



**Ty Brynseion,
Dowlais, Merthyr Tydfil**

Bat and Nesting Bird Survey Report

September 2026

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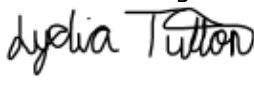
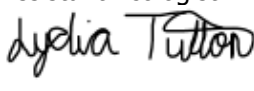
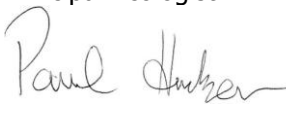
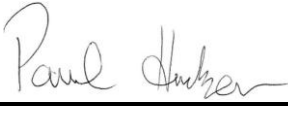
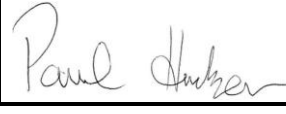
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DOCUMENT CONTROL

Ty Brynseion, Downlais, Merthyr Tydfil, CF48 3SR Preliminary Bat Roost and Nesting Bird Assessment				
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4.0	22 September 2026	Jack Martin Consultant Ecologist 	Paul Hudson MCIEM Principal Ecologist 	Paul Hudson MCIEM Principal Ecologist 

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Summary

Brief and Site Location	This report presents the findings of a bat and nesting bird survey of a retirement housing complex, at Ty Brynseion, Dowlais, Merthyr Tydfil, CF48 3SR (Ordnance Survey Grid Reference: SO 0645 0780).								
Proposed Works	The development proposals involve the extension of the roof timbers in the retirement housing complex to accommodate the external wall insulation across all elevations of the building.								
Survey Methodology	The survey comprised the following: • A preliminary bat roost assessment of the building searching for signs of bats and nesting birds; • Dusk emergence surveys of the building; and • One five-night static detector survey.								
Results of Preliminary Bat Roost Inspection	No signs of bats were found during the internal and external inspection of the retirement home. The retirement home is within a moderate-quality area for foraging and commuting bats.								
Results of Dusk Emergence Surveys	A maximum count of two common pipistrelles emerged and one re-entered. One emerged from under the fascia on the western elevation and two emerged and one re-entered under the fascia on the southern elevation.								
	<table><tr><th>Bat Species</th><th>Maximum Count</th><th>Roost Type</th></tr><tr><td>Common pipistrelle</td><td>Two</td><td>Day Roost</td></tr></table>			Bat Species	Maximum Count	Roost Type	Common pipistrelle	Two	Day Roost
Bat Species	Maximum Count	Roost Type							
Common pipistrelle	Two	Day Roost							
Evidence of Nesting Birds	No evidence of past or current nesting by birds was noted either within or on the building's exterior.								
Predicted Impacts of Development on Bats and Nesting Birds	In the absence of mitigation, the development would lead to the permanent loss of common pipistrelle day roosts. Based on the conclusion that birds are not currently nesting in the building, no negative impacts on birds are anticipated								
Mitigation and Compensation Measures for Bats and Nesting Birds	<table><tr><th>Bat Species</th><th>Proposed Mitigation/Compensation Measures</th></tr><tr><td>Common pipistrelle</td><td> • Two Beaumaris midi boxes; • One 1WQ Schwegler Summer and Winter Bat Roost Box; • 8 soffit bat boxes; and • Sensitive lighting strategy. </td></tr></table> Two Schwegler 1B General Small Bird Boxes will be installed as a biodiversity enhancement measure.			Bat Species	Proposed Mitigation/Compensation Measures	Common pipistrelle	• Two Beaumaris midi boxes; • One 1WQ Schwegler Summer and Winter Bat Roost Box; • 8 soffit bat boxes; and • Sensitive lighting strategy.		
Bat Species	Proposed Mitigation/Compensation Measures								
Common pipistrelle	• Two Beaumaris midi boxes; • One 1WQ Schwegler Summer and Winter Bat Roost Box; • 8 soffit bat boxes; and • Sensitive lighting strategy.								
Licensing Requirements for Bats	Evidence of bats has been confirmed within the building, and consequently, a bat development licence will be required from Natural Resource Wales (NRW) prior to works being undertaken. The NRW bat development licence application will need to be accompanied by a detailed method statement which sets out the activities to be carried out under the licence to ensure that bats will not be harmed during development. The method statement must ensure that provision is made for new or continued roosting opportunities after the completion of the development.								
Required Actions	Detailed required actions are given in Section 6 of this report which includes the following: • Applying for a bat development licence; • Measures to avoid disturbing, injuring or killing bats during works; • Bat roosting provision; and • Precautionary measures if nesting birds are found during works.								

1. Introduction

1.1. Brief and Site Location

This report presents the findings of a bat and nesting bird survey of a retirement home, at Ty Brynseion, Dowlais, Merthyr Tydfil, CF48 3SR (Ordnance Survey Grid Reference: SO 0645 0780)¹.

The retirement home is within the boundary of Merthyr Tydfil County Borough.

1.2. Site Description

The retirement home is 2.2 km northeast of Merthyr Tydfil in an urban area surrounded by residential properties. A community centre lies northeast of the site, featuring trees and shrubs and connecting to grassland and wooded areas. Ifor Park is located to the north-west and a small industrial estate is located to the south, with areas of vegetation surround the buildings.

The site's location is shown on Plan 1: Location Plan.

1.3. Proposed Works

The development proposals involve the extension of the roof timbers external wall insulation in the retirement home to accommodate the external wall insulation.

A planning application has been submitted under reference P/24/0130².

Drawing 1 and 2 detail current and existing site plans.

1.4. Legislation and Planning Policy

1.4.1. Bats

All UK bats are protected species. Their breeding sites or resting places³ (roosts) are fully protected under the Wildlife and Countryside Act 1981⁴ (as amended) and the Conservation of Habitats and Species Regulations 2017⁵ which continues to apply in UK law through the Conservation of Habitats and Species (Amendment) (EU Exit) [CHSAEU] Regulations 2019⁶. Works affecting bats are subject to licensing procedures by Natural Resources Wales. The legal protection and licensing procedures are summarised in Appendix 1.

¹ Latitude and Longitude: 51.761042, -3.3568845 / what3words: valley.water.refers

² [P/24/0130 | Proposed External Cladding and alterations to windows | Ty Bryn Seion North Street Dowlais Merthyr Tydfil CF48 3SR](#)

³ Resting places are defined as '*areas that are essential to sustain an animal or group of animals when they are not active*' (European Commission, Directorate-General for Environment, 2022). Resting places that are used regularly, either within or between years, must be protected even when not occupied.

⁴ <https://www.legislation.gov.uk/ukpga/1981/69>

⁵ <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

⁶ <https://www.legislation.gov.uk/ukdsi/2019/9780111179512>

1.4.2. Nesting Birds

All wild British birds (when building nests, nesting and sitting on eggs) and their nests and eggs, (with certain limited exceptions⁷) are protected by law under Section 1 of the Wildlife and Countryside Act 1981⁸ (as amended) and the Countryside and Rights of Way Act 2000⁹. Some species, such as barn owls (*Tyto alba*), are listed in Schedule 1 and have additional protection from disturbance during the breeding season, as do their nests, eggs and dependent young.

1.5. Survey Scope

The survey comprised the following:

- A preliminary bat roost assessment which included a survey for nesting birds;
- Two dusk emergence surveys of the retirement home; and
- One five-night static detector survey.

1.6. Reporting

This report aims to:

- Outline the survey methodology used;
- Present the results of the survey including determining the actual or potential presence of bats and nesting birds; and
- Provide suitable recommendations in line with planning policy and wildlife law, including potential licensing requirements, mitigation, compensation and enhancement measures.

⁷ Details of the exceptions are available at <https://naturalresources.wales/permits-and-permissions/species-licensing/list-of-protected-species/bird-licensing/bird-licences/?lang=en>

⁸ <https://www.legislation.gov.uk/ukpga/1981/69>

⁹ <https://www.legislation.gov.uk/ukpga/2000/37>

2. Methods

2.1. Desk Study

Maps and aerial photographs of the site and surrounding area, including existing habitats, were assessed. A search for statutory and non-statutory designated sites for bats within a 10km radius was undertaken using NRW Geographic Information System (GIS) data. A 2km search was undertaken for all other statutory and non-statutory conservation designated sites.

A local planning portal search was undertaken. This involved looking for other sites, within the same postcode area, which have previously had bat surveys submitted as a part of their planning applications.

2.2. Field Study

2.2.1. Daytime Internal and External Inspection

A systematic search of the exterior and interior of the retirement housing complex was undertaken following the methodology detailed in Section 5.2 of the Bat Survey Guidelines (Collins 2023). The survey looked for features that bats could use as access points and roosts¹⁰. In addition, a search was made for the presence of bats or evidence of bat use, such as droppings, feeding remains, urine staining, scratch marks, live or the remains of dead bats and/or squeaking noises. A high-powered torch (Clulite), binoculars and a ladder were available for use, as appropriate during the survey.

The survey was undertaken on 11th October 2024 by Charlotte Ingram¹¹ and Alice Thorne¹² who are both accredited agents on Paul Hudson's¹³ MCIEEM (NRW Licence Number: S094527)

2.2.2. Assessment of Bat Roosting Suitability

The value of the site for bats (and any potential roost sites therein) was assessed, in accordance with Table 4.1 of the Bat Surveys for Professional Ecologists (Collins, 2023) (see Appendix 2). The assessment was based on the relative abundance and quality of potential roost sites, and the habitat features within both the site and the surrounding landscape suitable for roosting, foraging and commuting bats.

Assessment of 'classic' and 'non-classic' winter hibernation potential was undertaken with consideration of Section 4.3.7 and Figure 1 of the Bat Surveys for Professional Ecologists (Collins, 2023).

¹⁰ Bats can utilise gaps approximately 8mmx17mm in size (The Bat Conservation Trust, Cluster-flies leaflet mentions 8mm by 20mm whilst the Bats and Buildings leaflet states 9mm by 17mm).

¹¹ Charlotte graduated from the University of South Wales with a degree in International Wildlife Biology. She is currently working for Acer Ecology as an Assistant Ecologist and is in her second season of bat surveying. Charlotte acted as an accredited agent on Paul Hudson's licence (S094527).

¹² Alice is currently studying for a BSc (Hons) Natural History degree from the University of South Wales. Alice is currently in her third season of bat surveying, working as an assistant ecologist at Acer Ecology. Alice acted as an accredited agent on Paul Hudson's licence (S094527). Further details of her qualifications can be found at <https://www.linkedin.com/in/alicethorne/>.

¹³ Paul graduated with a degree in Environmental Biology from Reading University and a Postgraduate Diploma in Conservation Management from the University of East Anglia. He has worked within ecological consultancy since 2000 and has undertaken bat work since 2001. He holds licences to disturb bats in both Wales (S091671-1) and England (2018-36707-CLS-CLS valid until 2028). Further details of his qualifications and experience can be found at <https://www.linkedin.com/in/batsurvey/>.

