



CARDIFF COUNCIL

NEW PENN, CARDIFF

BAT REPORT – BUILDING 1 – EMERGENCE/RE-ENTRY SURVEYS

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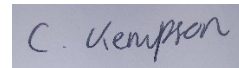
NEW PENN, CARDIFF

BAT REPORT – BUILDING 1 – EMERGENCE/RE-ENTRY SURVEYS

FEBRUARY 2023

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DRAWINGS	TITLE	SCALE
CA12409-002	Site Location Plan	1:20,000@A3
CA12409-005-P01	Building B1 Surveyor and Bat Emergence/Re-Entry Locations	1:400@A3

EXECUTIVE SUMMARY

Wardell Armstrong LLP (WA) was commissioned by Cardiff Council to undertake bat surveys in connection with the proposed demolition works at the former New Penn Public House (B1) on the site located at 210 Brynfedw, Llandeyrn, Cardiff CF23 9PX, centred on approximate National Grid Reference ST 19882 80527. The site is to provide a residential housing scheme.

WA was previously commissioned to undertake an external Preliminary Roost Assessment (PRA) survey, which was carried out on 11th April 2022, identifying that the disused building has moderate suitability to support roosting bats during their active season (April to October) and has potential to support hibernating bats (November to March). The hibernation survey results are covered in a separate report.

No evidence of bats was recorded during the PRA. No live bats were observed during the inspection, and no other evidence of bat activity was recorded. However, to accord with current best practice guidance, two surveys were required to assess whether the disused building is being used by roosting bats during their active season.

B1 was therefore subject to a dusk emergence survey in July 2022, and a separate dawn re-entry survey in August 2022. Three common pipistrelle bats and one soprano pipistrelle bat were observed emerging or re-entering B1 during the July/August 2022 emergence/re-entry surveys.

The building is now classified as containing three, confirmed low status, non-breeding summer day/transitional roosts for common and soprano pipistrelle bats. As such, the demolition of the building can only be undertaken following approval of a bat mitigation licence from Natural Resources Wales.

1 INTRODUCTION

1.1 Terms of Reference

1.1.1 Wardell Armstrong LLP (WA) was commissioned by Cardiff Council to undertake bat surveys in connection with the proposed demolition works at the former New Penn Public House on the site located at 210 Brynfedw, Llandeyrn, Cardiff CF23 9PX (herein referred to as ‘the site’).

1.2 Site Description

1.2.1 The site is centred on approximate National Grid Reference ST 19882 80527 as the site location is shown on Drawing CA12409-002 (Site Location Plan)

1.2.2 The site comprises; an extensive two storey building, with a flat above the disused public house, hardstanding, poor semi-improved grassland, an intact species-poor hedgerow, broadleaved scattered trees, and includes broadleaved woodland (ancient semi-natural woodland) on the periphery of the site which forms part of Llanederyn Woodland Complex Site of Importance for Nature Conservation (SINC).

1.2.3 The site is within a residential area. The site is bound to the north-west by Circle Way West Road and to the north-east by Brynfedw Road. A parcel of ancient semi-natural woodland is located directly south-west and south of the site.

1.3 Description of Development

1.3.1 The proposed development requires the demolition of the former New Penn Public House for the development of a residential housing scheme.

1.4 Background

Previous Surveys

1.4.1 WA was commissioned in March 2022 to undertake an Extended Phase 1 Habitat Survey of the site, a Preliminary Ground Level Roost Assessment (PGLRA) of trees and an internal and external Preliminary Roost Assessment (PRA) survey (WA, 2022¹) of the former New Penn Public House. These surveys were undertaken on 11th April 2022 by a suitably experienced ecologist.

1.4.2 The PRA identified that the disused building has a moderate suitability to support roosting bats during their active season (April to October) and has potential to support

¹ Wardell Armstrong LLP, “Cardiff Council, New Penn, Cardiff, Preliminary Ecological Appraisal, July 2022”.

hibernating bats (November to March). **The hibernation survey results are covered in a separate report.** No evidence of roosting bats was observed during the internal inspection.

1.4.3 In line with recommended guidance within the Bat Conservation Trust (BCT) (2006) good practice guidance² it was deemed that two surveys were required to assess whether the disused building is being used by roosting bats during their active season.

