



**Harlech Court,
Cardiff**

Preliminary Roost Assessment

December 2023

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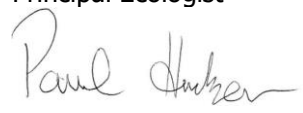
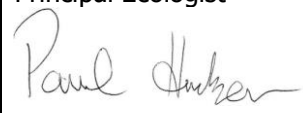
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DOCUMENT CONTROL

Harlech Court, Cardiff Preliminary Bat Roost and Nesting Bird Assessment				
Revision	Date	Prepared by	Checked by	Approved by
1.0	18 December 2023	Anita-May Connors Assistant Ecologist 	Paul Hudson MCIEEM Principal Ecologist 	Paul Hudson MCIEEM Principal Ecologist 

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Summary

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Brief and Site Location	This report presents the findings of a preliminary bat roost assessment and nesting bird survey of Harlech Court, Bute Terrace, Cardiff, CF10 2FE (Ordnance Survey Grid Reference: ST 1872 7608).
Proposed Works	The office block is proposed for demolition in Summer 2024. A planning application has not been submitted at the time of writing.
Survey Methodology	The preliminary bat roost assessment comprised a daytime internal and external inspection of Harlech Court, 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 office block. The office block is within a low-quality area for foraging and commuting bats.
Suitability of Harlech Court to Support Roosting Bats	B1a, B1b, B1c and B2 have moderate suitability to support roosting bats; B1D has negligible suitability to support roosting bats and B3 has low suitability for supporting 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 B1a, B1b, B1c and B2 have moderate roost suitability and current best practice guidelines (Collins, 2023) suggest that two additional dusk emergence surveys should be undertaken between May and September. At least one of the surveys should be undertaken before the end of August. B3 has been assessed as having low roost suitability and current best practice guidelines (Collins, 2023) suggest that it should be subject to one additional dusk emergence survey undertaken between May and August. The number of surveyors required on each building is detailed in Section 5.2 of the report.
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 office block. This will be established after the dusk emergence surveys have been completed and the extent of the proposed work has been decided.
Required Actions	Further surveys are required.

1. Introduction

1.1. Brief and Site Location

This report presents the findings of a preliminary bat roost assessment and nesting bird survey of Harlech Court, Bute Terrace, Cardiff, CF10 2FE (Ordnance Survey Grid Reference: ST 1872 7608)¹. The building proposed for development is referred to as the 'office block' throughout the remainder of this report.

The office block is within the boundary of the City of Cardiff Council.

1.2. Site Description

Harlech Court is located within Cardiff City Centre. It lies just south of the A4160 and is surrounded by other commercial buildings and there is a river to the southern rear of the buildings. The Severn Estuary is located 2.6km to the south-east of the proposed development site.

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

1.3. Proposed Works

The office block is proposed for demolition in Summer 2024. A planning application has not been submitted at the time of writing.

At the time of writing architectural plans had not been finalised.

1.4. Legislation and Planning Policy

1.4.1. Bats

All UK bats are protected species. Their breeding sites or resting places² (roosts) are fully protected under the Wildlife and Countryside Act 1981³ (as amended) and the Conservation of Habitats and Species Regulations 2017⁴ which continues to apply in UK law through the Conservation of Habitats and Species (Amendment) (EU Exit) [CHSAEU] Regulations 2019⁵. 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: 51.477817 , -3.1717736 / what3words: clubs.reduce.digits

² 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.

³ <https://www.legislation.gov.uk/ukpga/1981/69>

⁴ <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

⁵ <https://www.legislation.gov.uk/ukdsi/2019/9780111179512>

1.4.2. Nesting Birds

All wild British birds (whilst building nests, nesting, and sitting on eggs), and their nests and eggs (with certain limited exceptions⁶), are protected by law under Section 1 of the Wildlife and Countryside Act 1981⁷ (as amended) and the Countryside and Rights of Way Act 2000⁸. 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 structure to look for features that bats could use for entry/exit and roosting and to 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 licensing requirements, mitigation, compensation, and enhancement measures.

⁶ 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>

⁷ <https://www.legislation.gov.uk/ukpga/1981/69>

⁸ <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 conservation designated sites for bats within 10km 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 office block 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 roosts⁹.

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 the 17th of November 2023 by Rebecca Corley¹⁰ and Anita-May Connors^{11/12}.

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.

2.2.3. Survey for Nesting Birds

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

⁹ 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).

¹⁰ Rebecca graduated with a degree in Biological Science from the University of Birmingham and an MSc in Global Ecology and Conservation from Cardiff University. Rebecca is currently in her first season of bat surveying, working as an Assistant Ecologist and receiving training from Acer Ecology. She is listed as an accredited agent on Paul Hudson's bat licence (S091671-1). Further details of her qualifications and experience can be found at <https://www.linkedin.com/in/rebecca-corley-B1d3b61138>.

¹¹ Anita graduated with a degree in International Wildlife Biology from the University of South Wales. Anita is in her first season of bat surveying, working as an Assistant Ecologist and receiving training from Acer Ecology. Further details of her qualifications and experience can be found at: <https://www.linkedin.com/in/anita-connors-a2a887182/?originalSubdomain=uk>.

¹² Anita accompanied Becky and helped with the external building inspection. She did not enter the loft space during the survey.

2.2.4. 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.

Timing

The time of year when the preliminary roost assessment was carried out coincides with the time when bats are spending longer amounts of time in torpor and some bats begin hibernation.

However, signs of roosting activity from previous summers may still be identified inside loft spaces 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. In many situations it is 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.

Restricted Access

Not all parts of the office block could be inspected during the preliminary roost assessment. The missing glass panel to the southern rear of the building wasn't able to be accessed and therefore could not be inspected. The survey is only slightly constrained, and this is not considered to have significantly affected the accuracy of the assessment.

No Internal Access

Internal access to the Porters bar, B1D and B3 was not possible at the time of the survey. Section 5.2.43 of Bat Surveys for Professional Ecologists (4th edition) states that 'If it has not been possible to access the structure internally, then an increased number of subsequent surveys may be necessary'.

Restricted Access Due to Presence of Suspended Ceiling

Due to the presence of a suspended ceiling, a search for evidence of bats was constrained to areas near the removed roof tile of the suspended ceiling only.

Restricted View of External Parts of the Building

Not all of the external parts of the building could be inspected during the preliminary roost assessment. As the building is of considerable height, a close-up inspection of the roof was not possible and instead observations were made at a distance using binoculars. This made it difficult to see features of the office block on the western side and the rear of B3 due to fencing and prevented a search for evidence of bats.

3. Baseline Ecological Conditions

3.1. Desk Study

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

The planning portal search¹³ returned no bat roost records from a search of sites with the same postcode area as the proposed development.

3.1.2. Protected Sites

The location of protected sites is shown in Plan 3: Protected Sites.

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

No SACs or SSSIs that have been specially designated for bats lie within 10km of the office block.

