



Ty Brynseion, Dowlais, Merthyr Tydfil
Preliminary Roost Assessment

November 2024

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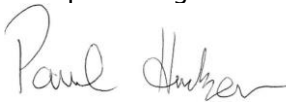
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DOCUMENT CONTROL

Ty Brynseion, Dowlais, Merthyr Tydfil Preliminary Bat Roost and Nesting Bird Assessment				
Revision	Date	Prepared by	Checked by	Approved by
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Summary

Brief and Site Location	This report presents the findings of a preliminary bat roost assessment 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 preliminary bat roost assessment comprised a daytime internal and external inspection of the retirement housing complex, searching for signs of bats and nesting birds. The inspection provides a preliminary assessment of the potential of the site to support roosting bats.
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.
Suitability of the retirement housing complex to Support Roosting Bats	The retirement home has moderate suitability to support roosting bats. Details of the features that led to this assessment are set out in Section 3.2 of this report and are shown in the corresponding photographs. Justification for this assessment is provided within Section 4.2.
Evidence of Nesting Birds	No evidence of past or current nesting by birds was noted either within or on the building's exterior.
Requirements for Additional Survey	As the retirement home has moderate roost suitability and current best practice guidelines (Collins, 2023) suggest that it should be subject to two additional dusk emergence surveys, undertaken between May and September. Ten surveyors will be required for both surveys (see Plan 5: Proposed Surveyor Positions).
Predicted Impacts of Development on Bats and Nesting Birds	Full impacts on bats and birds will be considered after further surveys have been undertaken.
Mitigation and Compensation of Proposed Impacts	Mitigation and compensation measures for bats and birds will be determined after the further surveys have been undertaken.
Licensing Requirements for Bats	It has not been possible to determine if a bat development licence will be required from Natural Resources Wales prior to works to the retirement home. This will be established after the dusk emergence surveys have been completed.
Required Actions	Further surveys are required in the form of two dusk emergence surveys.

1. Introduction

1.1. Brief and Site Location

This report presents the findings of a preliminary bat roost assessment 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 reference².

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 (NRW). 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 preliminary roost assessment (PRA) is a detailed inspection of the exterior and interior of a building looking for features that bats could use for entry/exit and roosting, as well as a search for signs of bats. A search for past and current evidence of nesting birds is also undertaken.

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;
- Determine the need for further targeted surveys; and
- Provide suitable recommendations in line with planning policy and wildlife law, including potential licencing 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 home 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 (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. 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.

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 not always 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.

Restricted Access

Not all parts of the retirement home could be inspected during the preliminary roost assessment. For example, not all of the loft voids were inspected due to access constraints. Additionally, it was not possible to inspect areas occupied and owned by tenants of the retirement complex at the time of the survey.

Restricted Access to External Parts of Retirement Home

The external inspection was restricted to ground level. While all external parts of the retirement home were observed, the inspection of features such as soffit boxes and rooflines were conducted from a distance using binoculars. Observations made at a distance using binoculars made it difficult to see certain features of the retirement home and prevented a thorough search for evidence of bats.

Restricted Access Due to Presence of Suspended Ceiling

Access to the loft space was significantly constrained. Only a small section of the loft on the north-east side of the building was accessible for inspection. The remainder of the loft was covered by a suspended ceiling, which we could not access. This restriction limited our ability to inspect the entirety of the loft area for potential bat roosts.

Local Records Centre Data Search

A Local Records Centre (LRC) data search was undertaken due a request by the planning authority. A BARB+ data search was conducted which looks into bats and nesting birds, the results are in section 3 of the report and contributed to the assessment of suitability for bats and birds.

3. Baseline Ecological Conditions

3.1. Desk Study

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

The planning portal search¹⁴ 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 ¹⁵	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) ¹⁶	Three within 2km of site.
Restored Ancient Woodland Sites (RAWS) ¹⁷	Two within 2km of site.