1.4.4 A desk study was undertaken as part of the PRA. The desk study identified one site designated for bats within 10km of the building: Ruperra Castle and Woodlands Site of Special Scientific Interest (SSSI), located approximately 6.2km to the northeast of the site. The designation supports a greater horseshoe (*Rhinolophus ferrumequinum*) bat nursery roost, which is one of only five nursery roosts in Wales. The SSSI is also used by a smaller population of lesser horseshoe (*Rhinolophus hipposideros*) bats.

1.4.5 The desk study also identified 286 records of bats within 2km of the site in the last 12 years, with the closest record located approximately 143m to the north of the building.

1.4.6 Species identified include:

- Brown long-eared (*Plecotus auritus*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Myotis Bat species (*Myotis spp.*)
- Nathusius's' pipistrelle (*Pipistrellus nathusii*)
- Natterer's (*Myotis nattereri*)
- Noctule (*Nyctalus noctula*)
- Serotine (*Eptesicus serotinus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)

1.4.7 Furthermore, 6 roosts were identified within 2km of the site. The closest record is of a common pipistrelle roost approximately 180m to the north of the building.

1.4.8 The most recent records of bats identified within 2km of the site were from April 2022, of a soprano pipistrelle, approximately 1,271m to the northwest of the building.

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust (BCT), London.

1.5 Legislative Framework

1.5.1 All UK bat species are protected by legislative framework, a summary of which is provided in Appendix 1.

1.6 Bat Ecology

1.6.1 There are 17 bat species found breeding in the UK, which are all insectivorous. These species have different life cycles and strategies, but in general require:

- Hibernation roost sites: sites which in winter have a constant temperature of 3-7°C e.g., underground sites (caves, mines) and built environments offering similar conditions;
- Nursery sites where females gather in spring/summer to give birth and rear offspring e.g., roof spaces, crevices/hollows in mature trees;
- Roost sites for individual males from spring to autumn e.g., roof spaces; and
- Habitats with numerous insects to feed upon.

1.6.2 Roosting habitat includes buildings, structures, caves, and trees; any structure or place that could be used for shelter or protection whether or not bats are present at the time.

1.6.3 Bats also use a variety of habitats for foraging with broad-leaved woodland and riparian habitats the most favourable. Arable, improved grassland and moorland are less favoured. Within these less favoured landscapes, linear features such as hedgerows, lines of trees, streams and rivers are often used by bats as they provide rich food sources, shelter, and commuter corridors.

1.7 Scope of Report

1.7.1 The purpose of this report is to detail the results of the bat emergence/re-entry surveys and provide an assessment of the potential impacts by the proposed demolition of the building on any bat populations present. This report therefore includes:

- Description of survey methodology;
- Results of the PRA undertaken in April 2022;
- Results of the emergence/re-entry surveys undertaken in July and August 2022 on Building 1, hereafter referred to as 'B1', and;

- Assessment of effects, mitigation measures and residual effects deemed relevant to bats in relation to the proposed demolition of building B1.

2 METHODOLOGY

2.1 Preliminary Roost Assessment (PRA)

2.1.1 A PRA of B1 was undertaken on 11th April 2022 by a suitably experienced ecologist, in conjunction with the Extended Phase 1 Habitat Survey (WA, 2022). The aim of the survey was to assess the potential of the building to support roosting bats, identify any evidence of roosting bats and whether there was a requirement for further surveys.

2.1.2 The methodology for the PRA can be found within the PEAR report issued in July 2022, produced by Wardell Armstrong (WA, 2022).

2.2 Dusk Emergence/Dawn Re-entry Surveys

2.2.1 Following the PRA surveys undertaken in April 2022, it was considered that B1 had moderate bat roost potential, and therefore it was subject to one dusk emergence survey in July 2022, and one separate dawn re-entry survey in August 2022.

2.2.2 The aim of the emergence/re-entry surveys was to establish if any roosts are present within the building and, if so, to establish the type of roost and bat species using the roost. The survey effort is based on the guidance given in Table 7.3 of the '*Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, J. (ed.) 2016*)'.

2.2.3 The dusk emergence survey was undertaken 15 minutes before sunset to 1.5 hours after sunset. The dawn re-entry survey was undertaken 1.5 hours before sunrise and continued to 15 minutes after sunrise. Weather conditions and times of the emergence and re-entry surveys are provided in Appendix 2.

2.2.4 The position of the six surveyors during the survey is shown on Drawing Number CA12409-005-P01 (Building B1 Surveyor and Bat Emergence/Re-Entry Locations).