2.2.3. Dusk Emergence Survey

Due to the size of the building, each survey was conducted over two days. Five surveyors conducted the survey each night, covering half of the building. The building being covered over two days is not considered a constraint and is considered an acceptable approach within Section 7.2.15 of Bat Surveys for Professional Ecologists (Collins 2023).

The first survey was undertaken across the 8th and 9th of May 2025 and the second was undertaken across the 17th and 18th of June 2025. Surveyor details can be found in Appendix 7.

Surveys were undertaken following the methodology detailed in Section 7.2 of the Bat Survey Guidelines (Collins, 2023). The surveyors were all equipped with Elekon Batlogger M bat detectors. The whole of the building was kept in view of the surveyors at all times. Each surveyor was also equipped with a Nightfox Red infrared camera each supplemented with a Nightfox XB5 850nm Infrared LED flashlight. Video footage was subsequently viewed using VLC Media Viewer. Screenshots from the cameras at the darkest point of each survey to illustrate the field of view and visibility are provided in Appendix 8.

2.2.4. Five-night Static Detector Survey

One Anabat Static Detector was deployed between Flat 35 and Flat 40 by Jack Martin¹⁴. The detector was set to record for a minimum of five nights. Bat activity between dusk and dawn was recorded. Analysis of the bat survey data was made using Analook for Windows to determine the number of bat passes recorded. The detector was sited in order to achieve the best results, based on field observations whereby it was noted that bat activity was highly concentrated.

2.2.5. Nesting Bird Survey

Searches were carried out for old and active nests, as well as any signs which might indicate previous nesting activities, such as piles of discarded nesting materials or large aggregations of guano.

2.2.6. Constraints

Temporal Constraints

An ecological survey can only identify what is present on site at the time the survey is conducted. However, habitat usage by species can change over time.

¹⁴ Jack Martin- Jack graduated with a BSc in Zoology and an MSc in Wetland Science and Conservation from Bangor University. Jack is currently working as an Assistant Ecologist and is receiving training from Acer Ecology. Further details of his qualifications and experience can be found at https://www.linkedin.com/in/jack-martin-336970184?utm_source=share&utm_campaign=share_via&utm_content=profile&utm_medium=android_app

Timing

The time of year when the preliminary roost assessment was carried out coincides with the period when most bats have retreated to winter hibernation sites and are most difficult to detect. They may leave the hibernation roost on warmer nights to find food and water.

However, signs of roosting activity from previous summers may still be identified and the potential of a building can be assessed outside the active season. Therefore, the timing of the inspection is unlikely to have significantly constrained the survey.

Evidence of Bats

Often bats leave no visible signs of their presence even on the inside of a building, particularly where there are hidden cracks, crevices and voids. It is also not possible to inspect all locations where bats may be present and therefore an absence of bat evidence does not equate to evidence of bat absence.

Local Records Centre Data Search

A Local Records Centre (LRC) data search was not undertaken due to the low impact and small-scale nature of the development. Current proposals suggest no land will be lost or linear features severed. The overall impact on biodiversity is likely to be localised and of low significance. It is very unlikely that the development will have any impact outside the footprint of the works. The data search results are considered unlikely to impact the decision-making process, and there is limited potential for key information to have been missed.

This approach is consistent with CIEEM's Guidelines for Accessing and Using Biodiversity Data (2020), which states that in low impact/small-scale scenarios, such as the extension of roof timbers, a LRC search may not be required.

3. Baseline Ecological Conditions

3.1. Desk Study

3.1.1. Bat Roosts Reported in Planning Applications Within the Same Postcode

The planning portal search¹⁵ returned no bat roost records from a search of sites within the same postcode area as the proposed development.

3.1.2. Protected Sites

The location of protected sites is shown in Plans 3 and 4: Protected Sites Within 2km and 10km respectively.

Statutory Sites Notified for Bats (Special Areas of Conservation (SACs)) or Sites of Special Scientific Interest (SSSIs) Within 10km

The table below details the sites designated for bats within 10km of the retirement home:

Table 1: Statutory Sites Designated for Bats Within 10km

Site name	Description	Distance and Direction from Development Site
Cwm Clydach SSSI ¹⁶	This site is designated as lesser horseshoe (<i>Rhinolophus hipposideros</i>) bats have been observed foraging within the woodland and several caves are known to be used as roosts. It is also known for its geological value.	9.4km to the west of the site boundary.

Other Protected Sites Within 2km

There are no statutory designated sites such as SACs, SSSIs, National Nature Reserves (NNRs) or Local Nature Reserves (LNRs) either within 2km of the retirement home.

Ancient Woodland Sites

The following table shows the ancient woodland sites within 2km of the site:

Table 2: Ancient Woodland Sites Within 2km

Ancient Woodland Site	
Ancient Semi-Natural Woodland (ASNW) ¹⁷	Three within 2km of site.
Restored Ancient Woodland Sites (RAWS) ¹⁸	Two within 2km of site.

¹⁵ [P/24/0130 | Proposed External Cladding and alterations to windows | Ty Bryn Seion North Street Dowlais Merthyr Tydfil CF48 3SR](#)
¹⁶ https://naturalresources.wales/media/641903/SSSI_0381_Citation_EN001b37a.pdf

¹⁷ Ancient Semi-Natural Woodland (ASNW) – broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400 years.

¹⁸ Restored Ancient Woodland Sites (RAWS) – woodlands which are predominately broadleaved now and are believed to have been continually wooded for over 400 years. These woodlands will have gone through a phase when canopy cover was more than 50% non-native conifer tree species and now have a canopy cover of more than 50 percent broadleaf.

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Nearest Area of Ancient Woodland	An unnamed area of ASNW 1.85km to the west of the site
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Protected Sites Summary

Given the small scale and localised nature of the proposed development, the limited ecological connectivity around the site and the distance between the proposed development and any designated or non-designated sites, as well as the limited scope for impacts outside of the footprint of the proposed works, no adverse impacts to the protected sites are likely to occur. These sites are not mentioned further in this report.

3.2. Field Study

3.2.1. Lighting and Ecological Context

Lighting

The site is within an E3: Suburban lighting zone, with medium district brightness (Institute of Lighting Professionals, 2012).

It lies on the edge of a suburban area and whilst woodland is present to the north-east of the site the retirement home is within a residential area and will experience moderate to high levels of artificial lighting from the streetlighting and properties to the south and west. This will decrease the quality of foraging and commuting bat habitat¹⁹.

Ecological Context

The habitats surrounding the retirement home includes areas of grass and hedgerows to the south-east and linked back gardens of the residential properties to the west. Though not completely continuous, these habitats act as an ecological corridor between the retirement home and the surrounding landscape. Consequently, the site provides moderate-quality bat foraging and commuting habitat.

3.2.2. Building Description from the Perspective of Bat Habitat

The table below summarises the key features of the retirement home.

Table 3: Key Features of Retirement Home

Building Type	The retirement home is a three-storey, brick-built structure designed in a distinctive Z-shaped layout. It appears as a series of interconnected and extended buildings, giving the impression of multiple structures joined together.
Roof	The roof is multi-pitched, with interlocking curved tiles in good condition and few visible gaps overall. Plastic anti-wildlife spikes are installed along the edge of each tile run; however, some are bent or missing, creating gaps that may allow access between the roofing felt and tiles, potentially leading into the roof void (Photos 7 and 9). Notably, there are additional gaps at the apex on the southern elevation pitch, and a large section of missing mortar along the edge of the western elevation, compromising the tile seal in that area (Photos 6 and 8).

¹⁹ Lighting can impact on bats' roosting sites, commuting routes and foraging areas.

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Lead Flashing	Lifted lead flashing on the joint of a single-story extension at the north-east elevation, where it meets the main complex, creating small gaps. Additionally, lead flashing around the vent stacks is partially lifted (Photo 9).
Soffits, Fascias and Bargeboards	The barge boards and fascias across all elevations have visible gaps beneath or are missing entirely (Photo 5).
Vents	There are multiple vents across all floors on the southern and eastern elevations. Vent stacks are also present on all roof sections. Many vents are damaged or missing (Photos 4 and 10).
External Walls	External walls are constructed of brick and mortar across all elevations, gaps due to missing mortar are present within the brickwork on all elevations (Photos 8 and 11).
Windows and doors	The windows and doors have uPVC frames. All windows and doors appear well sealed with no visible gaps (Photos 3 and 10).
Roof Void	Only a small section of the roof void was accessible for inspection (Photos 13 and 14).
Roof Lining	The roof is lined with 1F bitumen roof lining (Photos 13 and 14).
Roof Construction	The roof is constructed with a queen post design, not all areas of the roof void were able to be inspected due to the presence of a suspended ceiling (Photos 13 and 14).
Insulation of Void	Fiberglass insulation is present in the roof void (Photo 13).
Security Lighting	Security lighting is present close to the buildings entrances.
Plant Rooms	A plant room is present on the northern elevation, however this it well-lit and regularly used (Photo 12).

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Photos Showing the Retirement Home and its Features

Photo 1: North-east elevation



Photo 2: South-east elevation



Photo 3: Northern elevation



Photo 4: South-east elevation, example of broken vent and well-sealed windows



Photo 5: Gaps behind fascia boards



Photo 6: Missing mortar on western gable



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Photo 7: Interlocking tiles with missing wildlife spikes



Photo 8: Gap at apex on southern elevation and missing mortar between bricks



Photo 9: Lifted led flashing and missing wildlife spikes



Photo 10: Broken and missing vents



Photo 11: Long gaps running the height of the building, present at the building joins

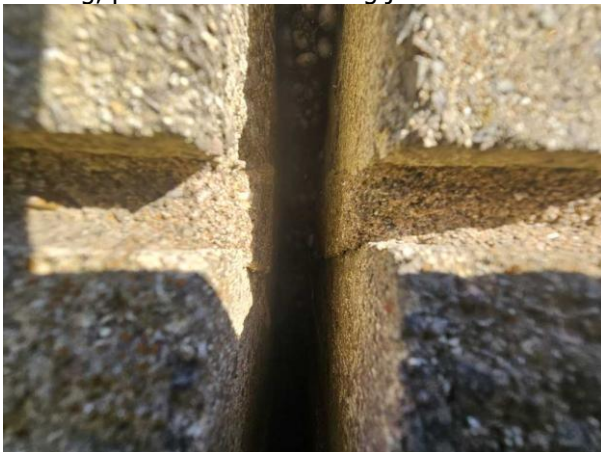


Photo 12: Well-lit plant room on northern elevation



Photo 13: Internal loft space on eastern elevation, lined with bitumen felt



Photo 14: View into a section of the loft void above the suspended ceiling



3.2.3. Potential Bat Access Points and Bat Roosting Locations

Potential Access Points for Bats in Retirement Home

The retirement home offers numerous potential access points for bats to gain entry into the building's interior. These include:

- Gaps created by bent or missing plastic anti-wildlife spikes along the roof tile runs (Photos 7 and 9);
- Missing mortar along the edge of the western elevation roof tiles (Photo 6);
- Gaps beneath or around bargeboards and fascias on all elevations (Photo 5);
- Lifted lead flashing at the joint of the single-storey extension on the north-east elevation and around vent stacks (Photo 9);
- Damaged or missing vents across the southern and eastern elevations (Photos 4 and 10); and
- Gaps within the brickwork due to missing mortar on all elevations (Photos 6, 8 and 11).