¹⁴ [P/24/0130 | Proposed External Cladding and alterations to windows | Ty Bryn Seion North Street Dowlais Merthyr Tydfil CF48 3SR](#)

¹⁵ https://naturalresources.wales/media/641903/SSSI_0381_Citation_EN001b37a.pdf

¹⁶ 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.

¹⁷ 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 habitat¹⁸.

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).

¹⁸ 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

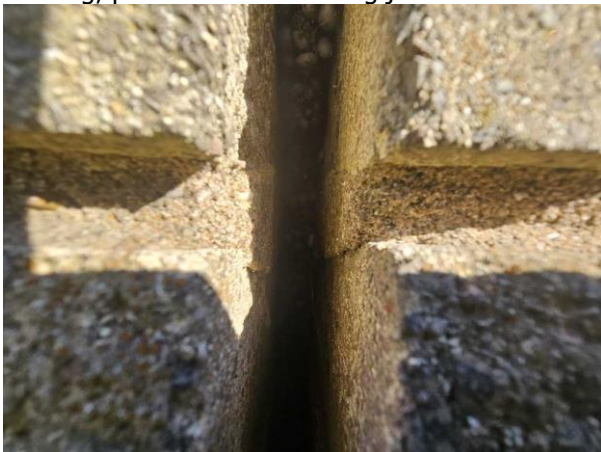


Photo 12: Well-lit plant room on northern elevation



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).
- **PRF 5:** Lifted lead flashing around the vent stacks and at the north-east elevation joint, creating small gaps (Photo 9).

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- **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. 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 Preliminary Roost Assessment

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

4.2. Suitability of Summer Roosts

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 (see Appendix 2).

4.3. Potential Winter Roosts

'Non-classic' Hibernation Potential

The crevices between the stonework provide potential hibernation sites for bats. However, a full assessment of the potential for winter use (i.e., hibernation) will be undertaken after the completion of further dusk emergence surveys.

4.4. Birds – Interpretation of Nesting Bird Survey

No evidence of past or current nesting by birds was observed during the survey. Further surveys for nesting birds will be undertaken at the same time as the dusk emergence surveys, and the assessment of its importance subsequently updated.

5. Required Actions

5.1. Licensing Requirements for Bats

It has not been possible to determine whether a NRW bat development licence will be required. This will be determined after the emergence surveys have been completed.

and method statement will be finalised after further dusk emergence surveys have been completed.

5.2. Further Work

As the retirement home has moderate roost suitability, two dusk emergence surveys are required to determine if bats are roosting within the building. Surveys should be conducted from May to September, with a minimum of three weeks between each survey to increase the likelihood of detecting bats that may use the building intermittently throughout the summer. At least one of the surveys should ideally occur during the core maternity period of mid-June to mid-July.

Due to the building's large size and complex shape, 10 surveyors will be necessary to achieve full coverage of all potential access points and roosting features. This will ensure all areas are observed effectively during each survey (see Plan 5: Proposed Surveyor Positions).

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

These measures will be formulated after the completion of dusk emergence surveys.

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

These measures will be formulated after the completion of dusk emergence surveys.

5.5. 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.

