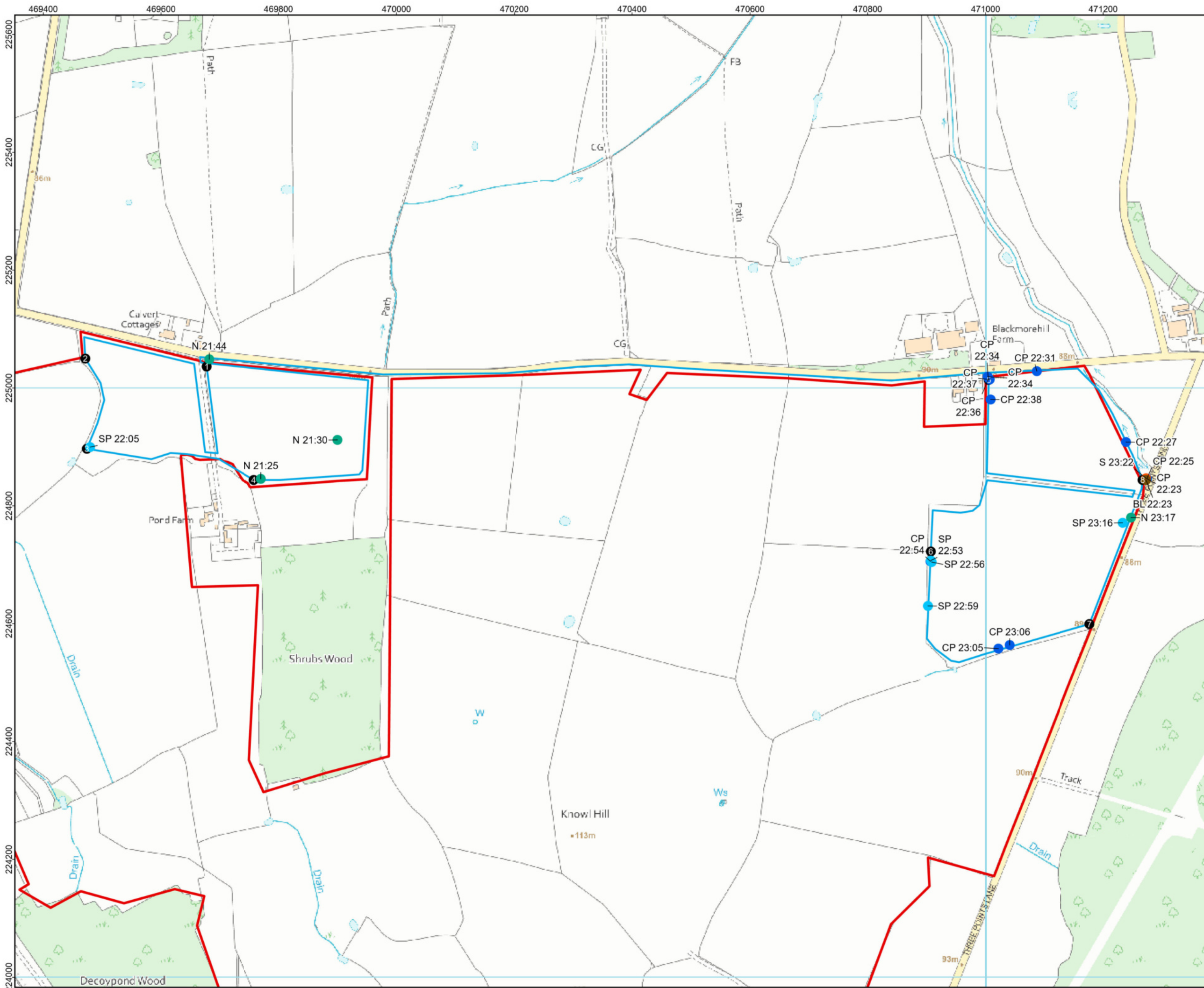
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Figure 4a

Meters

Scale: 1:6,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Noctule (N)
  - Serotine (S)
  - Soprano pipistrelle (SP)

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**Rosefield Solar Farm**

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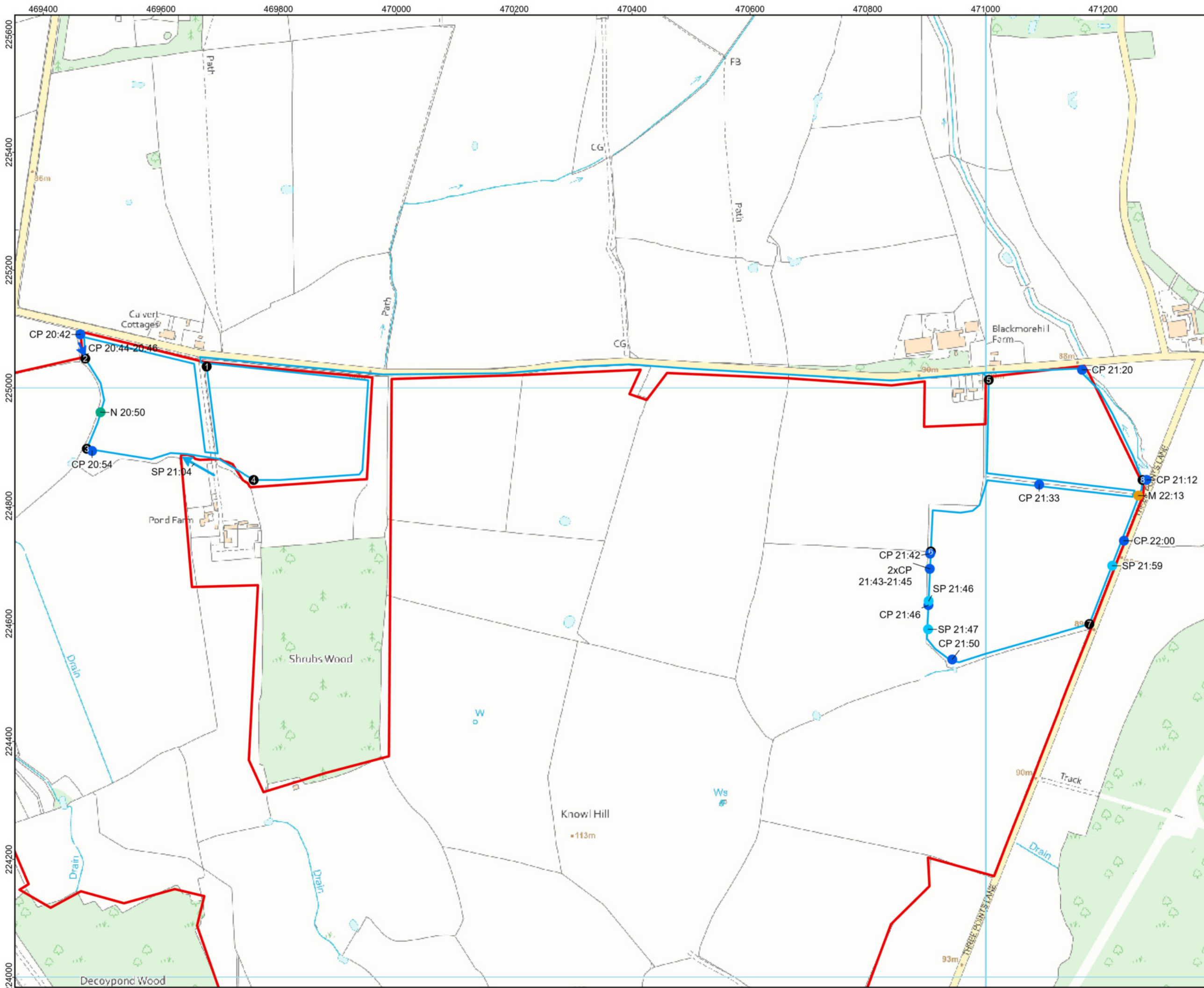
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- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
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  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)

**NOTES:**

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**DOCUMENT:**

ROSEFIELD SOLAR FARM

**TITLE:**

Bat Activity Survey Results Parcel 1 North  
Transect Visit 3 - 22nd August 2023

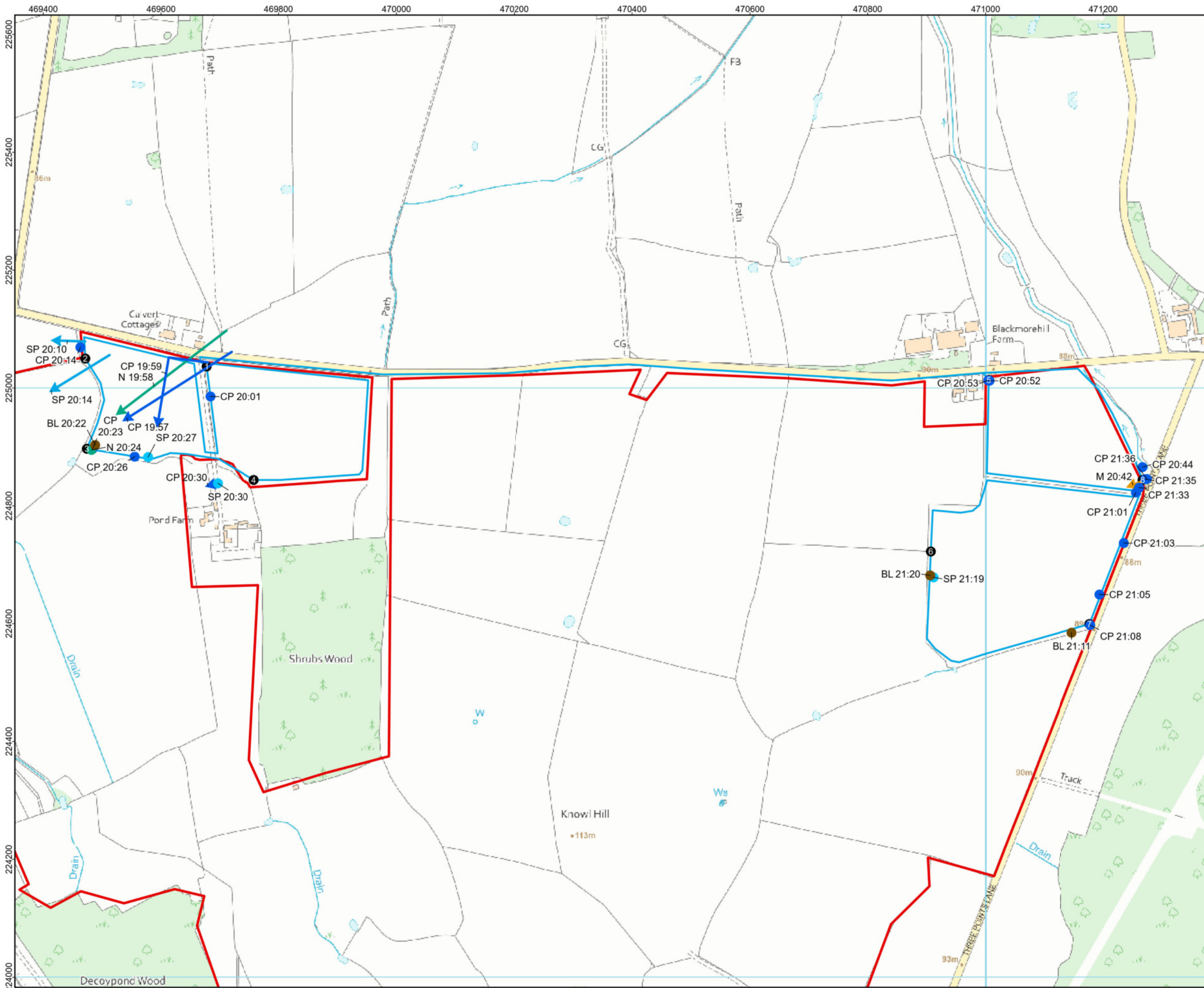
**FIGURE NUMBER:**

Figure 4c

Scale: 1:6,000 @ A3

REV 00





**LEGEND:**

Site Boundary

Transect Route

Stopping Point

Bat Record (Heard not seen)

Brown long-eared (BL)

Common pipistrelle (CP)

Noctule (N)

Soprano pipistrelle (SP)

Bat Record (Heard and Seen)

Common pipistrelle (CP)

Myotis (M)

Noctule (N)

Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**DOCUMENT:**

ROSEFIELD SOLAR FARM

**TITLE:**

Bat Activity Survey Results Parcel 1 North  
Transect Visit 4 - 7th September 2023

**FIGURE NUMBER:**

Figure 4d

050100

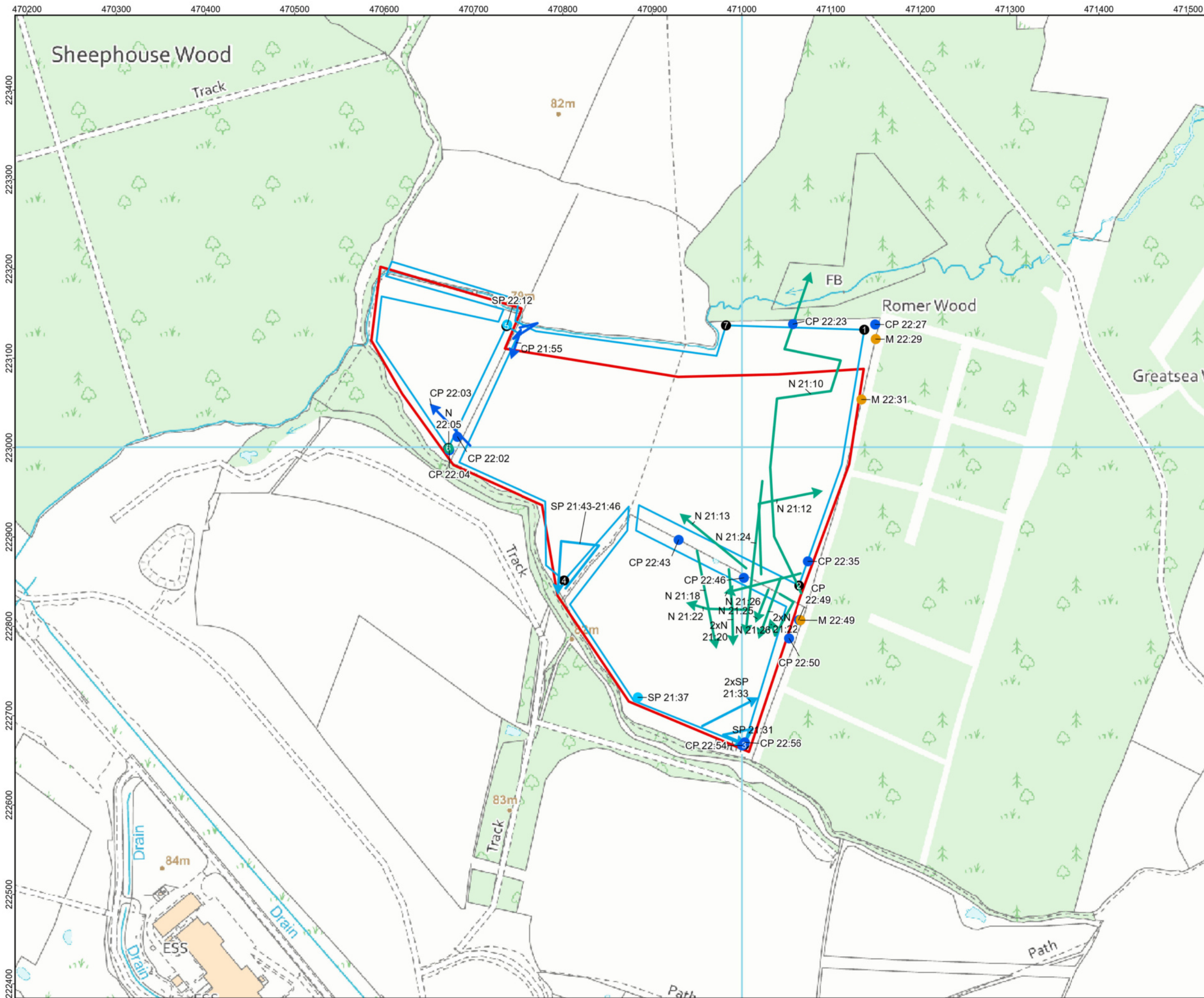
Meters

Scale: 1:6,000 @ A3

REV 00

Path: W:\Active Projects\Custodian Energy Solar Farm\GIS\Reformat\01\_Maps\Custodian\_Bats\Activity.aprx\Map - Bat Activity





**LEGEND:**  

Site Boundary

Transect Route

Stopping Point

Bat Record (Heard not seen)

Common pipistrelle (CP)

Myotis (M)

Noctule (N)

Soprano pipistrelle (SP)

Bat Record (Heard and Seen)

Common pipistrelle (CP)

Noctule (N)

Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

DOCUMENT:  
ROSEFIELD SOLAR FARM

TITLE:  
Bat Activity Survey Results Parcel 1a Transect  
Visit 1 - 26th July 2022

FIGURE NUMBER:  
Figure 5a

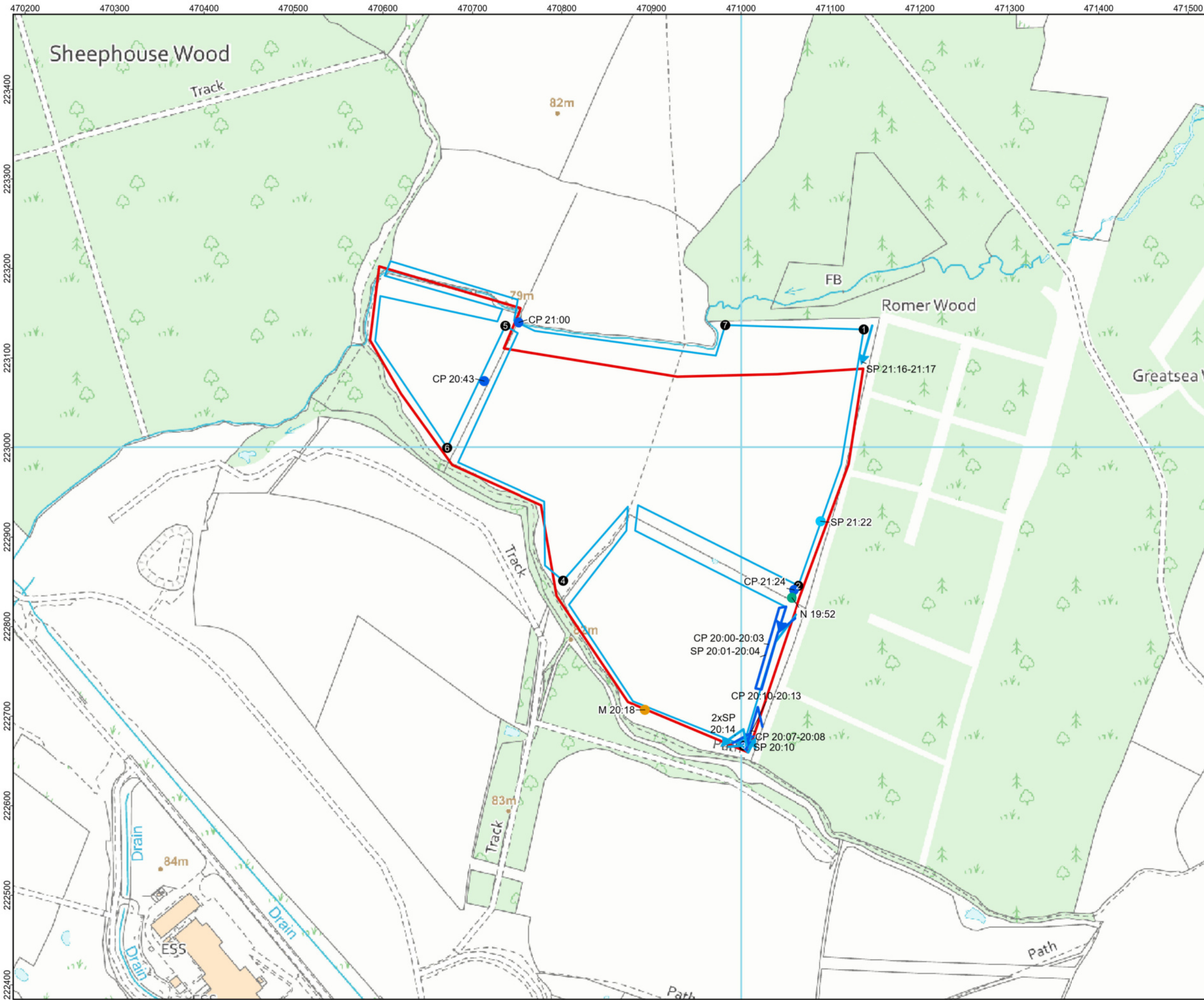
050100

Meters

Scale: 1:4,000 @ A3

REV 00

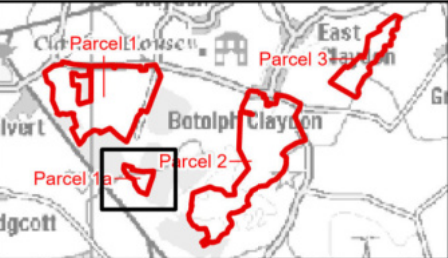




- LEGEND:**
- Site Boundary
  - Transect Route
  - Stopping Point
  - Bat Record (Heard not seen)
    - Common pipistrelle (CP)
    - Myotis (M)
    - Noctule (N)
    - Soprano pipistrelle (SP)
  - Bat Record (Heard and Seen)
    - Common pipistrelle (CP)
    - Soprano pipistrelle (SP)

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Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

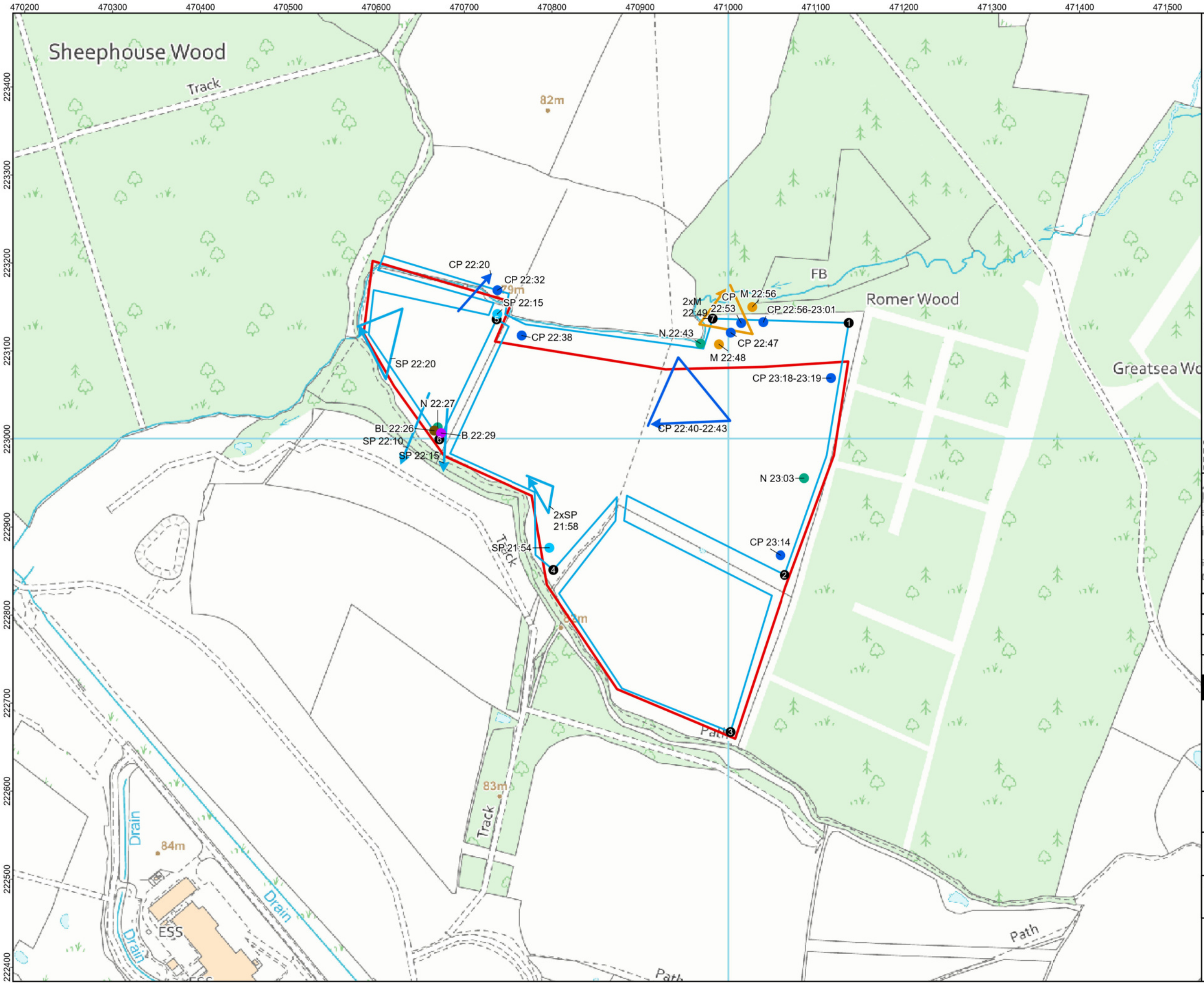
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Bat Activity Survey Results Parcel 1a Transect  
Visit 2 - 7th September 2022

**FIGURE NUMBER:**  
Figure 5b

Scale: 1:4,000 @ A3

REV 00



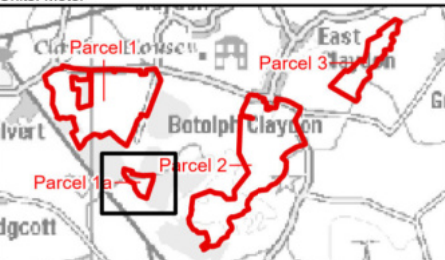


**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Barbastelle (B)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

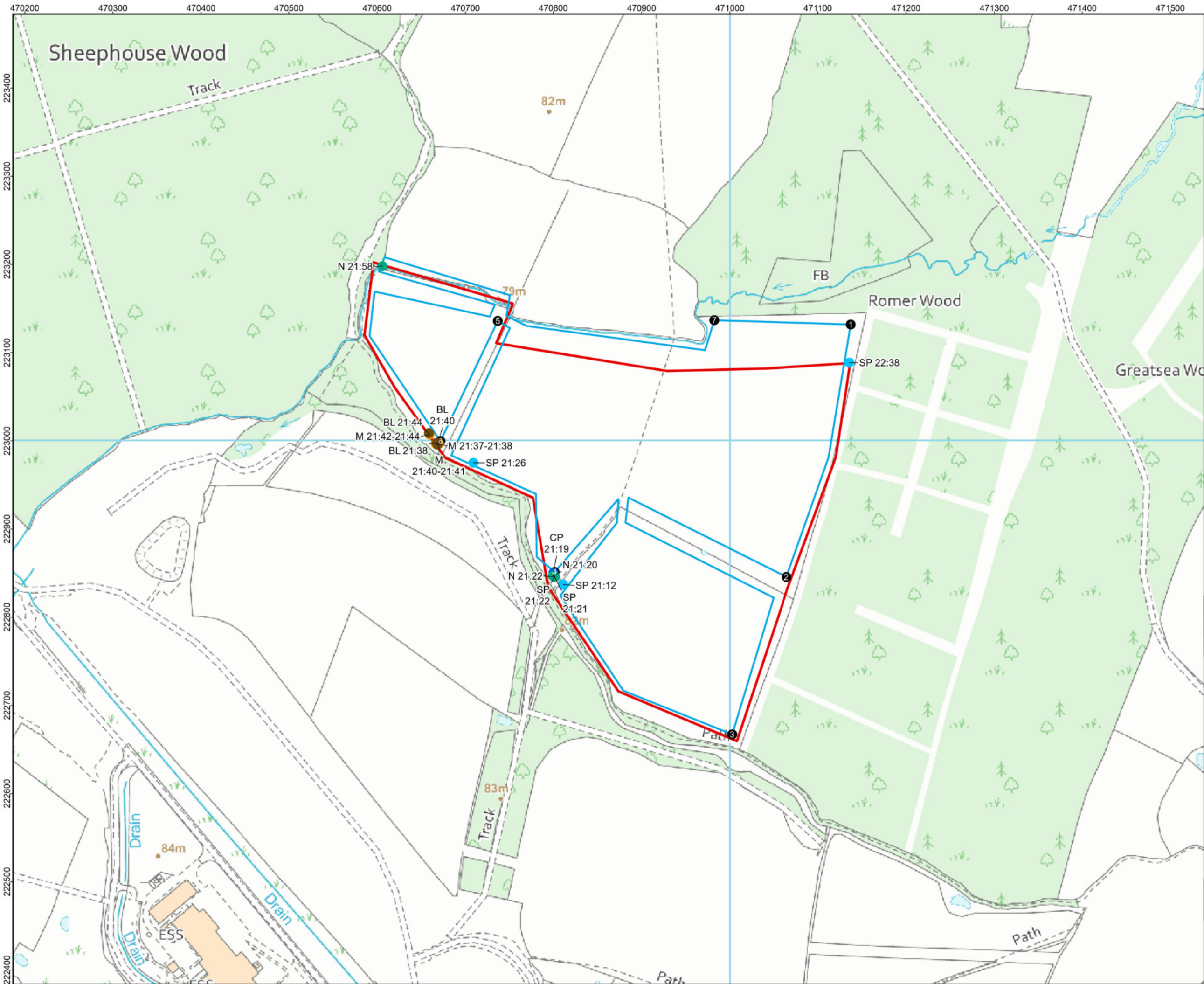
**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Bat Activity Survey Results Parcel 1a Transect  
Visit 3 - 8th June 2023

**FIGURE NUMBER:**  
Figure 5c

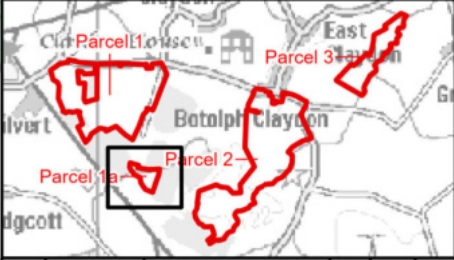




- LEGEND:
- Site Boundary
  - Transect Route
  - Stopping Point
  - Bat Record (Heard not seen)
    - Brown long-eared (BL)
    - Common pipistrelle (CP)
    - Myotis (M)
    - Noctule (N)
    - Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



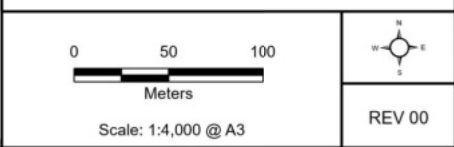
Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

Rosefield Solar Farm

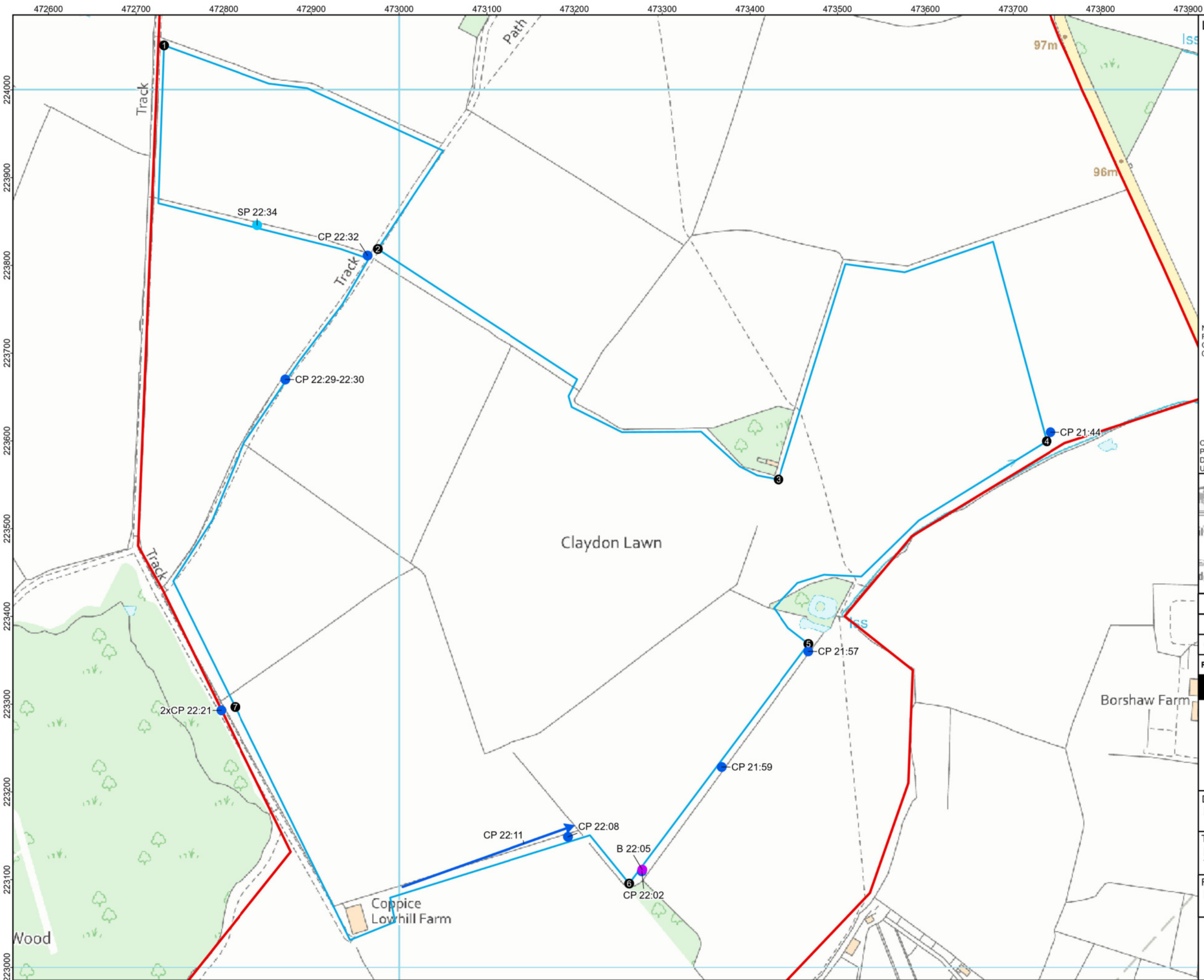
DOCUMENT:  
ROSEFIELD SOLAR FARM

TITLE:  
Bat Activity Survey Results Parcel 1a Transect  
Visit 4 - 8th August 2023

FIGURE NUMBER:  
Figure 5d





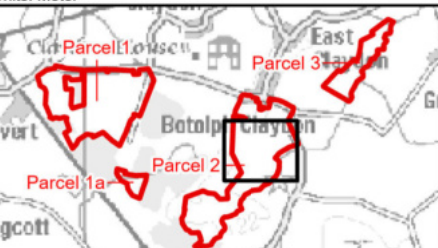


LEGEND:

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Barbastelle (B)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

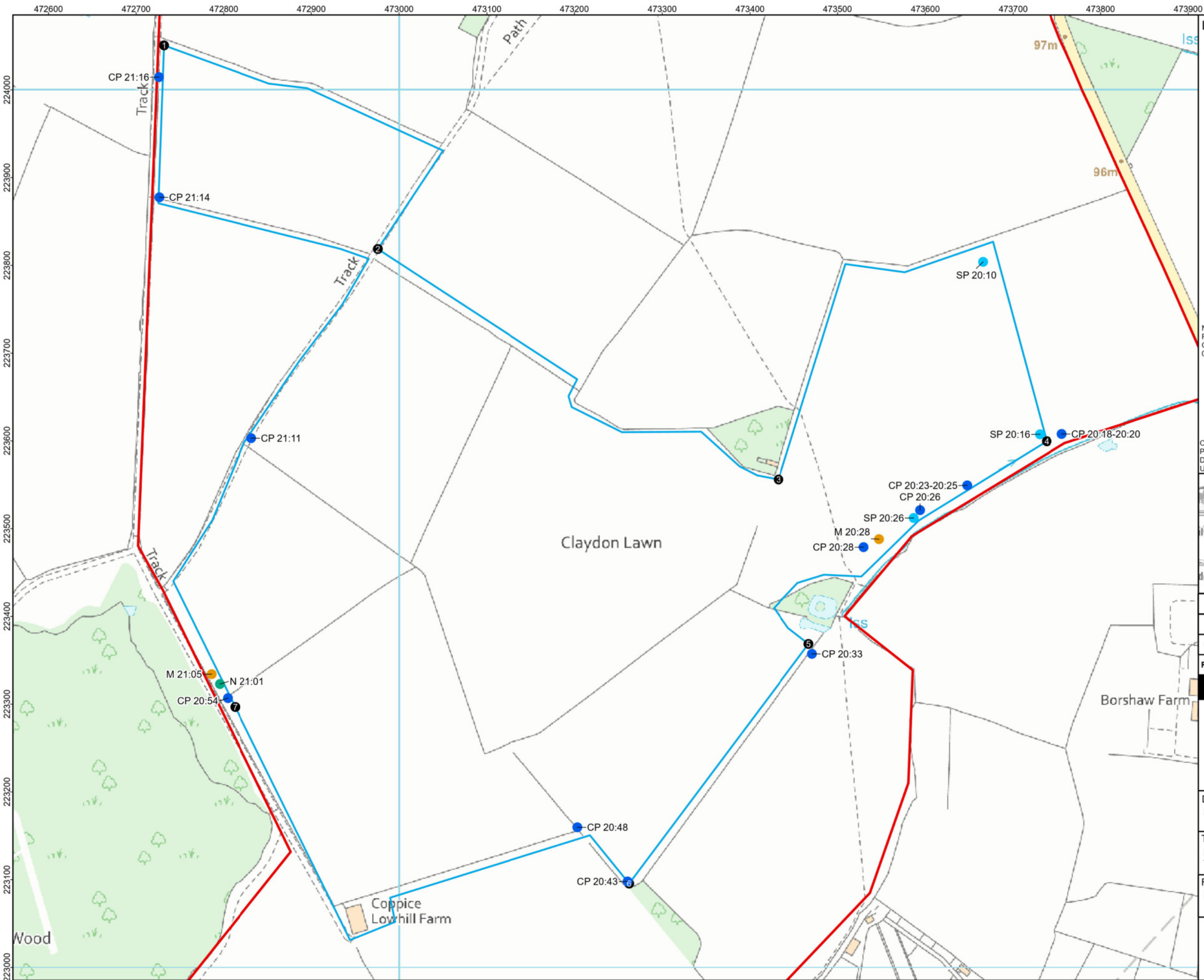
DOCUMENT:  
ROSEFIELD SOLAR FARM

TITLE:  
Bat Activity Survey Results Parcel 2 Northeast  
Transect Visit 1 - 26th July 2022

FIGURE NUMBER:  
Figure 6a

Scale: 1:4,000 @ A3

REV 00



**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

**Rev**   **Date**   **Description**   **Drn**   **Chk**   **App**

00	30/04/2024	Final	HW	BF	NS
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**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Bat Activity Survey Results Parcel 2 Northeast  
Transect Visit 2 - 7th September 2022