Potential Roosting Features for Bats

The following potential roosting features (PRFs) were identified:

- **PRF 1:** Gaps created by missing mortar along the edge of the roof tiles and at the roof apexes, which may provide access beneath the tiles (Photos 6 and 8).
- **PRF 2:** Bent or missing anti-wildlife spikes along the roof tile runs, potentially allowing entry to the space between tiles and the 1F bitumen roof lining (Photo 7).
- **PRF 3:** Gaps beneath bargeboards and fascias, which could lead into crevice spaces suitable for bat roosting (Photo 5).
- **PRF 4:** Missing or damaged vents on the southern and eastern elevations, which may provide entry into the wall cavities or other enclosed spaces (Photo 10).

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- **PRF 5:** Lifted lead flashing around the vent stacks and at the north-east elevation joint, creating small gaps (Photo 9).
- **PRF 6:** Gaps in masonry caused by missing mortar in the brickwork, along all elevations (Photos 8 and 11).

These features provide opportunities for both crevice-dwelling and void-dwelling bat species, making the building potentially suitable for roosting.

3.2.4. Dusk Emergence Survey

The results from the dusk emergence surveys are summarised below and in Plan 5:

Table 4: Summary of Conditions During Dusk Emergence Survey

	Survey 1a	Survey 1b	Survey 2a	Survey 2b
Date	08/05/2025	09/05/2025	17/06/2025	18/06/2025
Sunset Time	20:49	20:51	21:34	21:35
Start Time	20:34	20:36	21:19	21:20
Finish Time	22:04	22:06	23:19	23:20
Start Temperature (°C)	14	14	13	14
Sunset Temperature (°C)	14	14	13	14
Rain	None	None	None	None
Wind (Beaufort scale)	2	2	2	1
Cloud Cover (Oktas)	1	1	7	0

Table 5: Summary of Dusk Emergence Survey 1 Results

	Survey 1a: Dusk Emergence	Survey 1b: Dusk Emergence
Emergences/ Re-entries	No bats emerged from or interacted closely with the building.	One common pipistrelle was observed re-entering under the fascia on the western elevation (Photo 15).
Important Foraging/ Commuting Routes	No important foraging or commuting routes were observed.	No important foraging or commuting routes were observed.
Bat Activity	Low levels of common pipistrelles and soprano pipistrelles activity were recorded.	Low levels of common pipistrelles and soprano pipistrelles activity were recorded.

Table 6: Summary of Dusk Emergence Survey 2 Results

	Survey 1a: Dusk Emergence	Survey 1b: Dusk Emergence
Emergences	No bats emerged from or interacted closely with the building.	Two common pipistrelles were observed emerging and one re-entering under the fascia on the southern elevation (Photo 15).
Important Foraging/ Commuting Routes	Common pipistrelles were seen frequently foraging in the grassy area at the south-east of the site	No important foraging or commuting routes were observed.

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Bat Activity	Low levels of common pipistrelles and soprano pipistrelles and activity were recorded. A greater amount of activity was detected around the south-east of the site, with common pipistrelle feeding buzzes occasionally heard.	Low levels of common pipistrelles and soprano pipistrelles and activity were recorded.
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Photos Showing Confirmed Common Pipistrelle Roost/Access Location

Photo 15: Photo showing common pipistrelle roost location on the western elevation



Photo 16: Photo showing common pipistrelle roost location on the southern elevation



 = common pipistrelle roost location

3.2.5. Five-Night Static Detector Survey

No bat passes were recorded during the static detector survey

3.2.6. Nesting Bird Survey

No signs of recent or defunct nests were found within or on the exterior of the retirement home.

4. Evaluation

4.1. Summary of Survey Results

The preliminary roost assessment found no evidence of bats roosting within or on the external parts of the retirement home.

The dusk emergence surveys confirmed the presence of two common pipistrelle day roosts. A maximum count of two common pipistrelles were recorded using the various access points.

No bat passes were recorded during the static detector survey

4.2. Characterisation of Confirmed Roosts

The dusk emergence surveys confirmed that the following roosts are present within the building:

Table 7: Roost Characterisation

Bat Species	Maximum Count	Roost Type	Roosting Location	Rarity Category and Estimated Population	Roost Value
Common Pipistrelle	Two ²⁰	Day Roost	From underneath gaps the fascia on the western and southern elevations.	Widespread across the UK Estimated population in Wales: 297,000 (96,600 – 732,000) Bat Monitoring Report 2024 NBMP-annual-report-2024.pdf	Local

4.3. Suitability of Summer Roosts

The retirement home was assessed during the initial preliminary roost assessment survey as having moderate suitability for use by crevice-dwelling bats; moderate suitability for use by roof-void dwelling bats; and negligible suitability for use by direct access species (horseshoe species). Full justification of the assessment can be found in the Appendix 3.

4.4. Potential Winter Roosts

The crevices between the stonework provide potential hibernation sites for bats.

²⁰ It is assumed that the one bat emerged and then re-entered, however if this is not the case, the maximum count would be three. This would not changed the roost characterisation.

4.5. Birds – Interpretation of Nesting Bird Survey

No evidence of past or current nesting by birds was noted during the preliminary roost assessment or dusk emergence surveys on the exterior of the building.

5. Impact Assessment

5.1. Potential Impacts of Development on Bats

Short-term Impacts: Disturbance

If the proposed work was undertaken whilst bats were present, it could result in the physical disturbance of bats, direct human interference, increased noise²¹ and vibration disturbance, and potentially direct injury or killing of bats by being crushed or entombed. If work is undertaken between April and September, there is greater potential for bats to be impacted.

Long-term Impacts: Roost loss and Modification

In the absence of mitigation, the development would lead to the permanent loss of the common pipistrelle day roosts.

5.2. Potential Impacts of Development on Birds

As no bird were observed to be nesting on the building during the preliminary roost assessment and the dusk surveys no negative impacts of the development on birds are anticipated. Precautionary and enhancement measures for birds are detailed in Section 6.

²¹ Low-pitched noises, audible to humans but not to bats, are unlikely to cause significant disturbance; conversely ultrasound could do so. Sudden, loud noises could potentially disturb bats and cause abandonment of roosts (Pearson, Koford and Pearson, 1952; Humphrey and Kunz, 1976; Kunz, 1982; Fenton, 1997; Ferrara and Leberg, 2005).

6. Required Actions

6.1. Licensing Requirements for Bats

An NRW bat development licence is required. An application can only be made when planning consent has been granted and requires the following elements:

- A completed and signed application form;
- A copy of the planning consent/listed building consent (if applicable) and supplementary planning reports (planning officer delegated report/committee meeting minutes);
- A completed and signed Local Authority Planning Consultation form;
- A completed method statement which sets out a timetable of the development and details the provision for new or continued roosting opportunities for bats;
- The bat survey report/s;
- Confirmation that any relevant associated planning conditions have been discharged by the Local Authority; and
- A fee to be paid for some applications²².

6.2. Precautionary Measures

The implementation of the following measures will minimise the potential for disturbing, injuring or killing bats during works.

6.2.1. Installation of Bat Boxes for Displaced Bats During Works

In advance of the works, two Beaumaris Woodstone Midi bat boxes (see Appendix 8) will be installed to provide compensatory alternative roosting habitats during the construction period for any common pipistrelle bats that may be displaced as a result of the works²³. The bat boxes will be installed along the boundary wall along the south-east of the site (Plan 6). They will be installed at a height of at least 3m, away from artificial lighting and close to connectivity features. The bat boxes will be retained on site after completion of works in-perpetuity as a biodiversity enhancement²⁴.

6.2.2. Timing of Works

Work will commence either during the spring months (i.e. March to early April inclusive²⁵) or preferably the autumn months (i.e. 15th September to 31st October inclusive), thus reducing the probability of

²² <https://naturalresources.wales/permits-and-permissions/species-licensing/species-licensing-charges/?lang=en>

²³ This approach would not be suitable for horseshoe species. See footnote in Bat Discovery Action section for measures to be undertaken if horseshoe bats are encountered on site.

²⁴ If the bat box will not be retained on site, its removal should be detailed within the bat licence method statement. Its removal should be undertaken by a licensed bat worker.

²⁵ Works undertaken in April will be preceded by a nesting bird check by a consultant ecologist.

encountering either summer roosting bats or winter hibernating bats²⁶. This latter timeframe will also minimise the risk of encountering nesting birds.

6.2.3. Site Induction/ Toolbox Talk

A suitably qualified bat ecologist will deliver a 'tool-box talk' to all contractors involved in works that could affect bats. This will take place prior to the commencement of works. All site workers will be made aware of the role of the ecologist and briefed on the legal status of bats, the likely places to find them, the working practices that will be undertaken to minimise and avoid harming or disturbing bats (e.g. the procedure required for removing tiles etc.), the action to be taken if bats are encountered during the works and that all activities relating to bats and bat roosts are restricted to the terms and conditions of the licence.

All site workers will be made aware that in the event of bats (or occupied birds' nests) being found, or suspected, when the ecologist is not on site, all works must stop in the affected area until appropriate expert advice sought from the bat ecologist or NRW. A copy of the NRW licence and the Bat Licence Method Statement will remain on site at all times and a summary sheet of guidance will be given to the contractors working on site.

6.2.4. Ecological On-site Supervision of Works

A licensed bat worker will supervise the 'soft strip' whereby all features with bat roosting potential will be exposed and removed. This will include (but not be limited to) the soffit, fascias and bargeboards etc. The tiles and any associated timbers must be lifted off vertically (and not rolled or sprung) and checked on their underside to ensure that no bats are clinging to the underside. This will minimise the chance of bats being killed/injured.