6. References

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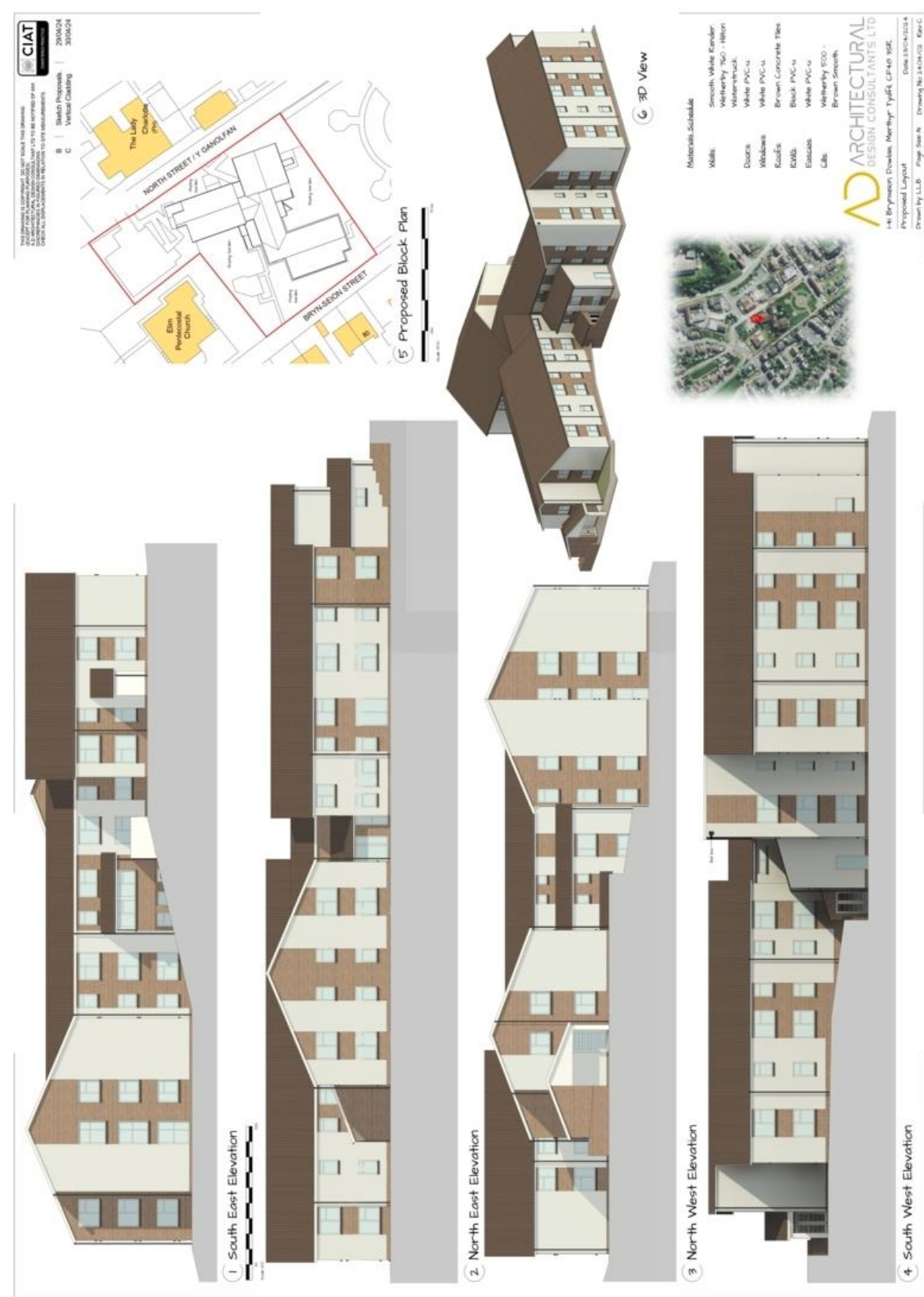