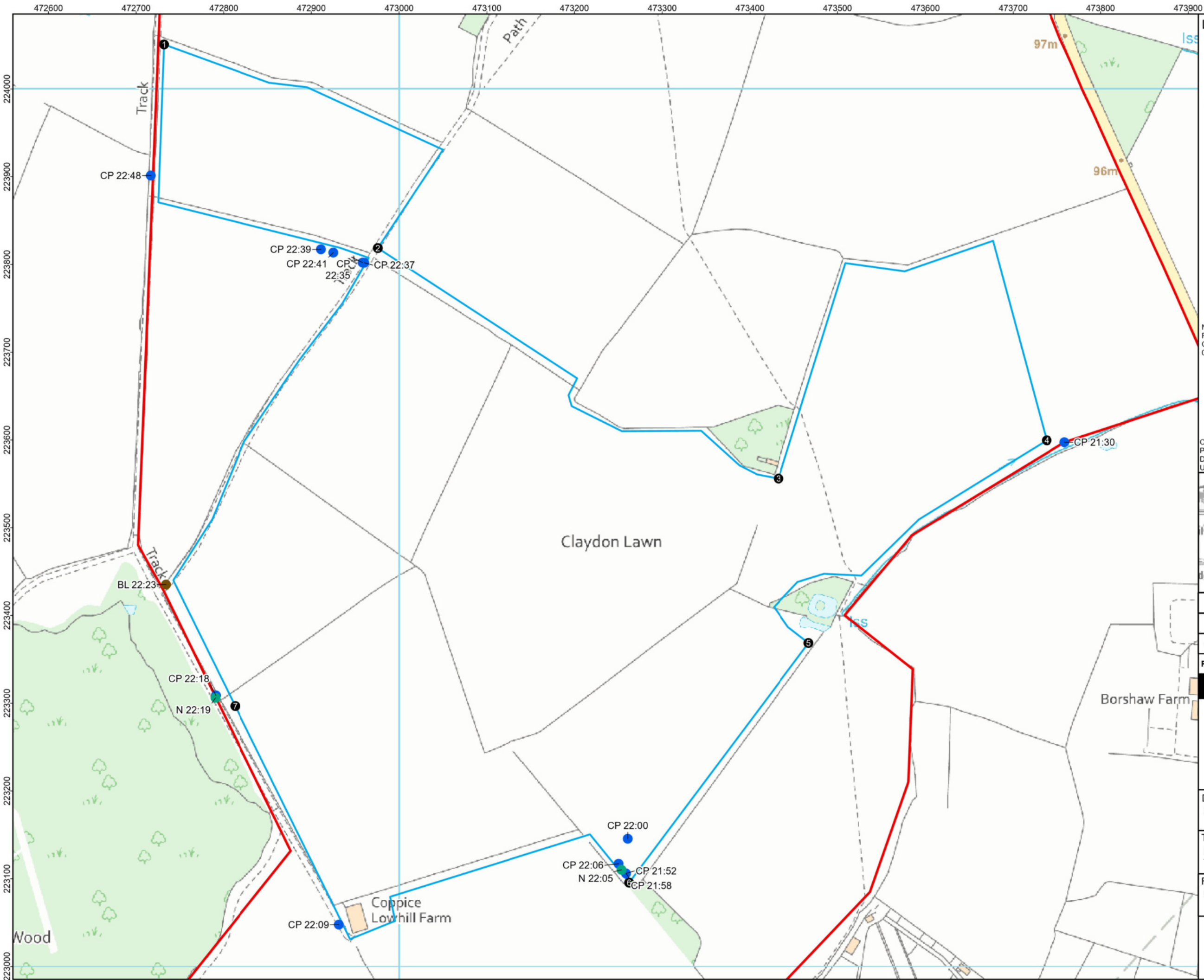
**FIGURE NUMBER:**  
Figure 6b

0   50   100  
Meters  
Scale: 1:4,000 @ A3

REV 00

Path: W:\Active Projects\Custodian Energy Solar Farm\GIS\Reformat\01\_Maps\Custodian\_Bats\Activity.aprx\Map - Bat Activity



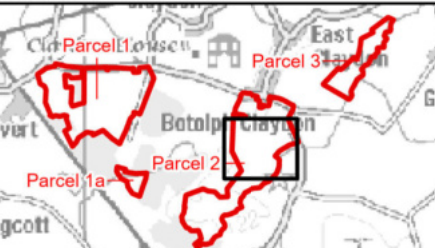


LEGEND:

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Noctule (N)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**Rosefield Solar Farm**

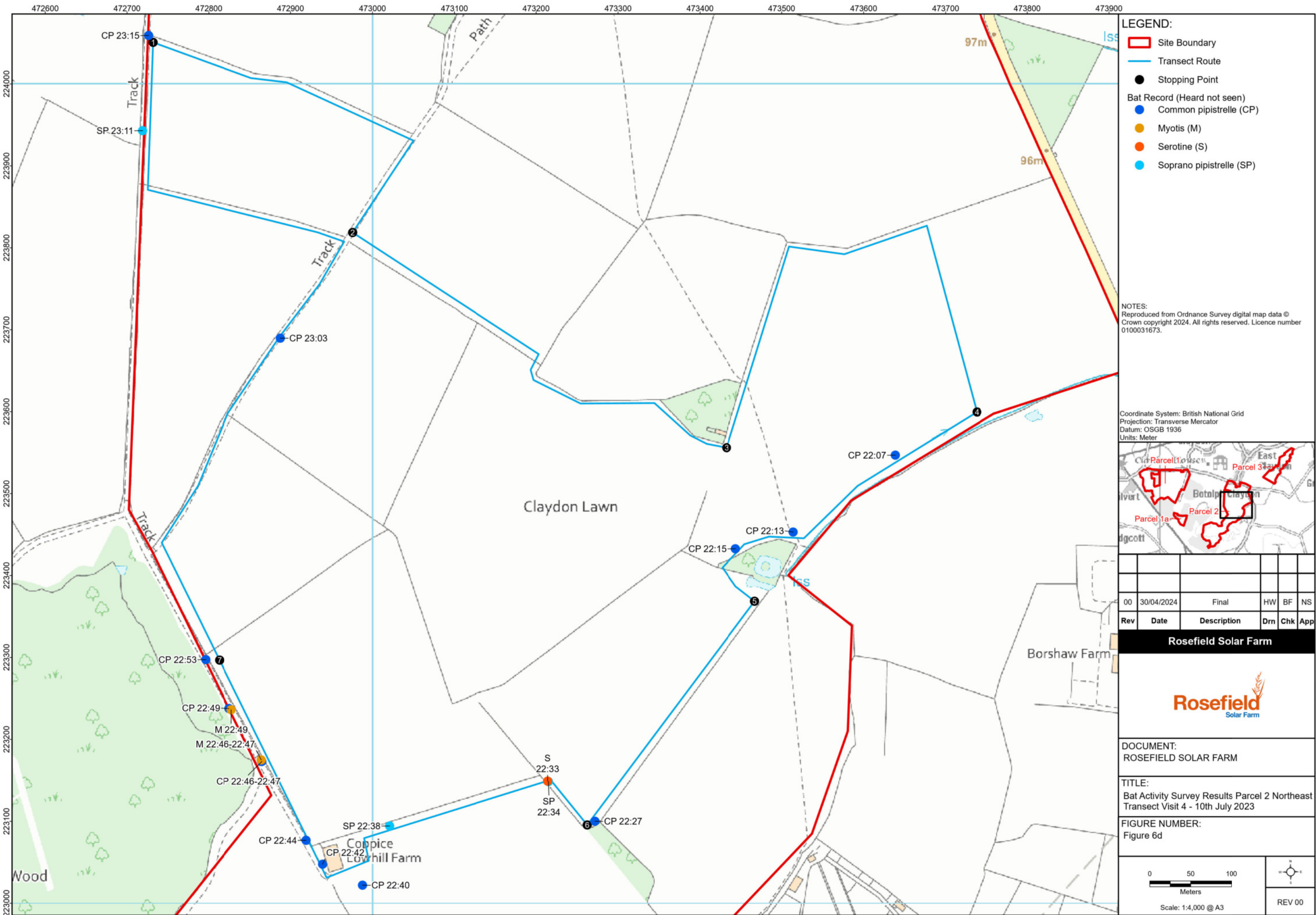
DOCUMENT:  
ROSEFIELD SOLAR FARM

TITLE:  
Bat Activity Survey Results Parcel 2 Northeast  
Transect Visit 3 - 17th May 2023

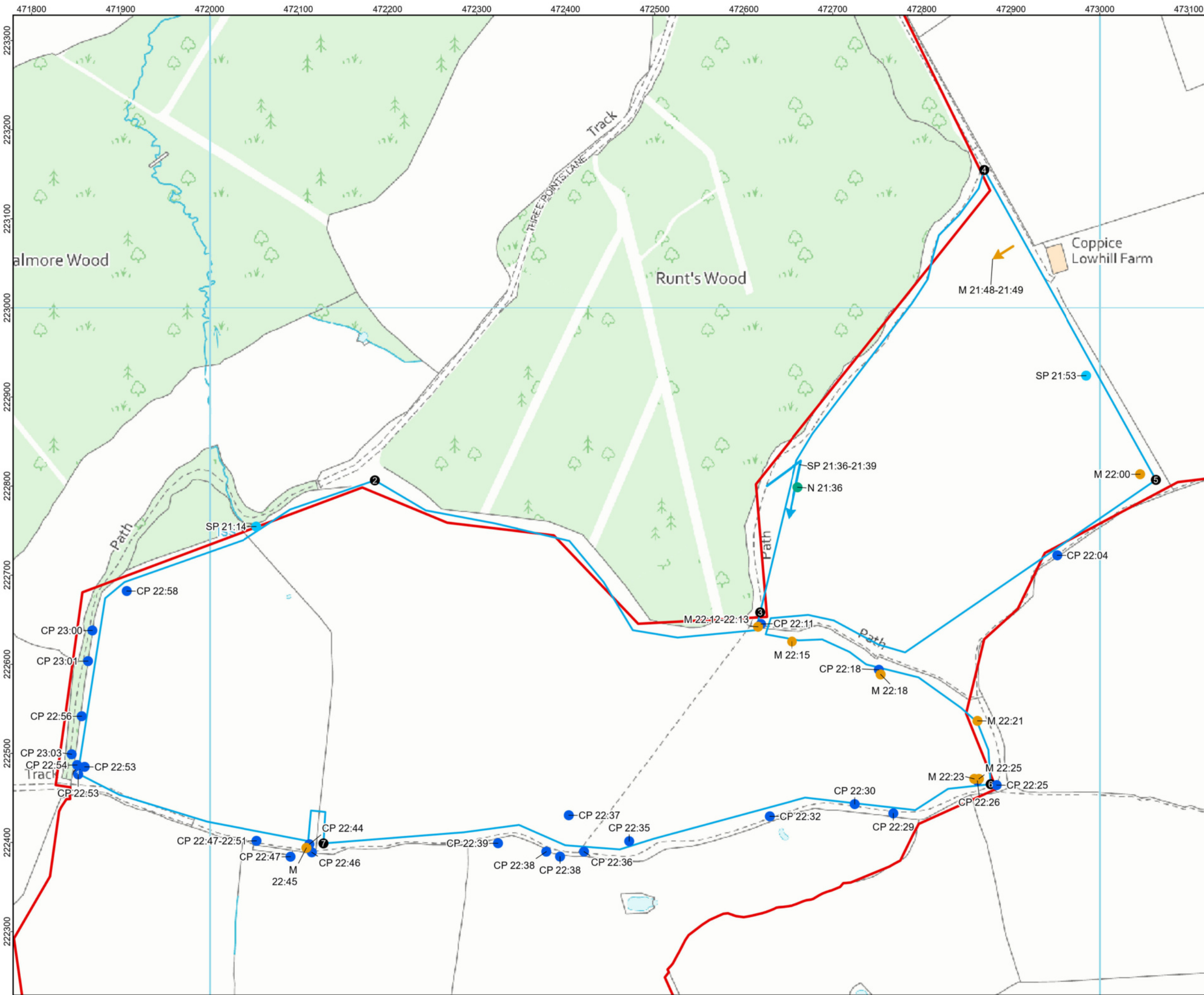
FIGURE NUMBER:  
Figure 6c

Scale: 1:4,000 @ A3

REV 00







**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Myotis (M)
  - Soprano pipistrelle (SP)

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Datum: OSGB 1936  
Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**

ROSEFIELD SOLAR FARM

**TITLE:**

Bat Activity Survey Results Parcel 2 Southwest  
Transect Visit 1 - 26th July 2022

**FIGURE NUMBER:**

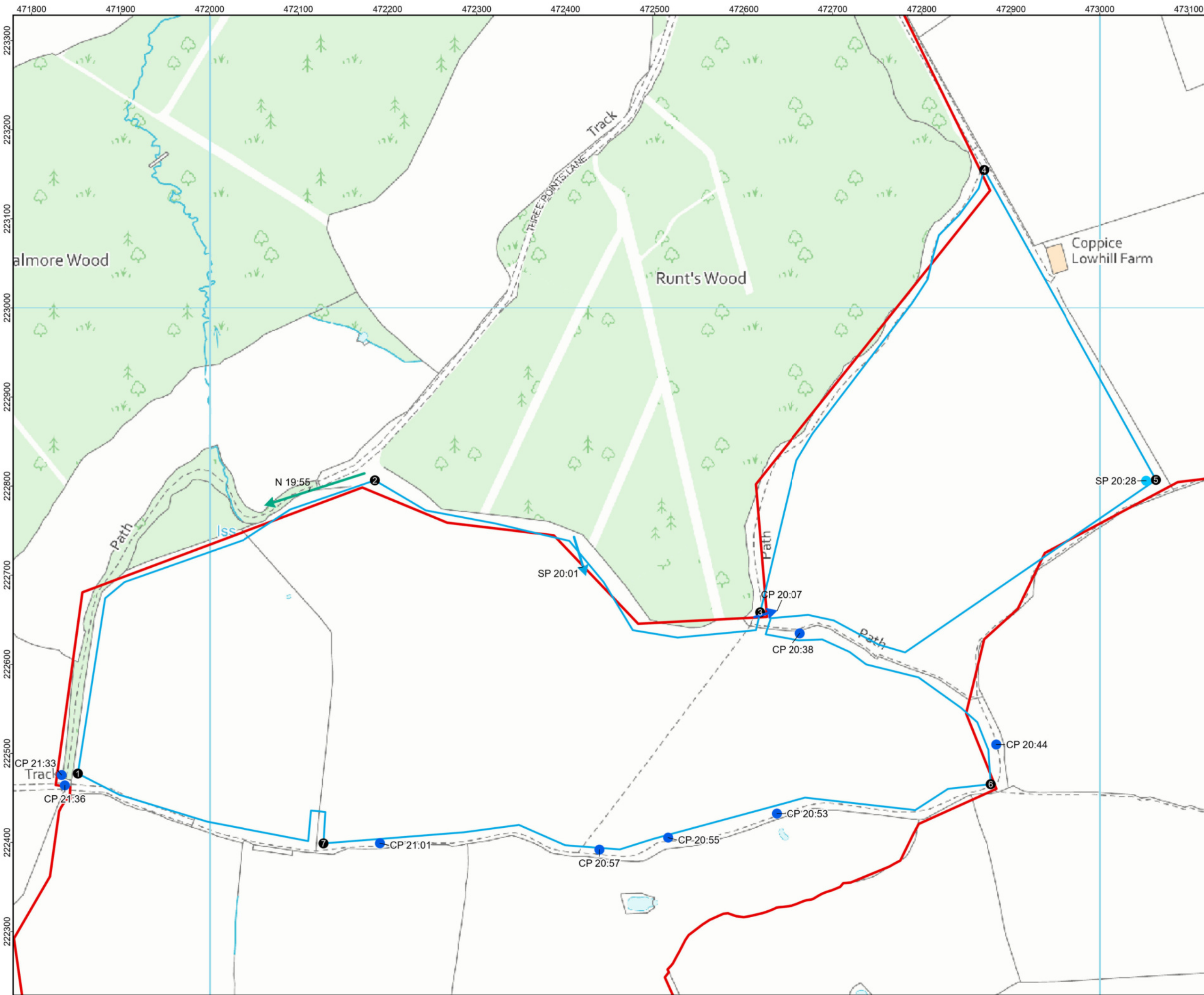
Figure 7a

Scale: 1:4,000 @ A3

REV 00

Path: W:\Active Projects\Custodian Energy Solar Farm\GIS\Reformat\01\_Maps\Custodian\_Bats\Activity.aprx\Map - Bat Activity





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Datum: OSGB 1936  
Units: Meter

**Rev**   **Date**   **Description**   **Drn**   **Chk**   **App**

00	30/04/2024	Final	HW	BF	NS
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**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

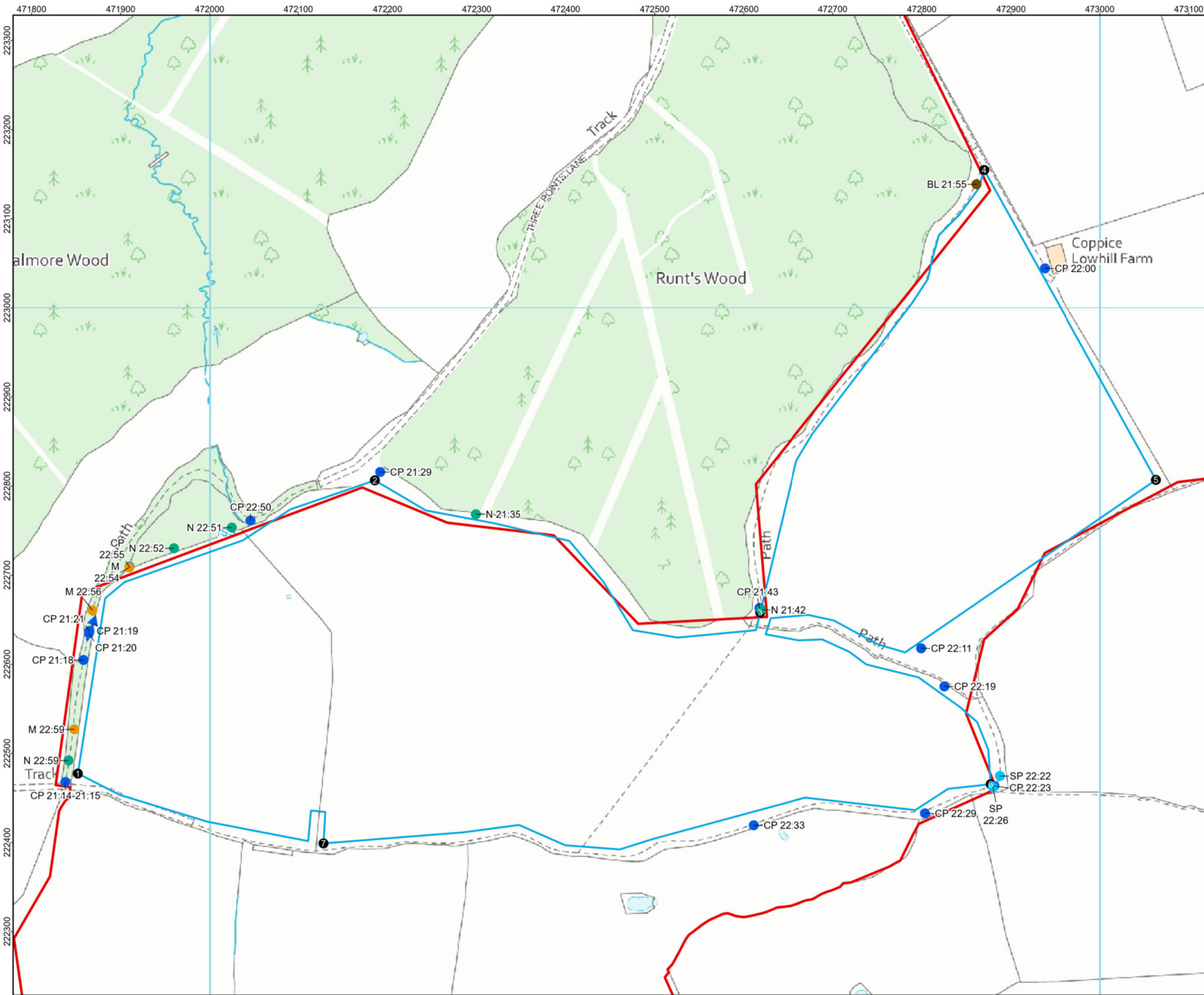
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southwest  
Transect Visit 2 - 7th September 2022

**FIGURE NUMBER:**  
Figure 7b

0 50 100  
Meters  
Scale: 1:4,000 @ A3

REV 00



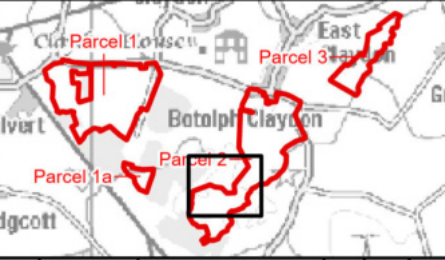


**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

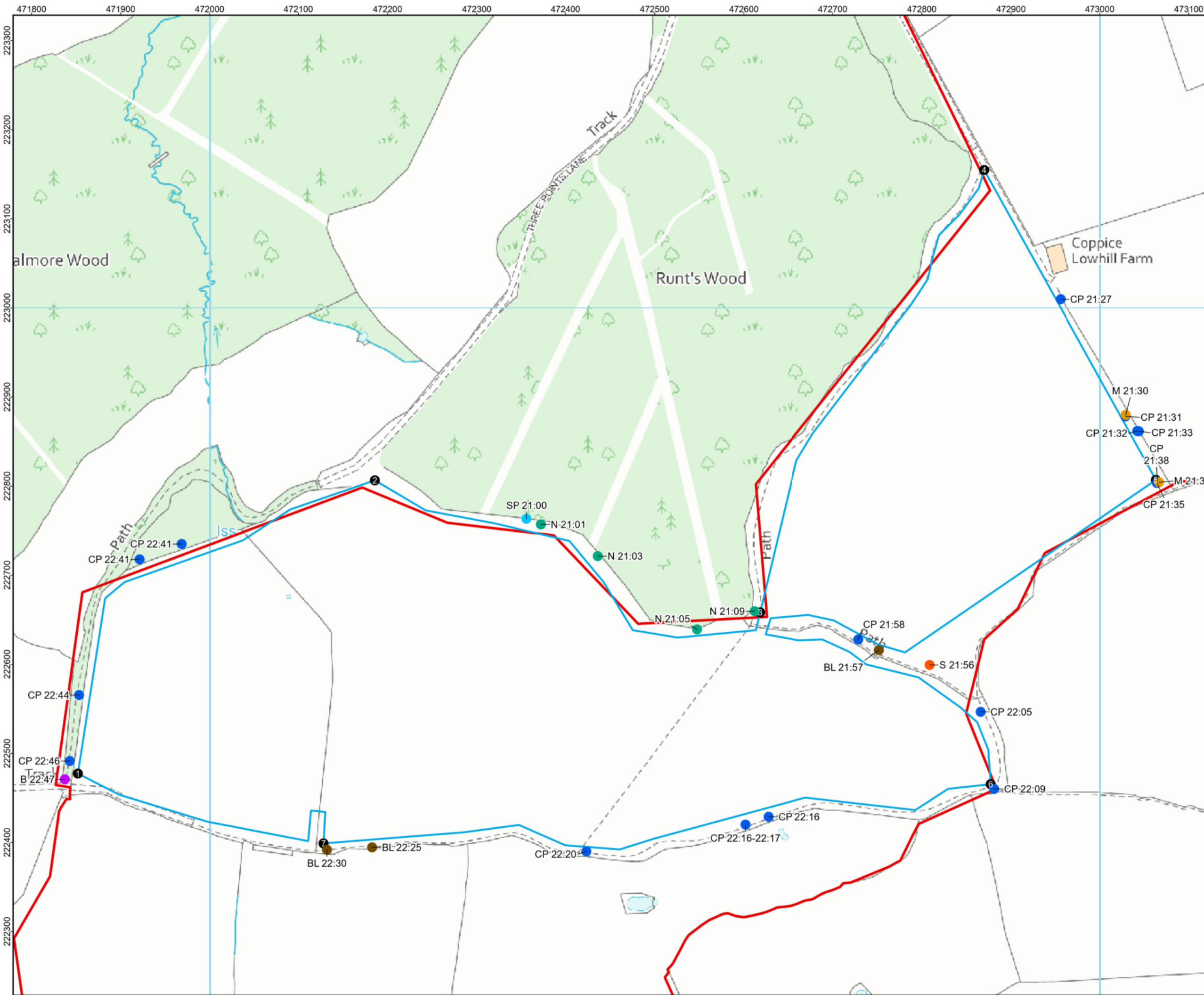
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southwest  
Transect Visit 3 - 17th May 2023

**FIGURE NUMBER:**  
Figure 7c

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Barbastelle (B)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Serotine (S)
  - Soprano pipistrelle (SP)

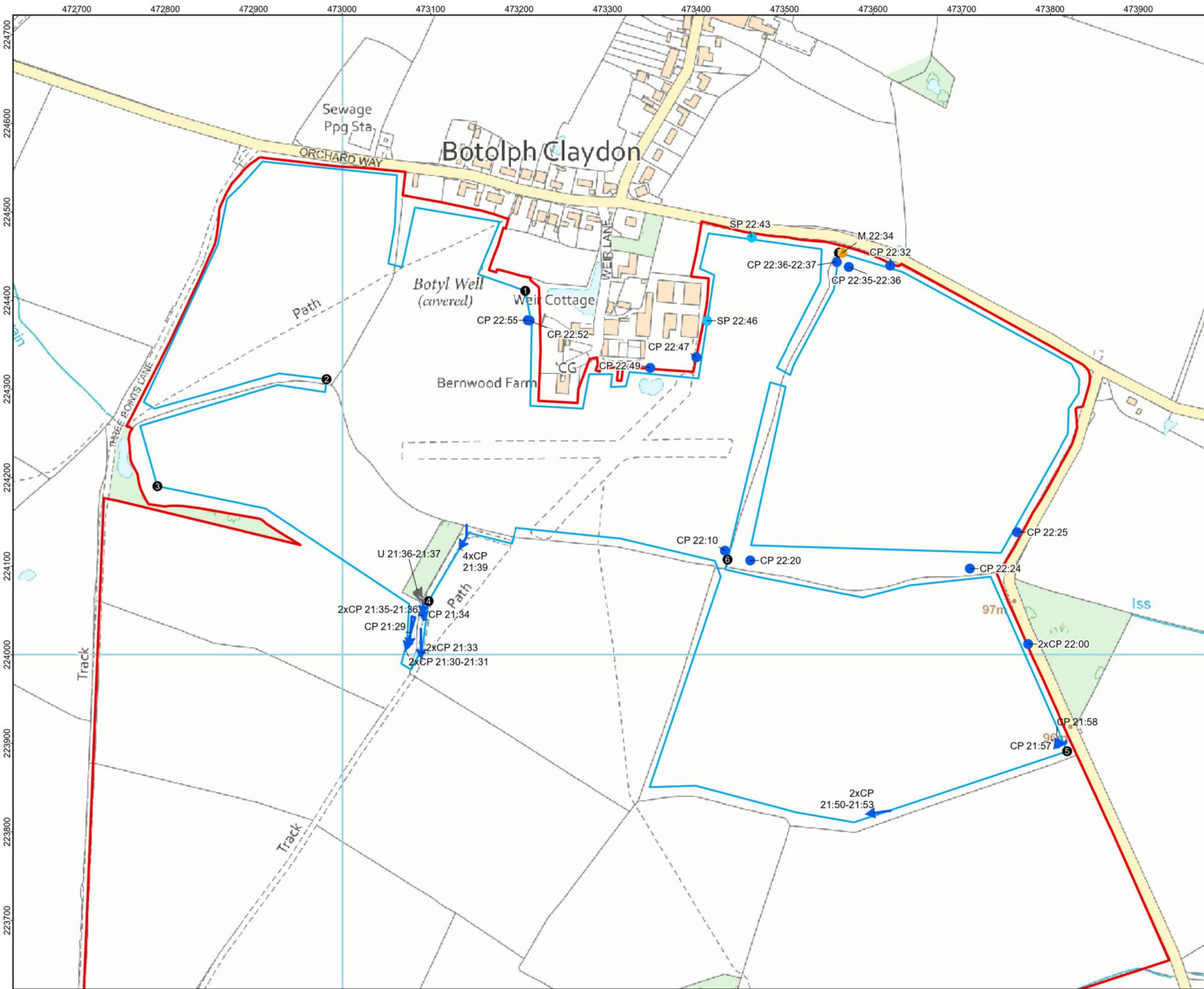
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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App
Rosefield Solar Farm					
DOCUMENT: ROSEFIELD SOLAR FARM					
TITLE: Bat Activity Survey Results Parcel 2 Southwest Transect Visit 4 - 8th August 2023					
FIGURE NUMBER: Figure 7d					
 Scale: 1:4,000 @ A3			 REV 00		

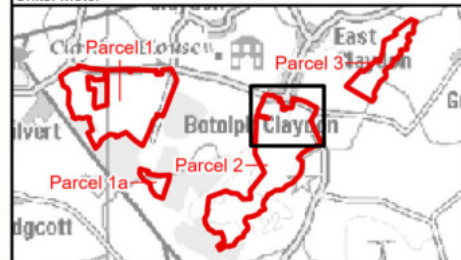




- LEGEND:**
- Site Boundary
  - Transect Route
  - Stopping Point
  - Bat Record (Heard not seen)
    - Common pipistrelle (CP)
    - Myotis (M)
    - Soprano pipistrelle (SP)
  - Bat Record (Heard and Seen)
    - Common pipistrelle (CP)
    - Unknown (U), likely brown long-eared

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

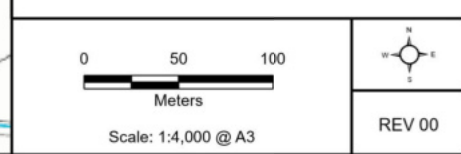
**Rosefield Solar Farm**



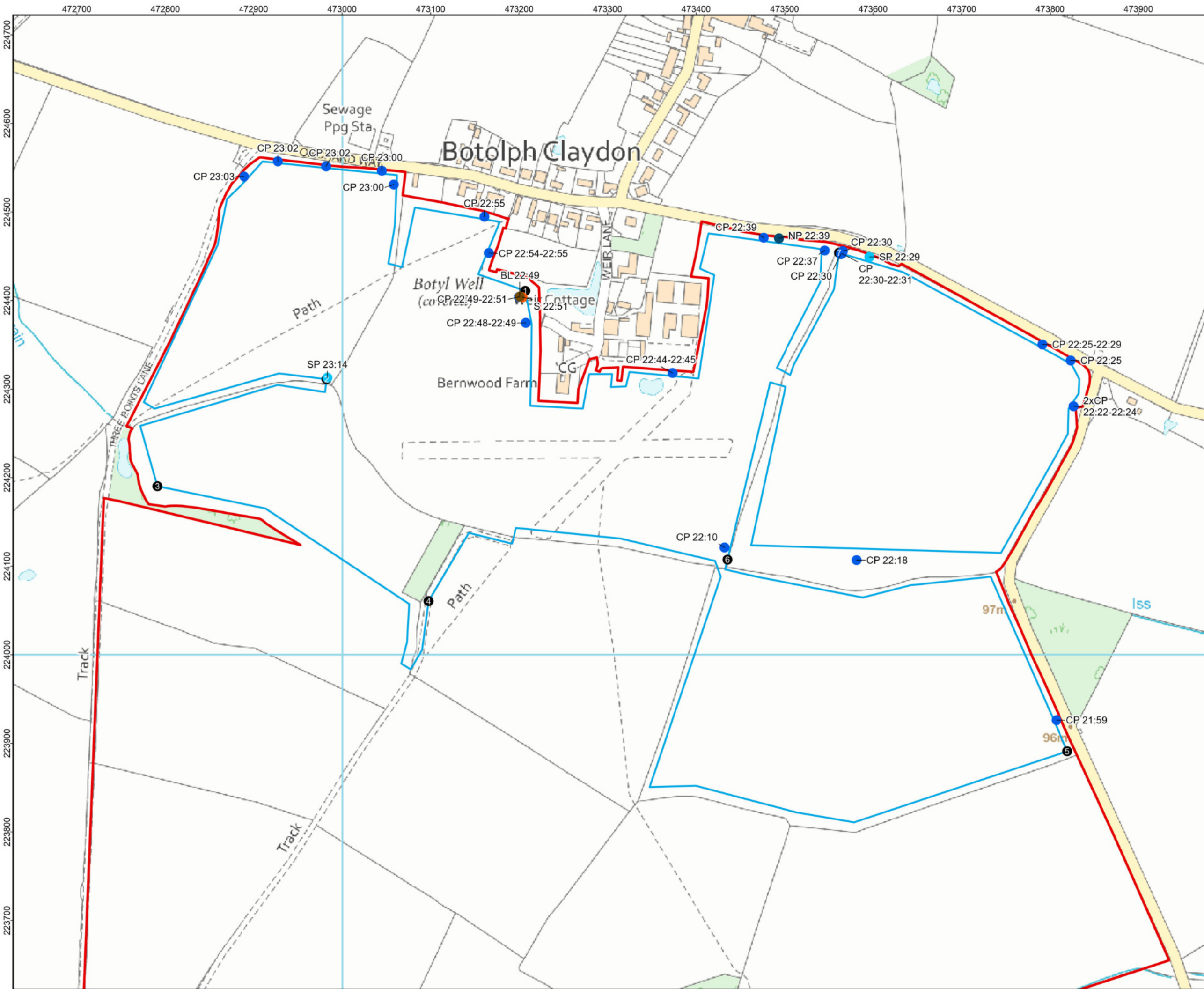
**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Bat Activity Survey Results Parcel 2 North  
Transect Visit 1 - 23rd May 2023

**FIGURE NUMBER:**  
Figure 8a





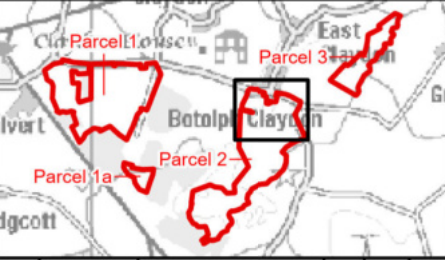


**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Nathusius' pipistrelle (NP)
  - Serotine (S)
  - Soprano pipistrelle (SP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

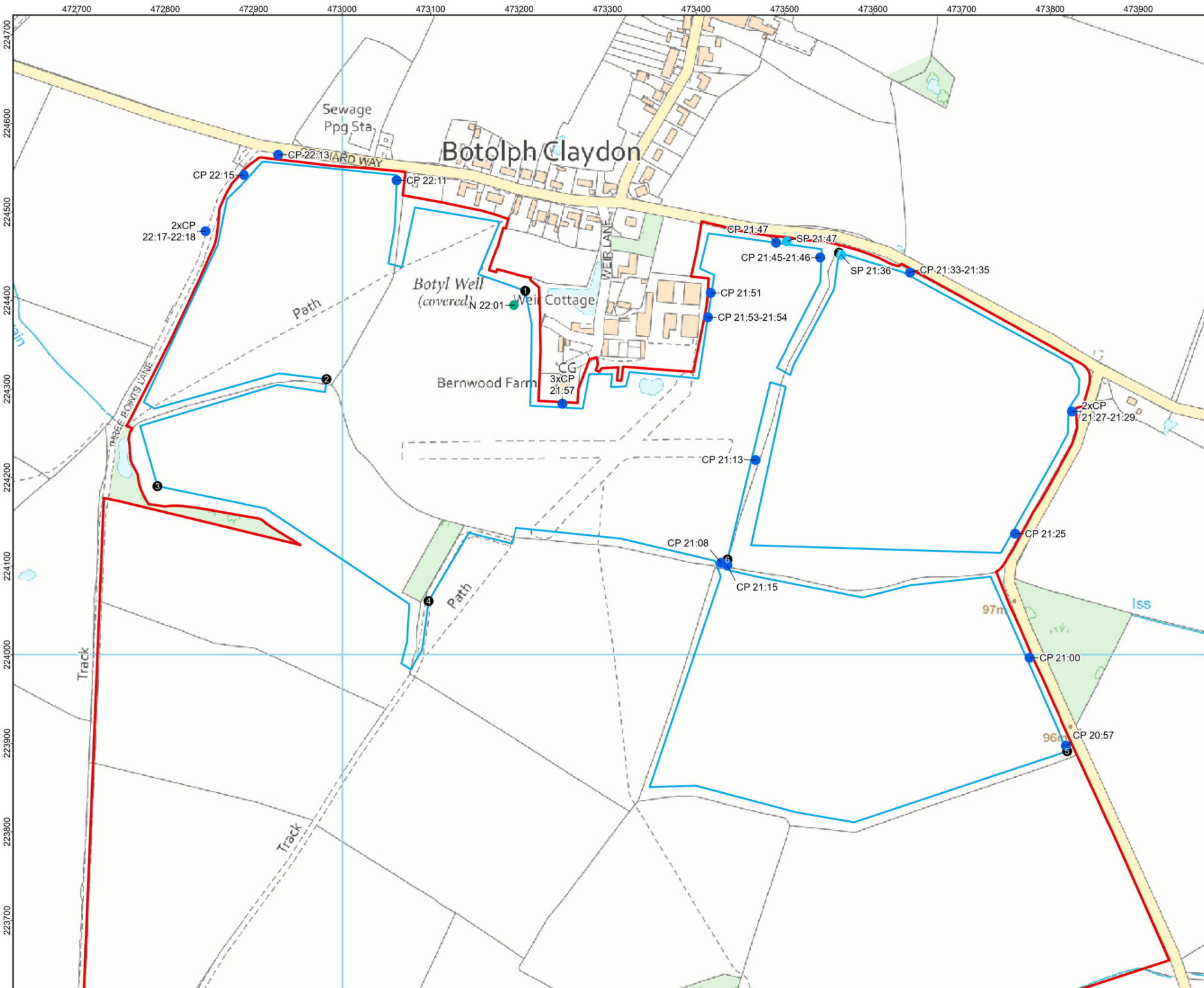
**TITLE:**  
Bat Activity Survey Results Parcel 2 North  
Transect Visit 2 - 10th July 2023