Any removal work will be undertaken using hand tools, (i.e., picks, crowbars, slate rippers, bow saws etc.). These features will be carefully removed by hand and contractors will check for the possible presence of bats on the undersides of these features before they are lifted off, prior to discarding or storing them. During the soft strip process, any cracks or crevices that have the potential to be used by bats will be inspected by a licensed bat worker using a high-powered torch to ensure they are not in use. Cavities will be carefully prised open using a crowbar. Wall tops will be exposed so that any wall cavities can be checked. A decision will be made on site at the time by the site ecologist about the extent of areas that need to be supervised.

The removal of such features will be observed and supervised at close quarters by a licensed bat handler from an appropriate viewing position to be provided by the contractor (e.g., scaffolding or lifting platform).

6.2.5. Bat Discovery Action Plan

If bats are encountered during supervised works, the licensed bat handler will capture the bat/s with thin gloved hands or a hand-held net, conduct a health check and then place it in a drawstring calico cloth bag.

²⁶ Work will not commence from November to February in order to avoid disturbing hibernating bats.

Removed bats will be temporarily transferred to a well-ventilated container. The removed bat will then be transferred to a species-specific bat box that will be fixed at a suitable location on or close to site. The access point of the bat box will be blocked with a cloth or other suitable material until the working day has been completed. This will allow the bat/s to settle in a safe place for the remainder of the day, and to emerge safely in the evening. Any injured bats or bats requiring supplementary feeding will be immediately taken into care.

If individual bats species not covered by the licence are discovered unexpectedly or greater numbers of bats than covered by the licence, works to the building will stop immediately. The Named Ecologist will re-assess the structure and determine whether works can continue under this licence, or whether a modification/amendment to the licence is required prior to works recommencing. A written record must be kept of this decision and be made available to NRW or any police officer on request. The incident will also be reported on the licence return form.

6.3. Avoidance, Mitigation, Compensation and Enhancement Measures for Bats

6.3.1. Summary of Recommended Mitigation and Compensation Measures

A suitable qualified and experienced bat ecologist will oversee the installation of all aspects of the mitigation.

A summary of proposed mitigation is given in the table below:

Table 8: Summary of Proposed Mitigation/Compensation Measures

Bat species	Proposed Mitigation/Compensation Measures
Common pipistrelle	• Two Beaumaris Midi boxes; • One 1WQ Schwegler Summer and Winter Bat Roost Box; • 8 soffit bat boxes; and • A sensitive lighting strategy.

6.3.2. Bat Boxes

Two Beaumaris Midi Bat Boxes (Appendix 8) will be installed on boundary wall at the south-east of the site as detailed in 6.2.1. and in Plan 6.

To compensate for the loss of hibernation potential from the building as a result of the development, one 1WQ Schwegler Summer and Winter Bat Roost Box (Appendix 9) will be screwed onto the outer wall in a north facing elevation. It will be placed at least 3m up the wall and away from windows and external lighting.

6.3.3. Soffit bat boxes

To compensate for the loss of fascia access, eight soffit boxes will be installed across each elevation of the building (see Drawings 3 and 4). These will be positioned to provide suitable replacement access points for crevice dwelling bats and to maintain continuity of roosting opportunities.

The soffit boxes will be installed directly beneath the roof line in locations that provide a clear and unobstructed flight path. Each box will be fitted as high as possible and in areas that receive some natural sunlight during the day. Shaded positions and locations affected by artificial lighting will be avoided. The boxes will be spaced evenly along each elevation to replicate the distribution of the original fascia gaps and to ensure that access is available across the full length of the building.

Installation will follow standard manufacturer guidance. The entrance slot will be positioned at the base of each box and the area immediately below will be kept clear so bats can land and crawl up into the box if required. The boxes will be fixed securely to the soffit structure and will not obstruct the guttering or any other roof features.

The final locations are shown on Drawings 3 and 4, which illustrate the placement of the eight boxes on both the north west and south west elevations.

While recommendations suggest the provision of access into the cavity wall to provide hibernation potential for bats, the cavity walls are filled with insulation and thus are unsuitable for this purpose. A hibernation box has been proposed as an alternative.

6.3.4. Sensitive Lighting Strategy

A bat-sensitive external lighting strategy will be delivered in line with the approved Realta 2700K lighting design by Thorlux Lighting, August 2025 where further information about location, height and type of lighting can be found.

All new luminaires will operate at a maximum correlated colour temperature of 2700K (warm-white), minimising blue-light emissions known to disrupt bat behaviour. Fittings are designed with optics and shields to direct light downward, preventing upward or lateral spill.

Lux contour modelling confirms that illumination levels at and around bat roost entrances, installed bat boxes, and along tree lines within the communal grounds remain at or below 0.5 lux, in accordance with BCT/ILP GN08 (2023) guidance. This maintains dark corridors along the northern and southern site boundaries, safeguarding commuting routes between roost features and the surrounding gardens/open space. Columns are restricted to a maximum height of 5 m, and all fittings are equipped with timers and/or motion sensors to ensure lighting operates only when required for safety or access.

Together, these measures will ensure the scheme provides a functional and safe lighting system for residents while protecting ecological connectivity and the effectiveness of bat roosting features.

Internal lighting is smart LED and have a corridor function, where lights are dimmed to 10% during the night which balances a reduction in light pollution with the need to maintain a safe environment for the elderly residents. These will not be changed as part of the works.

6.3.5. Post-Development Monitoring

On completion of work, confirmation of the works carried out and photographs of the works including retained access points and the bat mitigation features will be recorded by a licensed ecologist and submitted to NRW and the LPA (local planning authority) ecologist. The bat mitigation features will be checked by a bat worker to ensure that they are not obstructed or illuminated, and that they provide the intended access points.

Post-development monitoring of the works will be undertaken for one year, following implementation of the mitigation measures and will consist of an internal and external inspection and one dusk emergence survey undertaken between May and September by suitably qualified ecologists. A report will be submitted to NRW and the LPA ecologist following completion of the monitoring surveys. The report will detail any remedial measures required.

6.4. Avoidance, Mitigation, Compensation and Enhancement Measures for Birds

6.4.1. Discovery of Nesting Birds

If any active nests are found these will be protected, along with an appropriate buffer zone of approximately 5m, until the nesting is complete, and the young have fledged²⁷.

6.4.2. Nesting Provision

Bird nesting opportunities on site will be enhanced by the installation of two Schwegler 1B small bird boxes (see Appendix 11) on suitable trees within the communal courtyard at the south-east of the site. They will be at least 3m above ground level and ideally oriented so that it faces north or east. Their proposed location is shown in Plan 6.

6.5. Longevity of Report

In accordance with CIEEM's guidance (CIEEM, 2019), if development works do not begin within twelve to eighteen months of the date of this report, an updated survey may be required to determine if conditions and bat usage has changed since described in the current report.

Bat Surveys for Professional Ecologists (Collins, 2023) states that survey data should ideally be from the most recent optimal survey season before a planning or licence application is submitted. This is because bats are highly mobile and so the numbers of bats present may have increased or decreased in numbers since the survey was undertaken.

²⁷ Some bird species, especially raptors and owls remain dependent upon the nesting site after fledging and so depending upon the species the nest site may need to be protected for a period of time after fledging.

7. References

Bat Conservation Trust (2022) *Interim Guidance Note: Use of Night Vision Aids for Bat Emergence Surveys and Further Comment on Dawn Surveys*. Available online at <https://cdn.bats.org.uk/uploads/pdf/Interim-guidance-note-on-NVAs-May-2022-FINAL.pdf?v=1653399882>

BSI (2013) *BS 42020:2013 Biodiversity – Code of practice for planning and development*. British Standards Institution, London.

CIEEM (2019) *Advice Note on the Lifespan of Ecological Reports and Surveys* Available online at <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

CIEEM (2020) *Guidelines for Accessing, Using and Sharing Biodiversity data in the UK*. <https://cieem.net/wp-content/uploads/2016/03/Guidelines-for-Accessing-and-Using-Biodiversity-Data-March-2020.pdf>

CIEEM (2023) *UK Bat Mitigation Guidelines*. <https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf>

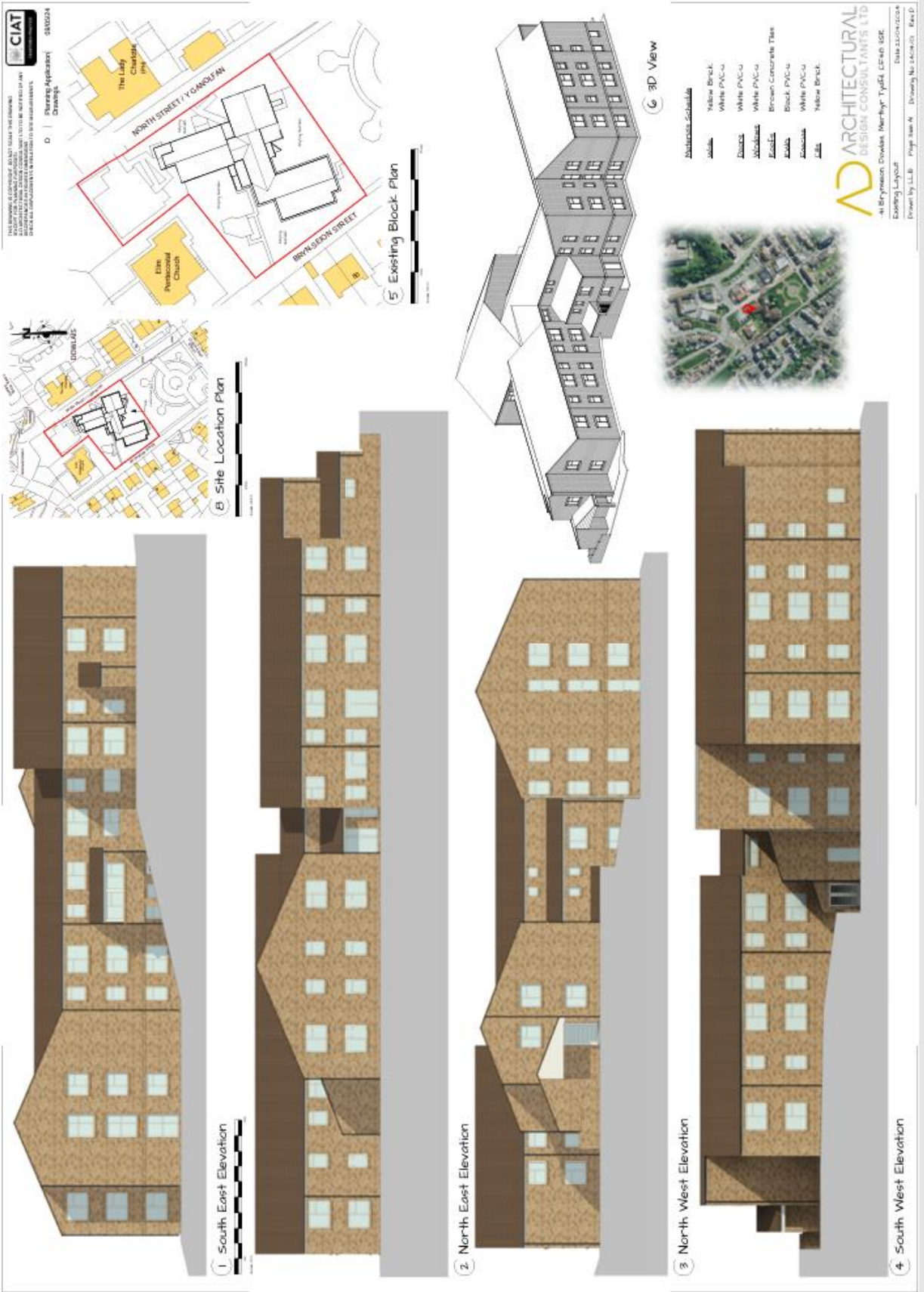
Collins, J (ed) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn)*. The Bat Conservation Trust, London.