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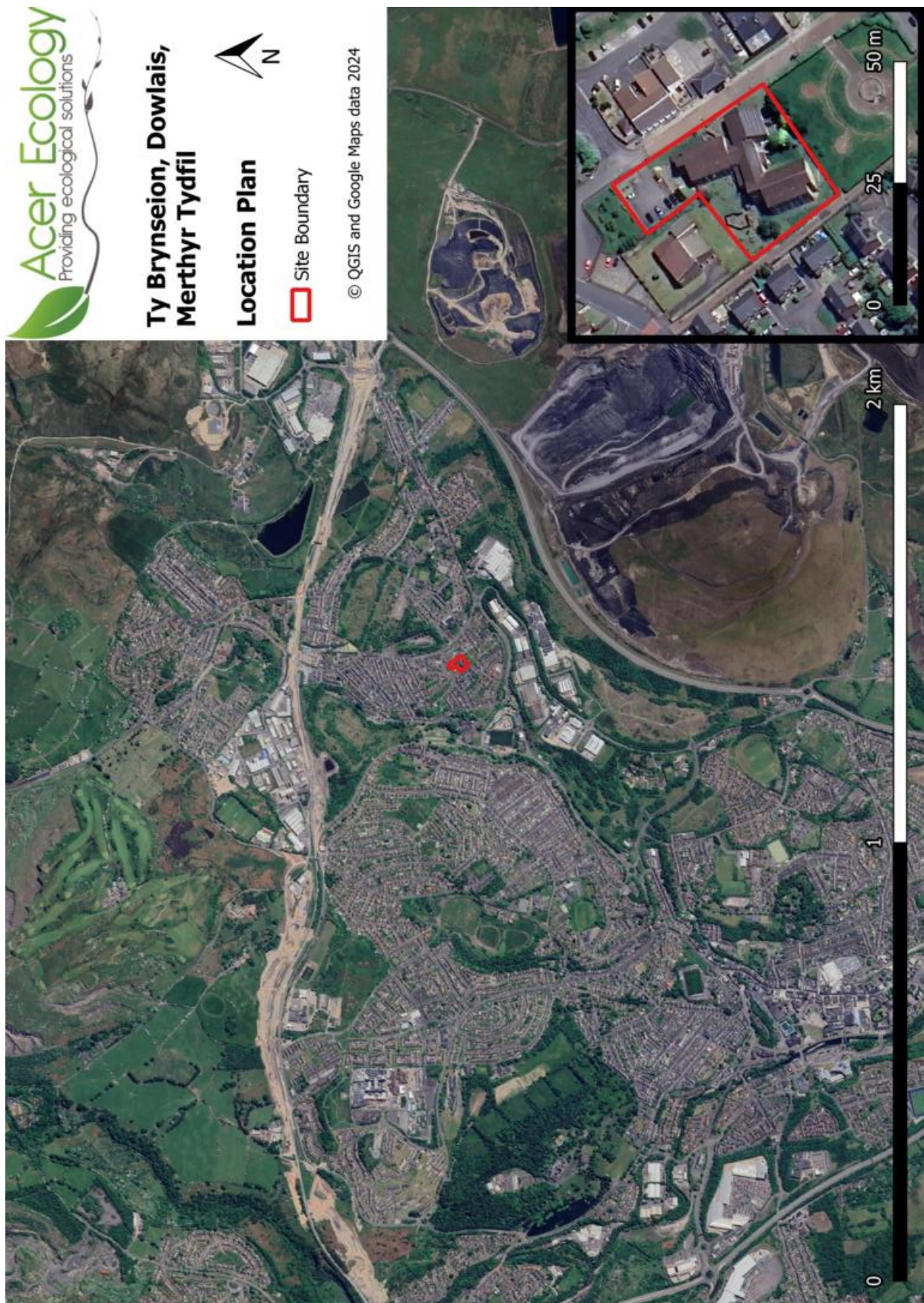