2.2.5 Echo Meter Touch (Wildlife Acoustics, Inc., Massachusetts) bat detectors and Samsung Galaxy Tablets were used by surveyors to detect bats and analysed later using Kaleidoscope Pro 4 software. Species identification was made on the basis of the characteristics of the call including peak frequency, minimum and maximum frequency, call duration and inter pulse interval. Observations of bat behaviour, size and the direction of the flight path were also noted where possible.

2.3 Assessment Limitations

- 2.3.1 Ecological surveys are limited by factors that affect the presence of plants and animals such as time of year, weather, migration patterns and behaviour. The surveys were undertaken between July and August 2022 and therefore represent a valid sample of ecological evidence present for that date/season and is based on the guidance given in Table 7.1 of the 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, J. (ed.) 2016)².
- 2.3.2 Echolocation calls of brown long-eared bats (*Plecotus auritus*) are significantly quieter than many other bat species within this country, therefore this species can be difficult to record and may at times go unrecorded. Similarly, some bats produce louder calls which travel greater distances with less attenuation, as a result, louder calls produced at greater distances from the detectors will be recorded (during activity and automated surveys) more readily whereas quieter calls produced from the same location may be missed which can lead to bias.
- 2.3.3 Species from the genera *Myotis* and *Nyctalus* are difficult to distinguish individual species within the genera from sonogram calls alone. Where an individual species cannot be determined, a genus is recorded.

2.4 Quality Assurance & Environmental Management

- 2.4.1 The surveys and assessments have been overseen by and the report checked and verified by a full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and thus bound by its code of professional conduct.
- 2.4.2 All surveys and assessments have been undertaken with reference to the recommendations given in British Standard (BS) 42020, and as stated within specialist guidance, as appropriate and referenced separately.

3 RESULTS

3.1 Preliminary Roost Assessment

3.1.1 An internal and external PRA inspection was conducted on B1. The building is a small, two storey, rectangular shaped brick building with two gable tiled roofs, surrounded by flat roofs. External inspection identified numerous points of entry into the building; in brickwork, soffits, fascia, under slate, hanging tiles, and drip edge. Internal inspection was limited due to lack of access to loft and attic. One loft space in the above flat was accessed, which identified limited potential roost features in the form of pitched beams. The woodland to the south is part of Llanederyn Woodland Complex SINC, providing connectivity to other areas of woodland for foraging and commuting further away. This building was therefore classified as having ‘moderate’ potential to support roosting bats. The detailed description of the building and photographs are provided in Appendix 3 – Preliminary Roost Assessment Results.

3.2 Dusk Emergence and Dawn Re-entry Surveys

Dusk Emergence Survey - 25th July 2022

3.2.1 One soprano and one common pipistrelle were observed emerging from the centre of the west gable end of the eastern part of the building. Another common pipistrelle was observed emerging from the north-eastern corner of the south-western part of the building

3.2.2 Common and soprano pipistrelles were recorded foraging and commuting around the building, and noctule and *Myotis* sp. were also recorded during the survey. The locations of the emergences observed during the July 2022 survey are shown on Drawing Number CA12409-005-P01 (Building B1 Surveyor and Bat Emergence/Re-Entry Locations) and a description of the roost locations are provided in Appendix 4.

Dawn Re-entry Survey – 19th August 2022

3.2.3 One common pipistrelle was recorded re-entering the south-western gable end.

3.2.4 Soprano pipistrelles, noctules and brown long-eared were recorded foraging and commuting around the building during the survey.

3.2.5 The location of the re-entry observed during the August 2022 survey is shown on Drawing Number CA12409-005-P01 (Building B1 Surveyor and Bat Emergence/Re-Entry Locations) and a description of the roost location is provided in Appendix 4.

4 EVALUATION

4.1 Overview

4.1.1 Four bats were observed emerging or re-entering B1 during the July/August 2022 bat emergence/re-entry surveys.

4.1.2 It is therefore considered that the building comprises three low status, non-breeding summer day/transitional roosts used by common and soprano pipistrelles. Common and soprano pipistrelles are common and widespread throughout Wales. Therefore, the roosts on site are considered to be of **local** value. The criteria of determining the value of ecological receptors is provided in Appendix 5.

4.2 Assessment of Effects

Short-term Impacts: Disturbance

4.2.1 In the absence of mitigation, the demolition of B1 would cause disturbance to bats through vibration, noise, and dust. Additionally, there is the potential to injure and/or kill individual common and soprano pipistrelles if present within the building during the time of demolition.