Other Protected Sites Within 2km

There is one LNR within 2km of the office block:

Table 1: Statutory Sites Within 2km

Site Name	Description	Distance and Direction from Development Site
Cardiff Bay and Hamadryad Park LNR ¹⁴	The Cardiff Bay Wetland Reserve is an area of approximately 8 hectares on the northern shore of Cardiff Bay. Home to species such as reed bunting (<i>Emberiza schoeniclus</i>), kestrel (<i>Falco tinnunculus</i>), heron (<i>Ardeidae sp.</i>), yellow flag iris (<i>Iris pseudacorus</i>), mallard (<i>Anas platyrhynchos</i>), peacock butterfly (<i>Aglais io</i>), and great crested grebe (<i>Podiceps cristatus</i>).	1.8km to the south of the development site

There is no mention of bats in the LNR citation, however, the site is likely to be used by several bat species for foraging and commuting.

¹³ <https://www.cardiffidoxcloud.wales/publicaccess/pagedSearchResults.do>

¹⁴ <https://www.cardiffharbour.com/attraction/cardiff-bay-wetland-reserve/>

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Non-statutory Protected Sites

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	Number within 2km of Site
Ancient Semi-Natural Woodland (ASNW) ¹⁵	Two
Restored Ancient Woodland Sites (RAWS) ¹⁶	Seven
Nearest Area of Ancient Woodland	An unnamed area of RAWS located 0.8km north-west of the site

Protected Sites Summary

Given the 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 E4: Urban lighting zone, with high district brightness (Institute of Lighting Professionals, 2012).

It lies within an urban area with extensive street lighting and other commercial buildings. This will decrease the quality of foraging and commuting bat habitat¹⁷.

Ecological Context

The habitats surrounding the site comprise rail lines to the east and south with other commercial buildings to the west of the site. The A4160 runs directly adjacent to the north of the site. There are sparse areas of woodland 0.8km to the north-west of the site which are ecologically isolated from more significant stands of woodland and other ecologically rich habitats and do not form a continuous habitat corridor extending from the office block to the wider landscape. Consequently, the site provides low-quality foraging and commuting bat habitat.

¹⁵ 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.

¹⁶ 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.

¹⁷ Lighting can impact on bats' roosting sites, commuting routes, and foraging areas.

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3.2.2. Building Description from the Perspective of Bat Habitat

The table below summarises the key features of the office block.

Table 3: Key Features of Harlech Court

Building Number	Description	Evidence Of Bats	Potential for Bats
B1a	<p>The building is a two-storey structure with split use as a bar, car park, office space and school (see Photos 1, 2, 3, 4 and 5). The roof is flat and constructed from concrete, and is utilised as a car park.</p> <p>There are multiple metal grates on the front of the building with suitable gaps that could provide bats with access to the interior (see Photo 6).</p> <p>The front of the building is constructed from stone on the first two floors of the structure. The southern rear, eastern and western sides of the building are constructed from brick and mortar, sections of which are rendered (see Photos 3, 4 and 5). The external walls are in generally good condition on the northern front, however there is a crack in the render on the southern rear which could be utilised by roosting bats (see Photo 41). Gaps are present between a notice board and the external walls on the southern rear, providing a potential roosting place for bats (see Photo 42). Ventilation gaps on the eastern side and southern rear provide potential access points for bats to the interior (see Photo 7). Sections of the ceiling have also been netted on the northern side and southern rear.</p> <p>The doors, window frames and door frames are of timber construction (see Photo 1). Multiple windows are boarded up and so do not provide access into the interior. However, some along the northern front are open, whilst others are covered with chicken wire which is in poor condition. These features allow access into the open space beneath the car park (see Photo 1). The windows and door surrounding the Porters bar are well sealed and had no gaps surrounding the frames. However, gaps between the door frames and external walls are present on fire exits and so could be used by bats (see Photo 4).</p> <p>Due to the usage of the building and urban location, numerous security lights are present on all sides (see Photo 7).</p>	None	Moderate
B1b	<p>The building is a four-storey structure with split use as an office space and a school (see Photos 9, 10, 11, 12, 13 and 14). The building is constructed of brick and mortar with glass panelling on all elevations. A section of the eastern elevation sits approximately 1-2m forward from the rest of the building, with a brick-and-mortar extension to the rear of this structure.</p> <p>The roof is flat and constructed from steel corrugated sheeting with rubber flat roof matting covering the entirety (see Photos 15 and 16). The access point to the roof is always open, leaving gaps between corrugated sheeting and breezeblocks exposed which could be utilised by roosting bats (see Photo 45).</p> <p>Numerous glass panels are missing to the rear of the building and have been boarded with MDF, and one single panel is missing completely to the southern rear and western side which allows access into the space between the panel and the external wall (see Photo 14). Where the eastern side of the building adjoins B1c, raised lead flashing is present which has potential</p>	None	Moderate

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Building Number	Description	Evidence Of Bats	Potential for Bats
	to be used by roosting bats (see Photo 46). The plastic trim is coated with rubber matting that is torn in various places and sits proud of the external walls (see Photo 47). The presence of the suspended ceiling provides a loft void that has no light ingress within it and is not lined with any insulation or roof lining, making it wholly unsuitable for bats.)		
B1c	The extension is a concrete rendered, single-storey structure located at the eastern side of the building (see Photo 17). The lean-to roof is constructed from bitumen felt and slate tiles, two of which are missing (see Photos 21 and 22). Raised tiles are also present across the roof, providing potential roosting locations for bats. There is a vapour control layer that has potential access for bats to enter beneath the tiles (see Photo 19). The fascia sits proud of the external wall (see Photo 17) and there is raised lead flashing to the adjoining wall of the extension and B1b (see Photo 20), both of which can be exploited by roosting bats.	None	Moderate
B1d	B1d is an external extension that adjoins the first floor of B1b and is used as a fire exit. The extension is constructed from corrugated metal that is well sealed and in generally good condition. There are small gaps where the metal sheets overlap, however these are sub-optimal for roosting bats (see Photos 31, 32 and 33). Corrugated metal sheeting also constructs the roof of the building. The window and door frames are in good condition.	None	Negligible
B2	B2 is a single-storey structure used as a boiler room and water tank. The building sits at the southern end of the site. The roof is flat and constructed of rubber roof matting (see Photo 23, 24, 25 and 27). The building is constructed from brick and mortar. The external walls are rendered and the building is in generally good condition, however the northern side is partially covered with wooden boards that are well sealed (see Photo 23). There is a brick missing on the northern side (see Photo 28) which could potentially provide an access point for bats. Dense ivy coverage surrounds the eastern rear and southern side of the building which could be utilised by bats (see Photo 24). The timber fascia sits proud of the external walls and is in poor condition (see Photos 23 and 39). Above the fascia is metal trim that is raised (see Photo 39). Both features could be exploited by roosting bats. The window and door frames are constructed from timber and have been covered with MDF boards (see Photo 23). The external door frame is in poor condition, with gaps in the timber and surrounding the door frame and external wall (see Photos 26 and 49). There is a metal water tank within the building's interior that remains open (see Photo 30).	None	Moderate
B3	B3 is a substation that is surrounded by metal fencing (see Photo 34). The building comprises metal sheeting and plastic trim, with a flat roof and doors constructed of metal. The building is in generally good condition, however there is a gap in the mesh under the eaves on the northern front which bats could use to roost and potentially access the interior (see Photo 36).	None	Low

Photos Showing B1a and its Features.