European Commission, Directorate-General for Environment (2011) *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC: final version*, February 2007. European Commission.

Institution of Lighting Professionals & Bat Conservation Trust (2023) *Bats and Artificial Lighting in the UK*. Guidance Note (GN08/23). Available online at <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>.

JNCC and Bat Conservation Trust (2022) *National Bat Monitoring Programme Annual Report 2022*. Available online at <https://cdn.bats.org.uk/uploads/pdf/Our%20Work/NBMP/National-Bat-Monitoring-Programme-Annual-Report-2021.pdf?v=1655151480>**Welsh Government (2024)** *Planning Policy Wales*. 12th Edition. Available online at https://www.gov.wales/sites/default/files/publications/2024-02/planning-policy-wales-edition-12_1.pdf

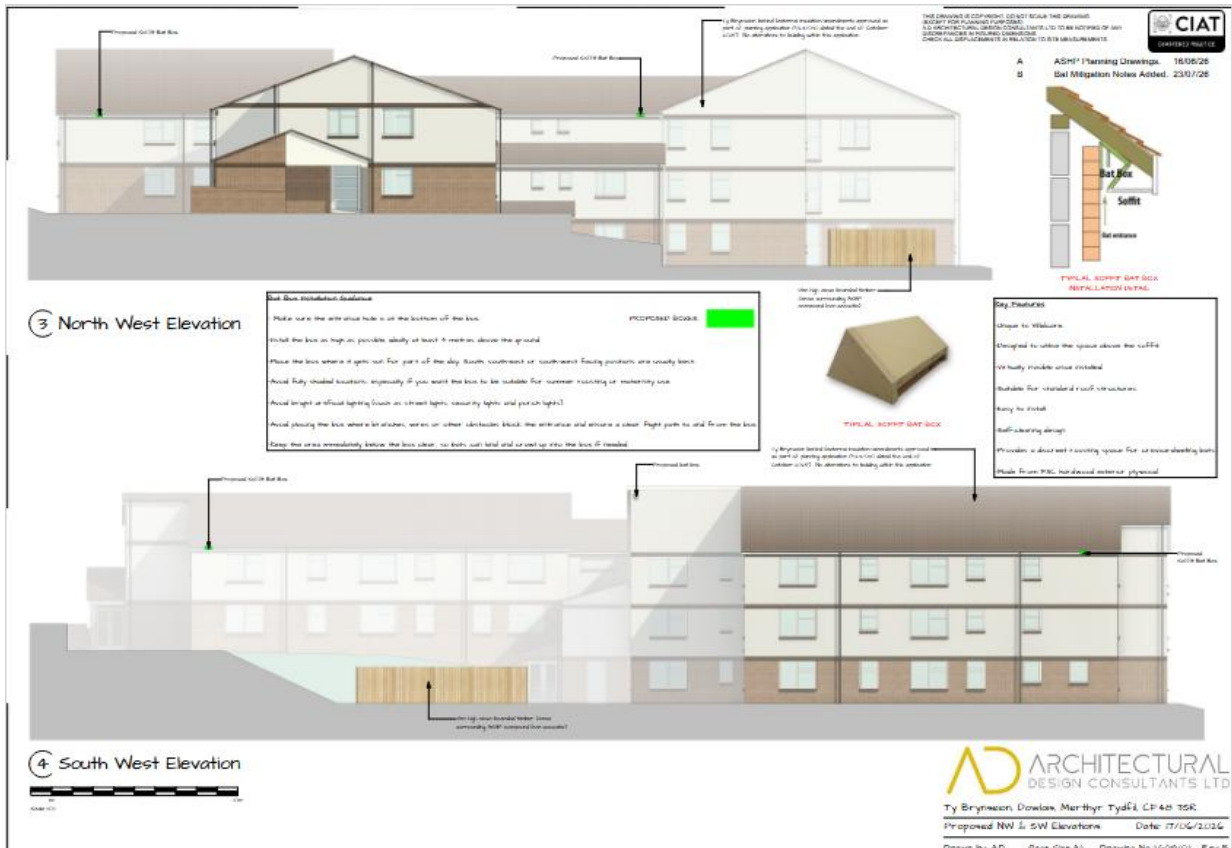
Drawing 1: Existing Site Plan



Drawing 2: Proposed Development



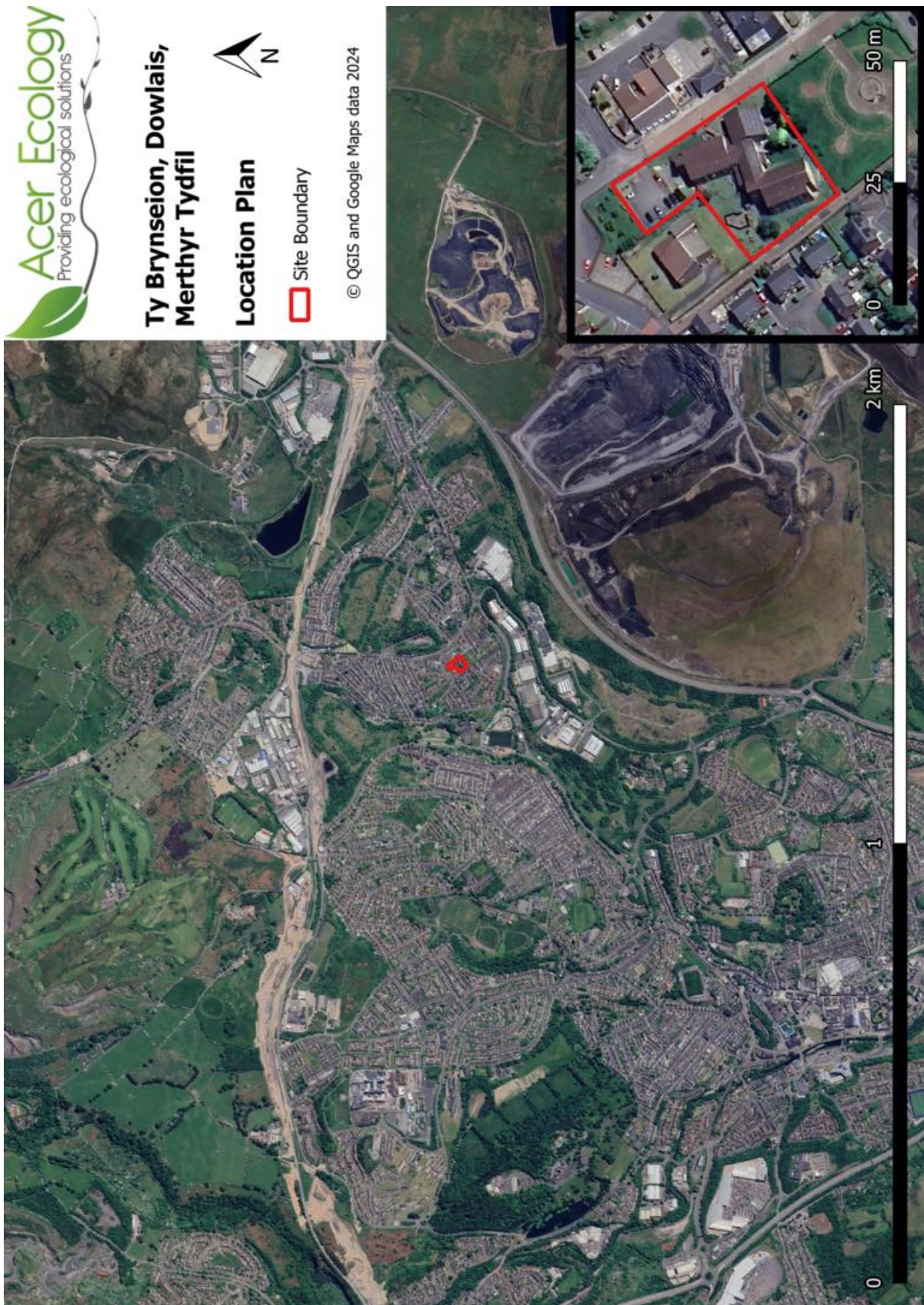
Drawing 4a: North-West and South-West Elevations and Soffit Box Detail