Long-term Impacts: Roost Loss

4.2.2 In the absence of mitigation, the demolition of B1 will result in the destruction and permanent loss of three low status, non-breeding common and soprano pipistrelle summer day/transitional roosts. However, common and soprano pipistrelles are considered to be common and widespread within the area, therefore, the loss of these roosts is not considered to be significant above the local level. It is considered that the loss of these roosts will not affect the favourable conservation status of common and soprano pipistrelle bats.

Long-term Impacts: Fragmentation and Isolation

4.2.3 It is considered that the demolition of B1 will not result in the severance of any flight lines within the area. Therefore, it is unlikely to lead to any significant adverse fragmentation or isolation effects.

Predicted scale of impact

4.2.4 The survey results identified that B1 is used by three common pipistrelle and one soprano pipistrelle, and that the three roosts to be lost are of low conservation significance. It is considered that the loss of these roosts will not affect the favourable

conservation status of common and soprano pipistrelles within the local area. Pipistrelles in particular are considered to be one of the more versatile species and are opportunistic in urban environments. Therefore, they are likely to adjust to use alternative roosts within the local area.

- 4.2.5 It is considered that the loss of the three roosts is not significant above the local level, however, without mitigation, the loss of the roosts would contravene legislation pertaining to bats.

Mitigation Measures

- 4.2.6 A licence from Natural Resources Wales (NRW) will be required for the demolition of the building. The demolition work on B1 cannot proceed until the bat mitigation licence from NRW has been granted.
- 4.2.7 The three roosts identified are classified as day/transitional roosts for a low number of non-breeding female and/or male common and soprano pipistrelle bats, therefore timing restrictions are not considered necessary.
- 4.2.8 To mitigate for the demolition of the three roosts in the building, it is expected that NRW will require as part of the licence, documents that bat boxes are installed prior to the demolition commencing. Mitigation will include the installation of three bat boxes suitable for pipistrelle bats on-site to replace the identified bat roosts that are being lost. Three bat boxes will be located on the trees along the southwestern boundary. This will include two Schwegler 1FF (or equivalent) and one crevice dwelling bat box suitable for maternity groups. If no suitable mature trees are identified, it may be required to install a pole to mount the bat boxes. Exact locations of the bat boxes will be determined by and sited under guidance of the Named Ecologist (or accredited agent) to advise on suitable installation. All boxes will be located at between 5 - 6m from ground level, with a clear flight path to the boxes.
- 4.2.9 Bat mitigation features will also be incorporated into the proposed residential development to be constructed on the site following demolition of B1. These integrated features will include a soffit bat box.
- 4.2.10 Prior to any demolition works, all contractors will be given a site induction and toolbox talk by the Named Ecologist (or accredited agent) to ensure they are familiar with the presence of bats, their legal protection, actions in the event of discovering a bat and information regarding safe working practices as set out in the method statement that forms part of the NRW licence.

- 4.2.11 The Named Ecologist (or accredited agent) will undertake a check for bats or evidence of bats before demolition commences. Any features, which could support roosting bats will be visually inspected using a torch or endoscope if required. Additionally, an internal inspection will be carried out immediately prior to demolition.
- 4.2.12 Features of B1 deemed suitable by the Named Ecologist (or accredited agent) to support bats must be removed by hand as much as possible and the undersides must be checked before disposal, or careful and closely supervised machine removal where unavoidable. All works in proximity of the roost locations will be undertaken under the supervision of the Named Ecologist (or accredited agent).
- 4.2.13 Any bats present will be caught by the Named Ecologist (or accredited agent) by hand or using a hand-held net, identified, placed in a bag/secure holding box, and then relocated immediately to the bat boxes specifically installed (prior to demolition) as mitigation for the demolition of the building. If immediate relocation to a bat box is not deemed appropriate by the Named Ecologist (or accredited agent), the bat will be placed in a dark, cool, and quiet place on site until sunset and released on site at a suitable time that evening. The roost feature will then be removed/made inaccessible to ensure bats do not re-enter once released.
- 4.2.14 If a bat is discovered during unsupervised times, demolition work will cease immediately, and advice sought from the Named Ecologist (or accredited agent).
- 4.2.15 The above mitigation will be detailed in the bat licence application to NRW.
- 4.2.16 The licence holder (Cardiff Council) will provide a copy of the approved bat licence and method statement to any future site owners. The bat mitigation installed on the site must be considered in any future plans for the site and must not be isolated or lit by artificial lighting.
- 4.2.17 The installed bat boxes will require a single monitoring survey to be carried out two years after demolition work is complete. This monitoring survey will involve an inspection of the bat boxes by a licenced ecologist. The level of monitoring will be subject to approval by NRW as part of the bat mitigation licence application.
- 4.2.18 Finally, should works not commence within 24 months of the surveys (unless development proposals change), it will be essential to update the survey effort.