**FIGURE NUMBER:**  
Figure 8b

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

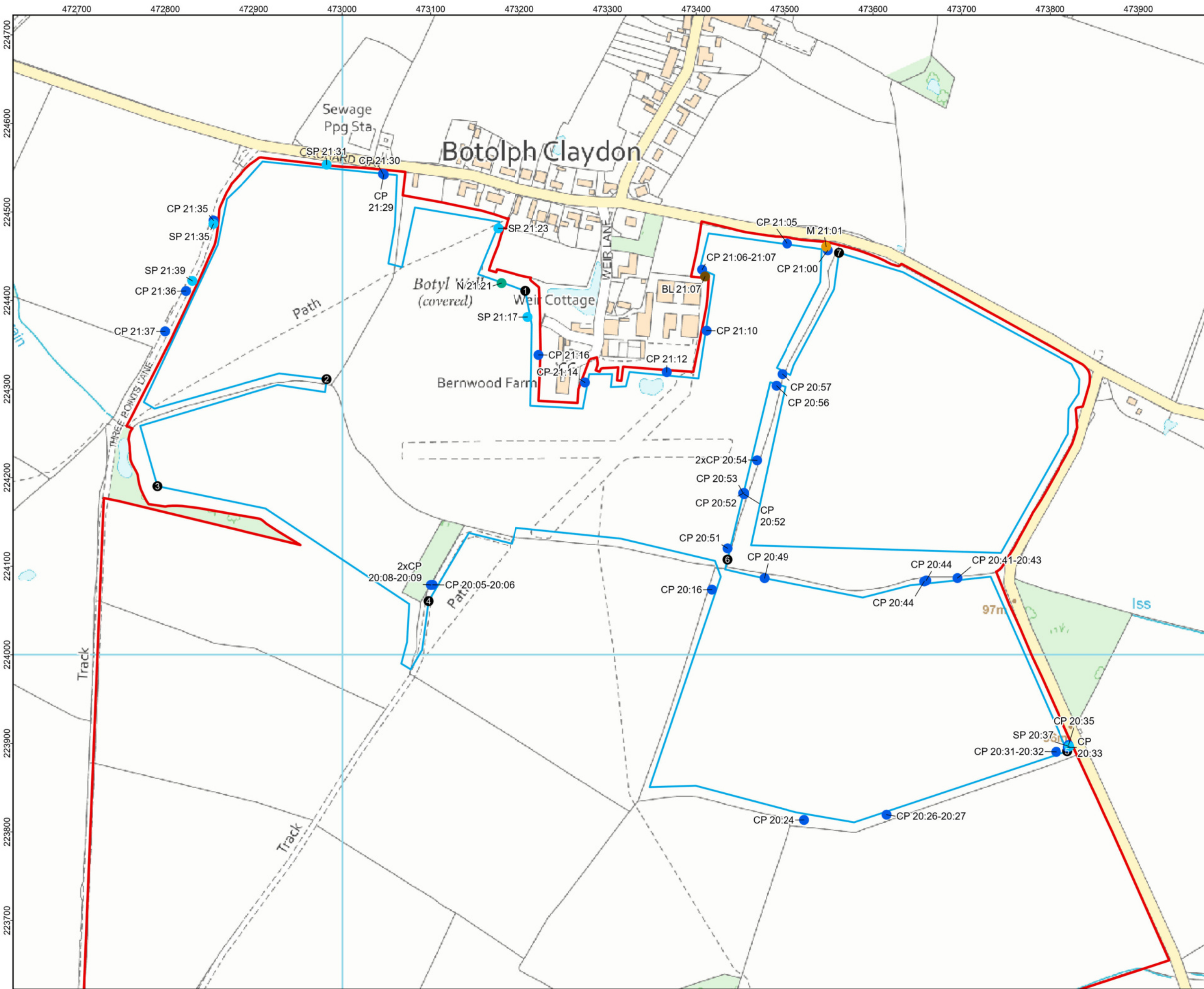
**TITLE:**  
Bat Activity Survey Results Parcel 2 North  
Transect Visit 3 - 22nd August 2023

**FIGURE NUMBER:**  
Figure 8c

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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Datum: OSGB 1936  
Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**

ROSEFIELD SOLAR FARM

**TITLE:**

Bat Activity Survey Results Parcel 2 North  
Transect Visit 4 - 7th September 2023

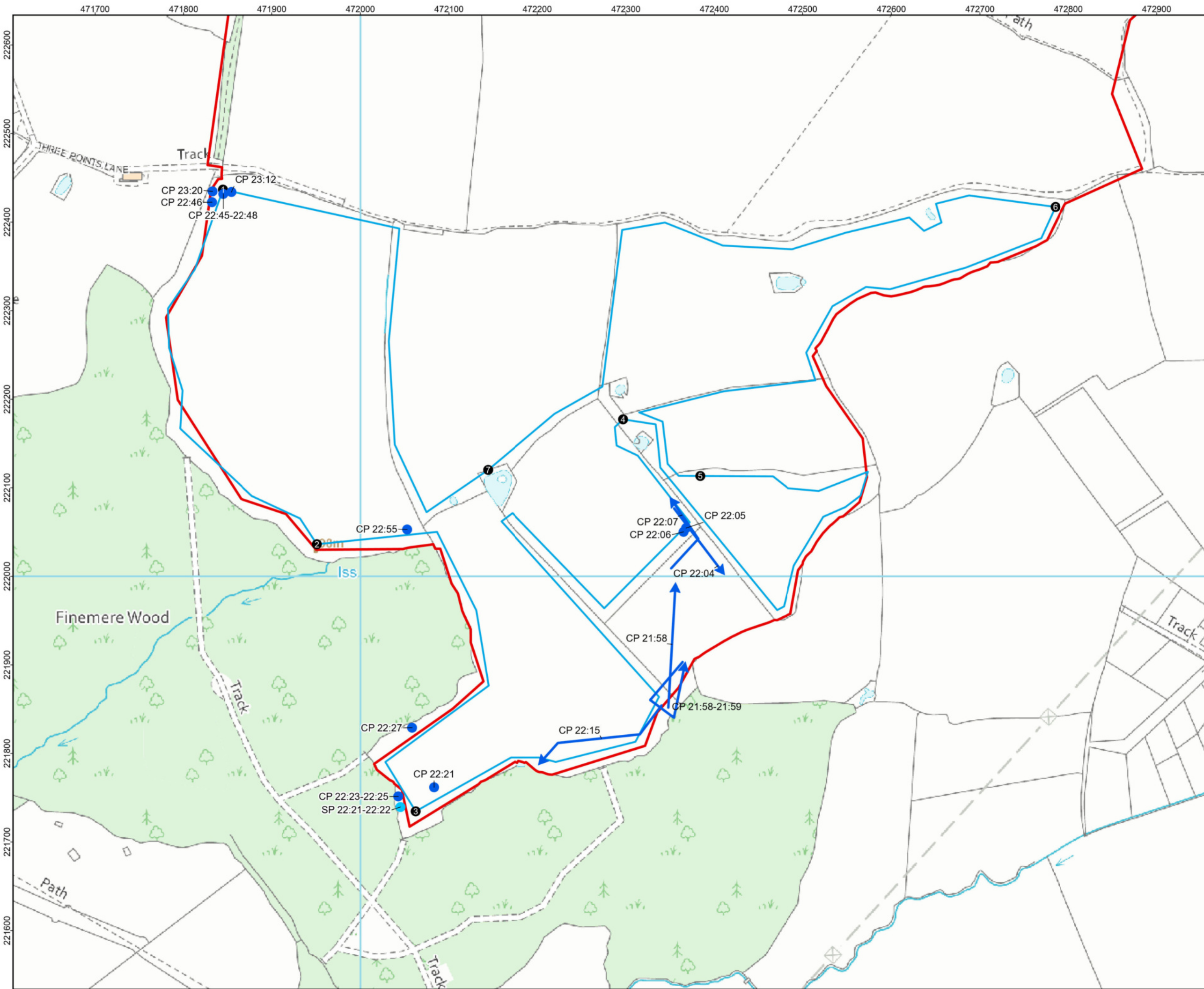
**FIGURE NUMBER:**

Figure 8d

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Datum: OSGB 1936  
Units: Meter

00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

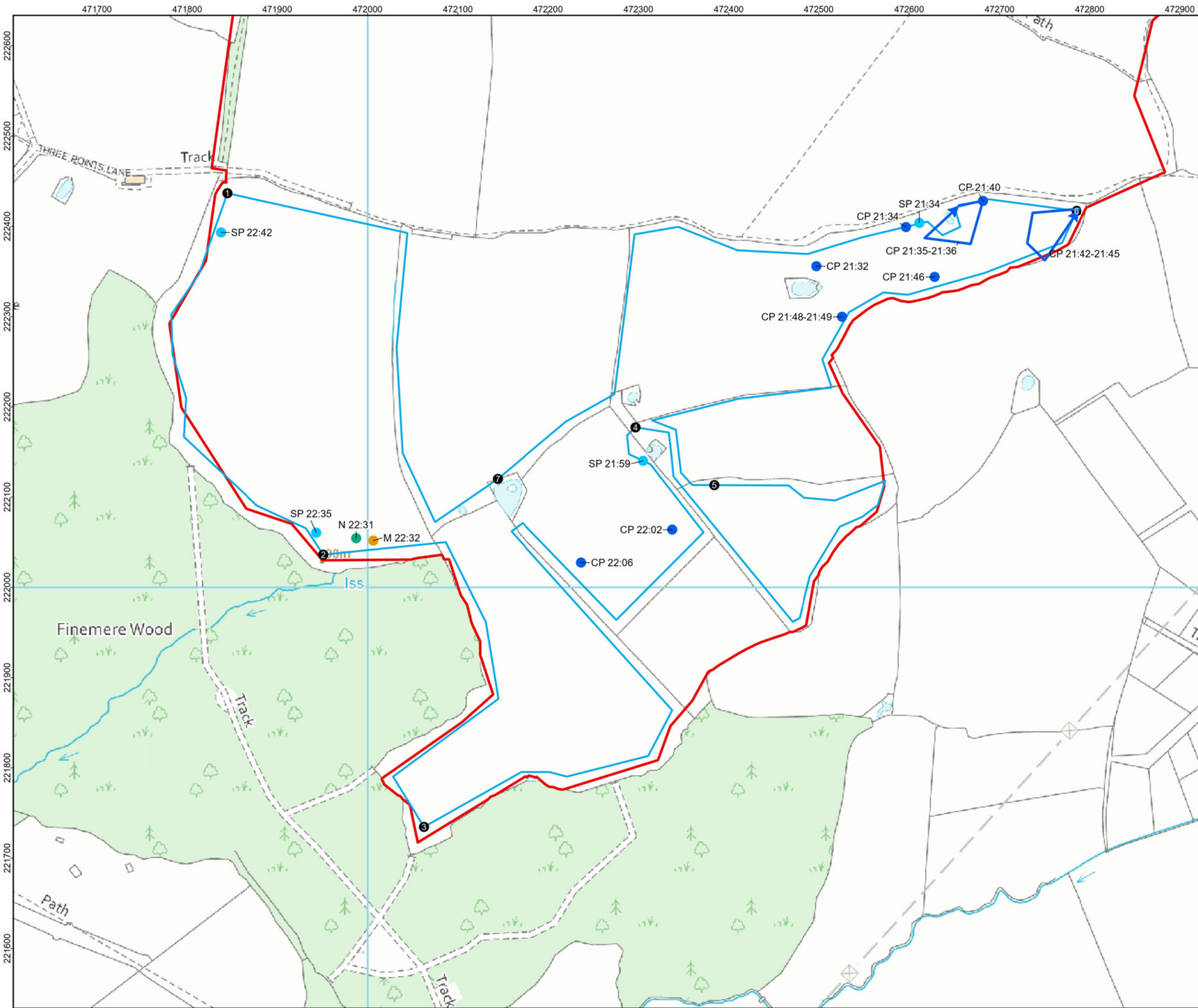
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southern Transect Visit 1 - 8th June 2023

**FIGURE NUMBER:**  
Figure 9a

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter

**Rev**   **Date**   **Description**   **Drn**   **Chk**   **App**

00	30/04/2024	Final	HW	BF	NS
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**Rosefield Solar Farm**

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

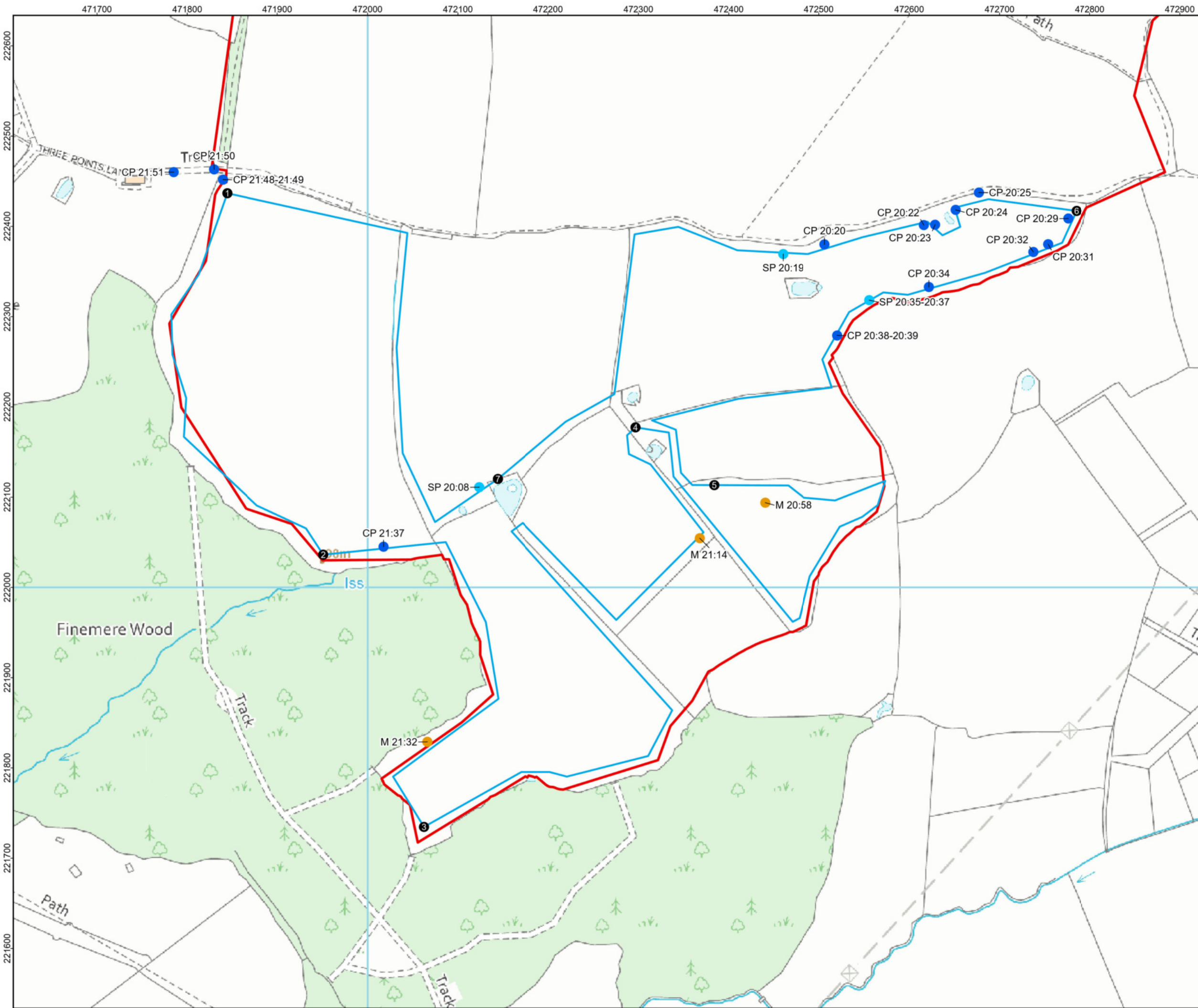
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southern Transect Visit 2 - 8th August 2023

**FIGURE NUMBER:**  
Figure 9b

0 50 100  
Meters  
Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Soprano pipistrelle (SP)

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00	30/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

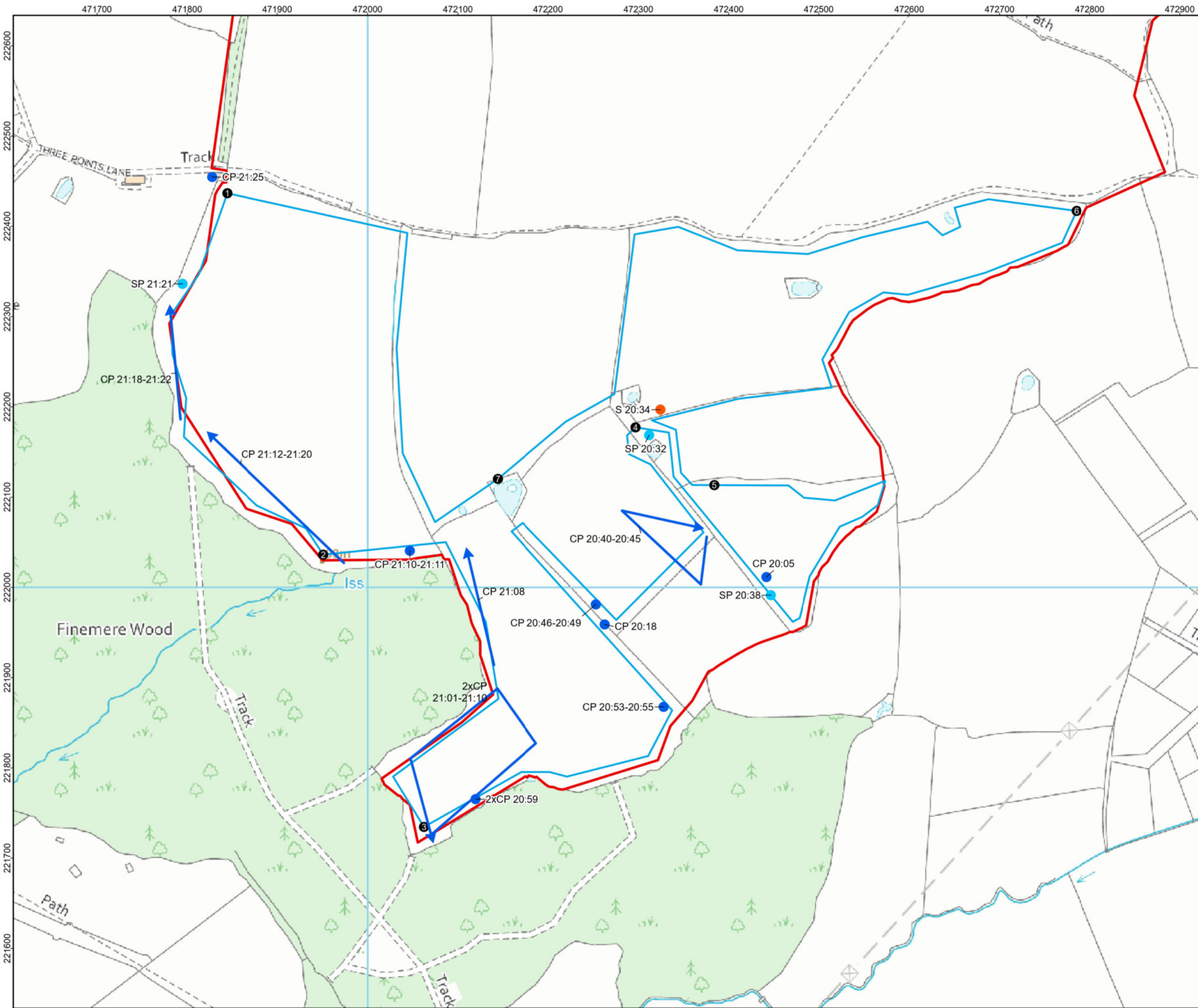
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southern Transect Visit 3 - 31st August 2023

**FIGURE NUMBER:**  
Figure 9c

Scale: 1:4,000 @ A3

REV 00



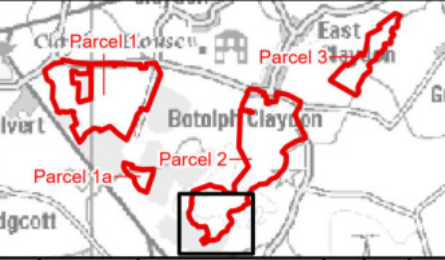


**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Serotine (S)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Datum: OSGB 1936  
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Rev	Date	Description	Drn	Chk	App
00	30/04/2024	Final	HW	BF	NS

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

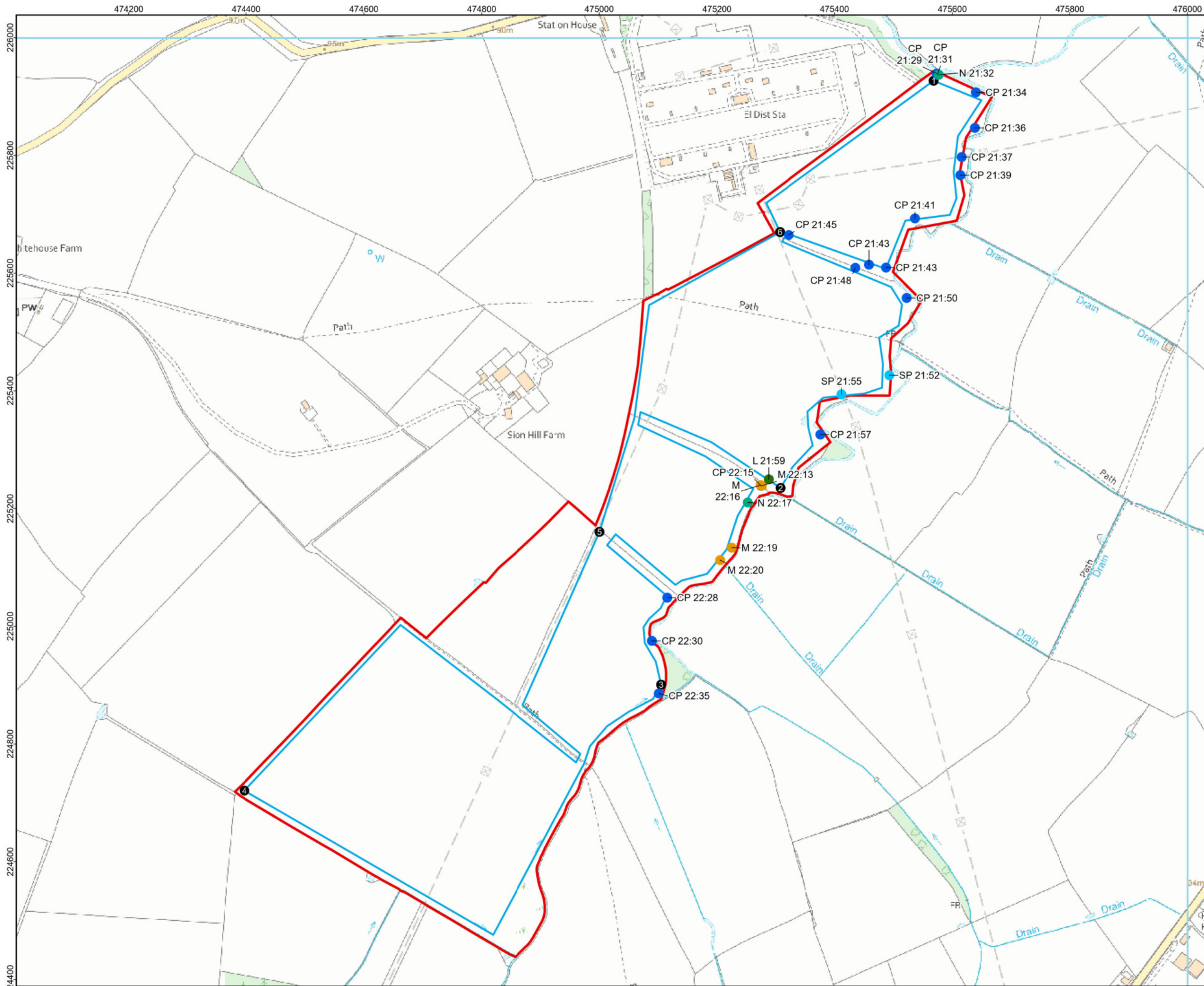
**TITLE:**  
Bat Activity Survey Results Parcel 2 Southern  
Transect Visit 4 - 7th September 2023

**FIGURE NUMBER:**  
Figure 9d

Scale: 1:4,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Leisler's (L)
  - Myotis (M)
  - Noctule (N)
  - Soprano pipistrelle (SP)

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**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

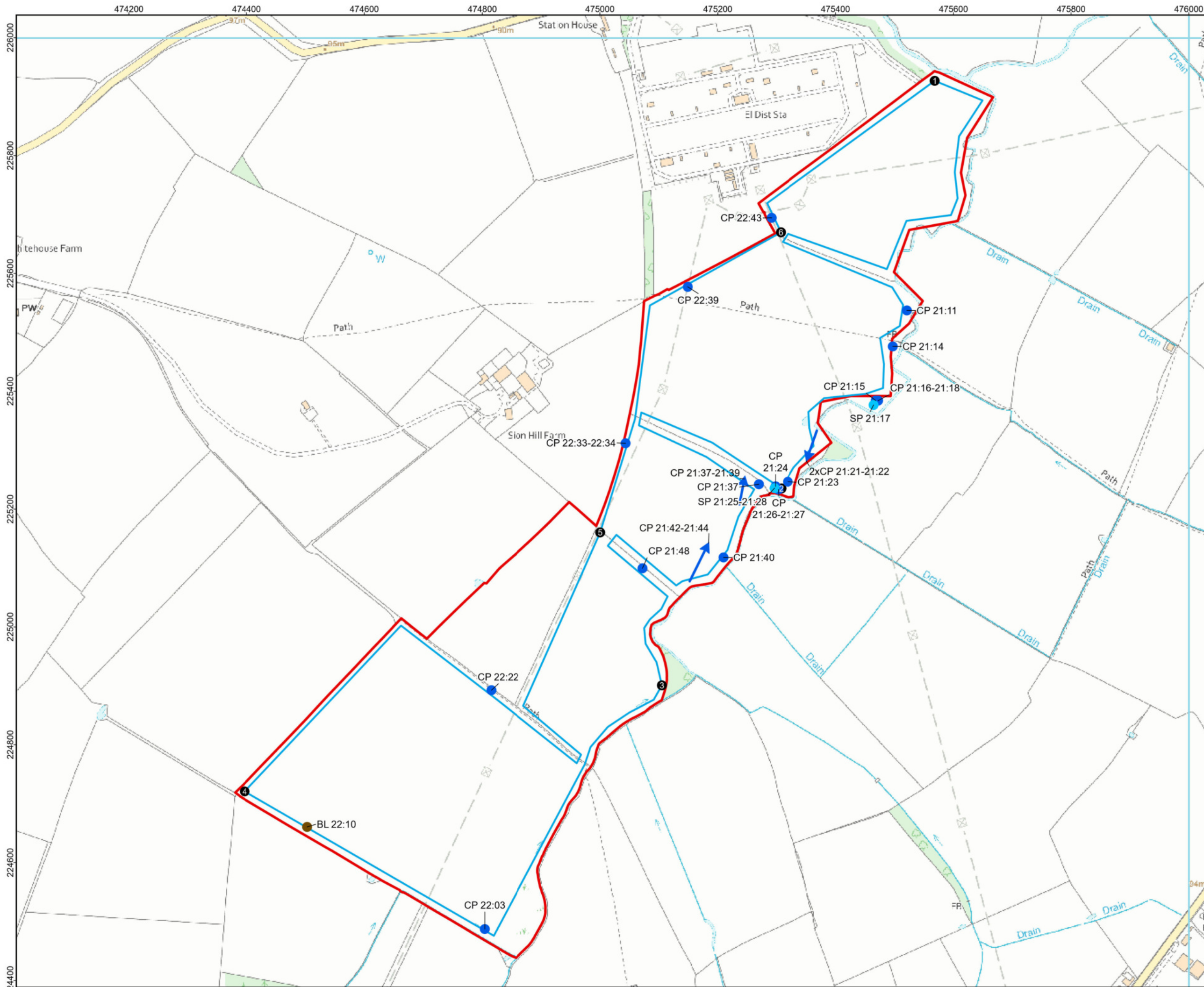
**TITLE:**  
Bat Activity Survey Results Parcel 3 Transect Visit 1 - 23rd May 2023

**FIGURE NUMBER:**  
Figure 10a

Scale: 1:6,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Brown long-eared (BL)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

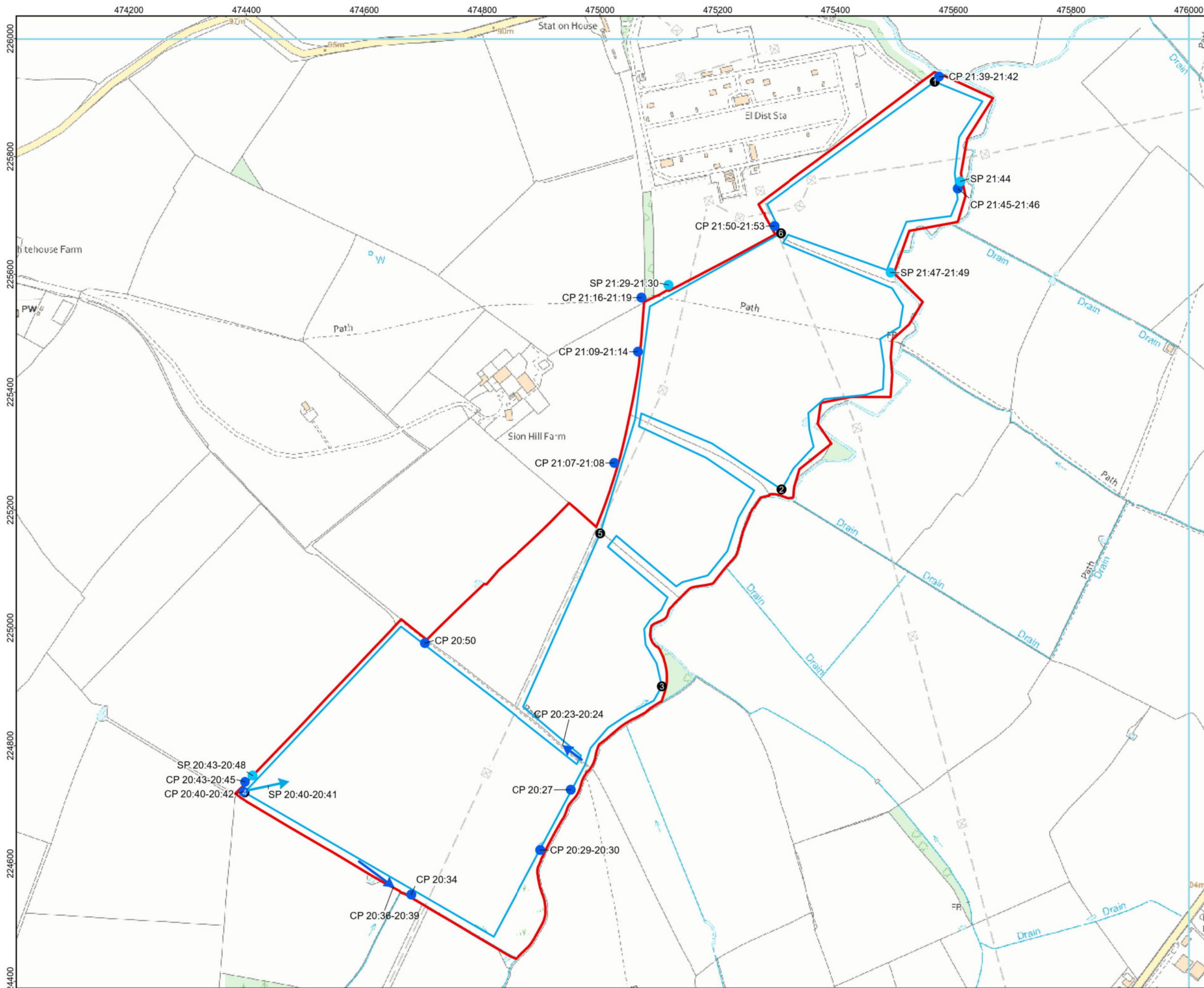
**TITLE:**  
Bat Activity Survey Results Parcel 3 Transect Visit 2 - 8th August 2023

**FIGURE NUMBER:**  
Figure 10b

0 50 100  
Meters  
Scale: 1:6,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)
  - Soprano pipistrelle (SP)

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Units: Meter

**Rev**   **Date**   **Description**   **Drn**   **Chk**   **App**

00	30/04/2024	Final	HW	BF	NS
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**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Bat Activity Survey Results Parcel 3 Transect Visit 3 - 31st August 2023

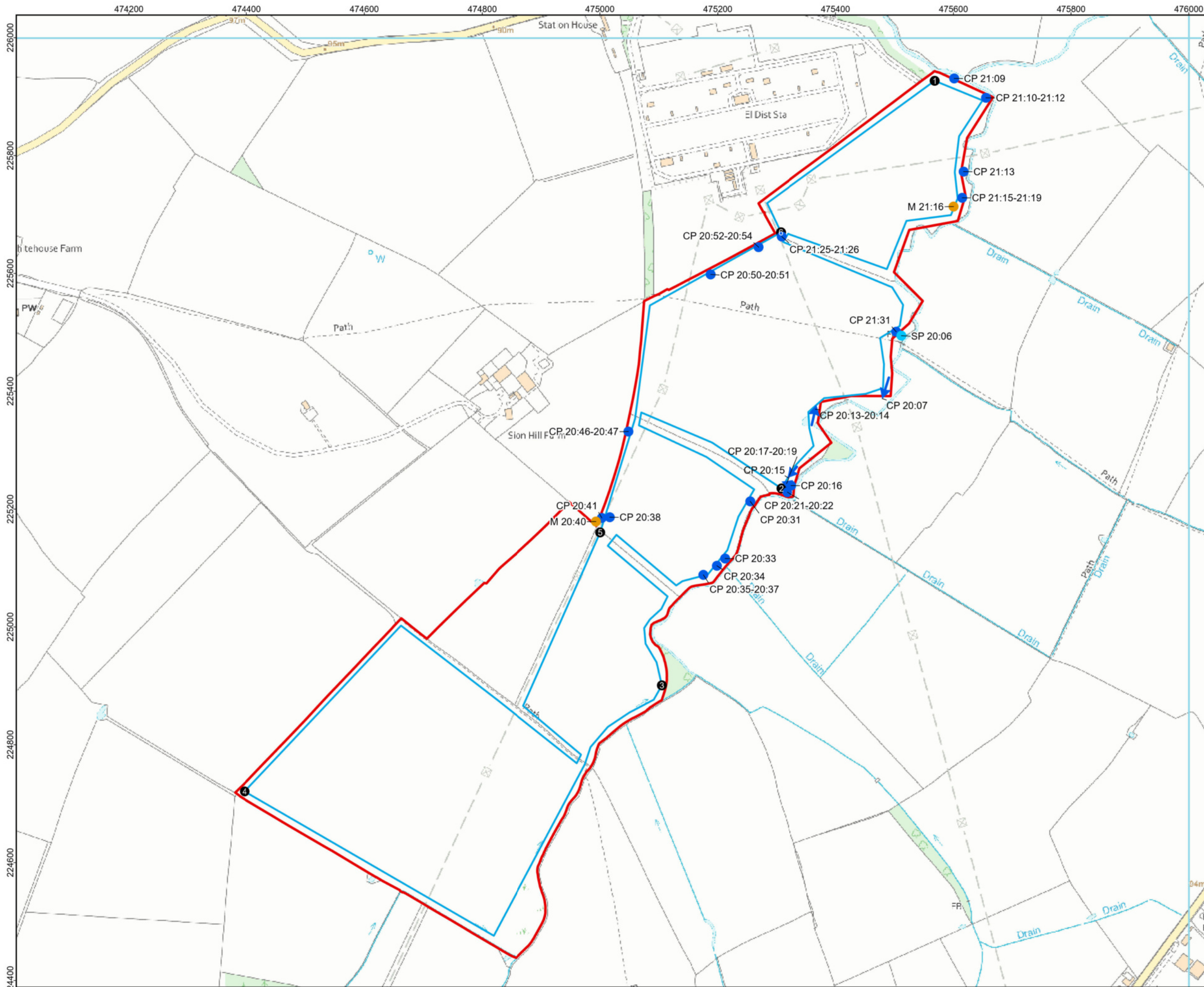
**FIGURE NUMBER:**  
Figure 10c

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Meters  
Scale: 1:6,000 @ A3

REV 00

Path: W:\Active Projects\Custodian Energy Solar Farm\GIS\Reformat01\_Maps\Custodian\_Bats\Activity.aprx\Map - Bat Activity





**LEGEND:**

- Site Boundary
- Transect Route
- Stopping Point
- Bat Record (Heard not seen)
  - Common pipistrelle (CP)
  - Myotis (M)
  - Soprano pipistrelle (SP)
- Bat Record (Heard and Seen)
  - Common pipistrelle (CP)

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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**

ROSEFIELD SOLAR FARM

**TITLE:**

Bat Activity Survey Results Parcel 3 Transect Visit 4 - 7th September 2023

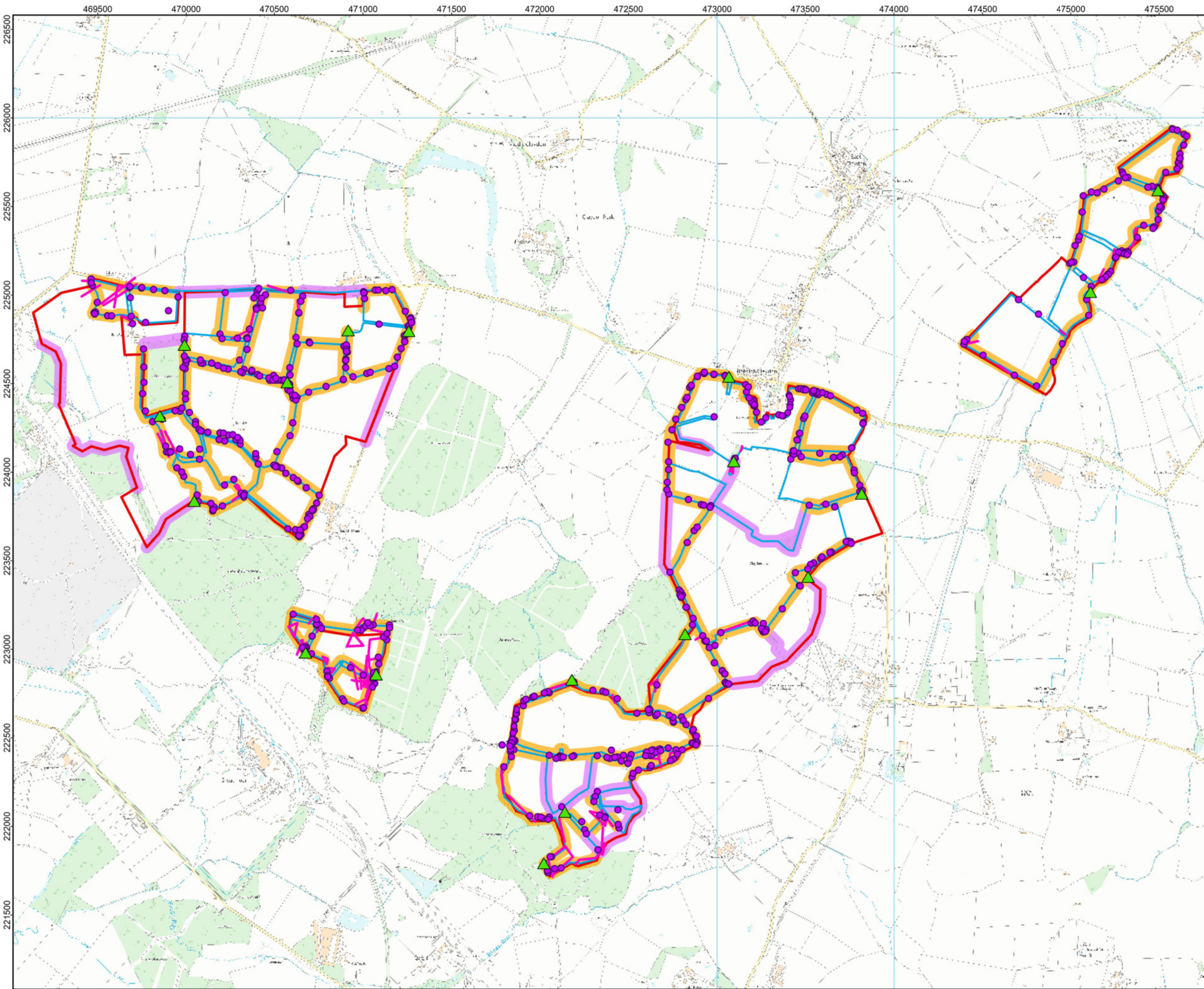
**FIGURE NUMBER:**

Figure 10d

Scale: 1:6,000 @ A3

REV 00





- LEGEND:**
- Site Boundary
  - Transect Route
  - Bat Registration
  - Bat Flightline
  - SM4 Locations with High Levels of Bat Activity Recorded
  - Areas of Key Bat Activity Recorded During Walked Transect Surveys
  - Areas of Anticipated Key Bat Habitat Outside of Walked Transect Survey Areas