Drawing 4b: South-east and North-east Elevations and Soffit Box Detail



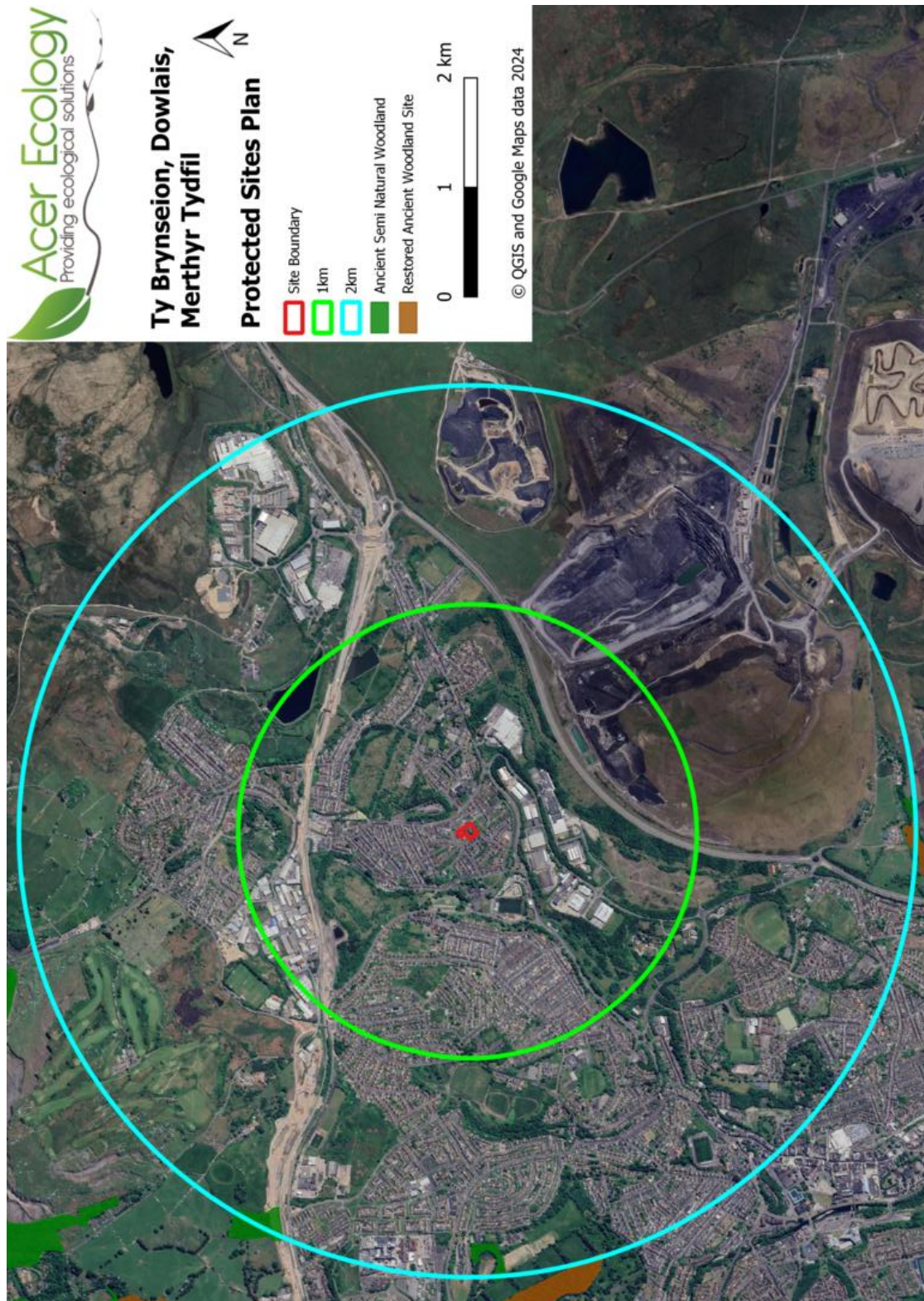
Plan 1: Location Plan



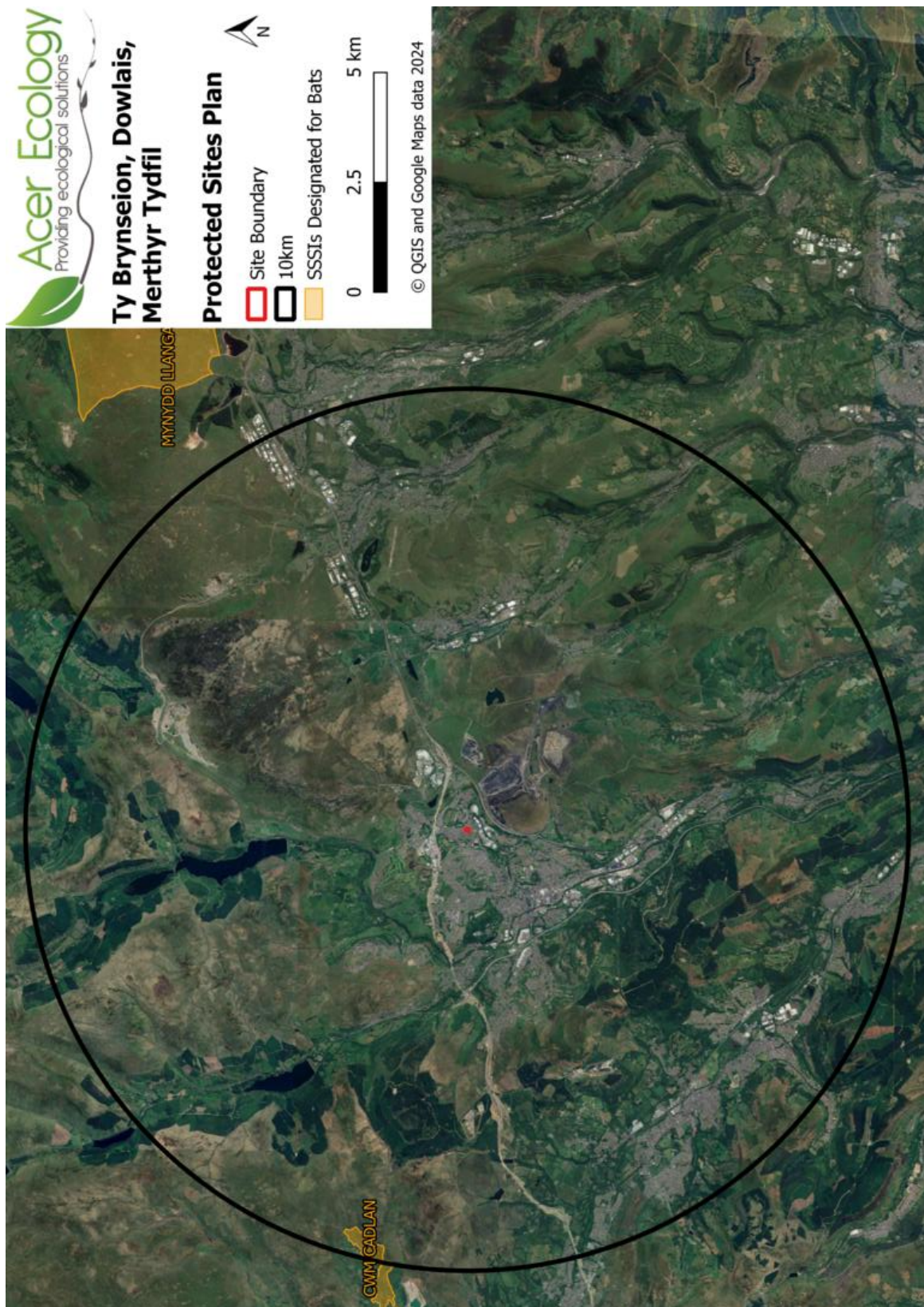
Plan 2: Location/Block Plan



Plan 3: Protected Sites Within 2km



Plan 4: Protected Sites Within 10km



Plan 5: Dusk Emergence Survey Results

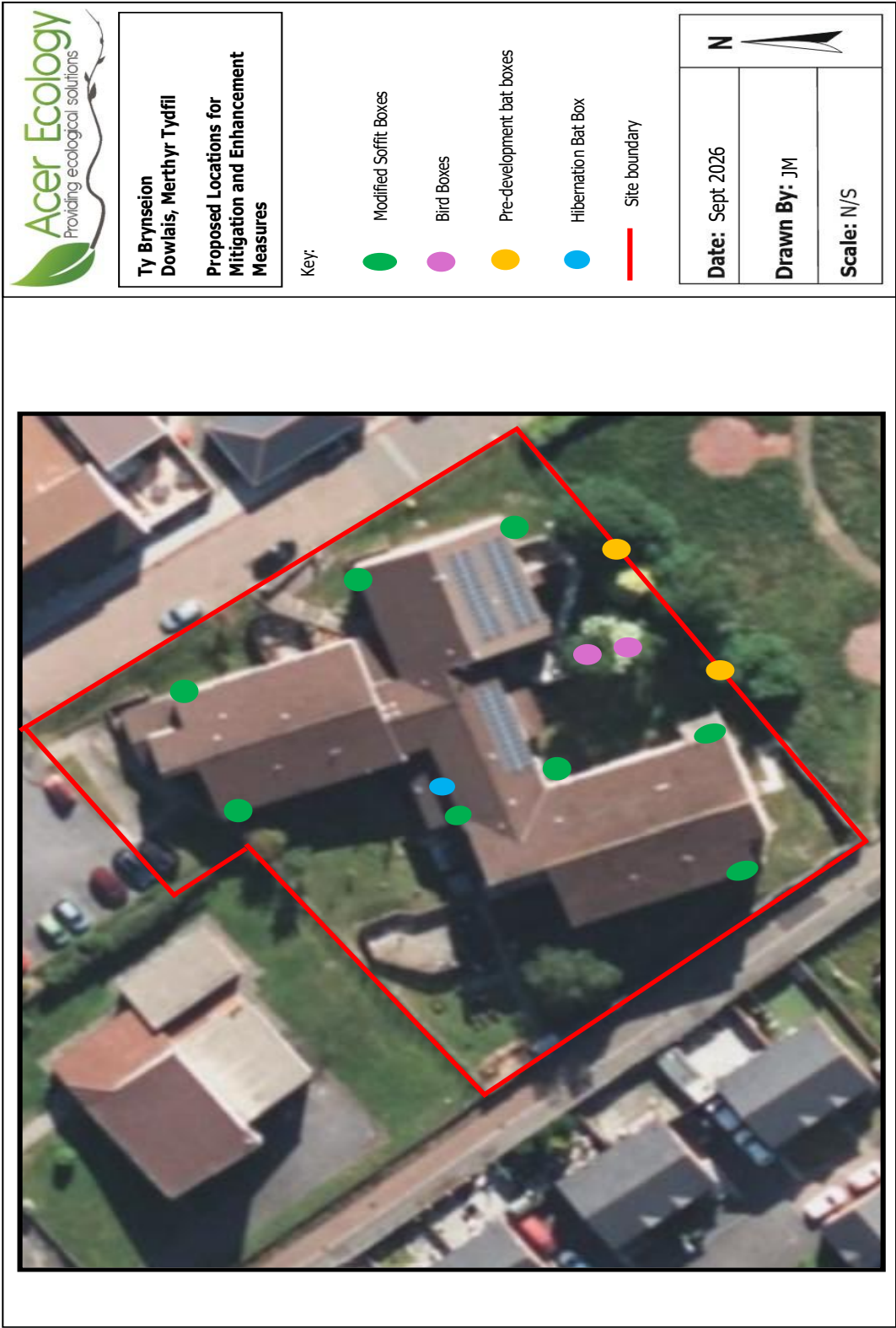
Survey 1B: 09/05/2025



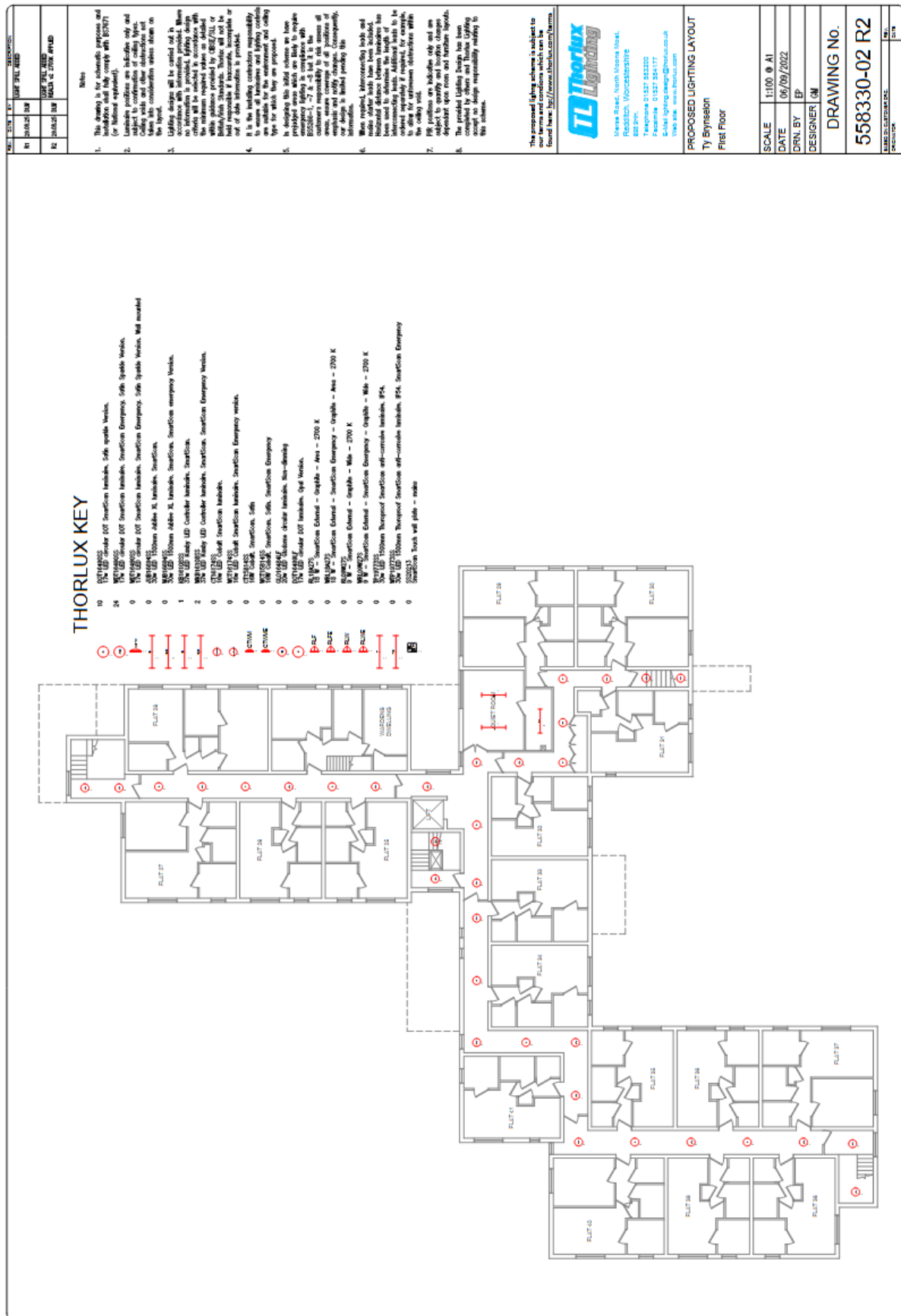
Survey 2A: 17/06/2025



Plan 6: Proposed Mitigation and Enhancement Locations



Plan 7: Proposed Lighting Plan



Appendix 1: Bat Ecology and Legislation Protecting Bats and Their Roosts

Bat Ecology

There are 17 known breeding species of bat found in the UK, with additional species recorded as migrants or vagrants. They are all small, nocturnal, flying, insectivorous mammals that are under conservation threat with many having undergone massive population declines over the last century. Some species, such as common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) are relatively common and widespread in the UK, while others, such as greater horseshoe (*Rhinolophus ferrumequinum*) bats, have an extremely restricted distribution.

Most bats will use a variety of roosts of different types throughout the year. The winter hibernation sites typically have cool, humid conditions with a stable microclimate and low levels of disturbance. Most British bats hibernate in caves or artificial structures that fulfil these requirements, such as mines, tunnels and cellars. Bats emerge from hibernation around late March or early April and move into transition or intermediary roosts. Around early May, female bats gather in colonies to form summer or maternity roosts, and it is here where they will give birth between late May and early July. A colony may consist of many individuals (sometimes hundreds of bats) of mixed age and sex. Roosts occur in a variety of habitat types, including tree-holes, caves, buildings and other secure crevices or internal spaces with appropriate stable temperatures and humidity. Bats may change roost locations many times during a year, and colonies may split up and reform during this period. Males occupy solitary roosts in autumn, to which they attract females for mating.

Legislation

All British bat species and any place used for shelter or protection, or as a breeding site or resting place (their roosts) are fully protected under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species (Amendment) (EU Exit) [‘CHSAEU’] Regulations 2019. The roosts are protected irrespective of whether bats are present at the time. The aforementioned legislation make it illegal to deliberately or recklessly:

- Kill, injure or capture bats;
- Disturb bats;
- Damage, destroy, or obstruct access to bat roosts (including sites that are currently unoccupied);
- Possess or transport a bat or any part of a bat unless acquired legally; or
- Sell, barter or exchange bats or parts of bats.

Disturbance is defined as that which is likely to impair bats ability:

- To survive, to breed or reproduce, or to rear or nurture their young;
- To hibernate or migrate; or
- To significantly affect the local distribution or abundance of the species to which they belong.

Habitats Regulations Licensing

If a bat roost will be affected by a development, Natural Resources Wales (NRW) can issue licences under the Habitats Regulations to permit otherwise prohibited acts. Licences for certain activities can be granted providing “three tests” are satisfied, that is:

1. The purposes of “preserving public health or safety, or for reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment”;
2. There must be “no satisfactory alternative”; and,
3. The action is “not detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”.

Where planning regulations apply, NRW will only issue a licence after planning consent has been granted. The licence application will require the production of a detailed method statement, which sets out the activities to be carried out under the licence to minimise the risk of bats being harmed during construction works and ensure that bats will be conserved during the development of the site. This will need to detail the mitigation proposed (such as the replacement or compensation roost); the timescale and schedule of works, the number, size and locations of bat access points to be provided; the type of materials to be used (roofing material, roof lining, fascias, soffits, and bargeboards etc.); lighting proposals; action to be taken in the event bats are found during works; and a post-development monitoring programme. The method statement will need to be accompanied by scaled plans and maps detailing the bat mitigation features. A cross-section of the access points and roost space is often required. The method statement must ensure that provision is made for new or continued roosting opportunities after the completion of development works. In some instances, a method statement is requested by the Local Planning Authority or Natural Resources Wales before the planning application is determined.