4.3 Residual Effects

4.3.1 It is considered unlikely that, with the above outlined mitigation measures, there will be significant residual adverse effects on common pipistrelle and soprano pipistrelle bats as a result of the demolition of B1.

4.4 Enhancements

4.4.1 An additional bat box (Schwegler 1FF or equivalent) should be installed as an enhancement for crevice dwelling bat species along the southern boundary.

4.4.2 Additional planting to create a mosaic of habitats along the southern and southwestern boundaries will be beneficial to foraging and commuting bats, improving the habitat around the proposed bat boxes. This can include areas of native tree planting, scrub, and open habitat/grassland. However, tree planting should not restrict access to the bat boxes.

APPENDICES

Appendix 1
Summary of Protection Legislation

Appendix 1: Summary of Protection Legislation

Protection of Bats

1.1.1 All UK bat species are listed under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) whereby legal protection is retained under domestic law. As such bats receive protection under Part 3 of the act, which makes it an offence to:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat;
- Damage or destroy a breeding site or resting place of a bat;

Under the Regulations, disturbance of bats includes any actions which is likely to:

- Impair their ability to survive, breed or reproduce, to rear or nurture their young to hibernate or migrate; and
- Significantly affect the local distribution or abundance of the species in question.

1.1.2 Further, where significant assemblages of Annex II bats are identified as listed by the Habitats Directive, the appropriate authority can designate as a Special Area of Conservation sites of national importance. This is based upon their natural range and the areas critical for their life and reproduction. However, priority of designation will be based on the importance of the sites for the maintenance/restoration of favourable conservation status and how the site would link with the National Site Network.

1.1.3 In view of any site designated as a Special Area of Conservation prior to or after the exit from the EU, a Habitat Regulation Assessment of projects and plans would be required where screening indicates potential impacts.

1.1.4 The Conservation of Habitats and Species Regulations 2017 (as amended) stems from signatory to pan-European and global conventions to halt the decline in biodiversity and restrictions on species migration, notable the Berne and Bonn Conventions. The outcome of these conventions was taken further by the European Union via the Habitats Directive (prior to the UK exit). Further, the legislation helps to achieve the aims of the Convention on Biological Diversity to which the UK is a signatory.

1.1.5 European Protected Species licenses can be granted by Natural Resources Wales in respect of development, to permit activities that would otherwise be unlawful and as

set out in the Conservation of Habitats and Species Regulations 2017 (as amended), providing that ‘favourable conservation status’ is maintained and there is “no satisfactory alternative”.

1.1.6 All UK bat species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and receive further partial protection under Section 9 of this legislative. This includes, making it an offence to:

- Intentionally or recklessly obstruct access to any place that a bat uses for shelter or protection; and
- Intentionally or recklessly disturb any bat whilst it is occupying a structure or place that it uses for shelter or protection.

1.1.7 Eight bat species are considered species of principal importance in Wales under Section 7 of the Environment (Wales) Act 2016. This stems from a review of the now superseded UK Biodiversity Action Plan and the continued need for global action on conserving biodiversity as result of the Convention on Biological Diversity. As a result, the Welsh Government (and therefore public authorities) have a duty to conserve biodiversity in relation to those bat species listed. The eight bat species covered under Section 7 of the Environment (Wales) Act 2016 are:

- Barbastelle (*Barbastella barbastellus*);
- Bechstein’s (*Myotis bechsteinii*);
- Brown long-eared (*Plecotus auritus*);
- Common pipistrelle (*Pipistrellus pipistrellus*);
- Greater horseshoe (*Rhinolophus ferrumequinum*);
- Lesser horseshoe (*Rhinolophus hipposideros*);
- Noctule (*Nyctalus noctula*); and
- Soprano Pipistrelle (*Pipistrellus pygmaeus*).