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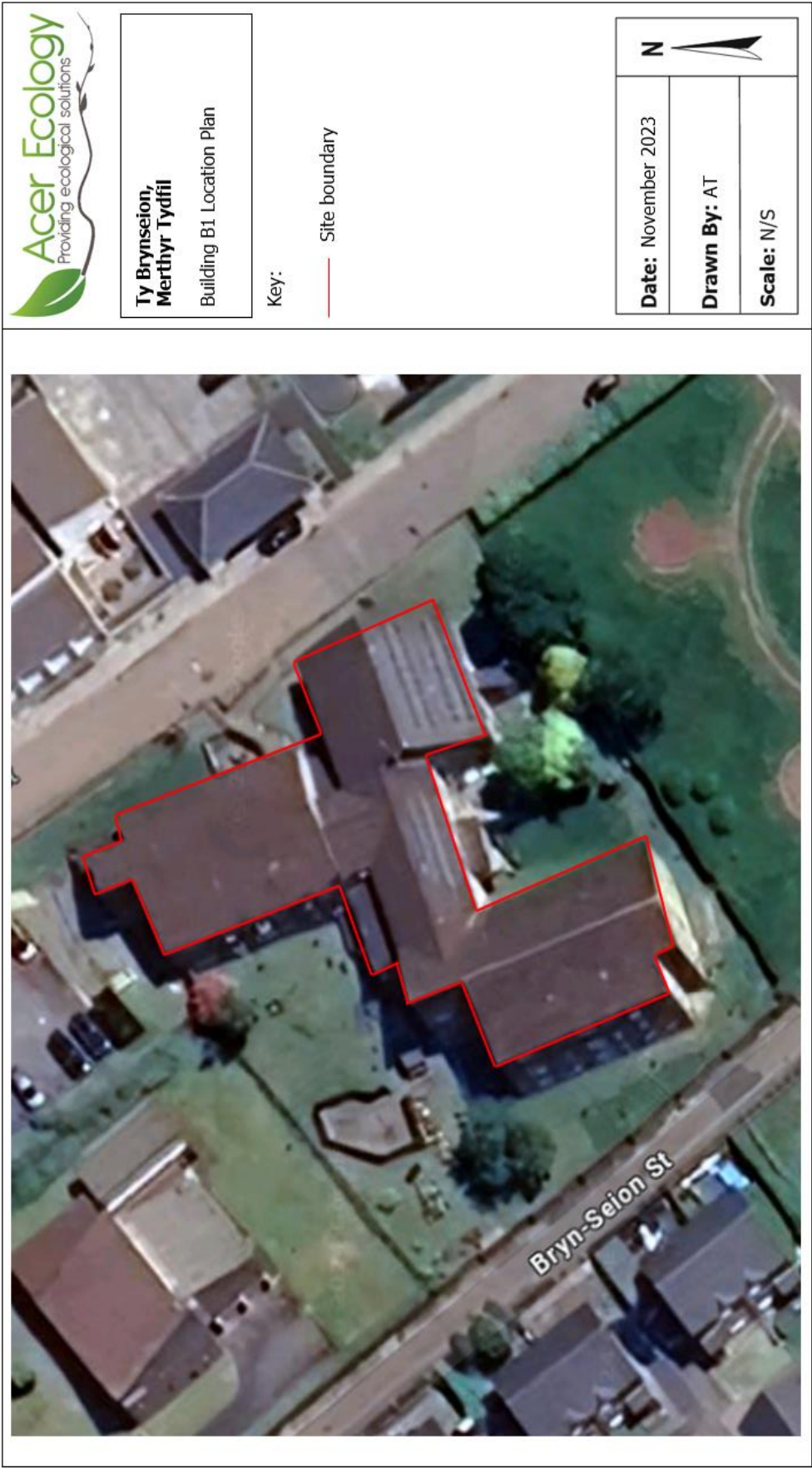
Drawing 1: Proposed Development