Planning Policy Wales

Section 6.4 Paragraph 6.4.5 of Planning Policy Wales Edition 12 (2024) that focuses on Biodiversity and Ecological Networks, Section 6 of The Environment (Wales) Act 2016²⁸ that details the requirement for enhanced biodiversity and resilience of ecosystems, and TAN 5 all encourage developments in Wales to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally.

Part 1, Section 7 of the Environment (Wales) Act 2016 provides a list of the ‘*living organisms of principal importance for maintaining and enhancing biodiversity in relation to Wales*’. This includes seven bat species (soprano pipistrelle, barbastelle (*Barbastella barbastellus*), Bechstein’s (*Myotis bechsteini*), noctule (*Nyctalus noctula*), brown long-eared (*Plecotus auritus*), lesser horseshoe (*Rhinolophus hipposideros*) and greater horseshoe bats (*Rhinolophus ferrumequinum*)).

²⁸ <http://www.legislation.gov.uk/anaw/2016/3/contents>

Appendix 2: Guidelines for Assessing Potential Bat Roosting Suitability²⁹

Protentional Suitability	Roosting Habitats in Structures
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels)
Negligible ³⁰	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ³¹ and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ³²).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions (see footnote from low suitability) and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (see footnote from low suitability) and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

²⁹ Taken from Table 4.1 of the Bat Survey Guidelines (2023) 4th edition.

³⁰ Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

³¹ For example, in terms of temperature, humidity, height above ground levels, light levels or levels of disturbance.

³² Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

Appendix 3: Summer Roosting Potential

The retirement home is assessed as having:

- **Moderate suitability** for crevice-dwelling bats (e.g., *Pipistrellus* species and smaller *Myotis* species such as Brandt's (*Myotis brandtii*) and whiskered bats (*Myotis mystacinus*)), due to multiple access points and small gaps, such as those found under lifted lead flashing and between the roofing felt and tiles. These features provide sheltered roosting opportunities that could be used by crevice-dwelling bats.
- **Moderate suitability** for roof-void-dwelling bats (e.g., long-eared bats (*Plecotus* species) and larger *Myotis* species). Although the segmented nature of the roof voids between residents' flats may provide suitable, thermally stable areas for roosting, the full extent of the void space could not be accessed during the survey, making its suitability for void-dwelling bats uncertain. However, gaps present at the apexes and missing wildlife spikes along the tile runs could provide access for void-dwelling species.
- **Negligible suitability** for direct-access bats such as lesser horseshoe (*Rhinolophus hipposideros*) and greater horseshoe (*Rhinolophus ferrumequinum*), which require larger entry points. The structure lacks large, direct access points or expansive roost space that would attract horseshoe bats.

This moderate assessment is based on the variety of available access points and roosting features that could support day and night roosting but are unlikely to support a roost of high conservation value. This assessment will guide the level of further survey effort required.

Appendix 4: Guidelines for Determining Required Number of Dusk Surveys

Roost Suitability	Minimum Number of Dusk Surveys Required ³³
Negligible	None.
None.	None.
Low	One survey visit comprising of a dusk emergence survey ³⁴ between May and August for structures.
Moderate	Two separate dusk emergence survey visits ³⁵ . Surveys must occur between May and September ³⁶ , with at least one survey between May and August ³⁷ .
High	Three separate dusk emergence survey visits. Surveys must occur between May to September, with at least two surveys between May and August.

³³ Adapted from Tables 7.1 and 7.2 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

³⁴ Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see para 5.2.44). In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

³⁵ Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more.

³⁶ September surveys are both weather- and location-dependant. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. September surveys are likely to miss maternity roosts due to dispersal before this time, but may still pick up mating roosts.

³⁷ Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more. Survey timings should consider the prevailing conditions in the year of survey, which will vary geographically. In years with a cold spring, the surveys should not be started in early May or all be completed in May. The surveys should maximise the possibility of detecting maternity roosts, which can switch roosts between pregnancy and lactation, and the optimum coverage includes the pre-parturition, post-parturition, and mating periods.