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Photo 1: Northern Front of B1a



Photo 2: Southern Rear of B1a



Photo 3: South-eastern Side of B1a (Porters Bar)



Photo 4: Eastern Side of B1a (Porters Bar)



Photo 5: Western Side of B1a



Photo 6: Metal Grate on Northern Front



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Photo 7: Security Light and Ventilation Gaps on the Eastern Side of B1a



Photo 8: Security Light Above uPVC door on Eastern side of B1a (School)



Photos Showing B1b and its Features.

Photo 9: Eastern Side of B1b



Photo 10: Eastern Side of B1b



Photo 11: Northern Front of B1b

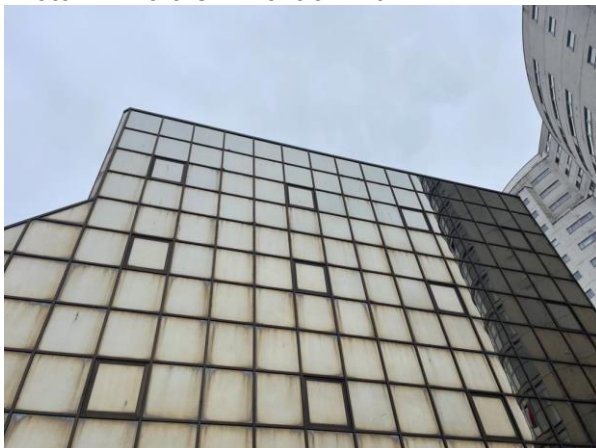


Photo 12: Northern Front of B1b



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Photo 13: Western Side of B1b



Photo 14: Southern Rear of B1b (Including Missing Glass Panels)

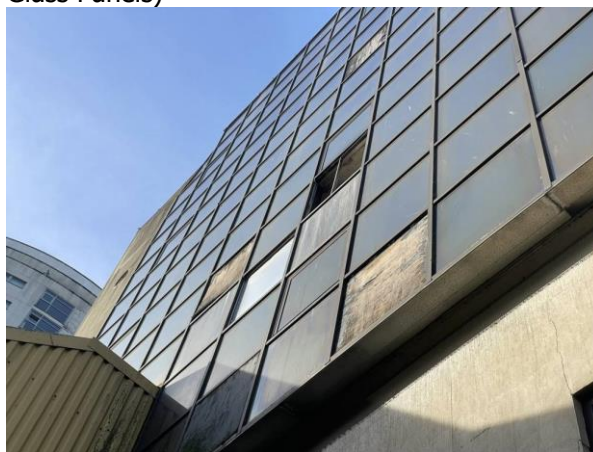
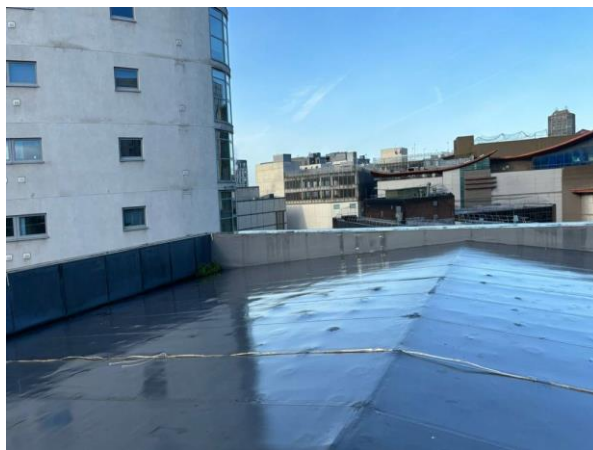


Photo 15: Roof of B1b Facing North



Photo 16: Roof of B1b Facing West



Photos Showing B1c and its Features.

Photo 17: Eastern Front and Southern Side of B1c



Photo 18: Southern Side of B1c



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Photo 19: Vapour Control Layer of B1c (Eastern Front)



Photo 20: Raised Lead Flashing on Southern Rear of B1c



Photo 21: Missing and Raised Roof Tiles on Southern Side of B1c



Photo 22: Raised Roof Tiles on Southern Side of B1c



Photos Showing B2 and its Features.

Photo 23: Northern Side of B2



Photo 24: Southern Side of B2



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Photo 25: Western Rear of B2



Photo 26: Timber Door on Northern Front of B2



Photo 27: Eastern Front of B2, Ivy Coverage



Photo 28: Interior of B2 Facing North, Gap in Brickwork



Photo 29: Interior of B2 Facing South



Photo 30: Interior of B2 Including Water Tank



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Photos Showing B1d and its Features.

Photo 31: Eastern Side of B1d



Photo 32: Western Side of B1d



Photo 33: Northern Front of B1d Above Doorframe



Photos Showing B3 and its Features.

Photo 34: Northern Front of B3



Photo 35: Northern Front and Eastern Side of B3



Photo 36: Gap Under the Eaves on B3



3.2.3. Potential Bat Access Points and Bat Roosting Locations

Potential Access Points for Bats in Harlech Court

B1a

There are numerous potential access points for bats to enter the interior. Bats could gain entry through the gaps in the metal grates (see Photo 1) and ventilation gaps (see Photo 7).

B1b

There is one potential access points for bats to enter the interior. Bats could gain entry through the roof access point (see Photo 38).

B1c

There are numerous potential access points for bats to enter the interior. Bats could gain entry through the vapour control layer (see Photo 19), under slipped roof tiles (see Photos 21 and 22) and under the raised fascia (see Photo 18).

B2

There are two potential access points for bats to enter the interior. Bats could gain entry through the gap in the external wall (see Photo 28) and the broken timber door (see Photo 26).

B1d

No potential access points were recorded during the survey. The external walls are in good condition, windows and doors are fitted tightly to their frames which in turn fit tightly to their respective apertures. This has resulted in there being no gaps of sufficient size to permit bats to gain access to potential roost sites.

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B3

There is one potential access point for bats to gain access to the interior. Bats could gain entry through the gap in the mesh underneath the eaves (see Photo 36).

Photos Showing Potential Access Points for Bats

Photo 37: Metal Grate on Northern Elevation of B1a



Photo 38: Open Access Point to the Roof of B1b



Photo 39: Broken and Raised Fascia and Raised Metal Trim on Northern Side of B2



Potential Roosting Features for Bats

B1a

The following potential roost features were recorded:

- PRF 1 – Gaps between external walls and door frames (see Photo 40);
- PRF 2 – Crack in rendering (see Photo 41);
- PRF 3 – Gaps behind notice board (see Photo 42);
- PRF 4 – Ventilation gaps (see Photo 7);
- PRF 5 – Gap underneath window frame (see Photo 43); and
- PRF 6 – Gap in rendering underneath security light (see Photo 44);

B1b

The following potential roost features were recorded:

- PRF 1 – Exposed corrugated metal sheeting (see Photo 45);
- PRF 2 – Crevices between breezeblocks (see Photo 45);
- PRF 3 – Missing glass panels on southern rear and western side (see Photo 14);
- PRF 4 – Raised lead flashing (see Photo 46);
- PRF 5 – Torn rubber coating (see Photo 47);
- PRF 6 – Raised fascia (see Photo 47); and
- PRF 7 – Netting (see Photo 48).