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Coordinate System: British National Grid  
Projection: Transverse Mercator  
Datum: OSGB 1936  
Units: Meter



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Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

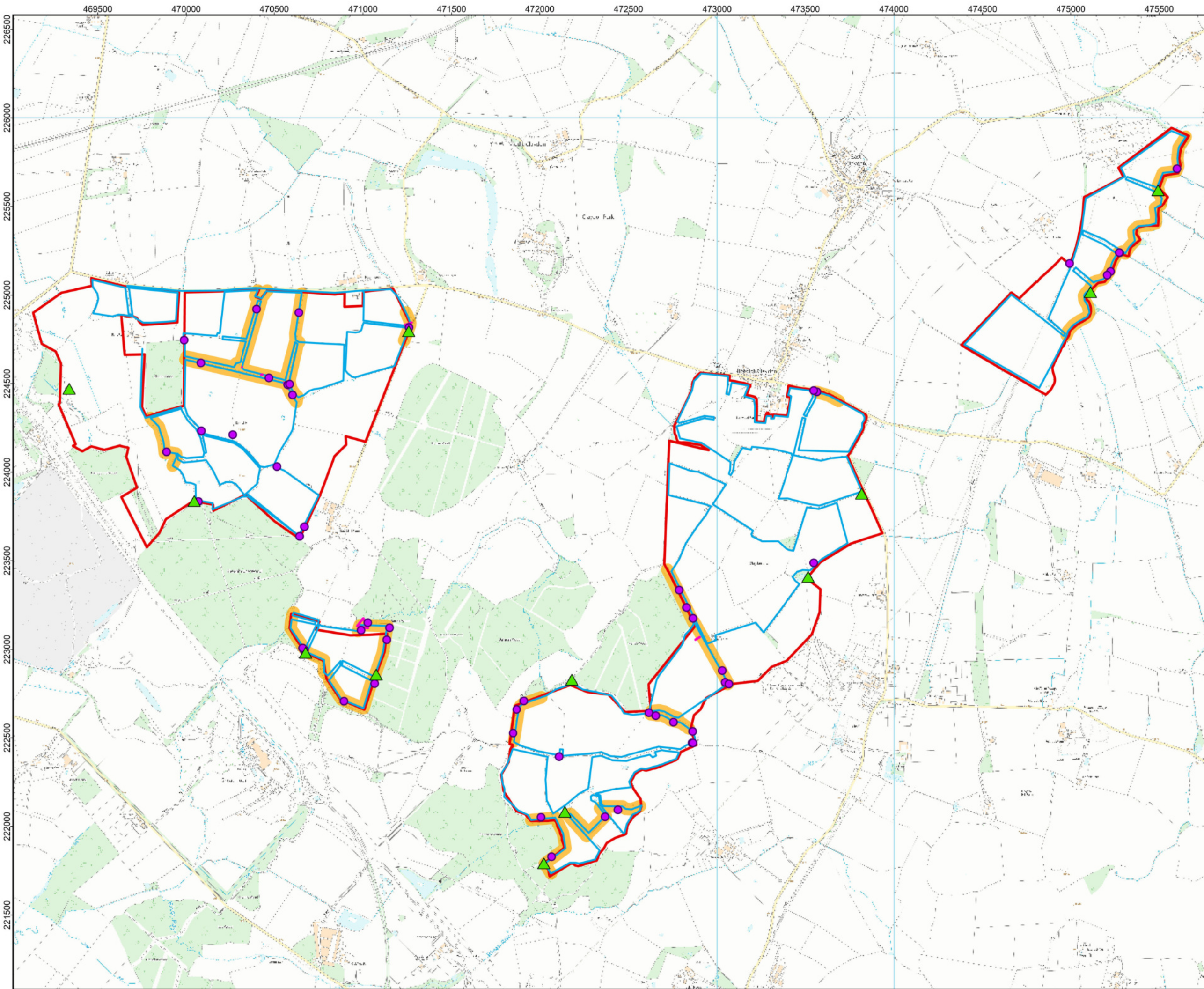
**TITLE:**  
Bat Activity Key Areas - All Species

**FIGURE NUMBER:**  
Figure 11

Scale: 1:20,000 @ A3

REV 00





- LEGEND:**
- Site Boundary
  - Transect Route
  - Myotis Registration
  - Myotis Flightline
  - High Levels of Myotis Recorded on SM4 Detectors
  - Key Areas of Myotis Activity Recorded During the Walked Transects

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Rev	Date	Description	Drm	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

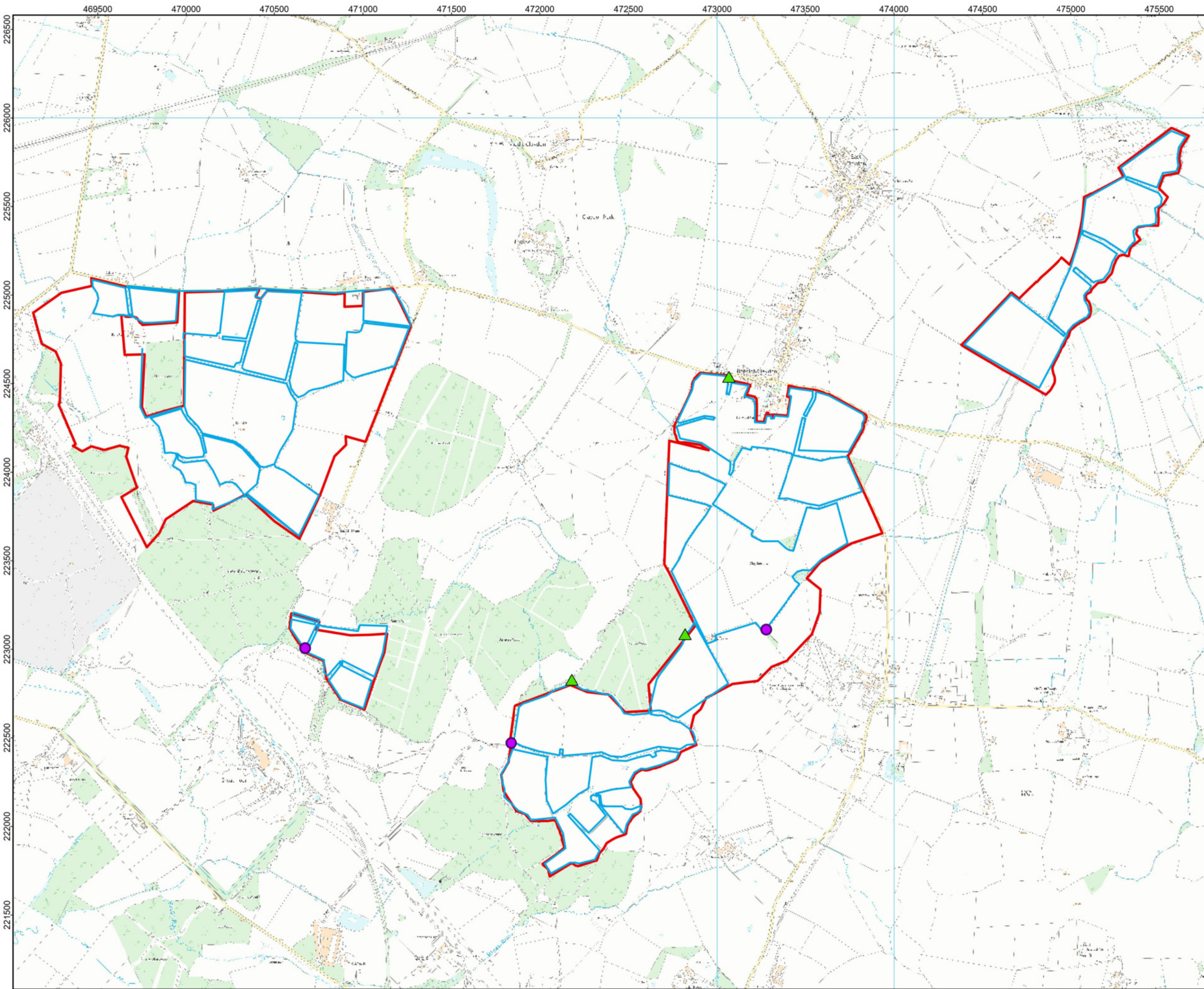
**TITLE:**  
Myotis Species Activity Summary

**FIGURE NUMBER:**  
Figure 12

Scale: 1:20,000 @ A3

REV 00





**LEGEND:**

- Site Boundary
- Transect Route
- Barbastelle Registration
- High Levels of Barbastelle Recorded on SM4 Detectors

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Datum: OSGB 1936  
Units: Meter



00	29/04/2024	Final	HW	BF	NS
Rev	Date	Description	Drn	Chk	App

**Rosefield Solar Farm**

**DOCUMENT:**  
ROSEFIELD SOLAR FARM

**TITLE:**  
Barbastelle Species Activity Summary

**FIGURE NUMBER:**  
Figure 13

Scale: 1:20,000 @ A3

REV 00



# **Annex B: Bat Activity Walked Transect Full Results Tables**





## Annex B Bat Activity Walked Transect Full Results Tables

### Parcel 1, West Transect, Visit 1: Dusk 26 July 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:31	Noctule	1	Brief pass	Heard not seen	1-2
21:40	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:43	Serotine	1	Brief pass	Heard not seen	2
21:44	Noctule	1	Brief pass	Heard not seen	2
21:51	Common pipistrelle	1	Social calls	Heard not seen	2-3
21:58	Common pipistrelle	1	Brief pass	Heard not seen	3
22:02	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:04	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:07	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:08	Soprano pipistrelle	1	Brief pass	Heard not seen	3-4
22:09	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:10	Common pipistrelle	2	Brief pass	Heard not seen	4
22:14	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:17	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:18	Brown long-eared bat	1	Brief pass	Heard not seen	4-5
22:19	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:20	Common pipistrelle	1	Brief pass	Heard not seen	4-5

Time	Species	Number of Bats	Activity	Observation	Transect Point
22:28	Brown long-eared bat	1	Brief pass	Heard not seen	5
22:32	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:35	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:36	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:37	Soprano pipistrelle	1	Brief pass	Heard not seen	5-6
22:39	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:40	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:41	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:47	Common pipistrelle	1	Brief pass	Heard not seen	6
22:52	Common pipistrelle	1	Brief pass with social calls	Heard not seen	6-7
22:57	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:59	<i>Myotis</i> species	1	Brief pass	Heard not seen	7
23:09	Common pipistrelle	1	Brief pass	Heard not seen	6-5
23:14 – 23:18	Common pipistrelle	1	Foraging passes	Heard not seen	6-5

Parcel 1, West Transect, Visit 2: Dusk 7 September 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
19:46	Noctule	1	Brief pass	Heard not seen	7-6
19:52	Soprano pipistrelle	1	Brief pass	Heard not seen	6
19:52	Noctule	1	Brief pass	Heard not seen	6
20:06	Soprano pipistrelle	2	Brief pass	Heard not seen	6-5
20:08	Soprano pipistrelle	1	Brief pass	Heard and seen	5
20:09	Common pipistrelle	1	Brief pass	Heard not seen	5
20:10	Soprano pipistrelle	1	Foraging	Heard not seen	5
20:13	Soprano pipistrelle	1	Brief pass	Heard not seen	5-4
20:16	Common pipistrelle	1	Brief pass	Heard not seen	5-4
20:16 – 20:17	Soprano pipistrelle	1	Brief pass	Heard not seen	5-4
20:17	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-4
20:18	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-4
20:19	Common pipistrelle	1	Brief pass	Heard not seen	5-4
20:23	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-4
20:24	Common pipistrelle	1	Brief pass	Heard not seen	5-4
20:24	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-4
20:25	Common pipistrelle	1	Brief pass	Heard not seen	5-4
20:27	Common pipistrelle	1	Brief pass	Heard not seen	5-4
20:30 – 20:31	Common pipistrelle	2	Brief pass	Heard not seen	4
20:33	Common pipistrelle	1	Brief pass	Heard not seen	4-3



Time	Species	Number of Bats	Activity	Observation	Transect Point
20:36	Common pipistrelle	1	Brief pass	Heard not seen	4-3
20:37	Brown long-eared bat	1	Brief pass	Heard not seen	4-3
20:38	Common pipistrelle	1	Brief pass	Heard not seen	4-3
20:38	Soprano pipistrelle	1	Brief pass	Heard not seen	4-3
20:39	Common pipistrelle	1	Brief pass	Heard and seen	4-3
20:52	Soprano pipistrelle	1	Brief pass	Heard not seen	3-2
20:53	Noctule	1	Brief pass	Heard not seen	2
20:53	Common pipistrelle	1	Social calls	Heard not seen	2
20:57	Noctule	1	Brief pass	Heard not seen	2-1
20:58	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-1
21:06	Common pipistrelle	1	Brief pass	Heard not seen	2-1
21:07	Soprano pipistrelle	1	Social calls	Heard not seen	2-1
21:08	Soprano pipistrelle	1	Social calls	Heard not seen	2-1
21:13	Common pipistrelle	1	Brief pass	Heard not seen	2-1
21:16	Soprano pipistrelle	1	Brief pass	Heard not seen	1
21:27	Soprano pipistrelle	1	Brief pass	Heard not seen	1-7
21:28	Soprano pipistrelle	1	Social calls	Heard not seen	1-7
21:30	Soprano pipistrelle	1	Social calls and foraging	Heard not seen	7
21:32	Soprano pipistrelle	1	Social calls	Heard not seen	7

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:41	Common pipistrelle	1	Brief pass	Heard not seen	7-8
21:44	Soprano pipistrelle	1	Social calls	Heard not seen	7-8

Parcel 1, West Transect, Visit 3: Dusk 8 June 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:37	Noctule	1	Commuting	Heard and seen	2-3
21:39	Noctule	1	Commuting	Heard and seen	2-3
21:39	Noctule	1	Commuting	Heard and seen	2-3
21:57	Soprano pipistrelle	1	Commuting	Heard and seen	4
21:57	Common pipistrelle	1	Brief pass	Heard not seen	4
21:58	Soprano pipistrelle	1	Foraging	Heard and seen	4
21:58	Common pipistrelle	1	Foraging	Heard and seen	4
22:21 - 22:24	Soprano pipistrelle	1	Foraging	Heard and seen	6-7
22:27	<i>Myotis</i> species	1	Foraging	Heard and seen	6-7
	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:27 – 22:29	Soprano pipistrelle	1	Foraging	Heard not seen	6-7
22:31 – 22:32	Soprano pipistrelle	1	Brief pass	Heard not seen	6-7
22:31 -22:32	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:33	Soprano pipistrelle	1	Brief pass	Heard not seen	6-7
22:33	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:36	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:36 – 22:37	<i>Myotis</i> species	Multiple	Foraging	Heard not seen	6-7
22:38	Soprano pipistrelle	1	Brief pass	Heard not seen	7
22:47	Soprano pipistrelle	1	Brief pass	Heard not seen	7-8
22:57	<i>Myotis</i> species	1	Brief pass	Heard not seen	6
22:58	Common pipistrelle	1	Brief pass	Heard not seen	6-5
23:03	Common pipistrelle	1	Foraging	Heard not seen	6-5
23:03	Soprano pipistrelle	1	Foraging	Heard not seen	6-5
23:05	Common pipistrelle	1	Foraging	Heard not seen	6-5
23:06	Common pipistrelle	1	Foraging	Heard not seen	6-5
23:07	<i>Myotis</i> species	1	Brief pass	Heard not seen	5
23:14	Common pipistrelle	1	Brief pass	Heard not seen	4
23:19	Soprano pipistrelle	1	Foraging	Heard not seen	4-3
23:19	Common pipistrelle	1	Foraging	Heard not seen	4-3
23:22	<i>Myotis</i> species	1	Foraging	Heard not seen	4-3



Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>23:22</b>	Common pipistrelle	1	Foraging	Heard not seen	4-3
<b>23:23</b>	Soprano pipistrelle	1	Foraging	Heard not seen	4-3
<b>23:23</b>	Soprano pipistrelle	1	Brief pass	Heard not seen	4-3
<b>23:24</b>	Common pipistrelle	1	Brief pass	Heard not seen	4-3
<b>23:33 – 23:34</b>	Common pipistrelle	1	Foraging	Heard not seen	2-1
<b>23:35 – 23:36</b>	Leisler's bat	1	Commuting	Heard not seen	2-1
<b>23:47</b>	Common pipistrelle	1	Foraging	Heard not seen	2-1

Parcel 1, West Transect, Visit 4: Dusk 6 July 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:35	Noctule	1	Brief pass	Heard not seen	2
21:37 – 21:38	Noctule	1	Foraging	Heard not seen	2-3
22:05 – 22:07	Common pipistrelle	1	Foraging	Heard and seen	4
22:12	Noctule	1	Commuting	Heard not seen	4-5
22:18	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:22	Noctule	1	Brief pass	Heard not seen	5-6
22:24	Common pipistrelle	1	Brief pass	Heard not seen	6
22:48	Noctule	1	Brief pass	Heard not seen	7-8
22:49	Common pipistrelle	1	Brief pass	Heard not seen	7-8
22:50 – 22:51	Common pipistrelle	1	Foraging	Heard not seen	8
22:50	Noctule	1	Brief pass	Heard not seen	8
22:50	Soprano pipistrelle	1	Brief pass	Heard not seen	8
22:50	<i>Myotis</i> species	1	Brief pass	Heard not seen	8
22:53	Common pipistrelle	2	Foraging	Heard not seen	8-5
22:56	Soprano pipistrelle	2	Foraging	Heard not seen	8-5
22:56	Common pipistrelle	2	Foraging	Heard not seen	8-5
22:58 – 22:59	Common pipistrelle	1	Brief pass	Heard not seen	8-5
23:01	Common pipistrelle	1	Brief pass	Heard not seen	6
23:02	Common pipistrelle	1	Brief pass	Heard not seen	6
23:08	Common pipistrelle	1	Brief pass	Heard not seen	6-5
23:10	<i>Myotis</i> species	1	Brief pass	Heard not seen	5
23:10	Common pipistrelle	1	Brief pass	Heard not seen	5
23:12	Soprano pipistrelle	1	Brief pass	Heard not seen	5
23:12	Common pipistrelle	1	Brief pass	Heard not seen	5
23:13 – 23:15	Common pipistrelle	1	Foraging	Heard not seen	5
23:13 – 23:14	Soprano pipistrelle	1	Foraging	Heard not seen	5

Time	Species	Number of Bats	Activity	Observation	Transect Point
23:13	Brown long-eared bat	1	Foraging	Heard not seen	5
23:23	Noctule	1	Brief pass	Heard not seen	4
23:27	Common pipistrelle	1	Brief pass	Heard not seen	4-3
23:37	Common pipistrelle	1	Brief pass	Heard not seen	3-2



### East Transect, Visit 1: Dusk 7 September 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
19:53	Noctule	1	Brief pass	Heard not seen	4
20:02	Soprano pipistrelle	1	Brief pass	Heard not seen	4-3
20:03	Soprano pipistrelle	2	Foraging	Heard not seen	4-3
20:05	Soprano pipistrelle	1	Brief pass	Heard not seen	4-3
20:09-20:10	Soprano pipistrelle	1	Foraging	Heard not seen	4-3
20:16	Common pipistrelle	1	Foraging	Heard not seen	3-2
20:18 – 20:19	Common pipistrelle	2	Foraging	Heard not seen	3-2
20:18	Common pipistrelle	1	Brief pass	Heard not seen	3-2
20:20	Pipistrelle species	1	Brief pass	Heard not seen	3-2
20:22	Common pipistrelle	2	Brief pass	Heard not seen	2
20:22	Soprano pipistrelle	1	Brief pass	Heard not seen	2
20:25 – 20:30	Common pipistrelle	1	Foraging	Heard not seen	2-1
20:33	Common pipistrelle	1	Foraging	Heard not seen	2-1
20:39	<i>Myotis</i> species	1	Brief pass	Heard not seen	1
20:47	Common pipistrelle	1	Foraging	Heard not seen	7
20:51 – 20:52	Common pipistrelle	2	Foraging	Heard not seen	7-6
20:54	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:54	Noctule	1	Brief pass	Heard not seen	7-6
20:58 – 20:59	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:03	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:05	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:07 – 21:08	Common pipistrelle	2	Foraging	Heard not seen	6-5
21:09	Soprano pipistrelle	1	Foraging	Heard not seen	6-5
21:11 – 21:13	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:12 – 21:13	Soprano pipistrelle	1	Foraging	Heard not seen	6-5
21:17	Common pipistrelle	1	Foraging	Heard not seen	5
21:21	Soprano pipistrelle	1	Foraging	Heard not seen	5-4
21:22	Common pipistrelle	1	Brief pass	Heard not seen	5-4
21:24	Pipistrelle species	1	Brief pass	Heard not seen	5-4
21:26 to 21:27	Common pipistrelle	1	Foraging	Heard not seen	5-4

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:32	Common pipistrelle	1	Brief pass	Heard not seen	4-3
21:35	Common pipistrelle	1	Brief pass	Heard not seen	4-3
21:38	<i>Myotis</i> species	1	Foraging	Heard not seen	6-7
21:39 – 21:41	Common pipistrelle	1	Foraging	Heard not seen	6-7

### East Transect, Visit 2: Dusk 8 June 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>21:14</b>	Soprano pipistrelle	1	Commuting	Heard and seen	1-2
<b>21:39</b>	Noctule	1	Commuting	Heard and seen	2-3
<b>21:53</b>	Soprano pipistrelle	1	Foraging	Heard not seen	4-3
<b>22:28</b>	Common pipistrelle	1	Foraging	Heard and seen	5-6
<b>22:34</b>	Common pipistrelle	1	Foraging	Heard and seen	5-6
<b>22:38</b>	Common pipistrelle	1	Foraging	Heard and seen	6
<b>22:41</b>	Soprano pipistrelle	1	Foraging	Heard not seen	6
<b>22:42</b>	Leisler's bat	1	Foraging	Heard not seen	6-7
<b>22:55</b>	Common pipistrelle	1	Foraging	Heard not seen	7
<b>23:10</b>	Soprano pipistrelle	1	Commuting	Heard not seen	2-1



### East Transect, Visit 3: Dusk 6 July 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
22:25	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:28	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-3
22:37	Soprano pipistrelle	1	Brief pass	Heard not seen	2-3
22:40	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:44	<i>Myotis</i> species	1	Brief pass	Heard and seen	2-3
22:45	Common pipistrelle	1	Brief pass	Heard and seen	2-3
22:48	<i>Myotis</i> species	1	Brief pass	Heard and seen	3
22:51	Common pipistrelle	1	Brief pass	Heard not seen	3-4
23:00 – 23:01	<i>Myotis</i> species	1	Brief pass	Heard not seen	3-4
23:05	Common pipistrelle	1	Brief pass	Heard not seen	4
23:05	Soprano pipistrelle	1	Brief pass	Heard not seen	4
23:15	Common pipistrelle	1	Brief pass	Heard not seen	4-5
23:24	Common pipistrelle	1	Brief pass	Heard not seen	4-5

### North Transect, Visit 1: Dusk 23 May 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:16	Noctule	1	Foraging	Heard not seen	4-1
21:19	Noctule	1	Foraging	Heard not seen	4-1
21:22	Noctule	1	Foraging	Heard not seen	4-1
21:24	Noctule	1	Foraging	Heard not seen	4-1
21:26	Noctule	1	Commuting	Heard not seen	4-1
21:27	Noctule	1	Commuting	Heard not seen	4-1
21:28	Common pipistrelle	1	Brief pass	Heard not seen	1
21:29	Noctule	1	Commuting	Heard not seen	1
21:30	Noctule	1	Foraging	Heard not seen	1
21:31	Common pipistrelle	1	Commuting	Travelling east to west	1
21:44	Common pipistrelle	1	Brief pass	Heard not seen	2
21:46	Common pipistrelle	1	Brief pass	Heard not seen	2
21:53	Soprano pipistrelle	1	Brief pass	Heard not seen	3
21:58	Common pipistrelle	1	Brief pass	Heard not seen	3
22:03	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:18	Common pipistrelle	2	Brief pass	Heard not seen	8
22:20	Common pipistrelle	1	Brief pass	Heard not seen	8-5
22:28	Common pipistrelle	1	Brief pass	Heard not seen	8-5
22:29	Common pipistrelle	1	Foraging	Heard not seen	8-5
22:32	Common pipistrelle	1	Foraging	Heard not seen	5
22:43	Common pipistrelle	1	Foraging	Heard not seen	7-8

### North Transect, Visit 2: Dusk 10 July 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:25	Noctule	1	Brief pass	Heard not seen	4
21:30	Noctule	1	Commuting north	Heard and seen	4-1
21:44	Noctule	1	Brief pass	Heard not seen	1
22:05	Soprano pipistrelle	1	Brief pass	Heard not seen	3
22:23	Common pipistrelle	1	Brief pass	Heard and seen	8
22:23	Brown long-eared bat	1	Brief pass	Heard not seen	8
22:25	Common pipistrelle	1	Brief pass	Heard not seen	8
22:27	Common pipistrelle	1	Brief pass	Heard not seen	8-5
22:31	Common pipistrelle	1	Brief pass	Heard not seen	8-5
22:34	Common pipistrelle	1	Brief pass	Heard not seen	5
22:34	Common pipistrelle	1	Brief pass	Heard not seen	5
22:36	Common pipistrelle	1	Foraging	Heard not seen	5
22:37	Common pipistrelle	1	Foraging	Heard not seen	5
22:38	Common pipistrelle	1	Foraging	Heard not seen	5-6
22:53	Soprano pipistrelle	1	Brief pass	Heard not seen	6
22:54	Common pipistrelle	1	Brief pass	Heard not seen	6
22:56	Soprano pipistrelle	1	Brief pass	Heard not seen	6
22:59	Soprano pipistrelle	1	Brief pass	Heard not seen	6-7
23:05	Common pipistrelle	1	Brief pass	Heard not seen	6-7
23:06	Common pipistrelle	1	Brief pass	Heard not seen	6-7
23:16	Soprano pipistrelle	1	Brief pass	Heard not seen	7-8
23:17	Noctule	1	Brief pass	Heard not seen	7-8
23:22	Serotine	1	Brief pass	Heard not seen	8



### North Transect, Visit 3: Dusk 22 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:42	Common pipistrelle	1	Brief pass	Heard not seen	1-2
20:44 – 20:46	Common pipistrelle	1	Foraging	Heard and seen	2
20:50	Soprano pipistrelle	1	Commuting	Heard not seen	2-3
20:54	Common pipistrelle	1	Foraging	Heard not seen	3
21:04	Soprano pipistrelle	1	Foraging	Heard and seen	3-4
21:12	Common pipistrelle	1	Brief pass	Heard not seen	8
21:20	Common pipistrelle	1	Brief pass	Heard not seen	8-5
21:33	Common pipistrelle	1	Brief pass	Heard not seen	5-6
21:42	Common pipistrelle	1	Commuting	Heard not seen	6
21:43 – 21:45	Common pipistrelle	2	Foraging	Heard not seen	6-7
21:46	Soprano pipistrelle	1	Foraging	Heard not seen	6-7
21:46	Common pipistrelle	1	Foraging	Heard not seen	6-7
21:47	Soprano pipistrelle	1	Foraging	Heard not seen	6-7
21:50	Common pipistrelle	1	Commuting	Heard not seen	6-7
21:59	Soprano pipistrelle	1	Commuting	Heard not seen	7-8
22:00	Common pipistrelle	1	Foraging	Heard not seen	7-8
22:13	<i>Myotis</i> species	1	Foraging	Heard not seen	8

### North Transect, Visit 4: Dusk 7 September 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
19:57	Common pipistrelle	1	Commuting across field, possible emergence from house	Heard and seen	1-2
19:58	Noctule	1	Commuting across field	Heard and seen	1-2
19:59	Common pipistrelle	1	Commuting across field	Heard and seen	1-2
20:01	Common pipistrelle	1	Commuting	Heard not seen	1-2
20:10	Soprano pipistrelle	1	Commuting	Heard and seen	2
20:14	Common pipistrelle	1	Brief pass	Heard not seen	2
20:14	Soprano pipistrelle	1	Commuting	Heard and seen	2
20:22	Brown long-eared bat	1	Commuting	Heard not seen	3
20:23	Common pipistrelle	1	Commuting	Heard not seen	3
20:24	Noctule	1	Brief pass	Heard not seen	3
20:26	Common pipistrelle	1	Commuting	Heard not seen	3-4
20:27	Soprano pipistrelle	1	Foraging	Heard not seen	3-4
20:30	Common pipistrelle	1	Foraging	Heard and seen	3-4
20:30	Soprano pipistrelle	1	Foraging	Heard not seen	3-4
20:42	<i>Myotis</i> species	1	Foraging	Heard and seen	8
20:44	Common pipistrelle	1	Foraging	Heard not seen	8
20:52	Common pipistrelle	1	Commuting	Heard not seen	5
20:53	Common pipistrelle	1	Commuting	Heard not seen	5

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:01	Common pipistrelle	1	Commuting	Heard not seen	8
21:03	Common pipistrelle	1	Foraging	Heard not seen	8-7
21:05	Common pipistrelle	1	Foraging	Heard not seen	8-7
21:08	Common pipistrelle	1	Foraging	Heard not seen	7
21:11	Brown long-eared bat	1	Foraging	Heard not seen	7
21:19	Soprano pipistrelle	1	Foraging	Heard not seen	7-6
21:20	Brown long eared	1	Foraging	Heard not seen	7-6
21:33	Common pipistrelle	1	Foraging	Heard not seen	8
21:35	Common pipistrelle	1	Foraging	Heard not seen	8



### Parcel 1a, Visit 1: Dusk 26 July 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:10	Noctule	1	Brief pass	Heard and seen	1-2
21:12	Noctule	1	Brief pass	Heard and seen	1-2
21:13	Noctule	1	Brief pass	Heard and seen	1-2
21:18	Noctule	1	Brief pass	Heard and seen	1-2
21:20	Noctule	2	Brief pass	Heard and seen	1-2
21:22	Noctule	1	Brief pass	Heard and seen	1-2
21:22	Noctule	2	Brief pass	Heard and seen	1-2
21:24	Noctule	1	Brief pass	Heard and seen	1-2
21:25	Noctule	1	Brief pass	Heard and seen	1-2
21:26	Noctule	1	Brief pass	Heard and seen	2
21:26	Noctule	1	Brief pass	Heard and seen	2
21:31	Soprano pipistrelle	1	Brief pass	Heard and seen	3
21:33	Soprano pipistrelle	2	Foraging	Heard and seen	3-4
21:37	Soprano pipistrelle	1	Foraging	Heard not seen	3-4
21:43 – 21:46	Soprano pipistrelle	1	Foraging	Heard and seen	4
21:54	Common pipistrelle	1	Foraging	Heard and seen	4-5
22:02	Common pipistrelle	1	Brief pass	Heard not seen	5
22:03	Common pipistrelle	1	Brief pass	Heard and seen	5
22:04	Common pipistrelle	1	Brief pass	Heard not seen	5
22:05	Noctule	1	Brief pass	Heard not seen	5
22:12	Soprano pipistrelle	1	Foraging	Heard not seen	6
22:23	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:27	Common pipistrelle	1	Brief pass	Heard not seen	1
22:29	<i>Myotis</i> species	1	Brief pass	Heard not seen	1
22:31	<i>Myotis</i> species	1	Foraging	Heard not seen	1-2
22:35	Common pipistrelle	1	Brief pass	Heard not seen	1-2
22:43	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:46	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:49	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-3
22:49	Common pipistrelle	1	Brief pass	Heard not seen	2-3

Time	Species	Number of Bats	Activity	Observation	Transect Point
22:50	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:54	Common pipistrelle	1	Brief pass	Heard not seen	3
22:56	Common pipistrelle	1	Brief pass	Heard not seen	3

### Parcel 1a, Visit 2: Dusk 7 September 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
19:52	Noctule	1	Brief pass	Heard not seen	2
20:00 – 20:03	Common pipistrelle	1	Foraging	Heard and seen	2-3
20:01 – 20:04	Soprano pipistrelle	1	Foraging	Heard and seen	2-3
20:07 – 20:08	Common pipistrelle	1	Social calls	Heard and seen	2-3
20:09 – 20:10	Soprano pipistrelle	1	Foraging	Heard and seen	3
20:10 – 20:13	Common pipistrelle	1	Foraging	Heard and seen	3
20:14	Soprano pipistrelle	2	Foraging	Heard and seen	3
20:18	<i>Myotis</i> species	1	Brief pass	Heard not seen	3-4
20:43	Common pipistrelle	1	Commuting	Heard not seen	5-6
21:00	Common pipistrelle	1	Foraging	Heard not seen	6-7
21:16 – 21:17	Soprano pipistrelle	1	Foraging	Heard and seen	1-2
21:22	Soprano pipistrelle	1	Foraging	Heard not seen	1-2
21:24	Common pipistrelle	1	Foraging	Heard not seen	2



### Parcel 1a, Visit 3: Dusk 8 June 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:54	Soprano pipistrelle	1	Commuting	Heard not seen	4
21:58	Soprano pipistrelle	2	Foraging	Heard and seen	4-5
22:10	Soprano pipistrelle	1	Foraging, then flew south over hedgerow	Heard and seen	5
22:15	Soprano pipistrelle	1	Brief pass	Heard and seen	5
22:20	Soprano pipistrelle	1	Foraging, circling overhead	Heard and seen	5
22:20	Common pipistrelle	1	Commuting, flew east over hedgerow	Heard and seen	5-6
22:26	Brown long-eared bat	1	Brief pass	Heard not seen	6
22:27	Noctule	1	Brief pass	Heard not seen	6
22:29	Barbastelle	1	Brief pass	Heard not seen	6
22:32	Common pipistrelle	1	Commuting	Heard not seen	6-7
22:38	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:40 - 22:43	Common pipistrelle		Foraging to north-east over field	Heard and seen	6-7
22:43	Noctule	1	Brief pass	Heard not seen	6-7
22:47	Common pipistrelle	1	Foraging	Heard not seen	7
22:48	<i>Myotis</i> species	1	Brief pass	Heard not seen	7
22:49	<i>Myotis</i> species	2	Foraging, circling	Heard and seen	7
22:53	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:56	<i>Myotis</i> species	1	Brief pass	Heard not seen	7-1

Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>22:56 – 23:01</b>	Common pipistrelle	1	Sporadic passes	Heard not seen	7-1
<b>23:03</b>	Noctule	1	Brief pass	Heard not seen	1-2
<b>23:14</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:18 – 23:19</b>	Common pipistrelle	1	Brief pass	Heard not seen	2-1

Parcel 1a, Visit 4: Dusk 8 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:12	Soprano pipistrelle	1	Brief pass	Heard not seen	3-4
21:19	Common pipistrelle	1	Brief pass	Heard not seen	4
21:20	Noctule	1	Brief pass	Heard not seen	4
21:21	Soprano pipistrelle	1	Brief pass	Heard not seen	4
21:22	Soprano pipistrelle	1	Brief pass	Heard not seen	4
21:22	Noctule	1	Brief pass	Heard not seen	4
21:26	Soprano pipistrelle	1	Foraging	Heard not seen	4-5
21:37 - 21:38	<i>Myotis</i> species	1	Foraging	Heard not seen	5
21:38	Brown long-eared bat	1	Brief pass	Heard not seen	5
21:40	Brown long-eared bat	1	Brief pass	Heard not seen	5
21:40 - 21:41	<i>Myotis</i> species	1	Foraging	Heard not seen	5
21:42 – 21:44	<i>Myotis</i> species	1	Brief passes	Heard not seen	5-6
21:44	Brown long-eared bat	1	Brief pass	Heard not seen	5-6
21:58	Noctule	1	Brief pass	Heard not seen	6-7
22:38	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2



### Parcel 2, Northeast Transect, Visit 1: Dusk 26 July 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:44	Common pipistrelle	1	Brief pass	Heard not seen	4
21:56 – 21:57	Common pipistrelle	1	Brief pass	Heard not seen	5
21:59	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:02	Common pipistrelle	1	Foraging	Heard not seen	6
22:05	Barbastelle	1	Brief pass	Heard not seen	6
22:08	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:11	Common pipistrelle	1	Foraging	Heard and seen	6-7
22:21	Common pipistrelle	2	Foraging	Heard not seen	7
22:29 – 22:30	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:32	Common pipistrelle	1	Foraging	Heard not seen	7-1
22:34	Soprano pipistrelle	1	Brief pass	Heard not seen	7-1