1.1.8 The UK Biodiversity Action Plan was superseded by ‘The UK Post-2010 Biodiversity Framework’ which was published in July 2012, to achieve the European Union wide biodiversity strategy (prior to EU exit). Work under the UK Post-2010 Biodiversity Framework is now focussed at the country level as a result of devolution. The

document covers the 5 strategic goals and 20 new global ‘Aichi’ targets stemming from the parties of the Convention on Biological Diversity. The species of principal importance listed under Section 7 of the Environment (Wales) Act 2016 are one of many aspects to reverse a decline in biodiversity at the global level and show progress towards the UK Post-2010 Biodiversity Framework.

- 1.1.9 During the decision-making process for planning applications, the Section 7 species of bat as listed under the Environment (Wales) Act 2016 should be taken into consideration through the “Biodiversity Duty), along within a review of the application in light of the well-being goal, “A resilient Wales” within the Well-being of Future Generations (Wales) Act 2015. The decision should fundamentally not lead to the decline of biodiversity within their geographic area or that of Wales, as part of their reporting for the two Acts.

Consideration of Bat Foraging Areas & Commuting Routes

- 1.1.10 Bat core sustenance zones, foraging areas and commuting routes are not directly protected under the legislation described above. However, loss of important foraging areas and/or commuting routes could potentially constitute an offence as defined by the Conservation of Habitats and Species Regulations 2017 (as amended) through disturbance affecting bats ability to survive, breed or reproduce, or to rear or nurture their young or to hibernate or migrate¹. Depending on the scheme this could also extend to significantly affect the local distribution or abundance of the species in question. Furthermore, the loss of a commuting route providing the only access to a roost could also potentially constitute a deliberate, intentional or reckless act of damage/destruction of a breeding site/resting place and damage/destroy/obstruction of a place used for shelter/protection covered by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).

¹ Where such actions are proven to result in a loss of the ecological functionality of the roost.

Appendix 2
Bat Surveys 2022 – Dates, Times & Weather Conditions

Appendix 2: Bat Surveys 2022 – Dates, Times & Weather Conditions

Building Reference	Date	Dusk or Dawn survey	Start Time (sunset/sunrise time - hours)	End Time (Hours)	Weather Conditions
B1	25/07/2022	Dusk	20:56 (21:11)	22:41	Start: 16°C, wind NW 8mph, 12.5% cloud cover, dry. End: 15°C, wind NW 7mph, 37.5% cloud cover, dry.
B1	19/08/2022	Dawn	04:34 (06:04)	06:19	Start: 16°C, wind W 4mph, 87.5% cloud cover, dry. End: 15°C, wind W 3mph, 12.5% cloud cover, dry.


Appendix 3


Preliminary Roost Assessment Results

Appendix 3 – Preliminary Roost Assessment Results



Table 1 – Preliminary Roost Assessment (PRA) conducted 11 th April 2022
Building 1 (B1) New Penn Public House
<p>The building on site, New Penn Public House was surveyed. The building is a two-storey large building, constructed in the 1960s. The building consists of predominantly brick walls, with some parts of the building having cement rendering with pebble dash. B1 has varying types of roof styles, the main 2 storey areas consist of a gable roof with the intersecting 1 storey sections having a flat roof. The material is predominantly tiles on the gabled roofs and roofing felt on the flat roofs. An internal survey of the building was carried out, the internal spaces, basement, boiler room and eave storage cupboards were surveyed, however the roof void was not accessed during this visit. No evidence of bats was identified during the internal inspection, however entryway into the building was limited with potential window and door access minimal.</p> <p>The majority of the potential roost features (PRFs) for bats externally on the building are on the pitched roofs, from gaps in hanging and broken tiles, entrance points at the edges of the roof under tiles, and under roofing felt. The majority of potential roost features on the flat roofed sections of the building come from breakages and circular holes (from light fittings) in soffits. Other PRFs include gaps in metal shutters and grates, broken soffits and gaps in soffits, gaps between the brick wall and plastic drip edge of roof, rotted fascia / drip edge, and gaps in brickwork.</p> <p>The building is surrounded by a residential area to the north, east and west. To the south, the building is adjoined to an ancient semi-natural woodland. The woodland corridor may provide opportunities for foraging and commuting for bats and birds. However, the surrounding habitat is predominantly an urban environment with residential housing enclosing the site. Circle Way West is located to the west and Brynfedw Road to the north of the site. The building is considered to be of moderate suitability for roosting bats in the active season, along with low suitability for hibernating bats (basement).</p>



Reference	Feature Description	Photograph
Reference Number Location		
Hanging and broken tiles.	The majority of potential roost features on the building are on the pitched roofs. The gaps are in hanging and broken tiles. The entrance points are at edges of roof under tiles, and under roofing felt.	