B1c

The following potential roost features were recorded:

- PRF 1 – Gap above roof in rendering (see Photo 18);
- PRF 2 – Raised fascia (see Photo 17);
- PRF 3 – Raised lead flashing (see Photo 20);
- PRF 4 – Missing roof tiles (see Photos 21 and 22);
- PRF 5 – Raised/slipped roof tiles (see Photos 21 and 22); and
- PRF 6 – Exposed vapour control layer (see Photo 19).

B1D

There were no potential roosting features identified internally or externally.

B2

The following potential roost features were recorded:

- PRF 1 – Dense ivy coverage (see Photo 24);
- PRF 2 – Raised fascia (see Photo 23);
- PRF 3 – Raised metal trim (see Photo 39);
- PRF 4 – Gaps around door frame (see Photo 26 and 49);

B3

The following potential roosting feature was recorded:

- PRF 1 – Gap underneath the eaves (see Photo 36).

Photos Showing Potential Roost Sites

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Photo 40: Gap Between External Wall and Door Frame to Southern Rear of B1a



Photo 41: Crack in Rendering Above School to Southern Rear of B1a



Photo 42: Gap Behind Notice Board to the Southern Rear of B1a



Photo 43: Gap Underneath Window Frame on Eastern Side of B1a



Photo 44: Gap in Rendering Underneath the Security Light to the Eastern Side of B1a



Photo 45: Exposed Corrugated Sheetting and Gaps in Brick Work in the Roof Access Point of B1b



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Photo 46: Raised Lead Flashing on the Eastern Side of B1b



Photo 47: Torn Rubber Coating and Raised Fascia on Eastern Side of B1b



Photo 48: Netting on the Northern Front of B1b

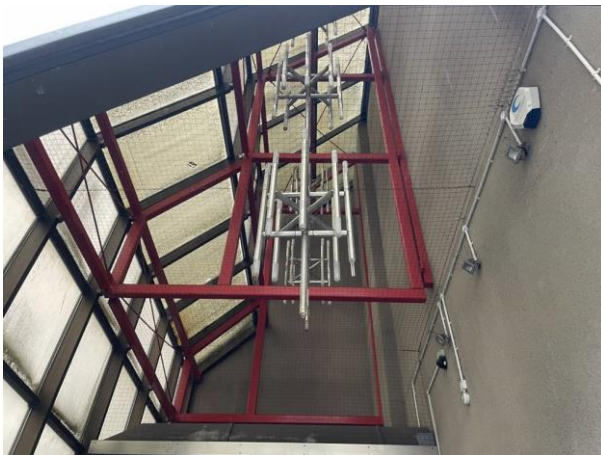


Photo 49: Gaps Surrounding Door Frame on the Eastern Front of B2



Photo 50: Internal Gap Above the Door Frame of B2



3.2.4. Nesting Bird Survey

No signs of recent nests were found within or on the exterior of the office block or surrounding buildings.

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 office block.

4.2. Suitability of Summer Roosts

B1a is assessed as having:

- Moderate suitability for use by crevice-dwelling bats (*Pipistrellus* species and smaller *Myotis* species such as Brandt's (*Myotis brandtii*) and whiskered bats (*Myotis mystacinus*)), due to the multiple potential roost features identified, including numerous gaps in the external walls, underneath the window frame and behind the notice board;
- Negligible suitability for use by roof-void-dwelling bats⁵ (long-eared species (*Plecotus* species) and large *Myotis* bats, such as Natterer's bat (*Myotis nattereri*) and serotine bats (*Eptesicus serotinus*)) as there is no void present within this section of the building; and
- Low suitability for use by direct-access species requiring a large access point⁶ and large roost space (lesser horseshoe (*Rhinolophus hipposideros*) and greater horseshoe (*Rhinolophus ferrumequinum*) bats)), due to the urban nature of the building being generally unsuitable these species. However as the building is of an open nature towards the rear and has netting that could potentially be used to hang, it is not possible to completely rule out direct-access species.

B1a has an overall moderate bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of further survey effort required (see Appendix 3).

B1b is assessed as having:

- Moderate suitability for use by crevice-dwelling bats (*Pipistrellus* species and smaller *Myotis* species such as Brandt's and whiskered bats), due to the numerous roosting features identified, including the exposed corrugated sheeting, raised lead flashing and crevices between the breeze blocks;
- Low suitability for use by roof-void-dwelling bats⁵ (long-eared species (*Plecotus* species) and large *Myotis* bats, such as Natterer's bat and serotine bats) due to the lack of light ingress or access points identified during the survey as well as the void being shallow in nature and constructed of metal sheeting. However due to the nature of the suspended ceiling, the void could not be inspected fully and therefore roosting bats cannot be ruled out completely; and
- Negligible suitability for use by direct-access species requiring a large access point and large roost space (lesser horseshoe and greater horseshoe bats)), due to there being no suitable access points into the building of a sufficient size.

B1b has an overall moderate bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of survey effort required (see Appendix 3).

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B1c is assessed as having:

- Moderate suitability for use by crevice-dwelling bats (*Pipistrellus* species and smaller *Myotis* species such as Brandt's and whiskered bats), due to the numerous potential roosting features identified, including the raised and slipped roof tiles, raised fascia, and raised lead flashing;
- Low suitability for use by roof-void-dwelling bats long-eared species (*Plecotus* species) and large *Myotis* bats, such as Natterer's bat and serotine bats) due to the lack of loft void; and
- Negligible suitability for use by direct-access species requiring a large access point⁶ and large roost space (lesser horseshoe and greater horseshoe bats) as there are no large access points suitable for use by these species were identified.

B1c has an overall moderate bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of further survey effort required (see Appendix 3).

B1D is assessed as having:

- Negligible suitability for use by bats due to the lack of access points and roosting features within the building, lack of loft space and good condition of the building in general.

B1D has an overall negligible bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of further survey effort required (see Appendix 3).

B2 is assessed as having:

- Moderate suitability for use by crevice-dwelling bats (*Pipistrellus* species and smaller *Myotis* species such as Brandt's and whiskered bats). This is due to the multiple potential roost features identified, including raised fascia, raised metal trim and gaps on the door frame;
- Negligible suitability for use by roof-void-dwelling bats⁵ (long-eared species (*Plecotus* species) and large *Myotis* bats, such as Natterer's bat and serotine bats). This is due to the absence of a loft void within the building; and
- Low suitability for use by direct-access species requiring a large access point⁶ and large roost space (lesser horseshoe and greater horseshoe bats). Due to the surrounding habitat being of a generally urban setting, however there is a large access point to the northern side of the building that could be utilised by these species, however this access point was cluttered on the exterior so is sub-optimal.

B2 has an overall moderate bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of further survey effort required (see Appendix 3).

B3 is assessed as having:

- Low suitability for use by crevice-dwelling bats (*Pipistrellus* species and smaller *Myotis* species such as Brandt's and whiskered bats). This is due to the lack of roosting features identified on the building, however the gap under the eaves does provide an opportunistic potential roosting feature;

- Negligible suitability for use by roof-void-dwelling bats⁵ (long-eared species (*Plecotus* species) and large *Myotis* bats, such as Natterer's bat and serotine bats) due to the lack of roof-void within the building; and
- Negligible suitability for use by direct-access species requiring a large access point⁶ and large roost space (lesser horseshoe and greater horseshoe bats) as there are no large access points suitable for use by these species that were identified.