Parcel 2, Northeast Transect, Visit 2: Dusk 7 September 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:10	Soprano pipistrelle	1	Brief pass	Heard not seen	3-4
20:16	Soprano pipistrelle	1	Brief pass	Heard not seen	4
20:18 – 20:20	Common pipistrelle	1	Brief passes three times	Heard not seen	4
20:23 – 20:25	Common pipistrelle	1	Foraging up and down hedgerow	Heard not seen	4-5
20:26	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:26	Soprano pipistrelle	1	Brief pass	Heard not seen	4-5
20:28	<i>Myotis</i> species	1	Brief pass	Heard not seen	4-5
20:28	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:33	Common pipistrelle	1	Brief pass	Heard not seen	5
20:43	Common pipistrelle	1	Brief pass	Heard not seen	6
20:48	Common pipistrelle	1	Brief pass	Heard not seen	6-7
20:54	Common pipistrelle	1	Brief pass	Heard not seen	7
21:01	Noctule	1	Brief pass	Heard not seen	7-1
21:05	<i>Myotis</i> species	1	Brief pass	Heard not seen	7-1
21:11	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:14	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:16	Common pipistrelle	1	Brief pass	Heard not seen	7-1

Parcel 2, Northeast Transect, Visit 3: Dusk 17 May 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:30	Common pipistrelle	1	Brief pass	Heard not seen	4
21:52	Common pipistrelle	1	Brief pass	Heard not seen	6
21:58	Common pipistrelle	1	Brief pass	Heard not seen	6
22:00	Common pipistrelle	1	Foraging	Heard not seen	6
22:05	Noctule	1	Commuting	Heard not seen	6
22:06	Common pipistrelle	1	Foraging	Heard not seen	6
22:09	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:18	Common pipistrelle	1	Brief pass	Heard not seen	7
22:19	Noctule	1	Commuting	Heard not seen	7-1
22:23	Brown long-eared bat	1	Brief pass	Heard not seen	7-1
22:35	Common pipistrelle	1	Foraging	Heard not seen	7-1
22:37	Common pipistrelle	1	Foraging	Heard not seen	7-1
22:39	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:41	Common pipistrelle	1	Foraging	Heard not seen	7-1
22:48	Common pipistrelle	1	Brief Pass	Heard not seen	7-1



Parcel 2, Northeast Transect, Visit 4: Dusk 10 July 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
22:07	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:13	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:15	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:27	Common pipistrelle	1	Brief pass	Heard not seen	6
22:33	Serotine	1	Brief pass	Heard not seen	6-7
22:34	Soprano pipistrelle	1	Brief pass	Heard not seen	6-7
22:38	Soprano pipistrelle	1	Brief pass	Heard not seen	6-7
22:40	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:42	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:44	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:46 – 22:47	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:46 – 22:47	<i>Myotis</i> species	1	Brief pass	Heard not seen	6-7
22:49	<i>Myotis</i> species	1	Brief pass	Heard not seen	6-7
22:49	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:53	Common pipistrelle	1	Brief pass	Heard not seen	7
23:03	Common pipistrelle	1	Brief pass	Heard not seen	7-1
23:11	Soprano pipistrelle	1	Brief pass	Heard not seen	7-1
23:15	Common pipistrelle	1	Brief pass	Heard not seen	1

### Southwest Transect, Visit 1: Dusk 26 July 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:14	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:36	Noctule	1	Brief pass	Heard not seen	3-4
21:36 – 21:39	Soprano pipistrelle	1	Foraging in tree line and woodland	Heard and seen	3-4
21:48 – 21:49	<i>Myotis</i> species	1	Foraging	Heard and seen	4-5
21:53	Soprano pipistrelle	1	Brief pass	Heard not seen	4-5
22:00	<i>Myotis</i> species	1	Brief pass	Heard not seen	5
22:04	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:11	Common pipistrelle	1	Brief pass	Heard not seen	3
22:12 – 22:13	<i>Myotis</i> species	1	Brief pass	Heard not seen	3
22:15	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-6
22:18	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-6
22:18	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:21	<i>Myotis</i> species	1	Brief pass	Heard not seen	5-6
22:23	<i>Myotis</i> species	1	Brief pass	Heard not seen	6
22:25	<i>Myotis</i> species	1	Brief pass	Heard not seen	6
22:25	Common pipistrelle	1	Brief pass	Heard not seen	6
22:26	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:29	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:30	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:32	Common pipistrelle	1	Brief pass	Heard not seen	6-7

Time	Species	Number of Bats	Activity	Observation	Transect Point
22:35	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:36	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:37	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:38	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:38	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:39	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:44	Common pipistrelle	1	Brief pass	Heard not seen	7
22:45	<i>Myotis</i> species	1	Brief pass	Heard not seen	7
22:46	Common pipistrelle	1	Brief pass	Heard not seen	7
22:47	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:47 – 22:51	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:53	Common pipistrelle	1	Brief pass	Heard not seen	1
22:53	Common pipistrelle	1	Brief pass	Heard not seen	1
22:54	Common pipistrelle	1	Brief pass	Heard not seen	1
22:56	Common pipistrelle	1	Brief pass	Heard not seen	2-1
22:58	Common pipistrelle	1	Brief pass	Heard not seen	2-1
23:00	Common pipistrelle	1	Brief pass	Heard not seen	1 -2
23:01	Common pipistrelle	1	Brief pass	Heard not seen	1 -2
23:03	Common pipistrelle	1	Brief pass	Heard not seen	1 -2



## Southwest Transect, Visit 2: Dusk 7 September 2022

Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>19:55</b>	Noctule	1	Commuting	Heard and seen	1-2
<b>20:01</b>	Soprano pipistrelle	1	Foraging	Heard and seen	2-3
<b>20:07</b>	Common pipistrelle	1	Commuting	Heard and seen	3
<b>20:28</b>	Soprano pipistrelle	1	Foraging	Heard not seen	5
<b>20:38</b>	Common pipistrelle	1	Foraging	Heard not seen	5-6
<b>20:44</b>	Common pipistrelle	1	Foraging	Heard not seen	5-6
<b>20:53</b>	Common pipistrelle	1	Foraging	Heard not seen	6-7
<b>20:55</b>	Common pipistrelle	1	Foraging	Heard not seen	6-7
<b>20:57</b>	Common pipistrelle	1	Foraging	Heard not seen	6-7
<b>21:01</b>	Common pipistrelle	1	Foraging	Heard not seen	6-7
<b>21:33</b>	Common pipistrelle	1	Foraging	Heard not seen	1
<b>21:36</b>	Common pipistrelle	1	Foraging	Heard not seen	1

### Southwest Transect, Visit 3: Dusk 17 May 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:14	Common pipistrelle	1	Brief pass	Heard not seen	1
21:18	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:19	Common pipistrelle	1	Brief pass	Heard and seen	1-2
21:20	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:21	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:29	Common pipistrelle	1	Brief pass	Heard not seen	2-3
21:35	Noctule	1	Brief pass	Heard not seen	2-3
21:42	Noctule	1	Brief pass	Heard not seen	3
21:43	Common pipistrelle	1	Brief pass	Heard not seen	3
21:55	Brown long-eared bat	1	Brief pass	Heard not seen	3-4
22:00	Common pipistrelle	1	Foraging	Heard not seen	3-4
22:11	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:19	Common pipistrelle	1	Brief pass	Heard not seen	3-4
22:22	Soprano pipistrelle	1	Brief pass	Heard not seen	4
22:23	Common pipistrelle	1	Brief pass	Heard not seen	4
22:26	Soprano pipistrelle	1	Brief pass	Heard not seen	4
22:29	Common pipistrelle	1	Foraging	Heard not seen	4-5
22:33	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:50	Common pipistrelle	1	Brief pass	Heard not seen	2-1
22:51	Noctule	1	Brief pass	Heard not seen	2-1
22:52	Noctule	1	Brief pass	Heard not seen	2-1
22:54	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-1
22:55	Common pipistrelle	1	Foraging	Heard not seen	2-1
22:56	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-1
22:59	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-1
22:59	Noctule	1	Brief pass	Heard not seen	1

### Southwest Transect, Visit 4: Dusk 8 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:00	Soprano pipistrelle	1	Commuting	Heard not seen	2-3
21:01	Noctule	1	Brief pass	Heard not seen	2-3
21:03	Noctule	1	Brief pass	Heard not seen	2-3
21:05	Noctule	1	Commuting	Heard not seen	2-3
21:09	Noctule	1	Commuting	Heard not seen	3
21:27	Common pipistrelle	1	Commuting	Heard not seen	3-4
21:30	<i>Myotis</i> species	1	Commuting	Heard not seen	3-4
21:31	Common pipistrelle	1	Commuting	Heard not seen	3-4
21:32	Common pipistrelle	1	Commuting	Heard not seen	3-4
21:33	Common pipistrelle	1	Commuting	Heard not seen	3-4
21:35	Common pipistrelle	1	Commuting	Heard not seen	4
21:35	<i>Myotis</i> species	1	Commuting	Heard not seen	4
21:38	Common pipistrelle	1	Commuting	Heard not seen	4
21:56	Serotine	1	Commuting	Heard not seen	4-5
21:57	Brown long-eared bat	1	Commuting	Heard not seen	4-5
21:58	Common pipistrelle	1	Commuting	Heard not seen	4-5
22:05	Common pipistrelle	1	Brief pass	Heard not seen	4-5
22:09	Common pipistrelle	1	Brief pass	Heard not seen	5
22:16	Common pipistrelle	1	Foraging	Heard not seen	5-6
22:16 – 22:17	Common pipistrelle	1	Foraging	Heard not seen	5-6
22:20	Common pipistrelle	1	Commuting	Heard not seen	5-6
22:25	Brown long-eared bat	1	Commuting	Heard not seen	5-6
22:30	Brown long-eared bat	1	Commuting	Heard not seen	6
22:41	Common pipistrelle	1	Brief pass	Heard not seen	2-1
22:41	Common pipistrelle	1	Brief pass	Heard not seen	2-1
22:44	Common pipistrelle	1	Brief pass	Heard not seen	2-1
22:45	Common pipistrelle	1	Commuting	Heard not seen	2-1
22:47	Barbastelle	1	Brief pass	Heard not seen	2-1

### North Transect, Visit 1: Dusk 23 May 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:29	Common pipistrelle	1	Commuting	Heard and seen, commuting north to south along hedgerow	3-4
21:30 – 21:31	Common pipistrelle	2	Foraging	Heard and seen, two bats foraging up and down hedgerow.	3-4
21:33	Common pipistrelle	2	Commuting	Heard and seen, Bats headed away from woodland and south along hedgerow.	3-4
21:34	Common pipistrelle	1	Commuting	Heard and seen	3-4
21:35 – 21:36	Common pipistrelle	2	Foraging	Heard and seen, many foraging passes.	3-4
21:36 – 21:37	Unknown, likely brown long-eared bat	1	Foraging	Heard and seen. Non echo-locating bat above tree line.	4
21:39	Common pipistrelle	4	Foraging	Heard and seen, many bats foraging around woodland.	4-5
21:50 – 21:53	Common pipistrelle	2	Foraging	Heard and seen, two bats foraging, feeding buzz and social calls.	4-5
21:57	Common pipistrelle	1	Foraging	Heard and seen	5
21:58	Common pipistrelle	1	Foraging	Heard and seen	5
22:00	Common pipistrelle	2	Foraging	Heard not seen	5-6
22:10	Common pipistrelle	1	Foraging	Heard not seen	6
22:20	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:24	Common pipistrelle	1	Foraging	Heard not seen	6-7



Time	Species	Number of Bats	Activity	Observation	Transect Point
22:25	Common pipistrelle	1	Foraging	Heard not seen	6-7
22:32	Common pipistrelle	1	Commuting	Heard not seen	6-7
22:34	<i>Myotis</i> species	1	Foraging	Heard not seen	6-7
22:35	Common pipistrelle	1	Social Calls	Heard not seen	6
22:36	Common pipistrelle	1	Commuting	Heard not seen	6
22:43	Soprano pipistrelle	1	Commuting	Heard not seen	7-1
22:46	Soprano pipistrelle	1	Commuting	Heard not seen	7-1
22:47	Common pipistrelle	1	Commuting	Heard not seen	7-1
22:49	Common pipistrelle	1	Commuting	Heard not seen	7-1
22:52	Common pipistrelle	1	Social Calls	Heard not seen	7-1
22:55	Common pipistrelle	1	Brief Pass	Heard not seen	7-1

### North Transect, Visit 2: Dusk 10 July 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:59	Common pipistrelle	1	Brief pass	Heard not seen	5-6
22:10	Common pipistrelle	1	Brief pass	Heard not seen	6
22:18	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:22 – 22:24	Common pipistrelle	2	Foraging	Heard not seen	6-7
22:25	Common pipistrelle	1	Brief pass	Heard not seen	6-7
22:25 to 22:29	Common pipistrelle	1	Continuous foraging along length of hedgerow	Heard not seen	6-7
22:29	Soprano pipistrelle	1	Continuous foraging along length of hedgerow	Heard not seen	6-7
22:30	Common pipistrelle	1	Foraging	Heard not seen	7
22:30	Common pipistrelle	1	Commuting	Heard not seen	7
22:30 – 22:31	Common pipistrelle	1	Foraging	Heard not seen	7
22:37	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:39	Nathusius' pipistrelle	1	Brief pass	Heard not seen	7-1
22:39	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:44 – 22:45	Common pipistrelle	1	Foraging	Heard not seen	7-1
22:48	Common pipistrelle	1	Brief pass	Heard not seen	7-1
22:49	Brown long-eared bat	1	Brief pass	Heard not seen	1

Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>22:49 – 22:51</b>	Common pipistrelle	1	Brief pass	Heard not seen	1
<b>22:51</b>	Serotine	1	Brief pass	Heard not seen	1
<b>22:54 – 22:55</b>	Common pipistrelle	1	Foraging	Heard not seen	1-2
<b>22:55</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:00</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:00</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:02</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:02</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:03</b>	Common pipistrelle	1	Brief pass	Heard not seen	1-2
<b>23:14</b>	Soprano pipistrelle	1	Brief pass	Heard not seen	2

### North Transect, Visit 3: Dusk 22 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:57	Common pipistrelle	1	Brief pass	Heard not seen, very faint call	5
21:00	Common pipistrelle	1	Brief pass	Heard not seen	5-6
21:08	Common pipistrelle	1	Brief pass	Heard not seen	6
21:13	Common pipistrelle	1	Brief pass	Heard not seen	6-7
21:15	Common pipistrelle	1	Brief pass	Heard not seen	6-7
21:25	Common pipistrelle	1	Brief pass	Heard not seen	6-7
21:27 – 21:29	Common pipistrelle	2	Brief pass	Heard not seen	6-7
21:33 – 21:35	Common pipistrelle	1	Brief pass	Heard not seen	6-7
21:36	Soprano pipistrelle	1	Brief pass	Heard not seen	7
21:45 – 21:46	Common pipistrelle	1	Foraging	Heard not seen	7-1
21:47	Soprano pipistrelle	1	Foraging	Heard not seen	7-1
21:47	Common pipistrelle	1	Foraging	Heard not seen	7-1
21:51	Common pipistrelle	1	Foraging	Heard not seen	7-1
21:53 – 21:54	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:57	Common pipistrelle	3	Brief pass	Heard not seen	7-1
22:01	Noctule	1	Brief pass	Heard not seen, very faint call	1
22:11	Common pipistrelle	1	Brief	Heard not seen	1-2
22:13	Common pipistrelle	1	Social calls	Heard not seen	1-2
22:15	Common pipistrelle	1	Brief pass	Heard not seen	1-2
22:17 - 22:18	Common pipistrelle	2	Brief pass	Heard not seen	1-2



### North Transect, Visit 4: Dusk 7 September 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:05 - 20:06	Common pipistrelle	1	Foraging	Heard not seen	4
20:08 - 20:09	Common pipistrelle	2	Foraging	Heard not seen	4
20:16	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:24	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:26 - 20:27	Common pipistrelle	1	Foraging	Heard not seen	4-5
20:31 - 20:32	Common pipistrelle	1	Brief pass	Heard not seen	5
20:33	Common pipistrelle	1	Brief pass	Heard not seen	5
20:35	Common pipistrelle	1	Brief pass	Heard not seen	5
20:37	Soprano pipistrelle	1	Brief pass	Heard not seen	5
20:41 - 20:43	Common pipistrelle	1	Foraging	Heard not seen	5-6
20:44	Common pipistrelle	1	Foraging	Heard not seen	5-6
20:44	Common pipistrelle	1	Foraging	Heard not seen	5-6
20:49	Common pipistrelle	1	Brief pass	Heard not seen	5-6
20:51	Common pipistrelle	1	Brief pass	Heard not seen	6
20:52	Common pipistrelle	1	Brief pass	Heard not seen	6-7
20:52	Common pipistrelle	1	Brief pass	Heard not seen	6-7
20:53	Common pipistrelle	1	Brief pass	Heard not seen	6-7
20:54	Common pipistrelle	2	Brief pass	Heard not seen	6-7
20:56	Common pipistrelle	1	Brief pass	Heard not seen	6-7
20:57	Common pipistrelle	1	Brief pass	Heard not seen	6-7
21:00	Common pipistrelle	1	Brief pass	Heard not seen	7
21:01	<i>Myotis</i> species	1	Brief pass	Heard not seen	7
21:05	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:06 - 21:07	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:07	Brown long-eared bat	1	Brief pass	Heard not seen	7-1
21:10	Common pipistrelle	1	Foraging	Heard not seen	7-1
21:12	Common pipistrelle	1	Foraging	Heard not seen	7-1
21:14	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:16	Common pipistrelle	1	Brief pass	Heard not seen	7-1
21:17	Soprano pipistrelle	1	Brief pass	Heard not seen	7-1

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:21	Noctule	1	Brief pass	Heard not seen, feint call	1
21:23	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:29	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:29	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:31	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:35	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:35	Soprano pipistrelle	1	Social calls	Heard not seen	1-2
21:36	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:37	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:39	Soprano pipistrelle	1	Brief pass	Heard not seen	2-1

### Southern Transect, Visit 1: Dusk 8 June 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
<b>21:58</b>	Common pipistrelle	1	Foraging	Heard and seen	4-3
<b>21:58 – 21:59</b>	Common pipistrelle	1	Foraging	Heard and seen	4-3
<b>22:04</b>	Common pipistrelle	1	Commuting	Heard and seen	4-3
<b>22:05</b>	Common pipistrelle	1	Brief pass	Heard not seen	4-3
<b>22:06</b>	Common pipistrelle	1	Brief pass	Heard not seen	4-3
<b>22:07</b>	Common pipistrelle	1	Commuting	Heard and seen	4-3
<b>22:15</b>	Common pipistrelle	1	Foraging	Heard and seen	4-3
<b>22:21</b>	Common pipistrelle	1	Brief pass	Heard not seen	3
<b>22:21 - 22:22</b>	Soprano pipistrelle	1	Foraging	Heard not seen	3
<b>22:23 - 22:25</b>	Common pipistrelle	1	Foraging	Heard not seen	3
<b>22:27</b>	Common pipistrelle	1	Brief pass	Heard not seen	3-2
<b>22:46</b>	Common pipistrelle	1	Foraging	Heard not seen	1
<b>22:45 – 22:48</b>	Common pipistrelle	1	Foraging	Heard not seen	1
<b>22:55</b>	Common pipistrelle	1	Foraging	Heard not seen	3-2
<b>23:12</b>	Common pipistrelle	1	Foraging	Heard not seen	1
<b>23:20</b>	Common pipistrelle	1	Brief pass	Heard not seen	1

### Southern Transect, Visit 2: Dusk 8 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:32	Common pipistrelle	1	Foraging	Heard not seen	7-6
21:34	Common pipistrelle	1	Foraging	Heard not seen	7-6
21:34	Soprano pipistrelle	1	Foraging	Heard not seen	7-6
21:35 – 21:36	Common pipistrelle	1	Foraging	Heard and seen	7-6
21:40	Common pipistrelle	1	Brief pass	Heard and seen	7-6
21:42 – 21:45	Common pipistrelle	1	Foraging	Heard and seen	6
21:46	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:48 – 21:49	Common pipistrelle	1	Foraging	Heard not seen	6-5
21:59	Soprano pipistrelle	1	Foraging	Heard not seen	4-3
22:02	Common pipistrelle	1	Foraging	Heard not seen	4-3
22:06	Common pipistrelle	1	Foraging	Heard not seen	4-3
22:31	Noctule	1	Brief pass	Heard not seen	3-2
22:32	<i>Myotis</i> species	1	Brief pass	Heard not seen	3-2
22:35	Soprano pipistrelle	1	Brief pass	Heard not seen	2
22:42	Soprano pipistrelle	1	Brief pass	Heard not seen	2-1



### Southern Transect, Visit 3: Dusk 31 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:08	Soprano pipistrelle	1	Foraging	Heard not seen	7
20:19	Soprano pipistrelle	1	Foraging	Heard not seen	7-6
20:20	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:22	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:23	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:24	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:25	Common pipistrelle	1	Foraging	Heard not seen	7-6
20:29	Common pipistrelle	1	Brief pass	Heard not seen	6
20:31	Common pipistrelle	1	Foraging	Heard not seen	6-5
20:32	Common pipistrelle	1	Foraging	Heard not seen	6-5
20:34	Common pipistrelle	1	Foraging	Heard not seen	6-5
20:35 – 20:37	Soprano pipistrelle	1	Foraging	Heard not seen	6-5
20:38 – 20:39	Common pipistrelle	1	Foraging	Heard not seen	6-5
20:58	<i>Myotis</i> species	1	Brief pass	Heard not seen	4-3
21:14	<i>Myotis</i> species	1	Brief pass	Heard not seen	4-3
21:32	<i>Myotis</i> species	1	Brief pass	Heard not seen	3-2
21:37	Common pipistrelle	1	Brief pass	Heard not seen	3-2
21:48 - 21:49	Common pipistrelle	1	Foraging	Heard not seen	1
21:50	Common pipistrelle	1	Foraging	Heard not seen	1
21:51	Common pipistrelle	1	Foraging	Heard not seen	1

### Southern Transect, Visit 4: Dusk 7 September 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:05	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:18	Common pipistrelle	1	Brief pass	Heard not seen	4-3
20:32	Soprano pipistrelle	1	Brief pass	Heard not seen	6-5
20:34	Serotine	1	Brief pass	Heard not seen	6-5
20:38	Soprano pipistrelle	1	Brief pass	Heard not seen	5-4
20:40 – 20:45	Common pipistrelle	1	Foraging	Heard and seen	4-3
20:46 – 20:49	Common pipistrelle	1	Foraging	Heard not seen	4-3
20:53 – 20:55	Common pipistrelle	1	Foraging	Heard not seen	4-3
20:59	Common pipistrelle	2	Foraging	Heard not seen	4-3
21:01 – 21:10	Common pipistrelle	2	Foraging	Heard and seen	3
21:08	Common pipistrelle	1	Foraging	Heard and seen	3-2
21:10 – 21:11	Common pipistrelle	1	Brief pass	Heard not seen	3-2
21:12 – 21:20	Common pipistrelle	1	Foraging	Heard and seen	2-1
21:18 – 21:22	Common pipistrelle	1	Foraging	Heard and seen	2-1
21:21	Soprano pipistrelle	1	Brief pass	Heard not seen	2-1
21:25	Common pipistrelle	1	Brief pass	Heard not seen	1

### Parcel 3, Visit 1: Dusk 23 May 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:29	Common pipistrelle	1	Brief pass	Heard not seen	1
21:31	Common pipistrelle	1	Brief pass	Heard not seen	1
21:32	Noctule	1	Brief pass	Heard not seen	1
21:34	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:36	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:37	Common pipistrelle	1	Foraging	Heard and seen	1-2
21:39	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:41	Common pipistrelle	1	Brief pass	Heard and seen	1-2
21:43	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:43	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:45	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:48	Common pipistrelle	1	Brief pass	Heard and seen	1-2
21:50	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:52	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:55	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:57	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:59	Leisler's bat	1	Brief pass	Heard not seen	2
22:13	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-3
22:15	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:16	Noctule	1	Brief pass	Heard not seen	2-3
22:17	Noctule	1	Brief pass	Heard not seen	2-3
22:19	<i>Myotis</i> species	1	Brief pass	Heard and seen	2-3
22:20	<i>Myotis</i> species	1	Brief pass	Heard not seen	2-3
22:28	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:30	Common pipistrelle	1	Brief pass	Heard not seen	2-3
22:35	Common pipistrelle	1	Brief pass	Heard not seen	3

### Parcel 3, Visit 2: Dusk 8 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
21:11	Noctule	1	Commuting	Heard not seen	1-2
21:14	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:15	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:16 – 21:18	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:17	Soprano pipistrelle	1	Brief pass	Heard not seen	1-2
21:21 – 21:22	Common pipistrelle	2	Foraging	Heard and seen	1-2
21:23	Common pipistrelle	1	Foraging	Heard not seen	2
21:24	Common pipistrelle	1	Foraging	Heard not seen	2
21:25 – 21:28	Soprano pipistrelle	1	Foraging	Heard not seen	2
21:26 – 21:27	Common pipistrelle	1	Brief pass	Heard not seen	2
21:37	Common pipistrelle	1	Foraging	Heard not seen	2-3
21:37 – 21:39	Common pipistrelle	1	Foraging	Heard and seen	2-3
21:40	Common pipistrelle	1	Foraging	Heard not seen	2-3
21:42 – 21:44	Common pipistrelle	1	Foraging	Heard and seen	2-3
21:48	Common pipistrelle	1	Foraging	Heard not seen	2-3
22:03	Common pipistrelle	1	Commuting	Heard not seen	3-4
22:10	Brown long-eared bat	1	Brief pass	Heard not seen	3-4
22:22	Common pipistrelle	1	Commuting	Heard not seen	4-5
22:33 – 22:34	Common pipistrelle	1	Foraging	Heard not seen	5-6
22:39	Common pipistrelle	1	Foraging	Heard not seen	5-6
22:43	Common pipistrelle	1	Foraging	Heard not seen	6-1



### Parcel 3, Visit 3: Dusk 31 August 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:23 – 20:24	Common pipistrelle	1	Foraging	Heard and seen	3-4
20:27	Common pipistrelle	1	Foraging	Heard not seen	3-4
20:29 - 20:30	Common pipistrelle	1	Foraging	Heard not seen	3-4
20:34	Common pipistrelle	1	Foraging	Heard not seen	3-4
20:36 – 20:39	Common pipistrelle	1	Foraging	Heard not seen	3-4
20:40 – 20:41	Soprano pipistrelle	1	Foraging	Heard and seen	4
20:40 – 20:42	Common pipistrelle	1	Foraging	Heard not seen	4
20:43 – 20:45	Soprano pipistrelle	1	Foraging	Heard not seen	4-5
20:43 – 20:48	Common pipistrelle	1	Foraging	Heard not seen	4-5
20:50	Common pipistrelle	1	Foraging	Heard not seen	4-5
21:07 - 21:08	Common pipistrelle	1	Foraging	Heard not seen	5-6
21:09 – 21:14	Common pipistrelle	1	Foraging	Heard not seen	5-6
21:16 - 21:19	Common pipistrelle	1	Foraging	Heard not seen	5-6
21:23	Common pipistrelle	1	Brief pass	Heard not seen	5-6
21:29 – 21:30	Soprano pipistrelle	1	Foraging	Heard not seen	5-6
21:39 to 21:42	Common pipistrelle	1	Foraging	Heard not seen	1
21:44	Soprano pipistrelle	1	Foraging	Heard not seen	1-2
21:45 – 21:46	Common pipistrelle	1	Brief pass	Heard not seen	1-2
21:47 – 21:49	Soprano pipistrelle	1	Foraging	Heard not seen	1-2
21:50 - 21:53	Common pipistrelle	1	Foraging	Heard not seen	6

### Parcel 3, Visit 4: Dusk 7 September 2023

Time	Species	Number of Bats	Activity	Observation	Transect Point
20:06	Soprano pipistrelle	1	Foraging	Heard not seen	1-2
20:07	Common pipistrelle	1	Commuting	Heard and seen	1-2
20:13 – 20:14	Common pipistrelle	1	Foraging	Heard and seen	1-2
20:15	Common pipistrelle	1	Foraging	Heard and seen	2
20:16	Common pipistrelle	1	Foraging	Heard not seen	2
20:17 – 20:19	Common pipistrelle	1	Foraging	Heard not seen	2
20:21 – 20:22	Common pipistrelle	1	Brief passes	Heard not seen	2 - 3
20:31	Common pipistrelle	1	Foraging	Heard not seen	2-3
20:33	Common pipistrelle	1	Commuting	Heard and seen	2-3
20:34	Common pipistrelle	1	Foraging	Heard not seen	2-3
20:35 – 20:37	Common pipistrelle	1	Foraging	Heard not seen	2-3
20:38	Common pipistrelle	1	Commuting	Heard not seen	2-3
20:40	<i>Myotis</i> species	1	Brief pass	Heard not seen	5
20:41	Common pipistrelle	1	Brief pass	Heard not seen	5
20:46 – 20:47	Common pipistrelle	1	Brief pass	Heard not seen	4-5
20:50 - 20:51	Common pipistrelle	1	Foraging	Heard not seen	5-6
20:52 – 20:54	Common pipistrelle	1	Foraging	Heard not seen	5-6
21:09	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:10 – 21:12	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:13	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:15 – 21:19	Common pipistrelle	1	Foraging	Heard not seen	1-2
21:16	<i>Myotis</i> species	1	Brief pass	Heard not seen	1-2
21:25 -21:26	Common pipistrelle	1	Foraging	Heard not seen	6
21:31	Common pipistrelle	1	Foraging	Heard not seen	1-2

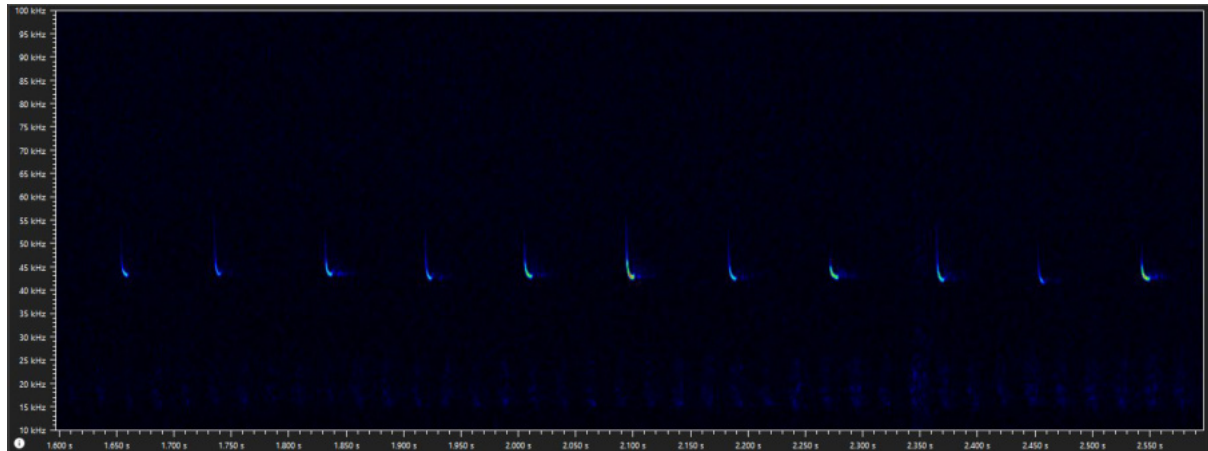
# **Annex C: Walked Activity**

## **Survey Example**

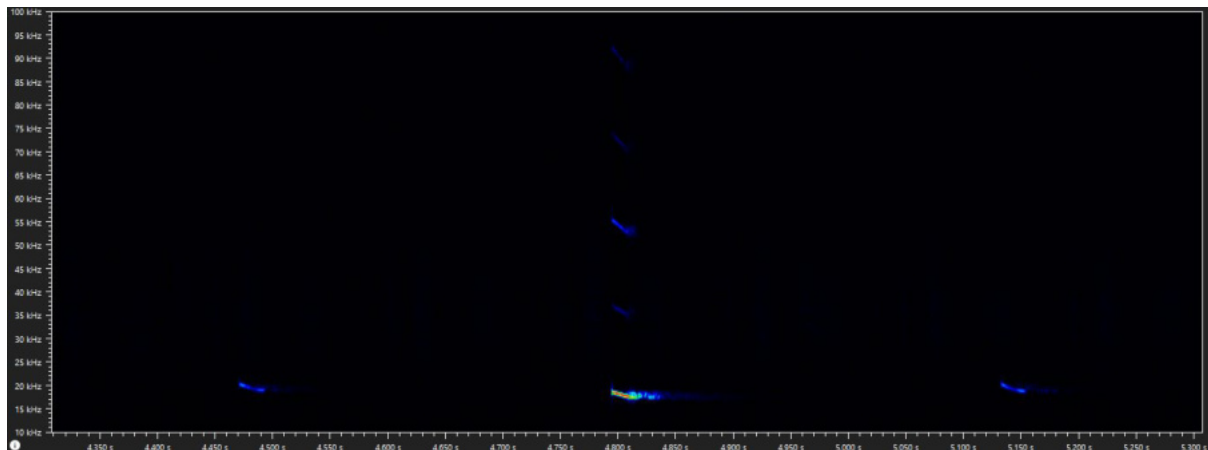
### **Sonograms**



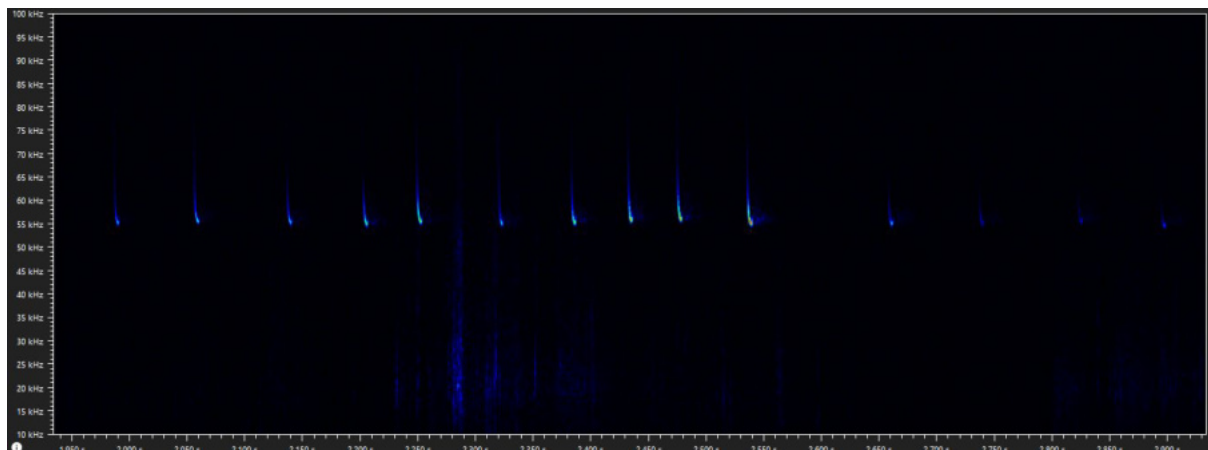
## Annex C: Walked Activity Survey Example Sonograms



**Common pipistrelle recorded 19:56 on 07/09/2023 at Parcel 1 North Transect**

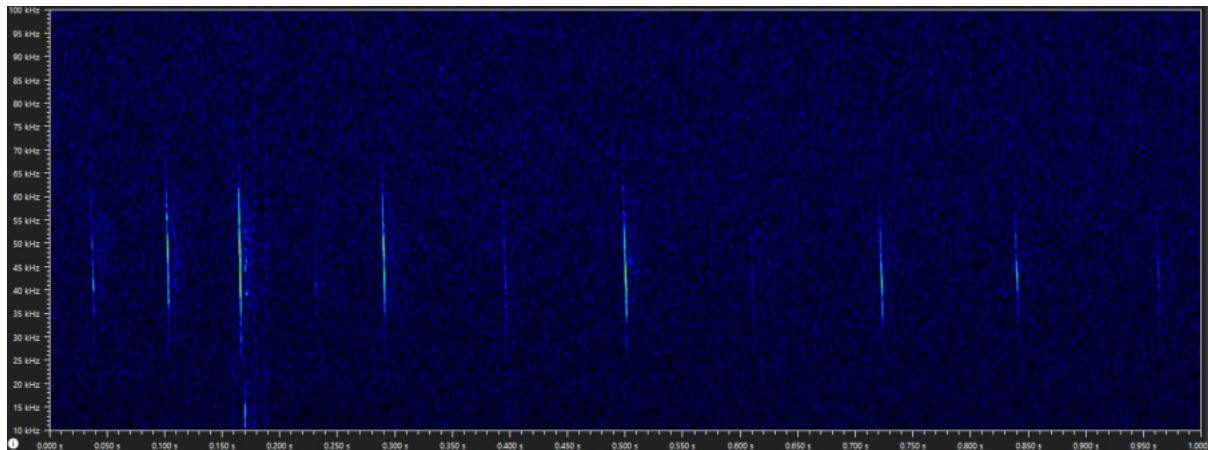


**Noctule recorded 19:56 on 07/09/2023 at Parcel 1 North Transect**

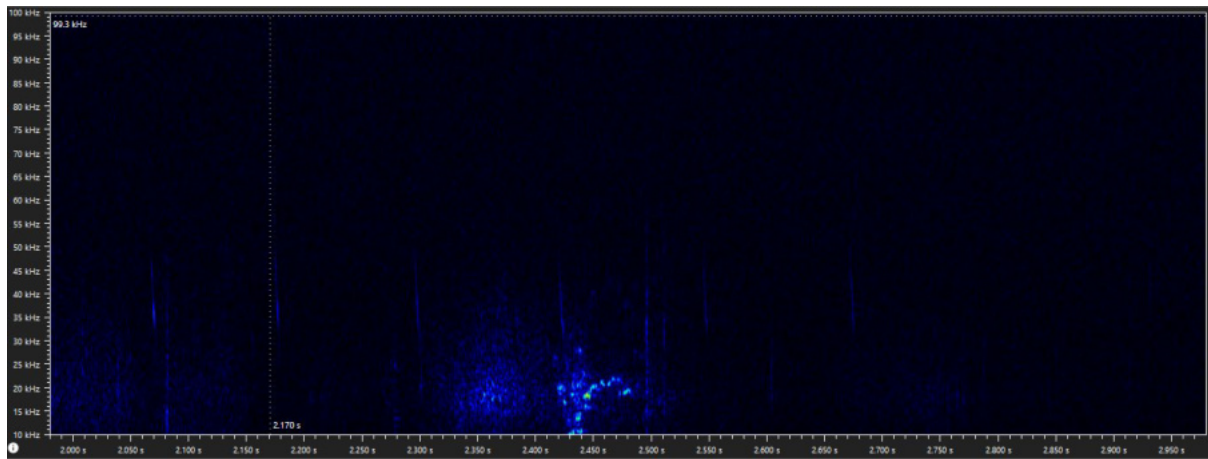


**Soprano pipistrelle recorded 20:10 on 07/09/2023 at Parcel 1 North Transect**

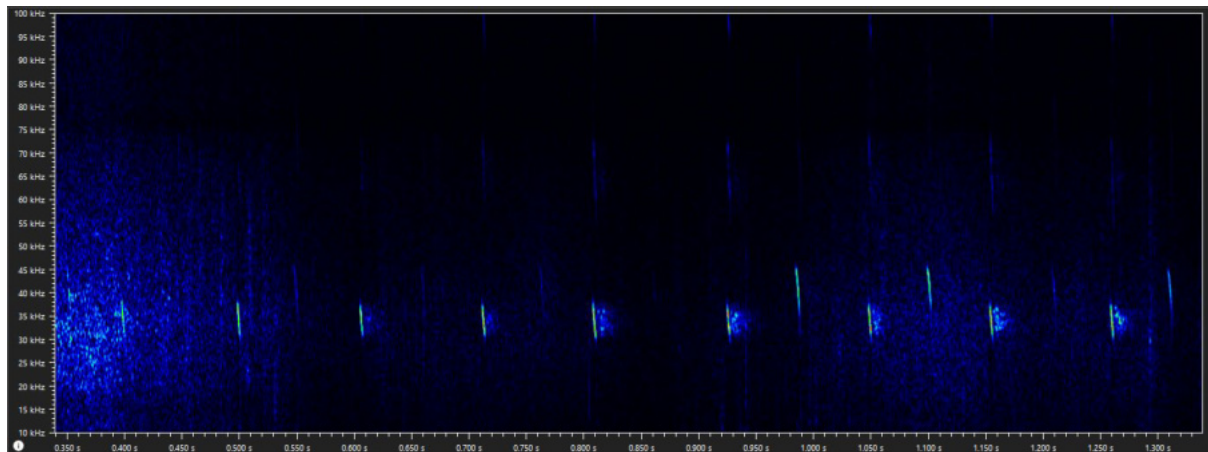




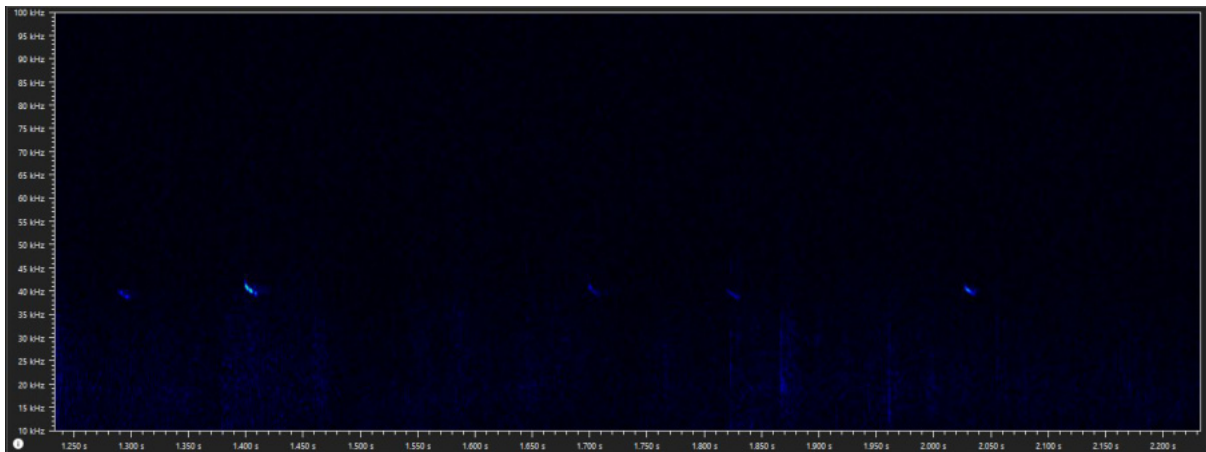
***Myotis* species recorded 22:42 on 07/09/2023 at Parcel 1 North Transect**