1	Letterbox gap in red shutter of southern most extension on north-west aspect of building.		
2	Broken soffit on north-eastern aspect of pitched roof. Allowing entry into soffit and cavity space.		

3	<p>Small gap between wall and plastic drip edge of roof. Very limited as a potential roost feature.</p>	
4	<p>Gap in soffit at north-west edge of western aspect of building. Man-made hole (from light fitting) adjacent that will also allow entry into soffit.</p>	



5	<p>Very large broken soffit on south-west aspect of building extension. Creating large gap into soffit area, facing and adjacent to woodland area off site.</p>	
6	<p>Large gap in soffit next to shutter door on northern aspect of building, facing Brynfedw road. Could provide entry into building or cavity wall.</p>	


7. Rusted steel grate that provides a potential entrance point into boiler room on eastern aspect of building. No droppings seen on or next to grate.



Potential access from basement entryway on eastern aspect of building. No droppings seen on or next to entryway.



8.	Gaps in brickwork on eastern aspect of building.		
9.	Gaps present under the fascia/drip edge of the southern-most extension on the eastern aspect of the building, the gap is adjacent to the woodland off site. The gap is very large and is present along the entire aspect. Bird nesting material/vegetation is present in the gaps. This gap provides accessible entry into the flat roof.		

10.	The majority of potential roost features on the flat roofed sections of the building come from breakages and circular holes (from light fittings) in soffits.	
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Appendix 4

Roost Location Descriptions

Appendix 4: Roost Location Descriptions

Refer also to Drawing CA12409-005-P01 which shows the Roost Locations.

Building reference	Description	Roost Location
B1	Bat roost observed during the 25/07/2022 dusk emergence survey. One soprano and one common pipistrelle were observed emerging from the centre of the west gable end of the eastern part of the building.	E1
	A second bat roost observed during the 25/07/2022 dusk emergence survey. One common pipistrelle was observed emerging from the north eastern corner of the southwest part of the building.	E2
	Bat roost observed during the 19/08/2022 dawn re-entry survey. A common pipistrelle was observed re-entering the gable point of the southwestern gable.	R1

The building can be confirmed as a low conservation significance roost of a low number of likely non-breeding or male common and soprano pipistrelles which are common and widespread species.

Appendix 5

Determining Value of Ecological Receptors

Appendix 5: Determining Value of Ecological Receptors

1.1.1 The conservation status of a site is defined in Habitats Directive as this relates to internationally designated sites. The Chartered Institute of Ecology and Environmental Management (CIEEM) guidance modifies the definition in order for it to be applicable to sites, habitats, or species within any defined geographical area.