B3 has an overall low bat roosting suitability due to the reasons stated above. This assessment will be used to determine the level of further survey effort required (see Appendix 3).

4.3. Potential Winter Roosts

The crevices between the breezeblocks where the roof access is located 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.

5.2. Further Work

The following work could have an impact on bats: asbestos survey, early vegetation clearance or measures to secure derelict buildings. These should not take place until the surveys recommended above have been completed and/or an ecologist has been consulted.

Works should not commence until further surveys have been carried out. This will enable the likely impacts of the proposals on bats to be assessed, determine if a NRW European Protected Species development licence will be required, inform the avoidance measures (timing of works), and determine the requirement for mitigation (retention of roosts and access points) and/or compensation measures (creation of new replacement/additional bat roosts).

Current best practice guidelines (Collins, 2023) state that building B3 has low roost suitability and so should be subject to one dusk emergence survey. Buildings B1a, B1b, B1c and B2 have been assessed as having moderate suitability, and so should be subject to two dusk emergence surveys. Building B1D will not require any further surveys due to its negligible roost potential. The surveys will be supplemented by use of night vision aids.

To ensure that all potential bat access/roosting features are covered Six surveyors will be required to survey B1a and Four surveyors to observe B1b. One surveyor will be required to observe B1c, four surveyors to observe B2 and two surveyors to observe B3 (see Plans 4 – 8: Proposed Surveyor Positions).

Table 6: Summary surveys and surveyors required for each structure.

Structure	Number of Surveys Required	Number of Surveyors Required
B1a	Two	Six
B1b	Two	Four
B1c	Two	One
B2	Two	Four
B3	One	Two

If bats are confirmed to be roosting in B3, a second survey will be required to characterise the roost and support a NRW bat development licence application.

Surveys should be timed to sample as much of the survey period as possible, undertaken at intervals of at least three weeks apart, or preferably more (Collins 2023). This increases the possibility of encountering

bats that may only use the building for short periods throughout the summer. Ideally at least one survey should be undertaken in the core maternity period of mid-June to mid-July.

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

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. The guidance acknowledges that presence/status data (not absence data) older than this can have considerable value, particularly when collected over a number of years using different techniques. The value of older data should be considered when updating surveys as it may not be necessary to start from scratch¹⁸.

CIEEM have issued an Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), which states that a survey report that is less than 12 months old is likely to be valid in most cases; reports 12-18 months old are likely to be valid with some exceptions; reports 18 months to 3 years old require a site visit plus consideration of repeating the surveys (depending on the circumstances) and reports older than this are likely to require most of the surveys to be repeated.

The NRW EPS mitigation license application asks, *'is the survey data less than two active seasons old?'* and if not, to *'please provide sound ecological reasoning for why this is acceptable.'*

¹⁸ The factors identified are as follows: Were the original surveys carried out according to good practice guidelines?; Were the original surveys constrained in any way (in terms of timings, weather conditions, equipment used, number of surveyors, surveyor expertise, etc.)?; Do the results of the original surveys support the original conclusions and are these still relevant?; Has the nature of the site or the surrounding area changed since the original surveys were undertaken (e.g. has a structure deteriorated and become less suitable for a roost or has human occupation ceased and the structure become more suitable for a roost; and are additional surveys likely to provide information that is material to a decision (such as a planning consent, the design of mitigation measures, or specific advice relating to a proposed activity)?

6. 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>

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

Eaton, M, Aebischer, N, Brown, A, Hearn, R Lock, L, Musgrove, A, Stroud, D and Gregory, R (2014) *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands, and Isle of Man*. *British Birds* 108. December 2015. 708-746. Available online at <http://bit.ly/2h23DqV>.

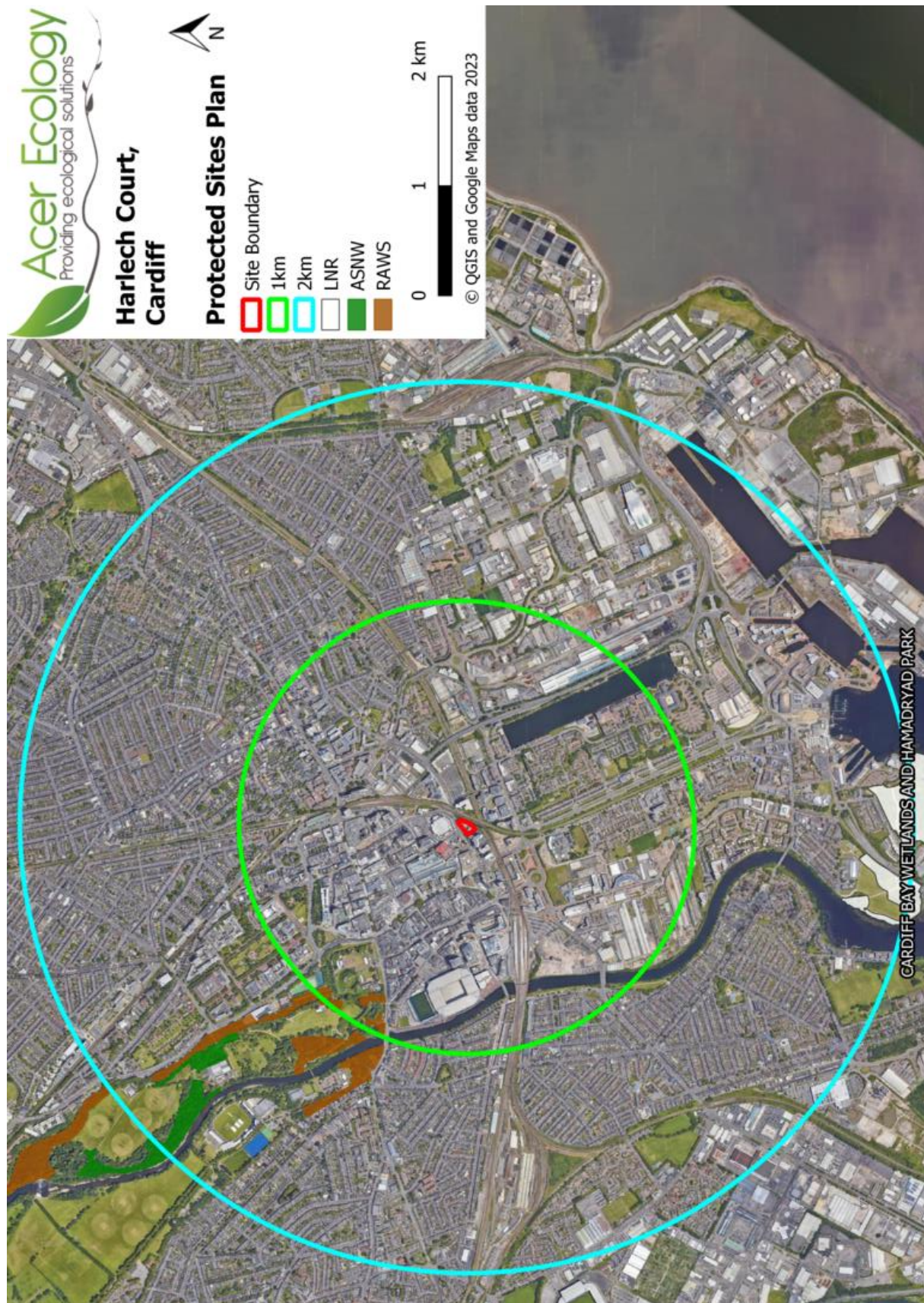
European Commission, Directorate-General for Environment (2011) *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC: final version*, February 2007. European Commission.