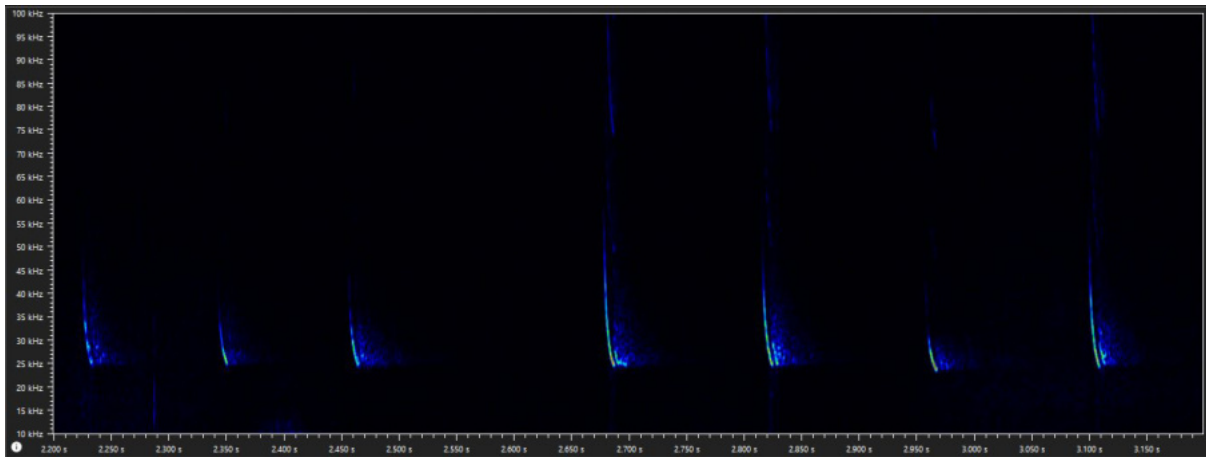
**Brown long-eared bat recorded 21:10 on 07/09/2023 at Parcel 1 North Transect**



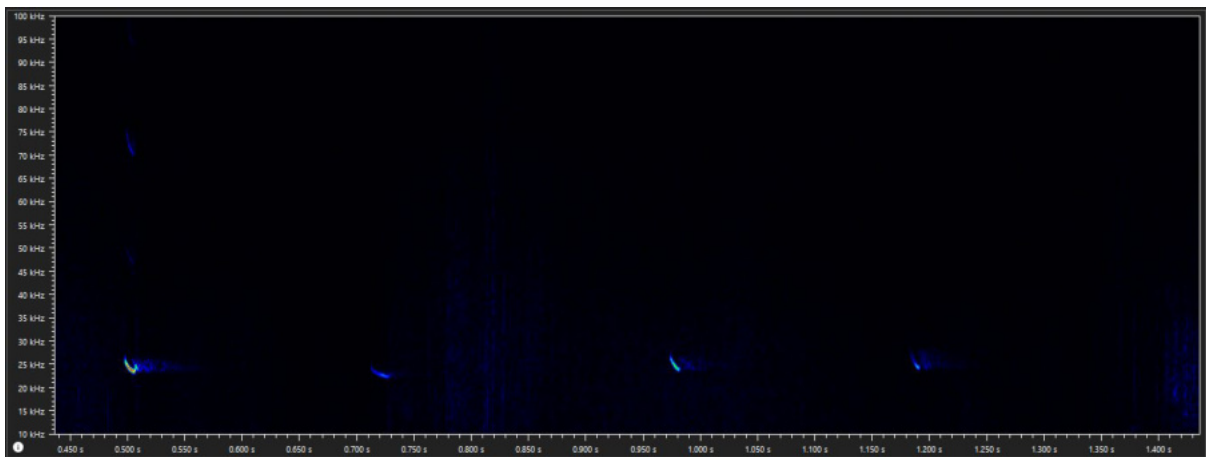
**Barbastelle recorded 22:29 on 08/06/2023 at Parcel 1a Transect**



**Nathusius' pipistrelle recorded 22:39 on 10/07/2023 at Parcel 2 North Transect**



**Serotine recorded 22:33 on 10/07/2023 at Parcel 2 North-East Transect**



**Leisler's bat recorded 23:35 on 08/06/2023 at Parcel 1 West Transect**

# **Annex D: Automated Detector Surveys Full Results Tables**



## Annex D: Automated Detector Surveys Full Results Tables

Parcel 1, West Transect, Location A, September 2022

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Noctule	Nyctalus sp.	Leisler' s bat	Myotis species	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Nyctalus / Eptesicus species	Serotine	Barbastelle	Brown long-eared bat
07/09/2022	11	84	39	0	2	0	0	43	1	1	1	0	0	7
08/09/2022	11	24	41	0	5	1	2	8	0	0	1	0	1	0
09/09/2022	11	2	4	0	6	0	0	7	0	0	0	0	0	0
10/09/2022	11	40	30	1	6	0	1	7	1	3	0	0	1	0
11/09/2022	11	57	140	0	8	0	1	18	6	0	0	1	1	1



Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Noctule	Nyctalus sp.	Leisler' s bat	Myotis species	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Nyctalus / Eptesicus species	Serotine	Barbastelle	Brown long-eared bat
<b>Total</b>	<b>55</b>	<b>207</b>	<b>254</b>	<b>1</b>	<b>27</b>	<b>1</b>	<b>4</b>	<b>83</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>8</b>
<b>Registrations per hour by species</b>		<b>3.76</b>	<b>4.62</b>	<b>0.02</b>	<b>0.49</b>	<b>0.02</b>	<b>0.07</b>	<b>1.51</b>	<b>0.15</b>	<b>0.07</b>	<b>0.04</b>	<b>0.02</b>	<b>0.05</b>	<b>0.15</b>
<b>Registrations of all bat species per hour</b>														<b>10.96</b>

Parcel 1, West Transect, Location A, June 2023

Date (night commencing)	Total night hours	Observation				
		Common pipistrelle	Noctule	Nyctalus sp.	Myotis species	Myotis/ brown long-eared bat
08/06/2023	7.5	5	0	0	0	0
09/06/2023	7.5	4	1	0	1	0
10/06/2023	7.5	0	0	1	1	0
11/06/2023	7.5	5	0	0	3	0
12/06/2023	7.5	1	0	0	3	1
13/06/2023	7.5	0	0	0	0	0
14/06/2023	7.5	1	0	0	0	0
<b>Total</b>	<b>52.5</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>1</b>

Date (night commencing)	Total night hours	Observation				
		Common pipistrelle	Noctule	<i>Nyctalus</i> sp.	<i>Myotis</i> species	<i>Myotis</i> /brown long-eared bat
Registrations per hour by species		0.30	0.02	0.02	0.15	0.02
Registrations of all bat species per hour		0.51				

Parcel 1, West Transect, Location A, July 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis sp	Brown long-eared	Myotis/ brown long-eared bat
06/07/2023	7.5	8	0	0	0	6	0	5	1	0	0	0
07/07/2023	7.5	11	7	3	1	4	0	0	0	9	1	1
08/07/2023	7.5	12	4	0	0	16	1	1	1	5	0	0
09/07/2023	7.5	27	6	0	0	5	0	0	2	2	0	0
10/07/2023	7.5	9	6	1	0	0	0	0	0	4	0	1
Total	37.5	67	23	4	1	31	1	6	4	20	1	2



Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis sp	Brown long-eared	Myotis/ brown long-eared bat
Registrations per hour by species		1.79	0.61	0.11	0.03	0.83	0.03	0.16	0.11	0.53	0.03	0.05
Registrations of all bat species per hour		4.27										

Parcel 1, West Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	<i>Nyctalus</i> sp	Serotine	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
<b>23/08/2023</b>	9.75	13	10	0	13	0	1	0	1	9	8
<b>24/08/2023</b>	9.75	12	14	2	4	0	0	2	1	14	2
<b>25/08/2023</b>	10	5	11	2	14	2	0	0	0	9	0
<b>26/08/2023</b>	10	0	0	0	0	0	0	0	0	0	0
<b>27/08/2023</b>	10	5	5	0	9	2	0	0	0	10	0
<b>28/08/2023</b>	10.25	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>59.75</b>	<b>35</b>	<b>40</b>	<b>4</b>	<b>40</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>42</b>	<b>10</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
Registrations per hour by species		0.59	0.67	0.07	0.67	0.07	0.02	0.03	0.03	0.70	0.17
Registrations of all bat species per hour		3.01									

Parcel 1, West Transect, Location B, September 2022

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Noctule	<i>Nyctalus sp</i>	<i>Myotis species</i>	Barbastelle	Brown long-eared bat
<b>07/09/2022</b>	11	2	5	2	0	7	0	1
<b>08/09/2022</b>	11	0	0	0	0	0	0	0
<b>09/09/2022</b>	11	0	0	1	1	0	1	1
<b>10/09/2022</b>	11	47	6	4	0	6	0	1
<b>11/09/2022</b>	11	0	0	0	0	0	0	0
<b>Total</b>	<b>55</b>	<b>49</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>0.89</b>	<b>0.20</b>	<b>0.13</b>	<b>0.02</b>	<b>0.24</b>	<b>0.02</b>	<b>0.05</b>



Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Noctule	<i>Nyctalus</i> sp	<i>Myotis</i> species	Barbastelle	Brown long-eared bat
Registrations of all bat species per hour		1.55						

Parcel 1, West Transect, Location B, June 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Myotis species	Myotis/ brown long eared bat
02/06/2023	7.5	17	15	0	1	2	0	0	5	0	2	0
03/06/2023	7.5	87	44	8	49	12	1	3	3	0	16	0
04/06/2023	7.5	53	28	34	6	1	0	0	5	0	5	0
05/06/2023	7.5	153	48	7	9	2	3	0	1	1	4	0
06/06/2023	7.5	69	29	0	11	0	1	0	2	0	5	0
07/06/2023	7.5	57	26	10	4	0	1	2	7	0	3	1

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Myotis species	Myotis/ brown long eared bat
Total	45	436	190	59	80	17	6	5	23	1	35	1
Registrations per hour by species		9.69	4.22	1.31	1.78	0.38	0.13	0.11	0.51	0.02	0.78	0.02
Registrations of all bat species per hour												18.96

Parcel 1, West Transect, Location B, July 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Nyctalus/ Eptesicus sp.	Myotis sp	Possible barbastelle	Myotis/ brown long-eared bat
06/07/2023	7.5	393	23	7	6	6	0	2	0	1	2	0	0
07/07/2023	7.5	108	10	1	2	11	1	1	1	1	2	1	0
08/07/2023	7.5	335	0	4	4	14	1	1	2	0	6	0	1
09/07/2023	7.5	1425	116	5	3	19	0	3	1	0	6	0	0
10/07/2023	7.5	209	192	0	1	8	0	2	3	0	1	0	1



Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Nyctalus/ Eptesicus sp.	Myotis sp	Possible barbastelle	Myotis/ brown long-eared bat
Total	37.5	2470	341	17	16	58	2	9	7	2	17	1	2
Registrations per hour by species		65.87	9.09	0.45	0.43	1.55	0.05	0.24	0.19	0.05	0.45	0.03	0.05
Registrations of all bat species per hour													78.45

Parcel 1, West Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	<i>Nyctalus sp</i>	<i>Nyctalus/Eptesicus</i>	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
23/08/2023	9.75	24	4	0	11	1	3	1	1	0	0	0
24/08/2023	9.75	44	22	0	16	0	5	1	1	0	3	1
25/08/2023	10	49	90	4	6	5	1	0	1	2	4	0
26/08/2023	10	28	99	2	10	3	2	0	1	3	0	0
27/08/2023	10	18	6	0	0	8	0	0	1	1	3	1
<b>Total</b>	<b>49.5</b>	<b>163</b>	<b>221</b>	<b>6</b>	<b>43</b>	<b>17</b>	<b>11</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>10</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>3.29</b>	<b>4.46</b>	<b>0.12</b>	<b>0.87</b>	<b>0.34</b>	<b>0.22</b>	<b>0.04</b>	<b>0.10</b>	<b>0.12</b>	<b>0.20</b>	<b>0.04</b>

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus</i> sp	<i>Nyctalus/Eptesicus</i>	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
Registrations of all bat species per hour		9.83										

Parcel 1, East Transect, Location A, September 2022

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Noctule	Leisler's bat	Barbastelle	Brown long-eared bat
07/09/2022	11	72	6	5	0	0	13	9	0	0
08/09/2022	11	71	18	7	2	6	17	7	1	1
09/09/2022	11	191	5	11	0	0	13	2	3	0
10/09/2022	11	106	8	3	2	2	22	1	3	1
11/09/2022	11	134	41	3	1	1	7	3	2	4
<b>Total</b>	<b>55</b>	<b>574</b>	<b>78</b>	<b>29</b>	<b>5</b>	<b>9</b>	<b>72</b>	<b>22</b>	<b>9</b>	<b>6</b>
<b>Registrations per hour by species</b>		<b>10.44</b>	<b>1.42</b>	<b>0.53</b>	<b>0.09</b>	<b>0.16</b>	<b>1.31</b>	<b>0.40</b>	<b>0.16</b>	<b>0.11</b>



Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	<i>Myotis</i> species	Pipistrelle species (common or soprano)	<i>Nyctalus</i> sp	Noctule	Leisler' s bat	Barbastelle	Brown long-eared bat
Registrations of all bat species per hour										14.62

Parcel 1, East Transect, Location A, June 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
08/06/2023	7.5	7	0	0	0	0	1	0	3	0	0
09/06/2023	7.5	9	1	0	0	0	2	0	0	3	1
10/06/2023	7.5	12	8	1	1	0	0	1	1	1	0
11/06/2023	7.5	114	8	1	1	4	11	0	0	2	1
12/06/2023	7.5	59	3	0	0	3	11	4	0	1	0
13/06/2023	7.5	20	7	0	0	3	1	0	1	3	0
14/06/2023	7.5	19	1	0	0	3	5	0	0	5	0
<b>Total</b>	<b>52.5</b>	<b>240</b>	<b>29</b>	<b>2</b>	<b>2</b>	<b>13</b>	<b>31</b>	<b>5</b>	<b>5</b>	<b>15</b>	<b>2</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
Registrations per hour by species		4.57	0.55	0.04	0.04	0.25	0.59	0.10	0.10	0.29	0.04
Registrations of all bat species per hour											6.55

## Parcel 1, East Transect, Location A, July 2023

Void, detector malfunctioned.



### Parcel 1, East Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Myotis sp	Barbastelle	Possible barbastelle	Brown long-eared bat
<b>22/08/2023</b>	9.75	10	3	0	0	5	1	1	0	1	0	0	0
<b>23/08/2023</b>	9.75	17	10	0	0	6	3	1	0	1	0	1	1
<b>24/08/2023</b>	9.75	44	7	2	1	5	1	0	1	0	2	0	0
<b>25/08/2023</b>	10	2	5	0	0	2	0	0	0	0	0	2	1
<b>26/08/2023</b>	10	8	3	0	0	2	2	1	0	0	0	1	2
<b>27/08/2023</b>	10	3	0	0	1	0	1	0	0	0	0	0	0
<b>28/08/2023</b>	10.25	10	5	0	0	1	0	0	0	0	0	0	0
<b>Total</b>	<b>69.75</b>	<b>94</b>	<b>33</b>	<b>2</b>	<b>2</b>	<b>21</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Myotis sp	Barbastelle	Possible barbastelle	Brown long-eared bat
Registrations per hour by species		1.35	0.47	0.03	0.03	0.30	0.11	0.04	0.01	0.03	0.03	0.06	0.06
Registrations of all bat species per hour		2.53											

Parcel 1, East Transect, Location B, September 2022

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Noctule	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Leisler's bat	Barbastelle	Brown long-eared bat
07/09/2022	11	0	0	0	0	0	0	0	0	0
08/09/2022	11	1	4	2	0	0	2	0	0	0
09/09/2022	11	6	1	9	0	1	0	0	0	1
10/09/2022	11	14	1	5	2	0	0	0	0	0
11/09/2022	11	8	3	5	1	1	0	3	1	2
<b>Total</b>	<b>55</b>	<b>29</b>	<b>9</b>	<b>21</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>0.53</b>	<b>0.16</b>	<b>0.38</b>	<b>0.05</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.02</b>	<b>0.05</b>

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Noctule	<i>Myotis</i> species	Pipistrelle species (common or soprano)	<i>Nyctalus</i> sp	Leisler's bat	Barbastelle	Brown long-eared bat
Registrations of all bat species per hour		1.33								



Parcel 1, East Transect, Location B, June 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
09/06/2023	7.5	41	10	0	0	0	13	1	0	1	0	1
10/06/2023	7.5	32	29	0	2	0	89	0	0	2	23	1
11/06/2023	7.5	30	4	0	0	0	37	0	1	2	0	0
12/06/2023	7.5	53	17	0	4	0	14	1	0	1	0	0
13/06/2023	7.5	36	28	1	1	0	16	2	0	4	2	0
14/06/2023	7.5	49	17	0	1	2	15	0	0	1	6	0
<b>Total</b>	<b>45</b>	<b>241</b>	<b>105</b>	<b>1</b>	<b>8</b>	<b>28</b>	<b>184</b>	<b>4</b>	<b>1</b>	<b>11</b>	<b>31</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>5.36</b>	<b>2.33</b>	<b>0.02</b>	<b>0.18</b>	<b>0.62</b>	<b>4.09</b>	<b>0.09</b>	<b>0.02</b>	<b>0.24</b>	<b>0.69</b>	<b>0.04</b>

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
Registrations of all bat species per hour												13.69

### Parcel 1, East Transect, Location B, July 2023

Date (night commencing)	Total night hours	Observation														
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Nyctalus/ Eptesicus sp.	Myotis sp	Barbastelle	Possible barbastelle	Brown long-eared bat	Myotis/ brown long-eared bat
06/07/2023	7.5	13	2	0	2	2	1	4	3	0	4	0	0	0	3	0
07/07/2023	7.5	29	5	4	0	5	4	2	1	2	1	1	0	0	1	1
08/07/2023	7.5	20	9	1	0	2	15	7	3	1	1	6	1	0	2	0
09/07/2023	7.5	18	6	0	1	0	9	2	4	0	1	5	0	0	2	0
10/07/2023	7.5	5	4	0	0	0	23	2	5	0	2	3	0	2	0	1
<b>Total</b>	<b>37.5</b>	<b>85</b>	<b>26</b>	<b>5</b>	<b>3</b>	<b>9</b>	<b>52</b>	<b>17</b>	<b>16</b>	<b>3</b>	<b>9</b>	<b>15</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>2.27</b>	<b>0.69</b>	<b>0.13</b>	<b>0.08</b>	<b>0.24</b>	<b>1.39</b>	<b>0.45</b>	<b>0.43</b>	<b>0.08</b>	<b>0.24</b>	<b>0.40</b>	<b>0.03</b>	<b>0.05</b>	<b>0.21</b>	<b>0.05</b>

Date (night commencing)	Total night hours	Observation														
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp.	Serotine	Nyctalus/ Eptesicus sp.	Myotis sp	Barbastelle	Possible barbastelle	Brown long-eared bat	Myotis/ brown long-eared bat
Registrations of all bat species per hour		6.75														



Parcel 1, East Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
23/08/2023	9.75	26	10	0	0	14	6	2	1	0	1	3	3
24/08/2023	9.75	68	17	3	1	5	3	1	0	0	0	2	0
25/08/2023	10	5	2	0	0	4	0	0	0	2	0	1	0
26/08/2023	10	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>39.5</b>	<b>99</b>	<b>29</b>	<b>3</b>	<b>1</b>	<b>23</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>2.51</b>	<b>0.73</b>	<b>0.08</b>	<b>0.03</b>	<b>0.58</b>	<b>0.23</b>	<b>0.08</b>	<b>0.03</b>	<b>0.05</b>	<b>0.03</b>	<b>0.15</b>	<b>0.08</b>
<b>Registrations of all bat species per hour</b>													<b>4.56</b>

Parcel 1, North Transect, Location A, May 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Brown long-eared bat	Myotis/ brown long-eared bat
<b>23/05/2023</b>	8	17	4	0	1	1	0	1	2	3	2
<b>24/05/2023</b>	8	13	10	1	3	0	0	0	4	2	2
<b>25/05/2023</b>	7.75	6	2	0	2	0	2	0	4	1	0
<b>26/05/2023</b>	7.75	2	1	0	0	1	0	0	0	0	1
<b>27/05/2023</b>	7.75	5	8	0	5	0	0	0	1	4	0
<b>28/05/2023</b>	7.75	0	0	0	3	0	0	0	0	1	0
<b>29/05/2023</b>	7.75	0	1	0	0	0	0	1	0	0	0
<b>30/05/2023</b>	7.75	4	0	0	3	0	0	0	0	0	0

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Myotis species	Brown long-eared bat	Myotis/ brown long-eared bat
31/05/2023	7.5	0	1	0	0	0	0	0	0	0	0
01/06/2023	7.5	0	1	0	1	0	0	0	0	0	0
Total	77.5	47	28	1	18	2	2	2	11	11	5
Registrations per hour by species		0.61	0.36	0.01	0.23	0.03	0.03	0.03	0.14	0.14	0.06
Registrations of all bat species per hour											1.64

Parcel 1, North Transect, Location A, July 2023

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or	Noctule	Leisler's bat	Nyctalus sp	Serotine	Myotis sp	Myotis/ brown long-eared bat
06/07/2023	7.5	110	29	1	2	0	0	0	0	0
07/07/2023	7.5	22	0	0	1	0	1	0	0	0
08/07/2023	7.5	25	14	0	5	1	0	0	0	1
09/07/2023	7.5	71	10	0	2	0	0	1	1	0
10/07/2023	7.5	19	6	0	0	0	0	0	0	0
<b>Total</b>	<b>37.5</b>	<b>247</b>	<b>59</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Registrations per hour by species</b>		<b>6.59</b>	<b>1.57</b>	<b>0.03</b>	<b>0.27</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>



Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Myotis sp</i>	<i>Myotis/ brown long-eared bat</i>
Registrations of all bat species per hour										8.59

Parcel 1, North Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
<b>23/08/2023</b>	9.75	23	22	0	2	2	4	0	1	7	4	1	0
<b>24/08/2023</b>	9.75	16	6	1	0	1	1	0	0	0	7	0	3
<b>25/08/2023</b>	10	22	21	1	2	1	3	0	3	3	3	3	1
<b>26/08/2023</b>	10	41	22	1	2	2	3	3	0	1	6	6	1
<b>27/08/2023</b>	10	13	14	0	2	3	1	0	1	1	3	3	0
<b>28/08/2023</b>	10.25	23	21	0	3	2	0	0	1	1	1	5	4
<b>Total</b>	<b>59.75</b>	<b>138</b>	<b>106</b>	<b>3</b>	<b>11</b>	<b>11</b>	<b>12</b>	<b>3</b>	<b>6</b>	<b>13</b>	<b>24</b>	<b>18</b>	<b>9</b>

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations per hour by species		2.31	1.77	0.05	0.18	0.18	0.20	0.05	0.10	0.22	0.40	0.30	0.15
Registrations of all bat species per hour		5.92											

## Parcel 1, North Transect, Location A, September 2023

No data recorded.



Parcel 1, North Transect, Location B, May 2023

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius')	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Possible barbastelle	Myotis species	Myotis/brown long eared bat	Brown long-eared bat
23/05/2023	8	105	10	2	0	3	0	1	1	0	1	0	13	0	1
24/05/2023	8	72	7	1	1	37	0	0	1	0	0	0	12	2	4
25/05/2023	7.75	140	15	2	0	9	0	0	0	0	0	0	20	2	3
26/05/2023	7.75	196	16	1	2	4	0	0	2	4	0	1	25	5	4
27/05/2023	7.75	84	4	5	0	21	4	0	0	0	0	1	8	2	0
28/05/2023	7.75	187	18	7	0	2	1	0	0	0	0	0	27	1	2
29/05/2023	7.75	69	13	0	0	5	0	0	0	0	0	0	10	1	2
30/05/2023	7.75	169	36	3	0	3	0	1	0	0	1	1	25	4	1

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius')	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Possible barbastelle	Myotis species	Myotis/brown long eared bat	Brown long-eared bat
31/05/2023	7.5	102	14	2	0	4	1	1	0	0	1	1	17	4	0
01/06/2023	7.5	103	18	0	0	2	2	0	1	0	0	1	14	4	3
Total	77.5	1227	151	23	3	90	8	3	5	4	3	5	171	25	20
Registrations per hour by species		15.83	1.95	0.30	0.04	1.16	0.10	0.04	0.06	0.05	0.04	0.06	2.21	0.32	0.26
Registrations of all bat species per hour															22.43

Parcel 1, North Transect, Location B, July 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Myotis species	Possible barbastelle	Brown long-eared bat
06/07/2023	7.5	128	30	0	9	0	0	0	0	1	7	0	2
07/07/2023	7.5	289	11	8	5	18	2	0	0	1	10	0	1
08/07/2023	7.5	60	9	1	3	0	15	0	0	0	6	1	0
09/07/2023	7.5	49	8	0	2	0	10	0	2	0	3	0	0
10/07/2023	7.5	36	4	0	5	0	12	2	3	4	1	0	0
<b>Total</b>	<b>37.5</b>	<b>562</b>	<b>62</b>	<b>9</b>	<b>24</b>	<b>18</b>	<b>39</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>27</b>	<b>1</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>14.99</b>	<b>1.65</b>	<b>0.24</b>	<b>0.64</b>	<b>0.48</b>	<b>1.04</b>	<b>0.05</b>	<b>0.13</b>	<b>0.16</b>	<b>0.72</b>	<b>0.03</b>	<b>0.08</b>

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Myotis species	Possible barbastelle	Brown long-eared bat	
Registrations of all bat species per hour														20.21



Parcel 1, North Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler's bat	Nyctalus sp	Serotine	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
22/08/2023	9.75	27	7	4	2	0	1	2	3	1	0
23/08/2023	9.75	71	13	26	1	3	0	1	25	1	0
24/08/2023	9.75	32	7	22	3	1	0	1	3	1	1
25/08/2023	10	9	3	2	0	3	0	0	2	0	0
26/08/2023	10	14	4	4	2	0	0	1	1	0	0
27/08/2023	10	11	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>59.25</b>	<b>164</b>	<b>34</b>	<b>58</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>5</b>	<b>34</b>	<b>3</b>	<b>1</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler' s bat	<i>Nyctalus</i> sp	Serotine	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
Registrations per hour by species		2.77	0.57	0.98	0.14	0.12	0.02	0.08	0.57	0.05	0.02
Registrations of all bat species per hour		5.32									

Parcel 1, North Transect, Location B, September 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
07/09/2023	10.75	150	44	1	1	13	1	1	0	0	4	1	2	2
08/09/2023	11	79	27	1	0	14	2	3	1	1	5	0	3	2
09/09/2023	11	110	28	0	1	17	0	1	0	0	3	1	2	3
10/09/2023	11	106	23	1	1	1	5	1	1	1	17	2	1	0
11/09/2023	11	16	11	0	0	0	0	0	0	0	1	1	0	0
<b>Total</b>	<b>54.75</b>	<b>461</b>	<b>133</b>	<b>3</b>	<b>3</b>	<b>45</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>30</b>	<b>5</b>	<b>8</b>	<b>7</b>
<b>Registrations per hour by species</b>		<b>8.42</b>	<b>2.43</b>	<b>0.05</b>	<b>0.05</b>	<b>0.82</b>	<b>0.15</b>	<b>0.11</b>	<b>0.04</b>	<b>0.04</b>	<b>0.55</b>	<b>0.09</b>	<b>0.15</b>	<b>0.13</b>

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations of all bat species per hour		13.02												

Parcel 1a, Location A, September 2022

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Noctule	Nathusius' pipistrelle	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Nyctalus / Eptesicus species	Leisler's bat	Barbastelle	Brown long-eared bat
07/09/2022	11	143	92	1		2	2	0	0	2	15	1
08/09/2022	11	41	27	1	0	1	1	1	0	2	4	0
09/09/2022	11	82	5	0	1	14	0	0	0	0	2	0
10/09/2022	11	228	42	1	1	11	5	0	2	0	5	0
11/09/2022	11	69	96	0	0	2	1	1	16	2	6	0
<b>Total</b>	<b>55</b>	<b>563</b>	<b>262</b>	<b>3</b>	<b>2</b>	<b>30</b>	<b>9</b>	<b>2</b>	<b>18</b>	<b>6</b>	<b>32</b>	<b>1</b>
<b>Registrations per hour by species</b>		<b>10.24</b>	<b>4.76</b>	<b>0.05</b>	<b>0.04</b>	<b>0.55</b>	<b>0.16</b>	<b>0.04</b>	<b>0.33</b>	<b>0.11</b>	<b>0.58</b>	<b>0.02</b>



Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Noctule	Nathusius' pipistrelle	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Nyctalus / Eptesicus species	Leisler' s bat	Barbastelle	Brown long-eared bat
Registrations of all bat species per hour												16.87

Parcel 1a, Location A, June 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Barbastelle	Possible barbastelle	Myotis species
02/06/2023	7.5	29	4	0	0	3	0	0	0	2	11
03/06/2023	7.5	34	5	1	0	1	1	0	1	3	67
04/06/2023	7.5	17	5	0	1	1	0	0	1	2	29
05/06/2023	7.5	66	6	0	1	0	1	1	2	5	33
06/06/2023	7.5	16	1	0	0	0	0	1	1	6	5
<b>Total</b>	<b>37.5</b>	<b>162</b>	<b>21</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>18</b>	<b>145</b>
<b>Registrations per hour by species</b>		<b>4.32</b>	<b>0.56</b>	<b>0.03</b>	<b>0.05</b>	<b>0.13</b>	<b>0.05</b>	<b>0.05</b>	<b>0.13</b>	<b>0.48</b>	<b>3.87</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis species</i>
Registrations of all bat species per hour		9.68									

Parcel 1a, Location A, July 2023

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Nyctalus sp	Nyctalus / Eptesicus species	Myotis species
11/07/2023	7.5	32	4	0	0	0	0	0
12/07/2023	7.75	151	5	68	1	0	0	19
13/07/2023	7.75	286	5	112	0	1	2	11
14/07/2023	7.75	16	9	0	1	0	1	0
15/07/2023	7.75	9	1	0	2	1	0	0
16/07/2023	7.75	217	2	11	0	0	0	5
<b>Total</b>	<b>46.25</b>	<b>711</b>	<b>26</b>	<b>191</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>35</b>
<b>Registrations per hour by species</b>		<b>15.37</b>	<b>0.56</b>	<b>4.13</b>	<b>0.09</b>	<b>0.04</b>	<b>0.06</b>	<b>0.76</b>

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	<i>Nyctalus</i> sp	<i>Nyctalus</i> / <i>Eptesicus</i> species	<i>Myotis</i> species
Registrations of all bat species per hour		21.02						



Parcel 1a, Location A, August 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius)	Noctule	Leisler's bat	Serotine	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
23/08/2023	9.75	24	9	1	0	17	6	1	0	0	4	3
24/08/2023	9.75	68	17	2	2	4	3	0	1	0	2	0
25/08/2023	10	5	2	0	0	4	0	0	2	1	0	0
<b>Total</b>	<b>29.5</b>	<b>97</b>	<b>28</b>	<b>3</b>	<b>2</b>	<b>25</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>3.29</b>	<b>0.95</b>	<b>0.10</b>	<b>0.07</b>	<b>0.85</b>	<b>0.31</b>	<b>0.03</b>	<b>0.10</b>	<b>0.03</b>	<b>0.20</b>	<b>0.10</b>
<b>Registrations of all bat species per hour</b>												<b>6.03</b>

Parcel 1a, Location B, September 2022

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Noctule	Daubenton' s bat	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Leisler' s bat	Barbastelle	Brown long-eared bat
07/09/2022	11	10	0	1	1	14	27	1	0	6	1
08/09/2022	11	14	35	2	0	14	0	0	2	7	1
09/09/2022	11	7	14	1	0	10	2	0	0	0	2
10/09/2022	11	16	18	2	0	8	0	0	0	1	2
11/09/2022	11	74	32	0	0	18	2	0	4	1	0
<b>Total</b>	<b>55</b>	<b>121</b>	<b>99</b>	<b>6</b>	<b>1</b>	<b>64</b>	<b>31</b>	<b>1</b>	<b>6</b>	<b>15</b>	<b>6</b>
<b>Registrations per hour by species</b>		<b>2.20</b>	<b>1.80</b>	<b>0.11</b>	<b>0.02</b>	<b>1.16</b>	<b>0.56</b>	<b>0.02</b>	<b>0.11</b>	<b>0.27</b>	<b>0.11</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Noctule	Daubenton' s bat	Myotis species	Pipistrelle species (common or soprano)	Nyctalus sp	Leisler' s bat	Barbastelle	Brown long-eared bat
Registrations of all bat species per hour		6.36									

Parcel 1a, Location B, June 2023

Date (night commencing)	Total night hours	Observation				
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or Nathusius' )	Noctule	Myotis or brown long-eared bat species
02/06/2023	7.5	0	1	0	5	1
03/06/2023	7.5	36	4	2	2	0
<b>Total</b>	<b>15</b>	<b>36</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>1</b>
<b>Registrations per hour by species</b>		<b>2.40</b>	<b>0.33</b>	<b>0.13</b>	<b>0.47</b>	<b>0.07</b>
<b>Registrations of all bat species per hour</b>						<b>3.40</b>

Parcel 1a, Location B, July 2023

Date (night commencing)	Total night hours	Observation														
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Possible barbastelle	Myotis species	Myotis/brown long eared	Brown long-eared bat
11/07/2023	7.5	326	39	2	11	8	2	2	1	1	0	1	4	22	0	0
12/07/2023	7.75	370	48	1	12	6	4	2	3	3	0	0	3	39	2	3
13/07/2023	7.75	250	36	0	10	10	7	0	0	1	1	4	2	50	2	0
14/07/2023	7.75	497	67	2	20	12	1	1	2	0	0	3	13	47	0	2
15/07/2023	7.75	166	29	0	15	0	0	0	1	0	0	6	31	41	1	2
16/07/2023	7.75	355	43	0	8	1	1	0	0	0	0	0	4	53	1	1
<b>Total</b>	<b>46.25</b>	<b>1964</b>	<b>262</b>	<b>5</b>	<b>76</b>	<b>37</b>	<b>15</b>	<b>5</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>14</b>	<b>57</b>	<b>252</b>	<b>6</b>	<b>8</b>
<b>Registrations per hour by species</b>		<b>42.46</b>	<b>5.66</b>	<b>0.11</b>	<b>1.64</b>	<b>0.80</b>	<b>0.32</b>	<b>0.11</b>	<b>0.15</b>	<b>0.11</b>	<b>0.02</b>	<b>0.30</b>	<b>1.23</b>	<b>5.45</b>	<b>0.13</b>	<b>0.17</b>



Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or	Pipistrelle species (common or	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus species	Barbastelle	Possible barbastelle	Myotis species
														Myotis/ brown long eared
														Brown long-eared bat
Registrations of all bat species per hour		58.68												

Parcel 1a, Location B, August 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
08/08/2023	9	4	4	1	0	1	0	0	0	0	0	17	2
09/08/2023	9	156	43	0	8	4	6	0	0	4	5	18	0
10/08/2023	9	273	36	1	2	0	1	1	2	10	8	71	0
11/08/2023	9	196	29	0	0	1	1	1	0	10	0	45	2
12/08/2023	9.25	89	21	0	0	0	0	0	0	4	9	29	0
Total	45.25	718	133	2	10	6	8	2	2	28	22	180	4
Registrations per hour by species		15.87	2.94	0.04	0.22	0.13	0.18	0.04	0.04	0.62	0.49	3.98	0.09

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations of all bat species per hour		24.64											

Parcel 2, Northeast Transect, Location A, September 2022

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler's bat	Myotis species	Pipistrelle species (common or	Nyctalus sp	Nyctalus/ Eptesicus sp	Barbastelle	Brown long-eared bat	Possible barbastelle
12/09/2022	11	99	26	5	1	32	8	0	0	2	2	2
13/09/2022	10.75	5	4	0	0	11	0	1	1	0	0	0
14/09/2022	10.75	6	3	0	0	3	2	1	0	0	1	0
15/09/2022	10.5	8	0	1	0	16	0	1	0	0	1	0
16/09/2022	10.5	0	0	0	0	0	2	0	0	0	0	0
<b>Total</b>	<b>53.5</b>	<b>118</b>	<b>33</b>	<b>6</b>	<b>1</b>	<b>62</b>	<b>12</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>2.21</b>	<b>0.62</b>	<b>0.11</b>	<b>0.02</b>	<b>1.16</b>	<b>0.22</b>	<b>0.06</b>	<b>0.02</b>	<b>0.04</b>	<b>0.06</b>	<b>0.04</b>

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler' s bat	Myotis species	Pipistrelle species (common or	Nyctalus sp	Nyctalus/ Eptesicus sp	Barbastelle	Brown long-eared bat	Possible barbastelle
Registrations of all bat species per hour		4.54										



Parcel 2, Northeast Transect, Location A, June 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Possible barbastelle	Myotis species
<b>15/06/2023</b>	7.5	22	0	6	0	11	0	0	0	0	5
<b>16/06/2023</b>	7.25	19	11	1	0	0	0	0	0	1	17
<b>17/06/2023</b>	7.25	9	2	6	1	1	0	0	0	0	4
<b>18/06/2023</b>	7.25	19	3	3	0	0	2	1	0	0	4
<b>19/06/2023</b>	7.25	39	5	7	0	1	0	3	1	0	12
<b>20/06/2023</b>	7.25	16	6	0	0	0	0	0	0	0	10
<b>21/06/2023</b>	7.25	22	6	2	0	1	0	0	0	0	9
<b>22/06/2023</b>	7.25	6	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>58.25</b>	<b>152</b>	<b>33</b>	<b>25</b>	<b>1</b>	<b>14</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>61</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Possible barbastelle	Myotis species
Registrations per hour by species		2.61	0.57	0.43	0.02	0.24	0.03	0.07	0.02	0.02	1.05
Registrations of all bat species per hour		5.05									

Parcel 2, Northeast Transect, Location A, July 2023

Date (night commencing)	Total night hours	Observation							
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Serotine	Myotis sp	Myotis/ brown long eared bat
11/07/2023	7.5	25	340	5	1	1	0	24	1
12/07/2023	7.75	32	346	12	0	1	0	30	0
13/07/2023	7.75	41	353	25	1	0	2	26	0
14/07/2023	7.75	17	13	1	0	0	0	15	0
15/07/2023	7.75	32	3	5	0	0	0	10	0
16/07/2023	7.75	75	425	67	1	0	0	28	0
<b>Total</b>	<b>46.25</b>	<b>222</b>	<b>1480</b>	<b>115</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>133</b>	<b>1</b>

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Serotine	Myotis sp
								Myotis/ brown long eared bat
Registrations per hour by species		4.80	32.00	2.49	0.06	0.04	0.04	2.88
Registrations of all bat species per hour								0.02
								42.34

Parcel 2, Northeast Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	<i>Nyctalus</i> sp	Serotine	<i>Nyctalus</i> / <i>Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
14/08/2023	9.25	13	11	2	0	8	2	0	0	2	0	15	7
15/08/2023	9.25	34	11	1	3	5	2	1	0	0	0	21	7
16/08/2023	9.5	44	30	0	4	2	0	0	0	1	0	13	5
17/08/2023	9.5	23	17	0	1	2	1	0	0	0	0	19	2
18/08/2023	9.5	143	36	4	1	0	1	0	1	0	1	23	12
19/08/2023	9.5	25	41	0	0	1	1	0	0	0	0	14	5
20/08/2023	9.5	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>66</b>	<b>282</b>	<b>146</b>	<b>7</b>	<b>9</b>	<b>18</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>105</b>	<b>38</b>



Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations per hour by species		4.27	2.21	0.11	0.14	0.27	0.11	0.02	0.02	0.05	0.02	1.59	0.58
Registrations of all bat species per hour		9.36											

Parcel 2, Northeast Transect, Location B, September 2022

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or Nathusius' )	Myotis species	Noctule	Leisler' s bat	Barbastelle	Brown long-eared bat
12/09/2022	11	389	8	1	1	44	4	2	6	3
13/09/2022	11	11	1	0	0	1	0	0	1	0
14/09/2022	11	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>33</b>	<b>400</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>45</b>	<b>4</b>	<b>2</b>	<b>7</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>12.12</b>	<b>0.27</b>	<b>0.03</b>	<b>0.03</b>	<b>1.36</b>	<b>0.12</b>	<b>0.06</b>	<b>0.21</b>	<b>0.09</b>
<b>Registrations of all bat species per hour</b>										<b>14.30</b>

## Parcel 2, Northeast Transect, Location B, June 2023

No data recorded.