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Appendix 5: Guidelines for Assessing Bat Habitat Suitability³⁸

Suitability	Commuting and Foraging Habitat
Negligible	Negligible habitat features on-site likely to be used by commuting and foraging bats.
Low	<u>Commuting Habitat</u> Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape. <u>Foraging Habitat</u> Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	<u>Commuting Habitat</u> Continuous habitat connected to the wider landscape that could be used by bats for commuting, such as lines of trees and scrub or linked back gardens. <u>Foraging Habitat</u> Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	<u>Commuting Habitat</u> Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. <u>Foraging Habitat</u> High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. <u>Proximity to Known Bat Roosts</u> The site is close to and connected to known roosts.

³⁸ Taken from Table 4.1 of the Bat Survey Guidelines (2023) 4th edition.

Appendix 6: Surveyor Experience

Survey 1A: 08/05/2025

Jack Martin- Jack graduated with a BSc in Zoology and an MSc in Wetland Science and Conservation from Bangor University. Jack is currently working as an Assistant Ecologist and is receiving training from Acer Ecology. Further details of his qualifications and experience can be found at https://www.linkedin.com/in/jack-martin-336970184?utm_source=share&utm_campaign=share_via&utm_content=profile&utm_medium=android_app

Martha Tingey - Martha graduated with an BSc (Hons) in Zoology from Swansea University. She has previously worked for 4 years at SWT Ecology Services before working as a Consultant Ecologist from Acer Ecology Ltd.

Georgia Davies – Georgia holds a master's degree from Cardiff University in Biological Sciences completing her research project on fungal communities in oak trees. Her passions lie in ecology and specifically ornithology where she participated in a bird ringing internship.

Matt Binding- Matt holds a degree in (BA hons) Marine and Natural History Photography. He has a keen interest in wildlife conservation and ecology and has been sub-contracting with Acer Ecology with previous work experience in Ecology/Conservation and Construction. He is in his 1st full season of bat surveying with Acer Ecology.

Robbie James – Robbie holds a BSc and Masters in Biosciences and has completed 4 seasons of bat surveying with Acer and other companies. He has always loved the study of ecology and agriculture and is passionate about the conservation of the natural world.

Survey 1B: 09/05/2025

Jack Martin – As above

Lydia Tutton – Lydia has a Masters in Sustainability and Ecology from the Centre of Alternative Technology. She is in her first season of bat surveying, working as an Assistant Ecologist at Acer Ecology, where she is receiving training

Georgia Davies – As above

Matt Binding – As above

Richard Hurn – Richard graduated in Zoology from Bangor University in 2006. He has also completed, Certificate in Ecological Consultancy from Ecology Training UK in 2021. He has been conducting bat and herpetological surveys for Acer Ecology since 2022. He also has experience and knowledge of great crested newt surveying and is a Lead Adviser with Natural England Wildlife Licensing Service.

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Survey 2A: 17/06/2025

Jack Martin – As Above

Georgia Davies – As Above

Robbie James – As Above

Ellis Cleland - Ellis holds a BSc (Hons) in Wildlife Ecology and Conservation Science and is currently in his first season of bat surveying with Acer Ecology. He has a strong interest in aquatic macro-invertebrates and species conservation, with particular enthusiasm for UK biodiversity and protected species work.

Sion Smyth – Sion is currently studying zoology at Swansea University. He is working in his second season of bat survey work and is receiving training from Acer Ecology. Further details of his qualifications and experience can be found at: <http://www.linkedin.com/in/sion-smyth-462443253>

Survey 2B: 18/06/2025

Jack Martin – As Above

Ellis Cleland – As Above

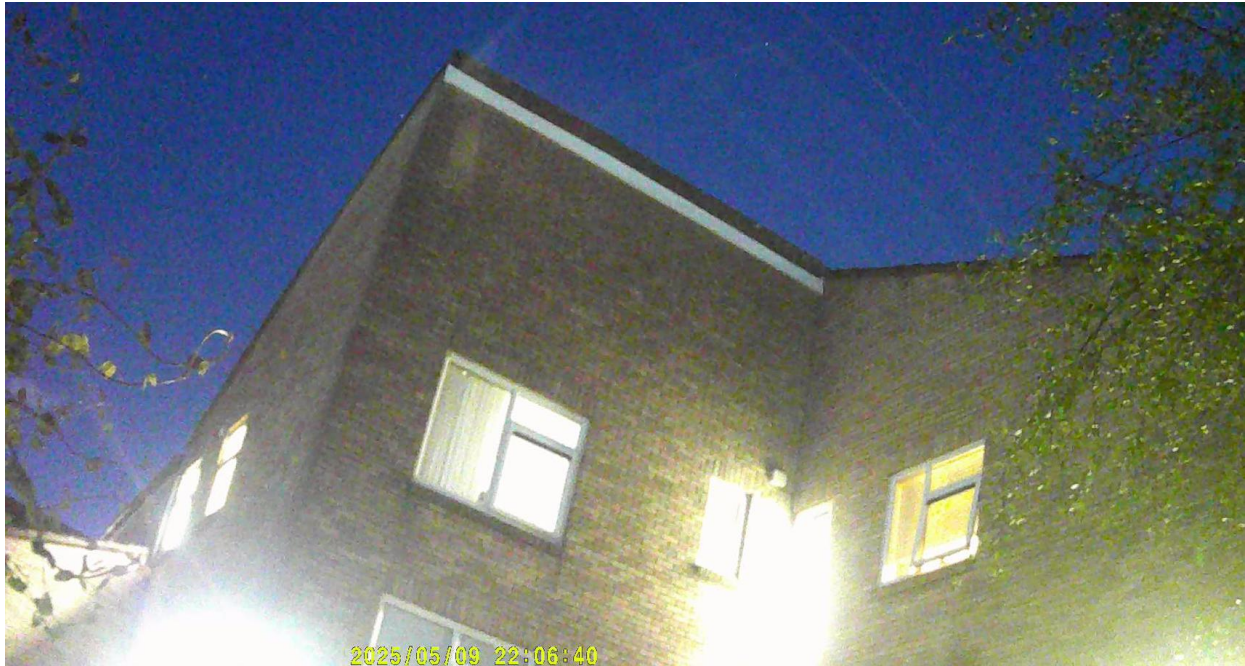
Sion Smyth – As Above

Jack Smith -Jack holds a degree in Ecology and Wildlife Conservation and is currently operating as a freelance surveyor in his spare time. He is driven by a fascination with the natural world and its' protection, and is involved with numerous charities and conservation groups in the south-west. This is his first season as a surveyor after extensive travel since graduating in 2022.

Dee Kozłowska - Dee graduated with a BSc (Hons) Biology and Biotechnology and studied for MSc in Molecular Biotechnology, including courses in Molecular Ecology, Field Surveys, Plant In Vitro Cultures and their Importance for Species Protection, Invasive Species. Her passion lies in nature conservation and ecology of Bryophytes.

Appendix 7: Darkest Point of Surveys

Survey 1B: 09/05/2025



Survey 2A: 17/06/2025



Acer Ecology

Survey 2B: 18/06/2025



Appendix 8: Beaumaris Woodstone Bat Box

This bat box is made entirely from woodstone, a robust material comprising concrete and wood fibres. This means that, not only does the box have excellent insulating properties maintaining a more consistent temperature throughout the year, it also provides excellent protection from predators. The Beaumaris box has a single narrow cavity which makes it suitable for crevice roosting bats such as the common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, Brandt's bat and whiskered bat. The interior of the box has a rough surface for bats to cling to and the front of the box features a subtle but attractive imprint of a bat in flight.

Suitable for attaching to external walls and should be sited as high up on the façade as possible, at a height of at least 3m from the ground. Avoid siting under artificial lights. Bats prefer to change roosts to benefit from varying ambient temperatures, so bat boxes should ideally be clustered in small groups.



Midi:

- Height: 39cm
- Width: 29cm
- Depth: 6cm
- Weight: 4.4kg

Appendix 9: 1WQ Schwegler Summer and Winter Bat Roost Box

Description:

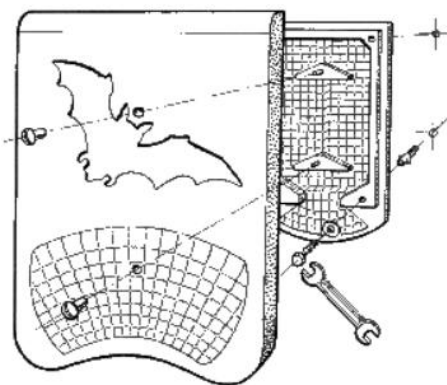
This box is designed to allow the safe hibernation of bats during the winter and for the formation of colonies and raising young in the summer. It has a layered structure of bat roost materials, coupling excellent insulation with good airflow. It has textured surfaces and varied hanging depths, making it suitable for different species. The entrance is designed with good grip on the approach and entry making it suitable for juvenile and inexperienced bats.

This roost is suitable for typical building-inhabiting species such as Pipistrelles, Serotines, Noctules or Bechsteins.



Installation:

Installation is easy using the four screws and plugs provided. The unit is detachable into two parts. First the base part is screwed to the wall and then the front-cover is attached, covering the mounting screws. The 1WQ can be easily attached to most types of external brick, timber or concrete walls.



Specification:

- Dimensions: 38 x 12 x 58 cm (L x W x H)
- Weight: 22 kg
- Material: Weather-resistant, air-permeable and rot-proof schwegler light-concrete. Rust-resistant.

More information can be found at: [1WQ Schwegler Summer & Winter Bat Roost | NHBS Practical Conservation Equipment](#)

Appendix 10: Schwegler 1B General Small Bird Box

The Schwegler 1B Woodcrete nest box is available with different entrance hole sizes to attract a wide range of species and prevent competition between birds. The nest box can be attached to the tree or wall using an aluminium nail or by hanging over a branch. The nest box has removable front panel to aid inspection and cleaning.

Entrance hole sizes:

- **32mm entrance hole** will attract great, blue, marsh, coal and crested tit, redstart, nuthatch, collared and pied flycatcher, wryneck, tree and house sparrow and bats.
- **26mm entrance hole** suits blue, marsh, coal and crested tit and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.
- **Oval entrance hole** (29 x 55mm) suits redstarts because more light enters the brood chamber. It is also suitable for all other species which nest in the 32mm boxes



The Schwegler 1B general small bird box will be preferably mounted on a stable tree trunk, rather than on branches which will sway. The mounting location will not be heavily shaded. Boxes should be mounted vertically on the tree.

Boxes will be mounted a minimum of 2m, and preferably 3m, above the ground, and as far as possible placed on the SE- or SW-facing surfaces of the tree trunks.