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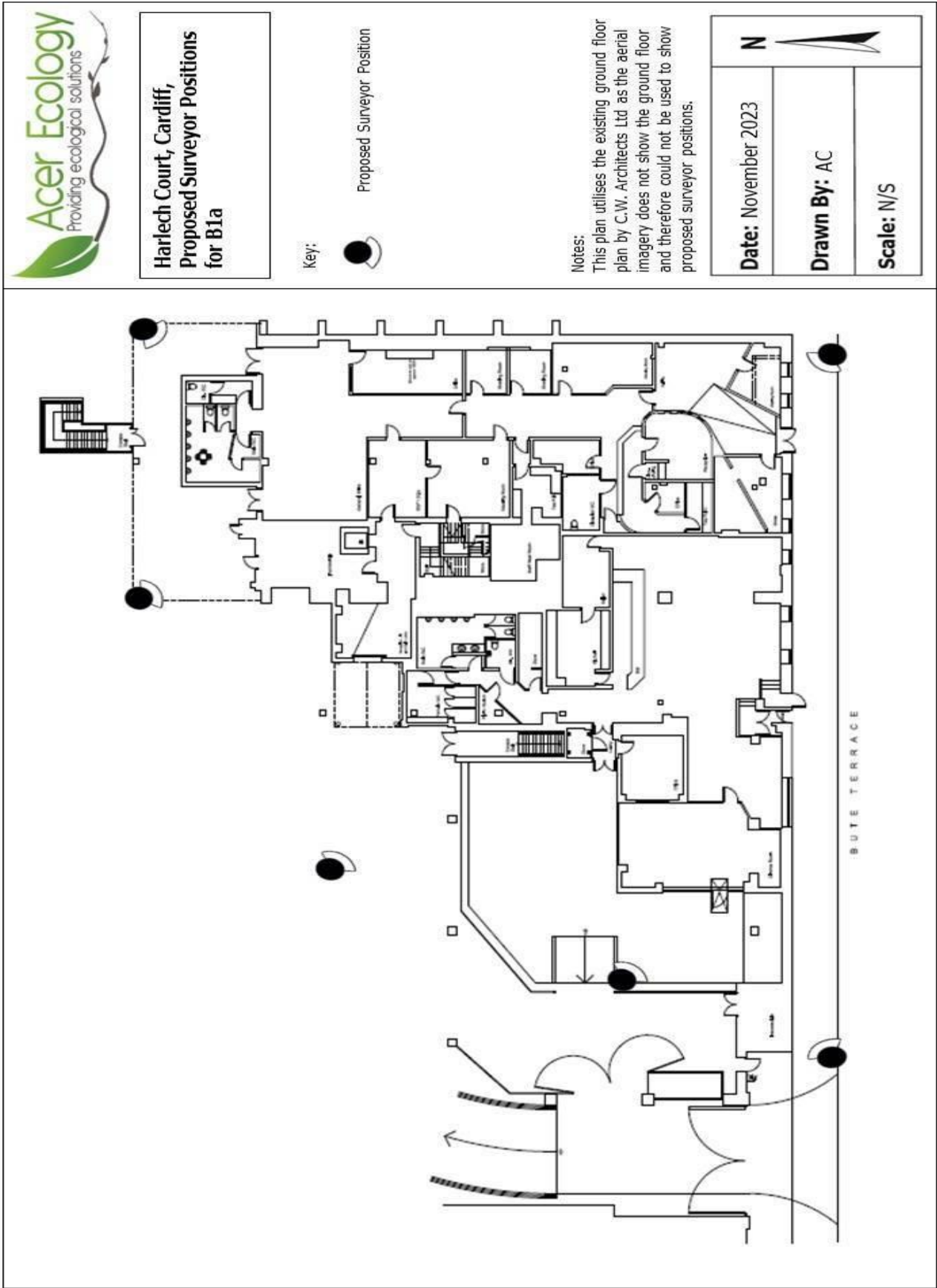
Plan 1: Location Plan