## Parcel 2, Northeast Transect, Location B, July 2023

No data recorded.

### Parcel 2, Northeast Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
14/08/2023	9.25	7	3	1	0	1	0	0	0	0	1	0	5	1
15/08/2023	9.25	204	29	10	0	0	0	0	0	0	7	2	24	2
16/08/2023	9.5	358	37	15	1	6	0	2	0	1	3	3	27	3
17/08/2023	9.5	151	26	12	2	1	5	0	1	0	2	0	6	6
18/08/2023	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>47</b>	<b>720</b>	<b>95</b>	<b>38</b>	<b>3</b>	<b>8</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>5</b>	<b>62</b>	<b>12</b>
<b>Registrations per hour by species</b>		<b>15.32</b>	<b>2.02</b>	<b>0.81</b>	<b>0.06</b>	<b>0.17</b>	<b>0.11</b>	<b>0.04</b>	<b>0.02</b>	<b>0.02</b>	<b>0.28</b>	<b>0.11</b>	<b>1.32</b>	<b>0.26</b>



Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
Registrations of all bat species per hour		20.53												

Parcel 2, Southwest Transect, Location A, September 2022

Date (night commencing)	Total night hours	Observation							
		Common pipistrelle	Soprano pipistrelle	Noctule	Serotine	Myotis species	Pipistrelle species (common or Nathusius' )	Leisler' s bat	Brown long-eared bat
12/09/2022	11	129	14	5	2	33	4	1	6
<b>Total</b>	<b>11</b>	<b>129</b>	<b>14</b>	<b>5</b>	<b>2</b>	<b>33</b>	<b>4</b>	<b>1</b>	<b>6</b>
<b>Registrations per hour by species</b>		<b>11.73</b>	<b>1.27</b>	<b>0.45</b>	<b>0.18</b>	<b>3.00</b>	<b>0.36</b>	<b>0.09</b>	<b>0.55</b>
<b>Registrations of all bat species per hour</b>									<b>17.64</b>

Parcel 2, Southwest Transect, Location A, June 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus/ Eptesicus sp	Serotine	Myotis sp	Myotis or brown long-eared bat species
02/06/2023	7.5	77	7	0	2	1	0	2	0	18	0
03/06/2023	7.5	147	20	1	2	3	1	10	30	36	0
04/06/2023	7.5	74	28	3	0	0	0	5	2	27	2
05/06/2023	7.5	97	90	0	0	3	3	3	1	9	1
<b>Total</b>	<b>30</b>	<b>395</b>	<b>145</b>	<b>4</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>20</b>	<b>33</b>	<b>90</b>	<b>3</b>
<b>Registrations per hour by species</b>		<b>13.17</b>	<b>4.83</b>	<b>0.13</b>	<b>0.13</b>	<b>0.23</b>	<b>0.13</b>	<b>0.67</b>	<b>1.10</b>	<b>3.00</b>	<b>0.10</b>
<b>Registrations of all bat species per hour</b>											<b>23.50</b>

Parcel 2, Southwest Transect, Location A, July 2023

Date (night commencing)	Total night hours	Observation							
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Serotine	Nyctalus / Eptesicus sp	Myotis sp	Brown long-eared bat
11/07/2023	7.5	231	5	1	1	0	0	22	0
12/07/2023	7.75	150	2	5	1	2	1	20	2
13/07/2023	7.75	534	21	6	3	2	0	31	0
14/07/2023	7.75	37	3	0	0	0	0	2	0
<b>Total</b>	<b>30.75</b>	<b>952</b>	<b>31</b>	<b>12</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>75</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>30.96</b>	<b>1.01</b>	<b>0.39</b>	<b>0.16</b>	<b>0.13</b>	<b>0.03</b>	<b>2.44</b>	<b>0.07</b>
<b>Registrations of all bat species per hour</b>									<b>35.19</b>

Parcel 2, Southwest Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
<b>08/08/2023</b>	9	107	6	0	1	6	0	0	0	0	4	4	5	2
<b>09/08/2023</b>	9	279	15	1	0	3	1	1	2	0	11	4	18	0
<b>10/08/2023</b>	9	108	11	0	0	2	6	1	1	0	2	3	14	0
<b>11/08/2023</b>	9	123	20	0	0	9	2	8	3	1	2	1	20	0
<b>12/08/2023</b>	9.25	67	8	0	0	8	1	3	1	0	1	1	8	0
<b>13/08/2023</b>	9.25	21	6	0	0	0	0	0	0	0	0	2	2	0
<b>Total</b>	<b>54.5</b>	<b>705</b>	<b>66</b>	<b>1</b>	<b>1</b>	<b>28</b>	<b>10</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>20</b>	<b>15</b>	<b>67</b>	<b>2</b>



Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations per hour by species		12.94	1.21	0.02	0.02	0.51	0.18	0.24	0.13	0.02	0.37	0.28	1.23	0.04
Registrations of all bat species per hour														17.17

Parcel 2, Southwest Transect, Location B, September 2022

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Noctule	<i>Nyctalus/Eptesicus</i> sp	<i>Myotis</i> species	<i>Nyctalus</i> sp	Leisler's bat	Barbastelle	Brown long-eared bat
12/09/2022	11	25	14	13	1	5	8	1	1	7
13/09/2022	10.75	2	1	0	1	1	0	1	0	0
14/09/2022	10.75	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>32.5</b>	<b>27</b>	<b>15</b>	<b>13</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>7</b>
<b>Registrations per hour by species</b>		<b>0.83</b>	<b>0.46</b>	<b>0.40</b>	<b>0.06</b>	<b>0.18</b>	<b>0.25</b>	<b>0.06</b>	<b>0.03</b>	<b>0.22</b>
<b>Registrations of all bat species per hour</b>										<b>2.49</b>

Parcel 2, Southwest Transect, Location B, June 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Possible barbastelle	Myotis species	Brown long-eared bat	Myotis/ brown long-eared bat
27/06/2023	7.25	183	4	0	1	1	4	0	4	1	0	7	3	1
28/06/2023	7.25	87	2	0	1	0	0	0	1	0	0	0	0	0
29/06/2023	7.25	542	19	0	25	0	1	0	1	1	0	13	0	0
30/06/2023	7.25	250	14	0	4	2	3	5	0	0	0	3	0	3
01/06/2023	7.25	825	26	1	29	0	6	2	1	0	1	6	0	0
<b>Total</b>	<b>36.25</b>	<b>1887</b>	<b>65</b>	<b>1</b>	<b>60</b>	<b>3</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>29</b>	<b>3</b>	<b>4</b>
<b>Registrations per hour by species</b>		<b>52.06</b>	<b>1.79</b>	<b>0.03</b>	<b>1.66</b>	<b>0.08</b>	<b>0.39</b>	<b>0.19</b>	<b>0.19</b>	<b>0.03</b>	<b>0.03</b>	<b>0.80</b>	<b>0.08</b>	<b>0.11</b>

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Possible barbastelle	Myotis species	Brown long--eared bat
Registrations of all bat species per hour		57.43											

Parcel 2, Southwest Transect, Location B, July 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Nyctalus / Eptesicus sp	Barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
15/07/2023	7.5	468	13	7	1	5	0	0	2	0	15	1	5
16/07/2023	7.25	919	4	57	1	9	1	1	0	1	15	2	1
<b>Total</b>	<b>14.75</b>	<b>1387</b>	<b>17</b>	<b>64</b>	<b>2</b>	<b>14</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>30</b>	<b>3</b>	<b>6</b>
<b>Registrations per hour by species</b>		<b>94.03</b>	<b>1.15</b>	<b>4.34</b>	<b>0.14</b>	<b>0.95</b>	<b>0.07</b>	<b>0.07</b>	<b>0.14</b>	<b>0.07</b>	<b>2.03</b>	<b>0.20</b>	<b>0.41</b>
<b>Registrations of all bat species per hour</b>													<b>103.59</b>



Parcel 2, Southwest Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
08/08/2023	9	11	14	1	0	9	4	3	0	0	3	9	0	0	0
09/08/2023	9	363	250	3	0	59	1	10	1	0	9	6	4	1	3
10/08/2023	9	693	156	0	0	21	2	2	0	0	0	5	7	0	1
11/08/2023	9	666	307	0	1	6	2	2	0	0	0	3	8	1	4
12/08/2023	9.25	807	697	0	2	1	0	0	0	2	0	1	11	0	8
13/08/2023	9.25	152	22	0	0	1	0	1	4	1	0	0	2	0	5
<b>Total</b>	<b>54.5</b>	<b>2692</b>	<b>1446</b>	<b>4</b>	<b>3</b>	<b>97</b>	<b>9</b>	<b>18</b>	<b>5</b>	<b>3</b>	<b>12</b>	<b>24</b>	<b>32</b>	<b>2</b>	<b>21</b>

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus</i> sp	Serotine	<i>Nyctalus</i> / <i>Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	<i>Myotis</i> /brown long eared bat	Brown long-eared bat
Registrations per hour by species		49.39	26.53	0.07	0.06	1.78	0.17	0.33	0.09	0.06	0.22	0.44	0.59	0.04	0.39
Registrations of all bat species per hour		80.15													

Parcel 2, North Transect, Location A, May 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (Common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Nyctalus/Eptesicus sp	Myotis sp	Brown long-eared bat
23/05/2023	8	14	0	1	3	0	0	1	0	0	2
24/05/2023	8	0	11	1	1	1	0	1	0	0	1
25/05/2023	7.75	12	0	3	1	1	1	1	1	1	2
26/05/2023	7.75	9	1	1	0	0	0	0	0	0	1
27/05/2023	7.75	14	1	1	0	1	1	0	0	2	0
28/05/2023	7.75	3	1	0	0	1	0	0	1	0	0
29/05/2023	7.75	4	0	0	0	0	0	0	0	0	0
30/05/2023	7.75	6	0	0	0	0	0	0	0	0	0
31/05/2023	7.5	1	0	0	0	0	0	0	0	0	0

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (Common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Myotis sp	Brown long-eared bat
Total	70	63	14	7	5	4	2	3	2	3	6
Registrations per hour by species		0.90	0.20	0.10	0.07	0.06	0.03	0.04	0.03	0.04	0.09
Registrations of all bat species per hour											1.56

## Parcel 2, North Transect, Location A, July 2023

No data recorded.



Parcel 2, North Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
14/08/2023	9.25	150	2	1	0	1	1	0	0	0	1	2	1	2
15/08/2023	9.25	278	18	0	5	4	0	2	0	1	15	11	1	2
16/08/2023	9.5	140	17	0	0	18	2	2	1	0	15	2	7	4
17/08/2023	9.5	99	7	0	1	4	1	0	1	1	1	0	8	4
18/08/2023	9.5	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>47</b>	<b>667</b>	<b>44</b>	<b>1</b>	<b>6</b>	<b>27</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>32</b>	<b>15</b>	<b>17</b>	<b>12</b>
<b>Registrations per hour by species</b>		<b>14.19</b>	<b>0.94</b>	<b>0.02</b>	<b>0.13</b>	<b>0.57</b>	<b>0.09</b>	<b>0.09</b>	<b>0.04</b>	<b>0.04</b>	<b>0.68</b>	<b>0.32</b>	<b>0.36</b>	<b>0.26</b>

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus</i> sp	Serotine	<i>Nyctalus</i> / <i>Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
Registrations of all bat species per hour		17.72												

Parcel 2, North Transect, Location A, September 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Serotine	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
07/09/2023	10.75	91	13	1	52	1	3	0	11	0	5	5
08/09/2023	11	94	12	0	156	2	1	1	9	1	1	5
09/09/2023	11	161	12	0	205	0	8	1	18	3	7	10
10/09/2023	11	35	12	0	4	0	1	1	6	3	5	4
11/09/2023	11	3	0	0	0	0	0	0	0	1	0	0
<b>Total</b>	<b>54.75</b>	<b>384</b>	<b>49</b>	<b>1</b>	<b>413</b>	<b>3</b>	<b>13</b>	<b>3</b>	<b>44</b>	<b>8</b>	<b>13</b>	<b>24</b>
<b>Registrations per hour by species</b>		<b>7.01</b>	<b>0.89</b>	<b>0.02</b>	<b>7.54</b>	<b>0.05</b>	<b>0.24</b>	<b>0.05</b>	<b>0.80</b>	<b>0.15</b>	<b>0.24</b>	<b>0.44</b>

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations of all bat species per hour		17.44										

Parcel 2, North Transect, Location B, May 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (Common or soprano)	Pipistrelle species (Common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Myotis sp	Brown long-eared bat	Myotis sp/ brown long eared bat
<b>23/05/2023</b>	8	183	4	5	4	0	0	1	1	4	1	3	0
<b>24/05/2023</b>	8	166	5	16	1	0	0	0	1	0	0	2	0
<b>25/05/2023</b>	7.75	60	1	7	0	2	0	0	1	0	0	1	0
<b>26/05/2023</b>	7.75	49	0	2	0	0	0	0	0	1	1	0	0
<b>27/05/2023</b>	7.75	40	2	2	1	0	1	1	3	0	0	1	1
<b>28/05/2023</b>	7.75	28	0	3	0	0	0	0	0	0	1	0	0
<b>Total</b>	<b>47</b>	<b>526</b>	<b>12</b>	<b>35</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>1</b>



Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (Common or soprano)	Pipistrelle species (Common or Nathusius' )	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus/ Eptesicus</i> sp	<i>Myotis</i> sp	Brown long-eared bat	<i>Myotis</i> sp/ brown long eared bat
Registrations per hour by species		11.19	0.26	0.74	0.13	0.04	0.02	0.04	0.13	0.11	0.06	0.15	0.02
Registrations of all bat species per hour		12.89											

## Parcel 2, North Transect, Location B, July 2023

No data recorded.

Parcel 2, North Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation				
		Common pipistrelle	Soprano pipistrelle	Noctule	Possible barbastelle	Brown long-eared bat
14/08/2023	9.25	4	1	0	0	0
15/08/2023	9.25	36	3	1	1	1
16/08/2023	9.5	0	0	0	0	0
<b>Total</b>	<b>28</b>	<b>40</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Registrations per hour by species</b>		<b>1.43</b>	<b>0.14</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>
<b>Registrations of all bat species per hour</b>						<b>1.68</b>

Parcel 2, North Transect, Location B, September 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
07/09/2023	10.75	150	44	1	1	13	1	1	0	0	4	1	2	2
08/09/2023	11	79	27	1	0	14	2	3	1	1	5	0	3	2
09/09/2023	11	110	28	0	1	17	0	1	0	0	3	1	2	3
10/09/2023	11	106	23	1	1	1	5	1	1	1	17	2	1	0
11/09/2023	11	16	11	0	0	0	0	0	0	0	1	1	0	0
<b>Total</b>	<b>54.75</b>	<b>461</b>	<b>133</b>	<b>3</b>	<b>3</b>	<b>45</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>30</b>	<b>5</b>	<b>8</b>	<b>7</b>
<b>Registrations per hour by species</b>		<b>8.42</b>	<b>2.43</b>	<b>0.05</b>	<b>0.05</b>	<b>0.82</b>	<b>0.15</b>	<b>0.11</b>	<b>0.04</b>	<b>0.04</b>	<b>0.55</b>	<b>0.09</b>	<b>0.15</b>	<b>0.13</b>

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
Registrations of all bat species per hour		13.02												



Parcel 2, Southern Transect, Location A, June 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
08/06/2023	7.5	30	15	0	1	0	0	0	0	1	0	12	4
09/06/2023	7.5	50	8	0	0	1	3	1	0	0	0	34	1
10/06/2023	7.5	40	31	1	5	0	6	0	1	0	2	45	1
11/06/2023	7.5	196	3	4	1	3	10	0	0	0	2	75	0
12/06/2023	7.5	228	6	0	1	0	2	0	0	0	0	6	0
<b>Total</b>	<b>37.5</b>	<b>544</b>	<b>63</b>	<b>5</b>	<b>8</b>	<b>4</b>	<b>21</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>172</b>	<b>6</b>
<b>Registrations per hour by species</b>		<b>14.51</b>	<b>1.68</b>	<b>0.13</b>	<b>0.21</b>	<b>0.11</b>	<b>0.56</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.11</b>	<b>4.59</b>	<b>0.16</b>

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus/ Eptesicus sp	Myotis species	Myotis/ brown long-eared bat
Registrations of all bat species per hour		22.13											

Parcel 2, Southern Transect, Location A, July 2023

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
17/07/2023	7.75	602	19	2	0	6	2	0	2	1	4	3	52	0	3
18/07/2023	7.75	623	9	1	1	3	2	1	4	0	1	0	57	2	5
19/07/2023	8	373	8	3	0	1	0	0	1	0	1	1	86	0	2
20/07/2023	8	249	6	4	0	0	0	0	2	0	2	1	44	0	1
21/07/2023	8	532	8	4	0	6	0	0	0	1	4	1	57	1	1
22/07/2023	8	10	1	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>47.5</b>	<b>2389</b>	<b>51</b>	<b>14</b>	<b>1</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>9</b>	<b>2</b>	<b>12</b>	<b>6</b>	<b>296</b>	<b>3</b>	<b>12</b>

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Myotis/brown long eared bat	Brown long-eared bat
Registrations per hour by species		50.29	1.07	0.29	0.02	0.34	0.08	0.02	0.19	0.04	0.25	0.13	6.23	0.06	0.25
Registrations of all bat species per hour		59.28													

Parcel 2, Southern Transect, Location A, August 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	Nyctalus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
08/08/2023	9	11	0	0	1	0	0	1	1	5	3
09/08/2023	9	42	4	1	7	1	5	1	2	20	3
10/08/2023	9	24	2	0	13	3	1	1	0	15	4
11/08/2023	9	14	2	0	5	2	1	0	2	12	2
12/08/2023	9.25	7	5	0	2	2	0	0	0	8	1
13/08/2023	9.25	4	0	0	7	0	0	0	0	6	1
<b>Total</b>	<b>47.5</b>	<b>102</b>	<b>13</b>	<b>1</b>	<b>42</b>	<b>8</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>66</b>	<b>14</b>



Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations per hour by species		2.15	0.27	0.02	0.88	0.17	0.15	0.06	0.11	1.39	0.29
Registrations of all bat species per hour		5.49									

Parcel 2, Southern Transect, Location A, September 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Noctule	<i>Nyctalus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
07/09/2023	10.75	167	24	2	0	8	10	0	2	8	5
08/09/2023	11	214	12	2	2	2	0	1	0	1	4
09/09/2023	11	166	14	1	0	2	6	0	0	4	2
<b>Total</b>	<b>32.75</b>	<b>547</b>	<b>50</b>	<b>5</b>	<b>2</b>	<b>12</b>	<b>16</b>	<b>1</b>	<b>2</b>	<b>13</b>	<b>11</b>
<b>Registrations per hour by species</b>		<b>16.70</b>	<b>1.53</b>	<b>0.15</b>	<b>0.06</b>	<b>0.37</b>	<b>0.49</b>	<b>0.03</b>	<b>0.06</b>	<b>0.40</b>	<b>0.34</b>
<b>Registrations of all bat species per hour</b>											<b>20.12</b>

Parcel 2, Southern Transect, Location B, June 2023

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Serotine	Possible barbastelle	Nyctalus/ Eptesicus sp	Myotis species	Brown long-eared bat	Myotis/ brown long-eared bat
08/06/2023	7.5	141	10	0	0	3	0	0	1	0	0	11	0	0
09/06/2023	7.5	71	10	0	1	2	4	0	1	0	0	23	0	5
10/06/2023	7.5	123	17	1	2	7	69	1	3	3	2	51	5	5
11/06/2023	7.5	120	5	0	1	5	8	0	1	0	0	30	0	0
12/06/2023	7.5	126	6	0	1	1	1	0	1	0	1	35	3	1
13/06/2023	7.5	136	5	0	61	0	4	0	2	0	0	54	1	2
14/06/2023	7.5	210	8	0	1	3	10	0	7	2	0	83	1	1
<b>Total</b>	<b>52.5</b>	<b>927</b>	<b>61</b>	<b>1</b>	<b>67</b>	<b>21</b>	<b>96</b>	<b>1</b>	<b>16</b>	<b>5</b>	<b>3</b>	<b>287</b>	<b>10</b>	<b>14</b>

Date (night commencing)	Total night hours	Observation												
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Serotine	Possible barbastelle	<i>Nyctalus/ Eptesicus</i> sp	<i>Myotis</i> species	Brown long-eared bat	<i>Myotis/ brown long-eared bat</i>
Registrations per hour by species		17.66	1.16	0.02	1.28	0.40	1.83	0.02	0.30	0.10	0.06	5.47	0.19	0.27
Registrations of all bat species per hour		28.74												

Parcel 2, Southern Transect, Location B, July 2023

Date (night commencing)	Total night hours	Observation														
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
17/07/2023	7.75	84	1	2	3	1	4	2	1	0	0	1	2	36	0	0
18/07/2023	7.75	28	2	0	0	1	5	0	0	0	0	0	0	22	1	0
19/07/2023	8	126	7	0	4	1	1	0	0	0	0	0	0	83	0	1
20/07/2023	8	83	21	1	2	1	3	0	0	0	1	0	1	73	1	0
21/07/2023	8	60	1	1	0	0	0	0	0	1	0	1	0	34	1	0
22/07/2023	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23/07/2023	8	41	10	0	3	0	0	0	0	0	0	0	2	46	0	0
<b>Total</b>	<b>55.5</b>	<b>423</b>	<b>42</b>	<b>4</b>	<b>12</b>	<b>4</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>294</b>	<b>3</b>	<b>1</b>



Date (night commencing)	Total night hours	Observation														
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	<i>Myotis</i> /brown long eared bat	Brown long-eared bat
Registrations per hour by species		7.62	0.76	0.07	0.22	0.07	0.23	0.04	0.02	0.02	0.02	0.04	0.09	5.30	0.05	0.02
Registrations of all bat species per hour		14.56														

Parcel 2, Southern Transect, Location B, August 2023

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler's bat	Nyctalus sp	Myotis sp	Brown long-eared bat
08/08/2023	9	7	2	1	0	2	9	0
09/08/2023	9	111	6	29	3	0	4	2
10/08/2023	9	184	3	5	1	0	21	5
11/08/2023	9	52	11	2	5	2	4	2
12/08/2023	9.25	66	8	1	1	0	9	1
13/08/2023	9.25	88	5	3	1	0	7	4
<b>Total</b>	<b>54.5</b>	<b>508</b>	<b>35</b>	<b>41</b>	<b>11</b>	<b>4</b>	<b>54</b>	<b>14</b>
<b>Registrations per hour by species</b>		<b>9.32</b>	<b>0.64</b>	<b>0.75</b>	<b>0.20</b>	<b>0.07</b>	<b>0.99</b>	<b>0.26</b>

Date (night commencing)	Total night hours	Observation						
		Common pipistrelle	Soprano pipistrelle	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	<i>Myotis sp</i>	Brown long-eared bat

Registrations of all bat species per hour

12.24

Parcel 2, Southern Transect, Location B, September 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or Nathusius' )	Noctule	Serotine	Possible barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
07/09/2023	10.75	32	2	0	0	0	1	0	10	1	0
08/09/2023	11	30	4	0	1	3	0	2	8	1	0
09/09/2023	11	37	2	0	0	0	0	1	9	2	1
10/09/2023	11	10	2	0	0	0	0	0	4	0	1
11/09/2023	11	11	0	1	0	0	0	0	7	0	0
<b>Total</b>	<b>54.75</b>	<b>120</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>38</b>	<b>4</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>2.19</b>	<b>0.18</b>	<b>0.02</b>	<b>0.02</b>	<b>0.05</b>	<b>0.02</b>	<b>0.05</b>	<b>0.69</b>	<b>0.07</b>	<b>0.04</b>

Date (night commencing)	Total night hours	Observation
		Common pipistrelle
		Soprano pipistrelle
		Nathusius' pipistrelle
		Pipistrelle species (common or Nathusius' )
		Noctule
		Serotine
		Possible barbastelle
		<i>Myotis</i> sp
		<i>Myotis</i> /brown long eared bat
		Brown long-eared bat
Registrations of all bat species per hour		3.34

Parcel 3, Location A, May 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp.	Possible barbastelle	Myotis sp.	Myotis/ brown long eared bat	Brown long-eared bat
23/05/2023	8	131	1	4	0	1	0	0	0	1	0	0
24/05/2023	8	253	6	6	2	0	0	3	0	2	0	1
25/05/2023	7.75	53	2	1	5	0	1	0	0	1	0	0
26/05/2023	7.75	110	0	1	0	1	0	2	0	0	1	1
27/05/2023	7.75	1	0	0	0	0	0	1	1	0	0	0
28/05/2023	7.75	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>47</b>	<b>548</b>	<b>9</b>	<b>12</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>



Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	<i>Nyctalus</i> sp	Serotine	<i>Nyctalus</i> / <i>Eptesicus</i> sp.	Possible barbastelle	<i>Myotis</i> sp.	<i>Myotis</i> /brown long eared bat	Brown long-eared bat
Registrations per hour by species		11.66	0.19	0.26	0.15	0.04	0.02	0.13	0.02	0.09	0.02	0.04
Registrations of all bat species per hour		12.62										

### Parcel 3, Location A, July 2023

No data collected due to access constraints.

Parcel 3, Location A, August 2023

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	Nyctalus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
14/08/2023	9.25	194	5	0	0	3	0	1	6	22	1
15/08/2023	9.25	74	5	1	8	3	3	1	1	8	3
16/08/2023	9.5	105	9	2	4	2	4	2	3	30	4
17/08/2023	9.5	799	16	2	5	4	1	0	1	18	7
18/08/2023	9.5	115	4	1	3	2	3	1	0	17	1
<b>Total</b>	<b>47</b>	<b>1287</b>	<b>39</b>	<b>6</b>	<b>20</b>	<b>14</b>	<b>11</b>	<b>5</b>	<b>11</b>	<b>95</b>	<b>16</b>
<b>Registrations per hour by species</b>		<b>27.38</b>	<b>0.83</b>	<b>0.13</b>	<b>0.43</b>	<b>0.30</b>	<b>0.23</b>	<b>0.11</b>	<b>0.23</b>	<b>2.02</b>	<b>0.34</b>

Date (night commencing)	Total night hours	Observation									
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations of all bat species per hour		32.00									

### Parcel 3, Location A, September 2023

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Brown long-eared bat
07/09/2023	10.75	104	7	0	31	1	3	0	0	0	1	6	2
08/09/2023	11	198	2	0	17	5	6	2	2	1	1	6	1
09/09/2023	11	120	6	0	14	1	3	0	3	1	5	8	2
10/09/2023	11	717	6	1	4	0	3	0	1	0	0	31	0
11/09/2023	11	478	2	0	4	1	1	0	0	0	1	32	1
12/09/2023	11	127	1	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	<b>65.75</b>	<b>1744</b>	<b>24</b>	<b>1</b>	<b>70</b>	<b>8</b>	<b>16</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>8</b>	<b>84</b>	<b>7</b>
<b>Registrations per hour by species</b>		<b>26.42</b>	<b>0.36</b>	<b>0.02</b>	<b>1.06</b>	<b>0.12</b>	<b>0.24</b>	<b>0.03</b>	<b>0.09</b>	<b>0.03</b>	<b>0.12</b>	<b>1.27</b>	<b>0.11</b>

Date (night commencing)	Total night hours	Observation											
		Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	Serotine	<i>Nyctalus / Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
Registrations of all bat species per hour		29.88											



Parcel 3, Location B, May 2023

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus / Eptesicus species	Myotis species	Brown long-eared bat
23/05/2023	8	70	1	2	1	4	0	0	2	0
24/05/2023	8	49	0	1	0	0	0	0	1	0
25/05/2023	7.75	120	0	1	0	0	0	0	1	0
26/05/2023	7.75	189	2	1	0	0	4	3	3	2
27/05/2023	7.75	30	0	0	0	7	0	2	2	0
28/05/2023	7.75	53	0	1	0	1	1	0	0	0
<b>Total</b>	<b>47</b>	<b>511</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>12</b>	<b>5</b>	<b>5</b>	<b>9</b>	<b>2</b>
<b>Registrations per hour by species</b>		<b>10.87</b>	<b>0.06</b>	<b>0.13</b>	<b>0.02</b>	<b>0.26</b>	<b>0.11</b>	<b>0.11</b>	<b>0.19</b>	<b>0.04</b>

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus / Eptesicus species	Myotis species	Brown long-eared bat
Registrations of all bat species per hour										11.79

Parcel 3, Location B, July 2023

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Myotis sp	Brown long-eared bat
17/07/2023	7.75	493	5	118	0	0	0	0	3	1
18/07/2023	7.75	178	2	6	2	0	2	0	7	0
19/07/2023	8	157	1	20	0	2	2	1	5	0
20/07/2023	8	135	2	10	0	0	0	0	2	1
21/07/2023	8	113	1	4	0	0	0	0	0	1
22/07/2023	8	376	0	9	0	0	0	0	0	0
23/07/2023	8	911	2	6	0	1	2	1	5	0
<b>Total</b>	<b>55.5</b>	<b>2363</b>	<b>13</b>	<b>173</b>	<b>2</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>22</b>	<b>3</b>

Date (night commencing)	Total night hours	Observation								
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	<i>Nyctalus</i> sp	<i>Myotis</i> sp	Brown long-eared bat
Registrations per hour by species		42.58	0.23	3.12	0.04	0.05	0.11	0.04	0.40	0.05
Registrations of all bat species per hour		46.61								

Parcel 3, Location B, August 2023

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler's bat	<i>Nyctalus</i> sp	<i>Nyctalus</i> / <i>Eptesicus</i> sp	Barbastelle	Possible barbastelle	<i>Myotis</i> sp	Brown long-eared bat
14/08/2023	9.25	137	1	0	0	1	0	0	0	0	12	0
15/08/2023	9.25	237	27	0	4	2	1	0	1	0	14	6
16/08/2023	9.5	302	38	0	12	1	1	0	1	0	29	1
17/08/2023	9.5	882	53	3	4	1	4	0	2	0	38	2
18/08/2023	9.5	1105	36	14	1	10	3	2	1	1	33	1
19/08/2023	9.5	13	9	0	1	0	1	0	0	0	0	0
20/08/2023	9.5	9	2	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>66</b>	<b>2685</b>	<b>166</b>	<b>17</b>	<b>22</b>	<b>15</b>	<b>10</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>126</b>	<b>10</b>

Date (night commencing)	Total night hours	Observation										
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Noctule	Leisler' s bat	<i>Nyctalus sp</i>	<i>Nyctalus / Eptesicus sp</i>	Barbastelle	Possible barbastelle	<i>Myotis sp</i>	Brown long-eared bat
Registrations per hour by species		40.68	2.52	0.26	0.33	0.23	0.15	0.03	0.08	0.02	1.91	0.15
Registrations of all bat species per hour												46.35



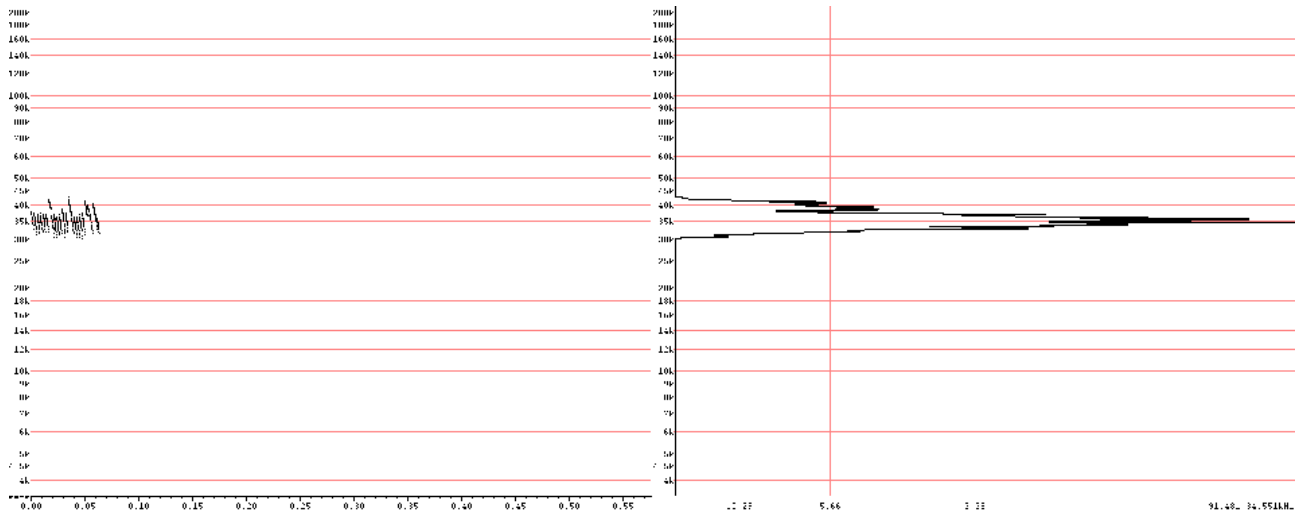
Parcel 3, Location B, September 2023

Date (night commencing)	Total night hours	Observation													
		Common pipistrelle	Soprano pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s bat	Nyctalus sp	Serotine	Nyctalus / Eptesicus sp	Barbastelle	Possible barbastelle	Myotis sp	Myotis/ brown long eared bat	Brown long-eared bat
07/09/2023	10.75	795	18	10	0	13	2	0	0	2	1	0	24	1	2
08/09/2023	11	827	23	7	0	17	1	8	0	0	1	1	25	1	0
09/09/2023	11	664	11	15	1	14	0	6	0	0	1	1	106	0	3
10/09/2023	11	643	10	44	0	7	1	0	1	2	0	0	88	0	0
<b>Total</b>	<b>43.75</b>	<b>2929</b>	<b>62</b>	<b>76</b>	<b>1</b>	<b>51</b>	<b>4</b>	<b>14</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>243</b>	<b>2</b>	<b>5</b>
<b>Registrations per hour by species</b>		<b>66.95</b>	<b>1.42</b>	<b>1.74</b>	<b>0.02</b>	<b>1.17</b>	<b>0.09</b>	<b>0.32</b>	<b>0.02</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>5.55</b>	<b>0.05</b>	<b>0.11</b>
<b>Registrations of all bat species per hour</b>		<b>77.65</b>													