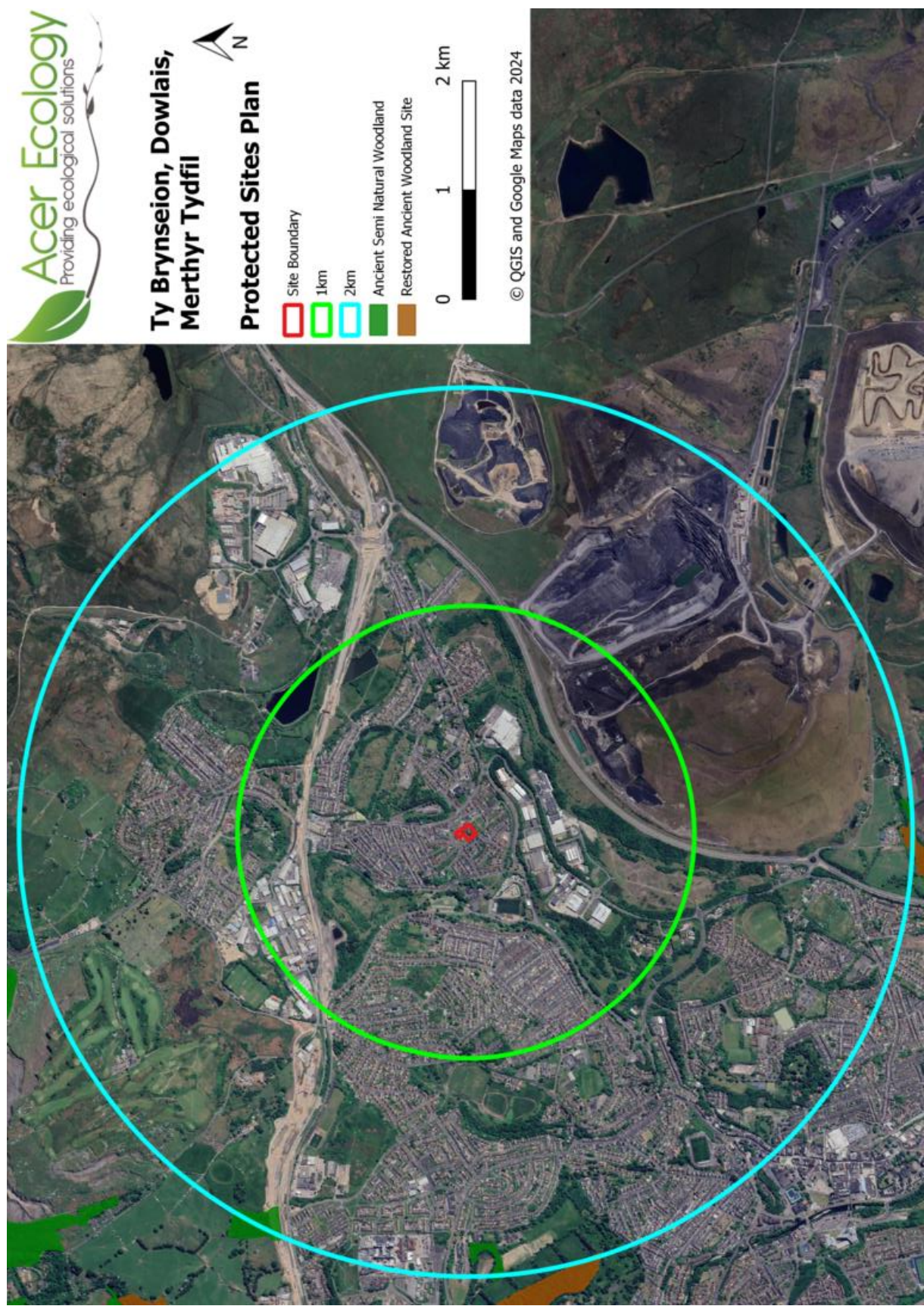
Plan 1: Location Plan



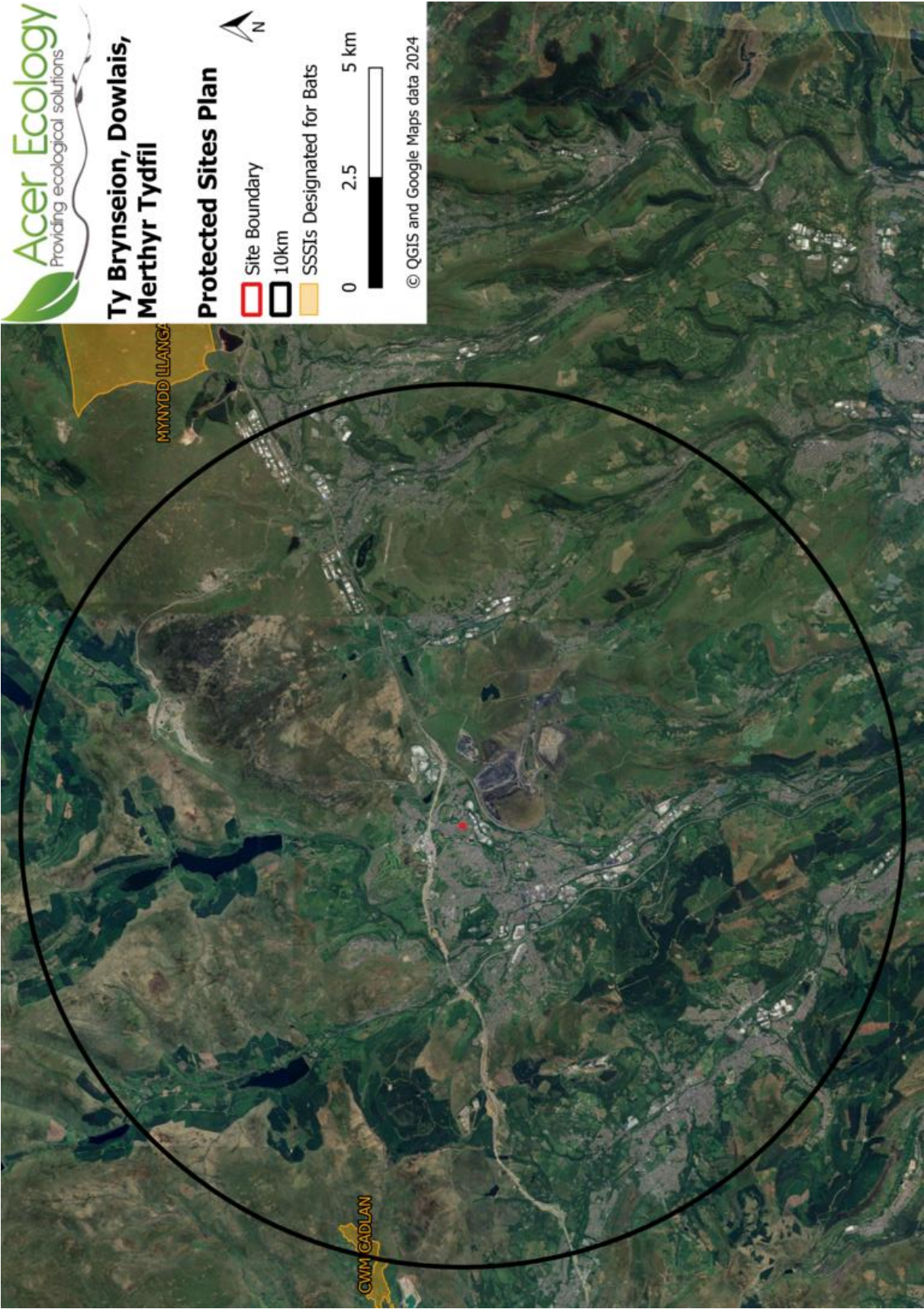
Plan 2: LocationPlan



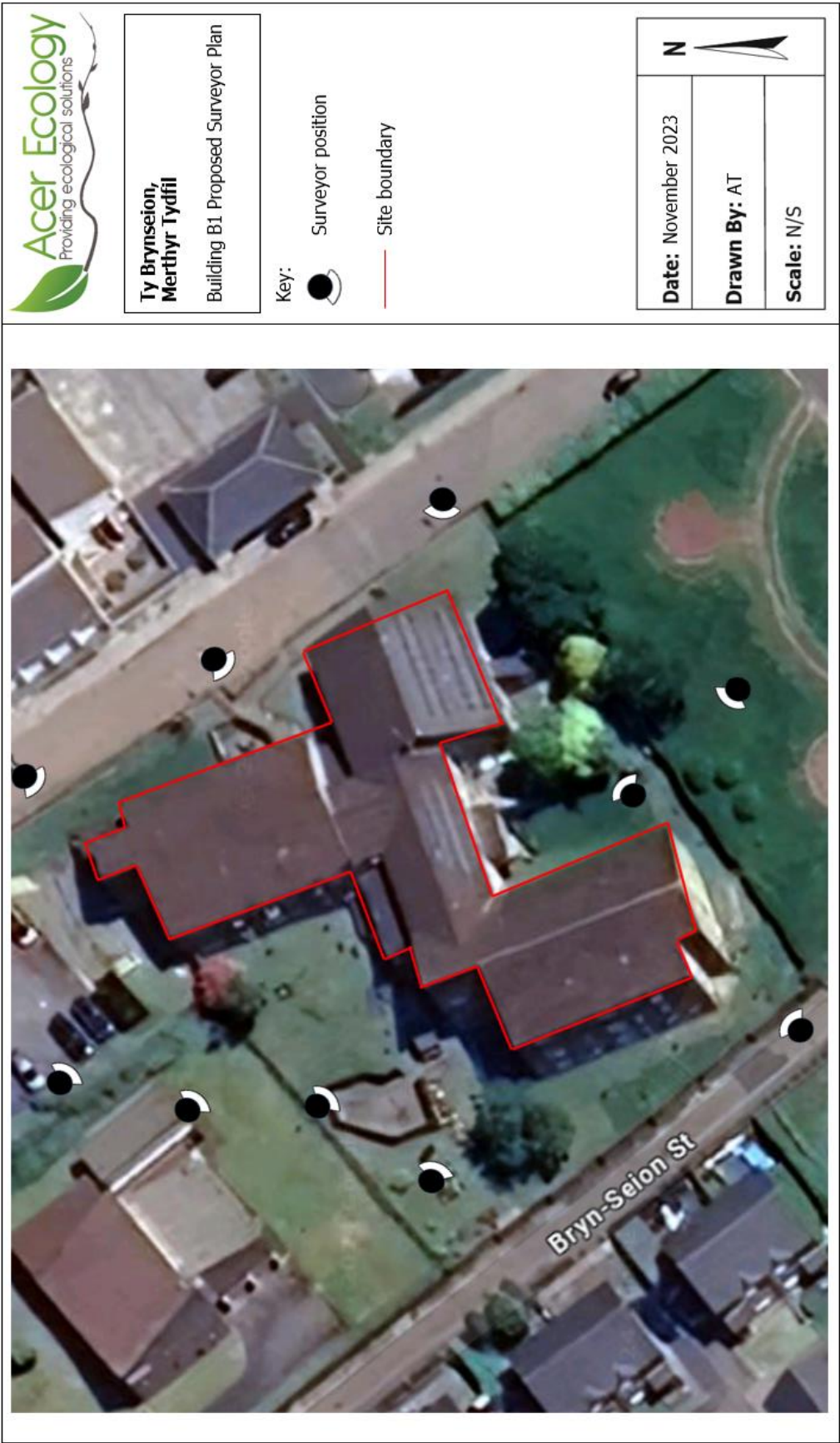
Plan 3: Protected Sites Within 2km



Plan 4: Protected Sites Within 10km



Plan 5: Proposed Surveyor Positions for Dusk Emergence Surveys



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 European Protected Species 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 2016¹⁹ 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 and greater horseshoe bats).

¹⁹ <http://www.legislation.gov.uk/anaw/2016/3/contents>

Appendix 2: Guidelines for Assessing Potential Bat Roosting Suitability²⁰

Protentional Suitability	Roosting Habitats in Structures
Negligible ²¹	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 ²² 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 ²³).
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.

²⁰ Taken from Table 4.1 of the Bat Survey Guidelines (2023) 4th edition.

²¹ 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).

²² For example, in terms of temperature, humidity, height above ground levels, light levels or levels of disturbance.

²³ 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: Guidelines for Determining Required Number of Dusk Surveys

Roost Suitability	Minimum Number of Dusk Surveys Required ²⁴
Negligible	None.
Low	One survey visit comprising of a dusk emergence survey ²⁵ between May and August for structures.
Moderate	Two separate dusk emergence survey visits ²⁶ . Surveys must occur between May and September ²⁷ , with at least one survey between May and August ²⁸ .
High	Three separate dusk emergence survey visits. Surveys must occur between May to September, with at least two surveys between May and August.

²⁴ Adapted from Tables 7.1 and 7.2 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

²⁵ 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.

²⁶ 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.

²⁷ 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.

²⁸ 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.

Appendix 4: Guidelines for Assessing Bat Habitat Suitability²⁹

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.

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