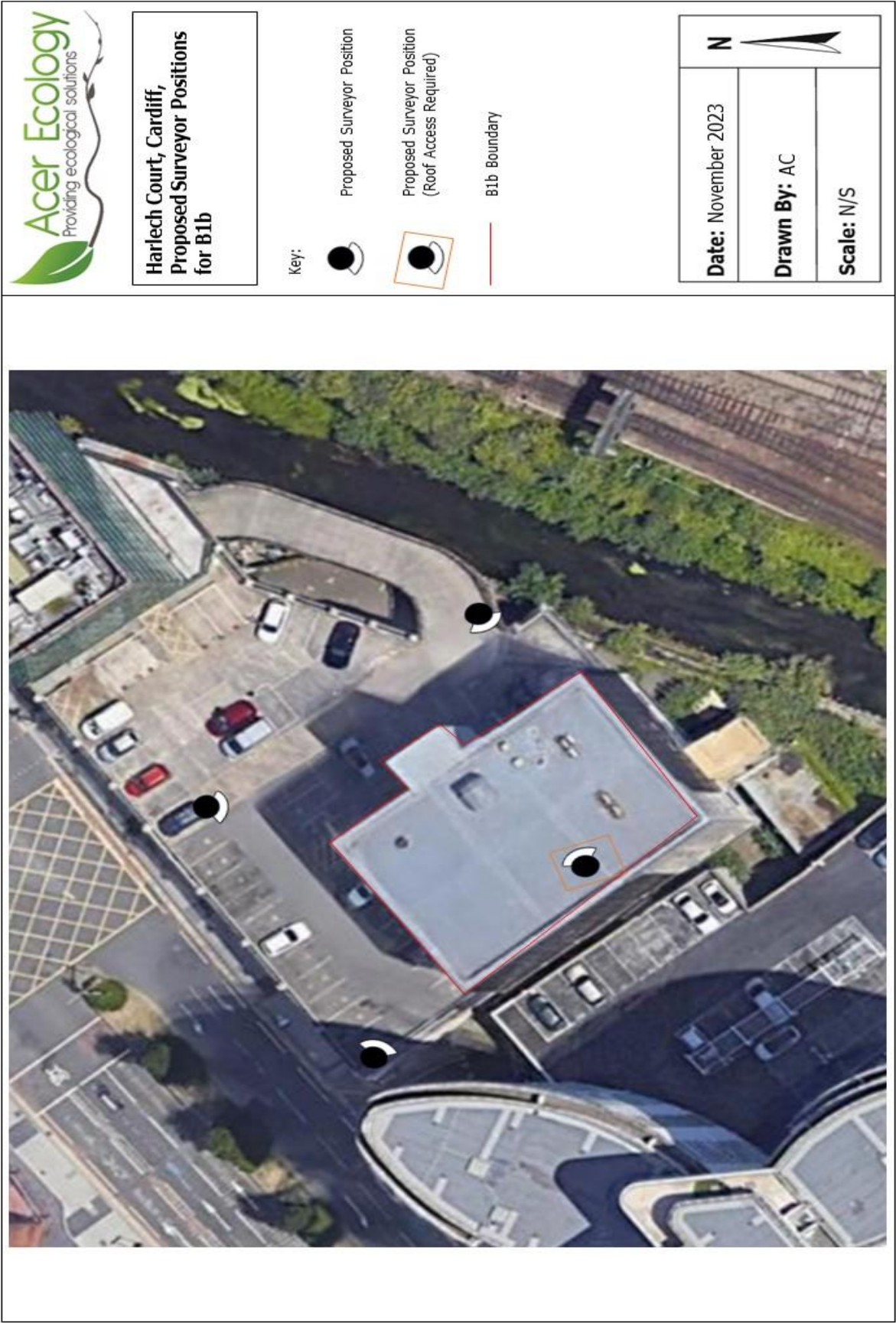
Plan 3: Protected Sites Within 2km



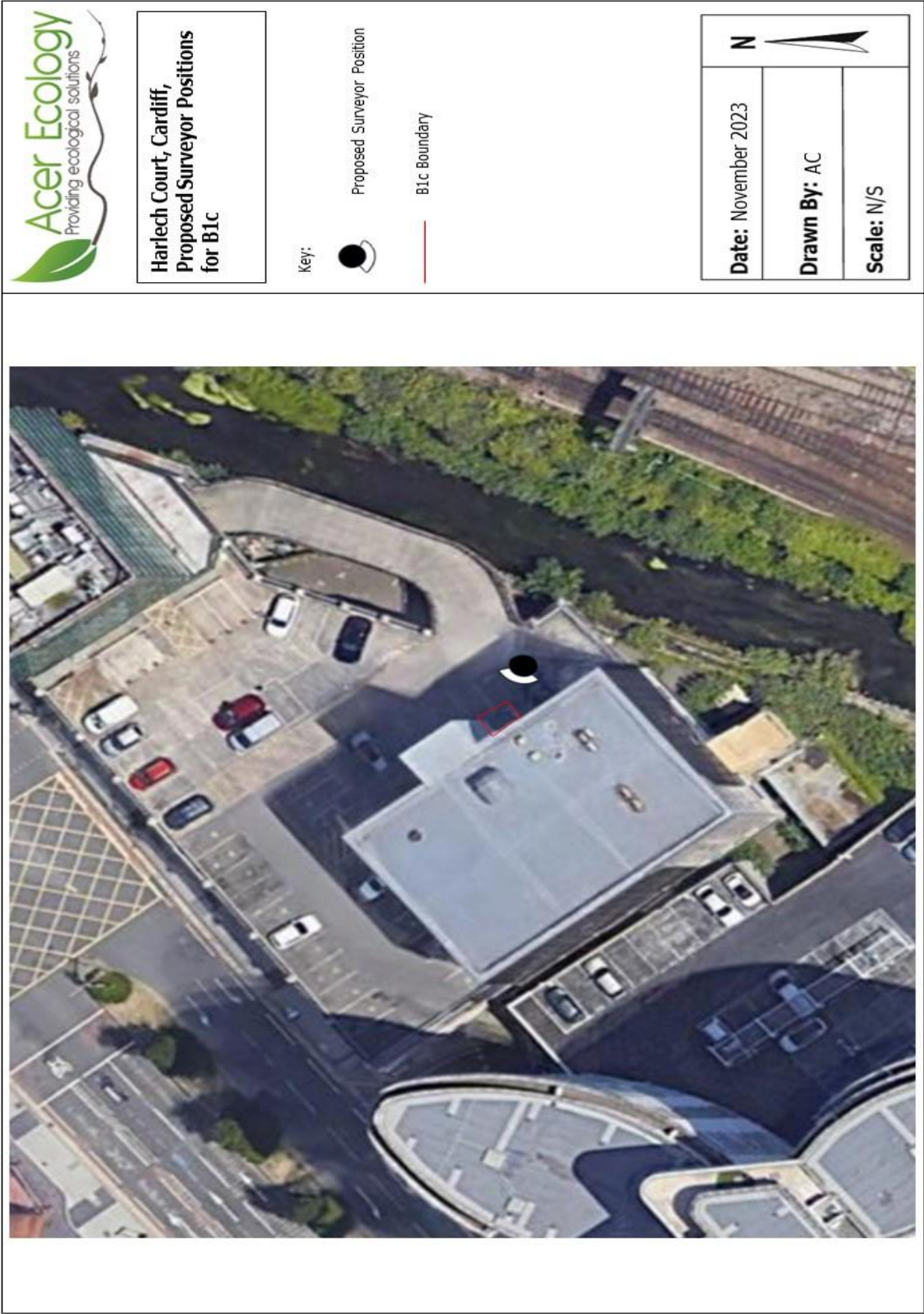
Plan 4: Proposed Surveyor Positions for Dusk Emergence Surveys at B1a



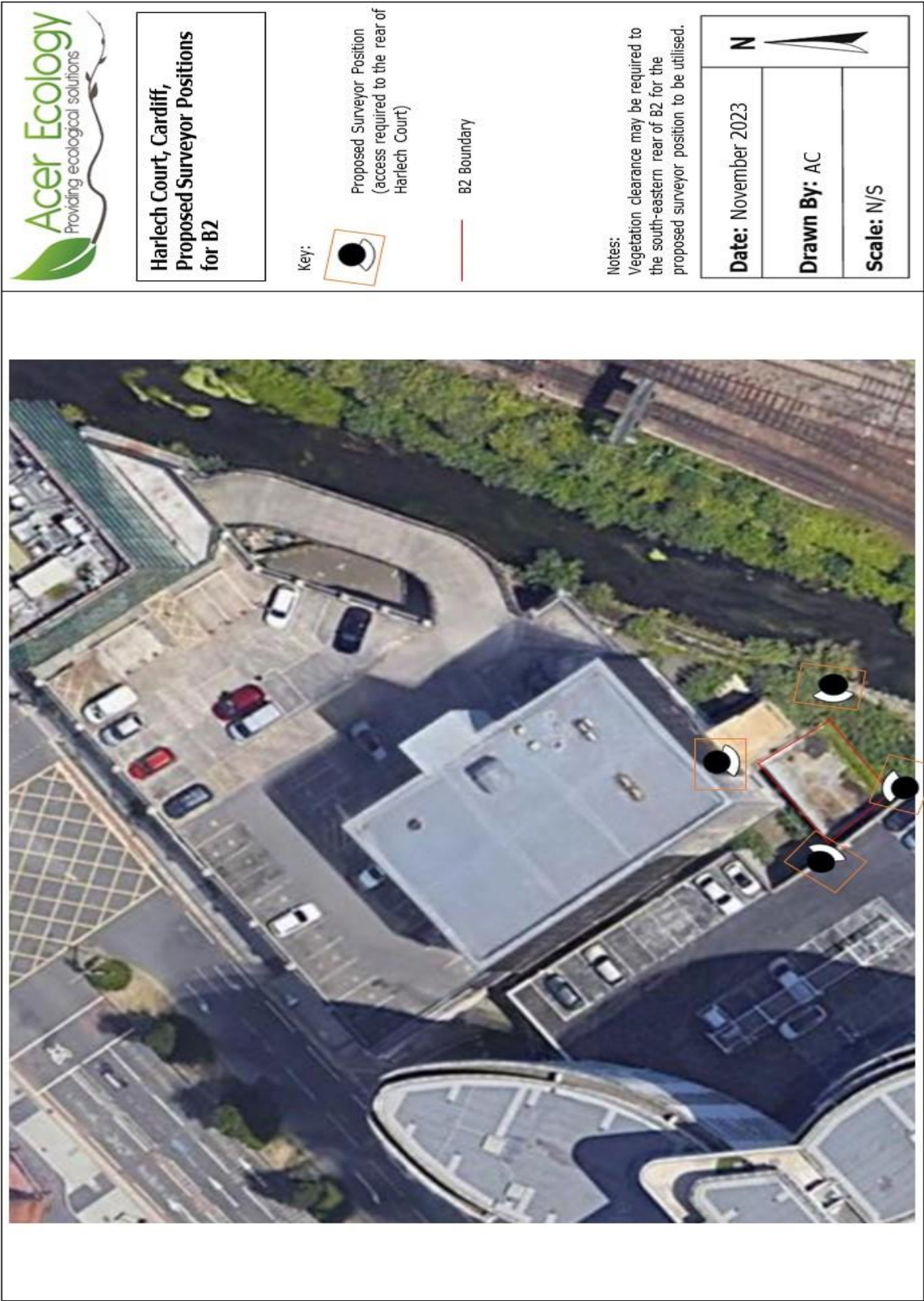
Plan 5: Proposed Surveyor Positions for Dusk Emergence Surveys at B1b