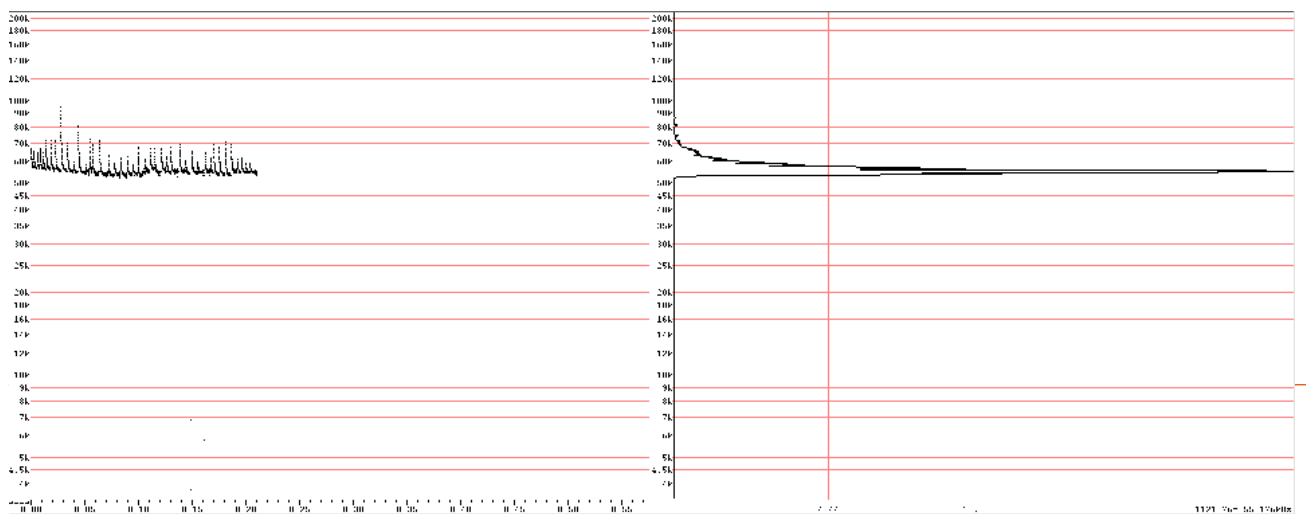
# **Annex E : Automated Detector Survey Example Sonograms**



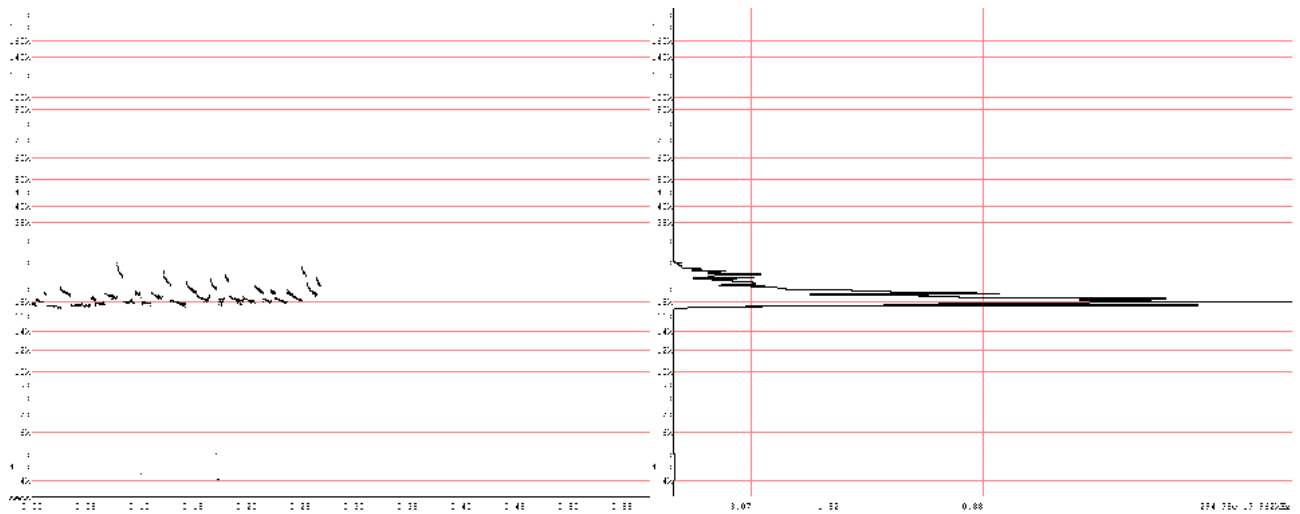
## Annex E: Automated Detector Survey Example Sonograms



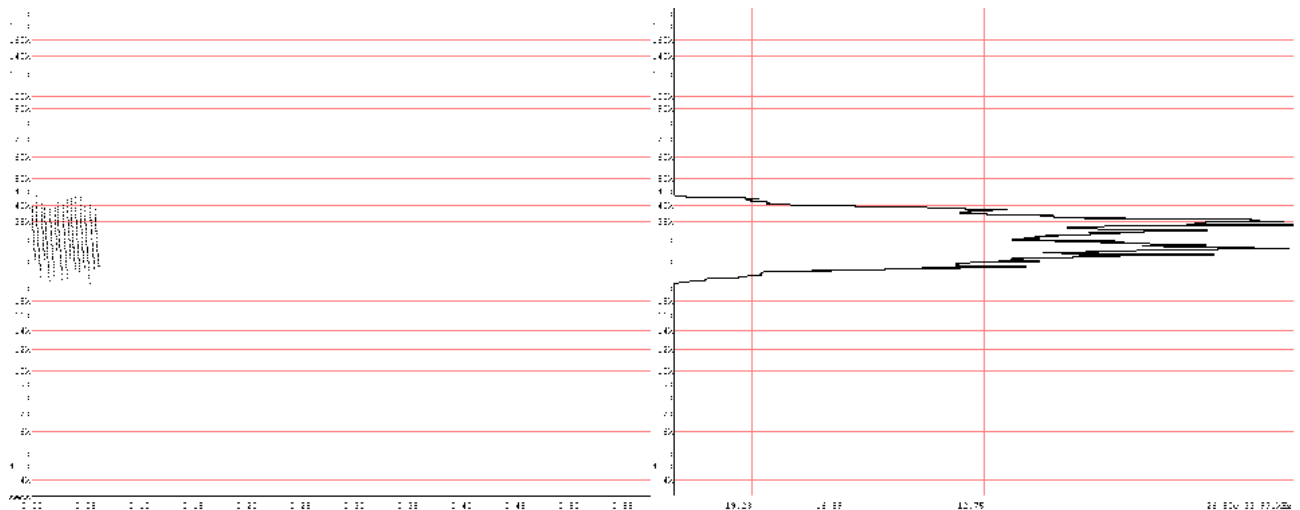
**Barbastelle recorded 22:02.07 on 08/09/2022 at Parcel 1a Location B, F6 compression**



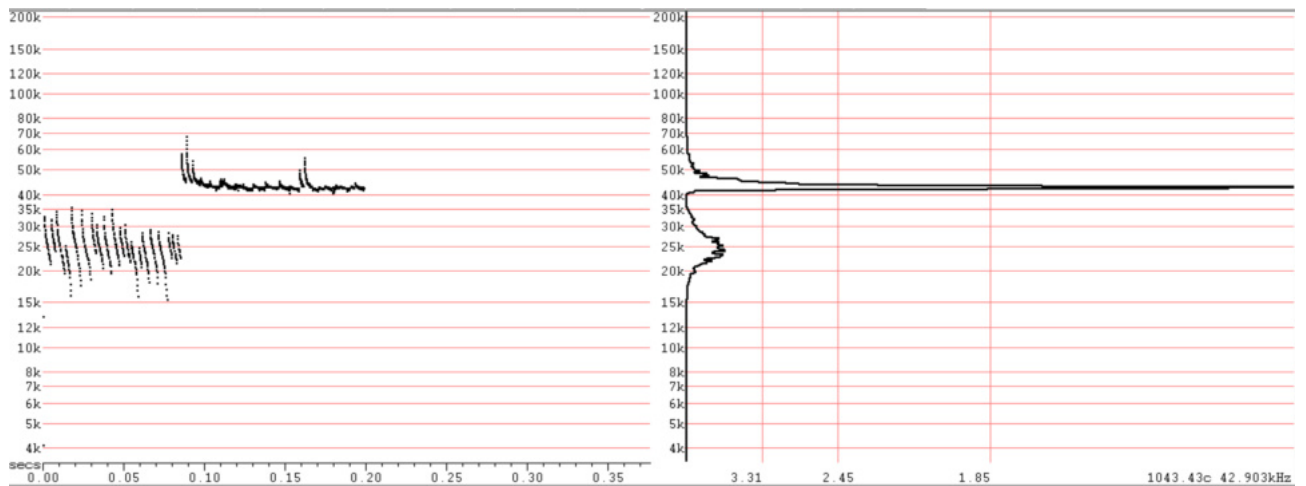
**Soprano pipistrelle recorded 05:39.38 on 09/09/2022 at Parcel 1a Location B, F6 compression**



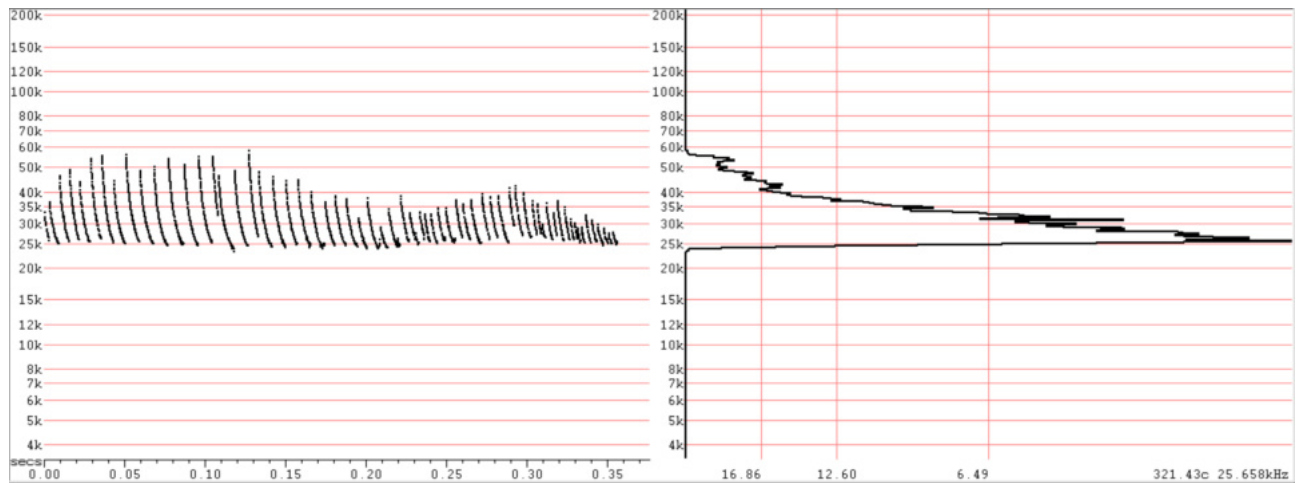
**Noctule recorded 05:53.04 on 09/09/2022 at Parcel 1a Location B, F6 compression**



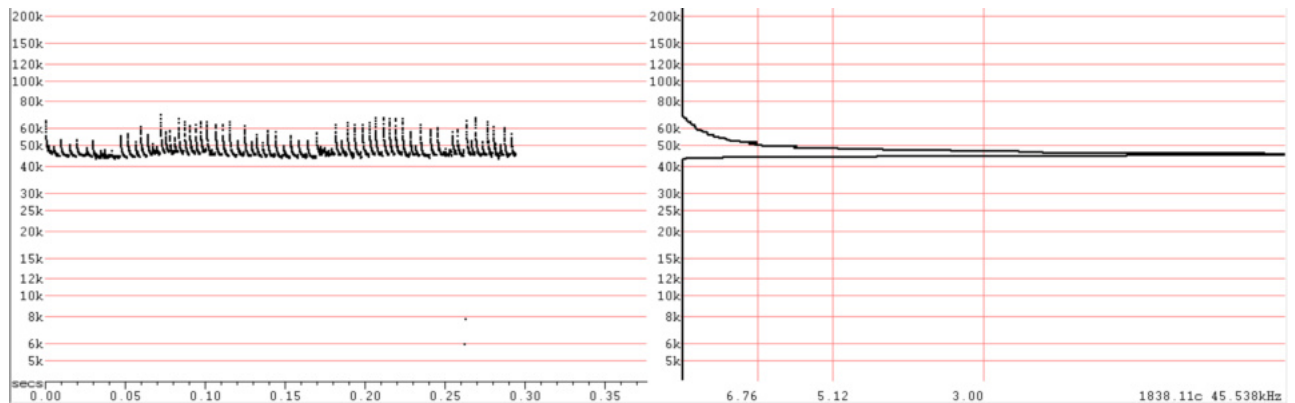
**Brown long-eared bat recorded 04:45.14 on 11/09/2022 at Parcel 1a Location B, F6 compression**



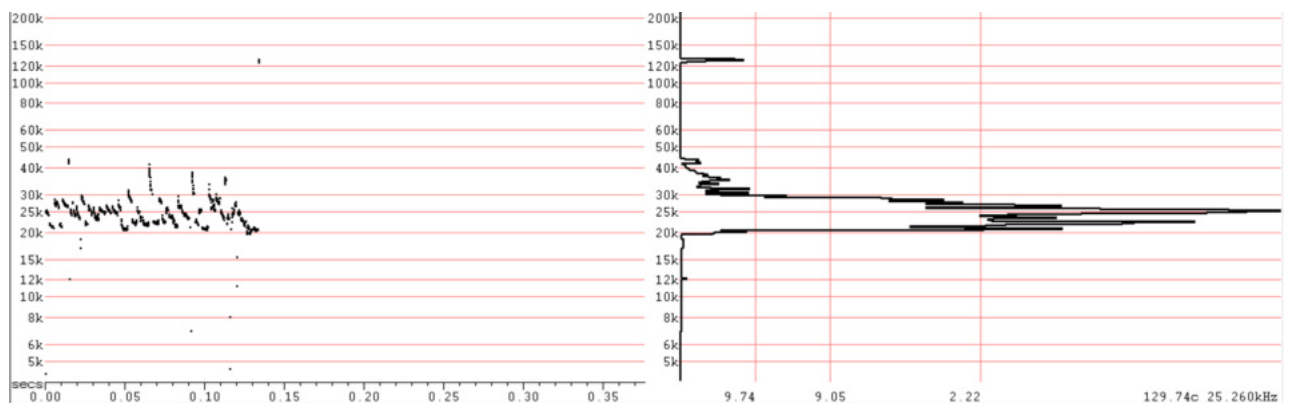
**Brown long-eared bat and common pipistrelle recorded 20:09.43 on 12/09/2022 at Parcel 2 Southwest Location A, F6 compression**



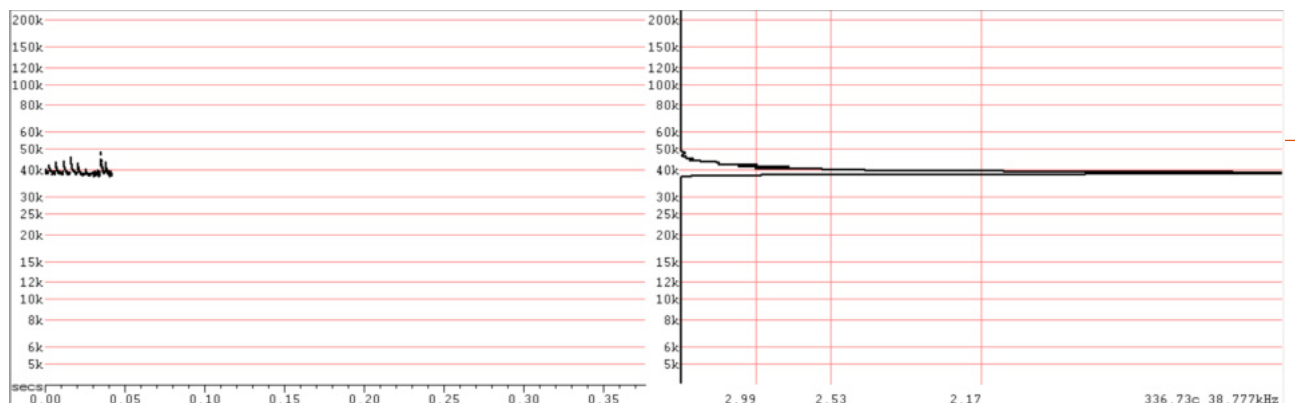
**Serotine recorded 20:22.29 on 12/09/2022 at Parcel 2 Location A, F6 compression**



**Common pipistrelle recorded at 20:27.44 on 07/09/2022 at Parcel 1a Location A, F6 compression**



**Leisler's bat recorded at 22:22.34 on 17/07/2023 at Parcel 2 Southern Transect Location B, F6 compression**



**Nathusius' pipistrelle recorded at 21:55.52 on 11/06/2023 at Parcel 2 Southern Transect Location A, F6 compression**



# **Annex F : Summary of Bat Registrations Per Hour**



## Annex F Summary of Bat Registrations Per Hour

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 West A September 2022</b>	3.76	4.62	0.02	0.15	0.07	0.49	0.07	0.02	0.02	0.04	0.05	0	1.51	0	0.15	0	10.96
<b>Parcel 1 West A June 2023</b>	0.30	0	0	0	0	0.02	0	0	0.02	0	0	0	0.15	0	0	0.02	0.51
<b>Parcel 1 West A July 2023</b>	1.79	0.61	0	0.11	0.03	0.83	0.03	0	0.16	0.11	0	0	0.53	0	0.03	0.05	4.27
<b>Parcel 1 West A August 2023</b>	0.59	0.67	0	0.07	0	0.67	0.07	0.03	0.03	0	0	0.03	0.70	0	0.17	0	3.01
<b>Parcel 1 West A - Average</b>	<b>1.61</b>	<b>1.48</b>	<b>0.01</b>	<b>0.08</b>	<b>0.03</b>	<b>0.50</b>	<b>0.43</b>	<b>0.01</b>	<b>0.06</b>	<b>0.04</b>	<b>0.01</b>	<b>0.01</b>	<b>0.72</b>	<b>0</b>	<b>0.09</b>	<b>0.02</b>	<b>4.69</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 West B September 2022</b>	0.89	0.20	0	0	0	0.13	0	0	0.02	0	0.02	0	0.24	0	0.05	0	1.55
<b>Parcel 1 West B June 2023</b>	9.69	4.22	0	1.31	0	1.78	0.38	0.11	0.13	0.51	0.02	0	0.78	0	0	0.02	18.96
<b>Parcel 1 West B July 2023</b>	65.87	9.09	0	0.45	0.43	1.55	0.05	0.19	0.24	0.05	0	0.03	0.45	0	0	0.05	78.45
<b>Parcel 1 West B August 2023</b>	3.29	4.46	0	0.12	0	0.87	0.34	0	0.22	0.04	0.10	0.12	0.20	0	0.04	0	9.83
<b>Parcel 1 West B - Average</b>	<b>19.94</b>	<b>4.49</b>	<b>0</b>	<b>0.47</b>	<b>0.11</b>	<b>1.08</b>	<b>0.19</b>	<b>0.08</b>	<b>0.15</b>	<b>0.15</b>	<b>0.04</b>	<b>0.04</b>	<b>0.42</b>	<b>0</b>	<b>0.02</b>	<b>0.02</b>	<b>27.20</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 East A September 2022</b>	10.44	1.42	0	0.09	0	1.31	0.40	0	0.16	0	0.16	0	0.53	0	0.11	0	14.62
<b>Parcel 1 East A June 2023</b>	4.57	0.55	0.04	0.04	0.25	0.59	0	0	0.10	0.10	0	0	0.29	0	0	0.04	6.55
<b>Parcel 1 East A July 2023</b>	VOID – Detector Malfunctioned																
<b>Parcel 1 East A August 2023</b>	1.35	0.47	0.03	0.03	0	0.30	0.11	0.01	0.04	0	0.03	0.06	0.03	0	0.06	0	2.53
<b>Parcel 1 East A - Average</b>	<b>5.45</b>	<b>0.81</b>	<b>0.02</b>	<b>0.05</b>	<b>0.08</b>	<b>0.73</b>	<b>0.17</b>	<b>0.00</b>	<b>0.1</b>	<b>0.03</b>	<b>0.06</b>	<b>0.02</b>	<b>0.28</b>	<b>0</b>	<b>0.06</b>	<b>0.01</b>	<b>7.9</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 East B September 2022</b>	0.53	0.16	0	0.04	0	0.38	0.05	0	0.04	0	0.02	0	0.05	0	0.05	0	1.33
<b>Parcel 1 East B June 2023</b>	5.36	2.33	0.02	0.18	0.62	4.09	0.09	0	0.02	0.24	0	0	0.69	0	0	0.04	13.69
<b>Parcel 1 East B July 2023</b>	2.27	0.69	0.13	0.08	0.24	1.39	0.45	0.08	0.43	0.24	0.03	0.05	0.40	0	0.21	0.05	6.75
<b>Parcel 1 East B August 2023</b>	2.51	0.73	0	0.08	0.03	0.58	0.23	0.03	0.08	0	0.05	0.03	0.15	0	0.08	0	4.56
<b>Parcel 1 East B - Average</b>	<b>2.67</b>	<b>0.98</b>	<b>0.04</b>	<b>0.10</b>	<b>0.22</b>	<b>1.61</b>	<b>0.21</b>	<b>0.03</b>	<b>0.14</b>	<b>0.12</b>	<b>0.03</b>	<b>0.02</b>	<b>0.32</b>	<b>0</b>	<b>0.09</b>	<b>0.02</b>	<b>6.58</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 North A May 2023</b>	0.61	0.36	0	0	0.01	0.23	0.03	0	0.03	0.03	0	0	0.14	0	0.14	0.06	1.64
<b>Parcel 1 North A July 2023</b>	6.59	1.57	0	0	0.03	0.27	0.03	0.03	0.03	0	0	0	0.03	0	0	0.03	8.59
<b>Parcel 1 North A August 2023</b>	2.31	1.77	0	0.05	0	0.18	0.18	0.05	0.20	0.10	0.22	0.40	0.30	0	0.15	0	5.92
<b>Parcel 1 North A September 2023</b>	No Data Recorded																
<b>Parcel 1 North A - Average</b>	<b>3.17</b>	<b>1.23</b>	<b>0</b>	<b>0.02</b>	<b>0.01</b>	<b>0.23</b>	<b>0.08</b>	<b>0.03</b>	<b>0.09</b>	<b>0.04</b>	<b>0.07</b>	<b>0.13</b>	<b>0.16</b>	<b>0</b>	<b>0.10</b>	<b>0.03</b>	<b>5.38</b>



Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1 North B May 2023</b>	15.83	1.95	0	0.30	0.04	1.16	0.10	0.06	0.04	0.05	0.04	0.06	2.21	0	0.26	0.32	22.43
<b>Parcel 1 North B July 2023</b>	14.99	1.64	0.24	0.64	0.48	1.04	0.05	0	0.13	0.16	0	0.03	0.72	0	0.08	0	20.21
<b>Parcel 1 North B August 2023</b>	2.77	0.57	0	0	0	0.98	0.14	0.02	0.12	0	0.08	0.57	0.05	0	0.02	0	5.32
<b>Parcel 1 North B September 2023</b>	8.42	2.43	0.05	0.05	0	0.82	0.15	0.04	0.11	0.04	0.55	0.09	0.15	0	0.13	0	13.02
<b>Parcel 1 North B – Average</b>	<b>10.50</b>	<b>1.65</b>	<b>0.07</b>	<b>0.25</b>	<b>0.13</b>	<b>1</b>	<b>0.11</b>	<b>0.03</b>	<b>0.1</b>	<b>0.06</b>	<b>0.17</b>	<b>0.19</b>	<b>0.78</b>	<b>0</b>	<b>0.12</b>	<b>0.08</b>	<b>15.25</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1a Location A September 2022</b>	10.24	4.76	0.04	0.16	0	0.05	0.11	0	0.04	0.33	0.58	0	0.55	0	0.02	0	16.87
<b>Parcel 1a Location A June 2023</b>	4.32	0.56	0	0.03	0.05	0.13	0.05	0	0.05	0	0.13	0.48	3.87	0	0	0	9.68
<b>Parcel 1a Location A July 2023</b>	15.37	0.56	0	4.13	0	0.09	0	0	0.04	0.06	0	0	0.76	0	0	0	21.02
<b>Parcel 1a Location A August 2023</b>	3.29	0.95	0	0.10	0.07	0.85	0.31	0.03	0	0	0.10	0.03	0.20	0	0.10	0	6.03

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1a Location A - Average</b>	<b>8.31</b>	<b>1.71</b>	<b>0.01</b>	<b>1.11</b>	<b>0.03</b>	<b>0.28</b>	<b>0.12</b>	<b>0.01</b>	<b>0.03</b>	<b>0.10</b>	<b>0.20</b>	<b>0.13</b>	<b>1.35</b>	<b>0</b>	<b>0.03</b>	<b>0</b>	<b>13.4</b>
<b>Parcel 1a Location B September 2022</b>	2.20	1.80	0	0	0.02	0.11	0.11	0	0	0	0.27	0	1.16	0.02	0.11	0	6.36
<b>Parcel 1a Location B June 2023</b>	2.40	0.33	0	0	0.13	0.47	0	0	0	0	0	0	0	0	0	0.07	3.40
<b>Parcel 1a Location B July 2023</b>	42.46	5.66	0.11	1.64	0.80	0.32	0.11	0.11	0.15	0.02	0.30	1.23	5.45	0	0.17	0.13	58.68

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 1a Location B August 2023</b>	15.87	2.94	0	0.04	0	0.22	0.13	0.04	0.18	0.04	0.62	0.49	3.98	0	0.09	0	24.64
<b>Parcel 1a Location B - Average</b>	<b>15.73</b>	<b>2.68</b>	<b>0.03</b>	<b>0.42</b>	<b>0.24</b>	<b>0.28</b>	<b>0.09</b>	<b>0.04</b>	<b>0.08</b>	<b>0.02</b>	<b>0.30</b>	<b>0.43</b>	<b>2.65</b>	<b>0.01</b>	<b>0.09</b>	<b>0.05</b>	<b>23.27</b>
<b>Parcel 2 Northeast A September 2022</b>	2.21	0.62	0	0.22	0	0.11	0.02	0	0.06	0.02	0.04	0.04	1.16	0	0.06	0	4.54
<b>Parcel 2 Northeast A June 2023</b>	2.61	0.57	0	0.43	0.02	0.24	0.03	0	0.07	0.02	0	0.02	1.05	0	0	0	5.05

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 Northeast A July 2023</b>	4.80	32.00	0	2.49	0	0.06	0.04	0.04	0	0	0	0	2.88	0	0	0.02	42.34
<b>Parcel 2 Northeast A August 2023</b>	4.27	2.21	0	0.11	0	0.14	0.27	0.02	0.11	0.02	0.05	0.02	1.59	0	0.58	0	9.36
<b>Parcel 2 Northeast A - Average</b>	<b>3.47</b>	<b>8.85</b>	<b>0</b>	<b>0.81</b>	<b>0.005</b>	<b>0.14</b>	<b>0.09</b>	<b>0.02</b>	<b>0.06</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>1.67</b>	<b>0</b>	<b>0.16</b>	<b>0.01</b>	<b>15.32</b>
<b>Parcel 2 Northeast B September 2022</b>	12.12	0.27	0.03	0	0.03	0.12	0.06	0	0	0	0.21	0	1.36	0	0.09	0	14.30

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
Parcel 2 Northeast B June 2023	No Data Recorded																
Parcel 2 Northeast B July 2023	No Data Recorded																
Parcel 2 Northeast B August 2023	15.32	2.02	0	0.81	0.06	0.17	0.11	0.02	0.04	0.02	0.28	0.11	1.32	0	0.26	0	20.53
Parcel 2 Northeast B - Average	13.72	1.15	0.02	0.41	0.05	0.15	0.09	0.01	0.02	0.01	0.25	0.06	1.34	0	0.18	0	17.42



Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 Southwest A September 2022</b>	11.73	1.27	0	0	0.36	0.45	0.18	0.09	0	0	0	0	3.00	0	0.55	0	17.64
<b>Parcel 2 Southwest A June 2023</b>	13.17	4.83	0	0	0.13	0.13	0.23	1.10	0.13	0.67	0	0	3.00	0	0	0.10	23.50
<b>Parcel 2 Southwest A July 2023</b>	30.96	1.01	0	0.39	0.16	0	0	0.13	0	0.03	0	0	2.44	0	0.07	0	35.19
<b>Parcel 2 Southwest A August 2023</b>	12.94	1.21	0.02	0.02	0	0.51	0.18	0.13	0.24	0.02	0.37	0.28	1.23	0	0.04	0	17.17

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 Southwest A – Average</b>	<b>17.2</b>	<b>2.08</b>	<b>0.01</b>	<b>0.10</b>	<b>0.16</b>	<b>0.27</b>	<b>0.15</b>	<b>0.36</b>	<b>0.09</b>	<b>0.18</b>	<b>0.09</b>	<b>0.07</b>	<b>2.42</b>	<b>0</b>	<b>0.17</b>	<b>0.03</b>	<b>23.38</b>
<b>Parcel 2 Southwest B September 2022</b>	0.83	0.46	0	0	0	0.40	0.06	0	0	0.06	0.03	0	0.18	0	0.22	0	2.49
<b>Parcel 2 Southwest B June 2023</b>	52.06	1.79	0.03	1.66	0.08	0.39	0	0.19	0.19	0.03	0	0.03	0.80	0	0.08	0.11	57.43
<b>Parcel 2 Southwest B July 2023</b>	94.03	1.15	0	4.34	0.14	0.95	0.07	0	0.07	0.14	0.07	0	2.03	0	0.41	0.20	103.59

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 Southwest B August 2023</b>	49.39	26.53	0.07	0.06	0	1.78	0.17	0.09	0.33	0.06	0.22	0.44	0.59	0	0.39	0.04	80.15
<b>Parcel 2 Southwest B - Average</b>	<b>49.08</b>	<b>7.48</b>	<b>0.03</b>	<b>1.52</b>	<b>0.06</b>	<b>0.88</b>	<b>0.08</b>	<b>0.07</b>	<b>0.15</b>	<b>0.07</b>	<b>0.08</b>	<b>0.12</b>	<b>0.9</b>	<b>0</b>	<b>0.26</b>	<b>0.09</b>	<b>60.92</b>
<b>Parcel 2 North A May 2023</b>	0.90	0.20	0	0.10	0	0.07	0.06	0.04	0.03	0.03	0	0	0.04	0	0.09	0	1.56
<b>Parcel 2 North A July 2023</b>	No Data Recorded																
<b>Parcel 2 North A August 2023</b>	14.19	0.94	0.02	0.13	0	0.57	0.09	0.04	0.09	0.04	0.68	0.32	0.36	0	0.26	0	17.72

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 North A September 2023</b>	7.01	0.89	0	0.02	0	7.54	0.05	0.05	0.24	0	0.80	0.15	0.24	0	0.44	0	17.44
<b>Parcel 2 North A - Average</b>	<b>7.37</b>	<b>0.68</b>	<b>0.01</b>	<b>0.08</b>	<b>0</b>	<b>2.73</b>	<b>0.07</b>	<b>0.04</b>	<b>0.12</b>	<b>0.02</b>	<b>0.49</b>	<b>0.16</b>	<b>0.21</b>	<b>0</b>	<b>0.26</b>	<b>0</b>	<b>12.24</b>
<b>Parcel 2 North B May 2023</b>	11.19	0.26	0	0.74	0.13	0.04	0.02	0.13	0.04	0.11	0	0	0.06	0	0.15	0.02	12.89
<b>Parcel 2 North B July 2023</b>	No Data Recorded																
<b>Parcel 2 North B August 2023</b>	1.43	0.14	0	0	0	0.04	0	0	0	0	0	0.04	0	0	0.04	0	1.68

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 North B September 2023</b>	8.42	2.43	0.05	0.05	0	0.82	0.15	0.04	0.11	0.04	0.55	0.09	0.15	0	0.13	0	13.02
<b>Parcel 2 North B - Average</b>	<b>7.01</b>	<b>0.94</b>	<b>0.02</b>	<b>0.26</b>	<b>0.04</b>	<b>0.3</b>	<b>0.06</b>	<b>0.06</b>	<b>0.05</b>	<b>0.05</b>	<b>0.18</b>	<b>0.04</b>	<b>0.07</b>	<b>0</b>	<b>0.11</b>	<b>0.01</b>	<b>9.20</b>
<b>Parcel 2 Southern A June 2023</b>	14.51	1.68	0.13	0.21	0.11	0.56	0.03	0.03	0.03	0.11	0	0	4.59	0	0	0.16	22.13
<b>Parcel 2 Southern A July 2023</b>	50.29	1.07	0	0.29	0.02	0.34	0.08	0.19	0.02	0.04	0.25	0.13	6.23	0	0.25	0.06	59.28
<b>Parcel 2 Southern A August 2023</b>	2.15	0.27	0	0.02	0	0.88	0.17	0	0.15	0	0.06	0.11	1.39	0	0.29	0	5.49

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 Southern A September 2023</b>	16.70	1.53	0.15	0.06	0	0.37	0	0	0.49	0	0.03	0.06	0.40	0	0.34	0	20.12
<b>Parcel 2 Southern A - Average</b>	<b>20.91</b>	<b>1.14</b>	<b>0.07</b>	<b>0.15</b>	<b>0.03</b>	<b>0.54</b>	<b>0.07</b>	<b>0.06</b>	<b>0.17</b>	<b>0.04</b>	<b>0.09</b>	<b>0.08</b>	<b>3.15</b>	<b>0</b>	<b>0.22</b>	<b>0.06</b>	<b>26.76</b>
<b>Parcel 2 Southern B June 2023</b>	17.66	1.16	0.02	1.28	0.40	1.83	0.02	0.30	0	0.06	0	0.10	5.47	0	0.19	0.27	28.74
<b>Parcel 2 Southern B - Average</b>	<b>17.66</b>	<b>1.16</b>	<b>0.02</b>	<b>1.28</b>	<b>0.40</b>	<b>1.83</b>	<b>0.02</b>	<b>0.30</b>	<b>0</b>	<b>0.06</b>	<b>0</b>	<b>0.10</b>	<b>5.47</b>	<b>0</b>	<b>0.19</b>	<b>0.27</b>	<b>28.74</b>



Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 2 North B July 2023</b>	7.62	0.76	0.07	0.22	0.07	0.23	0.04	0.02	0.02	0.02	0.04	0.09	5.30	0	0.02	0.05	14.56
<b>Parcel 2 North B August 2023</b>	9.32	0.64	0	0	0	0.75	0.20	0	0.07	0	0	0	0.99	0	0.26	0	12.24
<b>Parcel 2 North B September 2023</b>	2.19	0.18	0.02	0	0.02	0.05	0	0.02	0	0	0	0.05	0.69	0	0.04	0.07	3.34
<b>Parcel 2 North B - Average</b>	<b>6.38</b>	<b>0.53</b>	<b>0.03</b>	<b>0.07</b>	<b>0.03</b>	<b>0.34</b>	<b>0.08</b>	<b>0.01</b>	<b>0.03</b>	<b>0.01</b>	<b>0.01</b>	<b>0.05</b>	<b>2.33</b>	<b>0</b>	<b>0.11</b>	<b>0.04</b>	<b>10.05</b>
<b>Parcel 3 Location A May 2023</b>	11.66	0.19	0	0.26	0	0.15	0	0.02	0.04	0.13	0	0.02	0.09	0	0.04	0.02	12.62

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 3 Location A July 2023</b>	No Data Recorded																
<b>Parcel 3 Location A August 2023</b>	27.38	0.83	0	0.13	0	0.43	0.30	0	0.23	0	0.11	0.23	2.02	0	0.34	0	32.00
<b>Parcel 3 Location A September 2023</b>	26.42	0.36	0.02	0	0	1.06	0.12	0.03	0.24	0.09	0.03	0.12	1.27	0	0.11	0	29.88
<b>Parcel 3 Location A - Average</b>	<b>21.82</b>	<b>0.46</b>	<b>0.01</b>	<b>0.13</b>	<b>0</b>	<b>0.55</b>	<b>0.14</b>	<b>0.02</b>	<b>0.17</b>	<b>0.07</b>	<b>0.05</b>	<b>0.12</b>	<b>1.13</b>	<b>0</b>	<b>0.16</b>	<b>0.01</b>	<b>24.83</b>

Survey Location	Common pipistrelle	Soprano pipistrelle	Nathusius' pipistrelle	Pipistrelle species (common or soprano)	Pipistrelle species (common or Nathusius' )	Noctule	Leisler' s	Serotine	Nyctalus sp.	Nyctalus/ Eptesicus sp.	Barbastelle	Possible barbastelle	Myotis sp.	Daubenton' s bat	Brown long-eared bat	Myotis species or brown long-eared bat	Registrations of all bat species per hour
<b>Parcel 3 Location B May 2023</b>	10.87	0.06	0	0.13	0.02	0.26	0.11	0	0	0.11	0	0	0.19	0	0.04	0	11.79
<b>Parcel 3 Location B July 2023</b>	42.58	0.23	0	3.12	0.04	0.05	0.11	0	0.04	0	0	0	0.40	0	0.05	0	46.41
<b>Parcel 3 Location B August 2023</b>	40.68	2.52	0	0.26	0	0.33	0.23	0	0.15	0.03	0.08	0.02	1.91	0	0.15	0	46.35
<b>Parcel 3 Location B September 2023</b>	66.95	1.42	0	1.74	0.02	1.17	0.09	0.02	0.32	0.09	0.07	0.05	5.55	0	0.11	0.05	77.65

Survey Location

Common pipistrelle	40.27	1.06	0	1.31	0.02	0.45	0.14	0.01	0.13	0.06	0.04	0.02	2.01	0	0.09	0.01	45.55
Soprano pipistrelle																	
Nathusius' pipistrelle																	
Pipistrelle species (common or soprano)																	
Pipistrelle species (common or Nathusius' )																	
Noctule																	
Leisler' s																	
Serotine																	
Nyctalus sp.																	
Nyctalus/ Eptesicus sp.																	
Barbastelle																	
Possible barbastelle																	
Myotis sp.																	
Daubenton' s bat																	
Brown long-eared bat																	
Myotis species or brown long-eared bat																	
Registrations of all bat species per hour																	



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