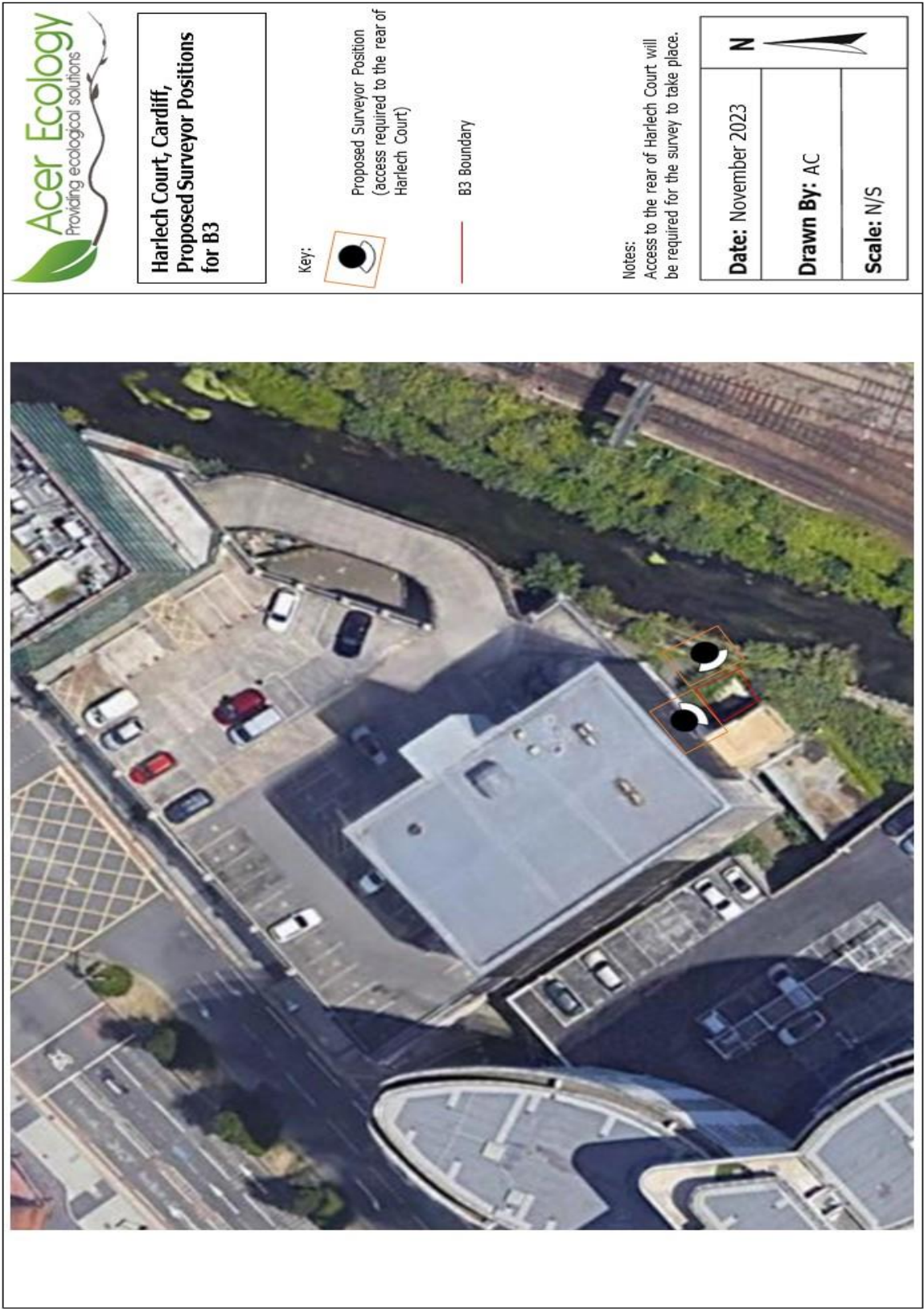
Plan 6: Proposed Surveyor Positions for Dusk Emergence Surveys at B1c



Plan 7: Proposed Surveyor Positions for Dusk Emergence Surveys at B2



Plan 8: Proposed Surveyor Positions for Dusk Emergence Survey at B3



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 makes 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, fascia’s, 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 11 (2021) 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, TAN 5 and Section 40(1) of the Natural Environment and Rural Communities Act (NERC) 2006 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).

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

Appendix 2: Guidelines for Assessing Potential Bat Roosting Suitability

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 ²⁰ (B1d)	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 (B3)	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 ²¹ 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 ²²).
Moderate (B1a, B1b, B1c, B2)	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.
Confirmed Roost	Evidence of bats or use of bats found.

²⁰ 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 would (due to another attribute).

²¹ For example, in terms of temperature, humidity, height above ground levels, light levels or levels of disturbance.

²² 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 Emergence Surveys

Roost Suitability	Minimum Number of Dusk Surveys Required ²³
Negligible	None.
Low	One survey visit comprising of a dusk emergence survey ²⁴ between May and August for structures.
Moderate	Two separate dusk emergence survey visits ²⁵ . Surveys must occur between May and September ²⁶ , with at least one survey between May and August ²⁷ .
High	Three separate dusk emergence survey visits. Surveys must occur between May to September, with at least two surveys between May and August.

²³ Adapted from Tables 7.1 and 7.2 of the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

²⁴ 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.

²⁵ 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.

²⁶ 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.

²⁷ 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 4: Guidelines for Assessing Bat Habitat Suitability

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.