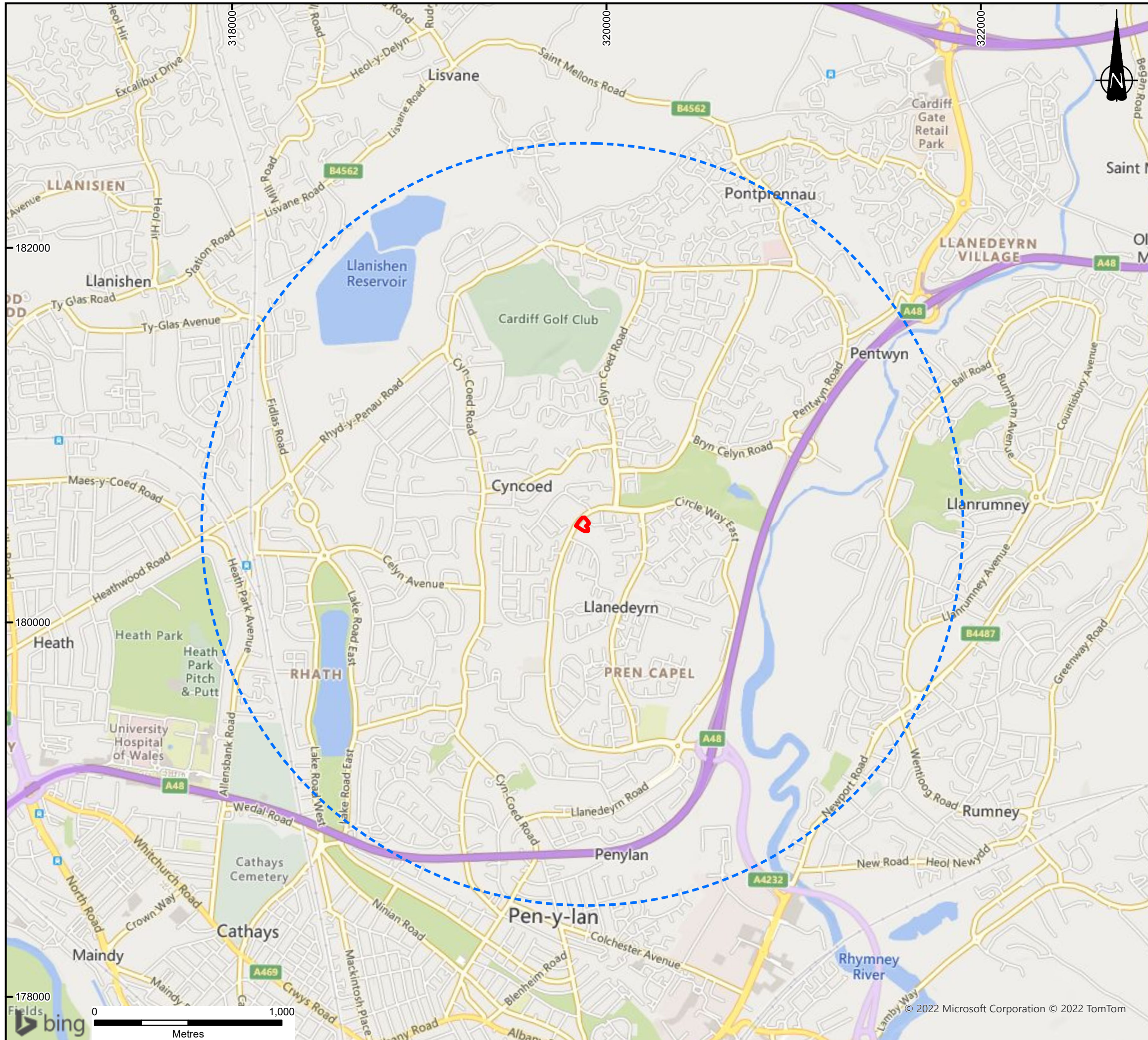
1.1.2 The levels of conservation importance are detailed below.

Categories of Values		
Value Category	Relevance to Site	Examples
International	Europe	An internationally important site (e.g., Special Protection Area (SPA), Special Area of Conservation (SAC), RAMSAR (or a site proposed for, or considered worthy of such designation)); A regularly occurring substantial population of an internationally important species (listed on Annex IV of the Habitats Directive).
National	Wales	A nationally designated site (e.g. Site of Special Scientific Interest (SSSI), or a site proposed for, or considered worthy of such designation); A viable area of a habitat type listed in Annex 1 of the Habitats Directive or of smaller areas of such habitat which are essential to maintain the viability of a larger whole; A regularly occurring substantial population of a nationally important species (e.g. listed on Schedules 5 & 8 of the Wildlife and Countryside Act 1981 (as amended) (Ref 8.2); A site where field study shows that the site would meet published SSSI Selection Guidelines.
Regional	South Wales	Areas of internationally or nationally important habitats that are degraded but are considered readily restorable; A regularly occurring, locally significant population of a species listed as being nationally scarce.
County	Cardiff	A non-statutory designated site (e.g., Local Wildlife Site (LWS) or a site listed on the Ancient Woodland Inventory (AWI)). A site where field study shows that the site would meet published county LWS selection criteria. Viable areas of priority habitat identified in the WLBAP where protection of all areas of that habitat is a published target; A regularly occurring, locally significant population of a species which is listed in a County Red Data Book or WLBAP on account of its regional rarity or localisation.
District	Llanedeyrn	A site designated as a non-statutory district wildlife site. A good example of a common or widespread habitat in the local area (e.g. those listed as broad habitats on the LBAP); Habitats that are scarce in the district or appreciably enrich the district ecological resource. A

Categories of Values		
Value Category	Relevance to Site	Examples
		population of a species that is listed in the LBAP because of its rarity in the locality.
Local	Parish to site	Areas of heavily modified or managed vegetation of low species diversity or low value as habitat to species of nature conservation interest; Common and widespread species.

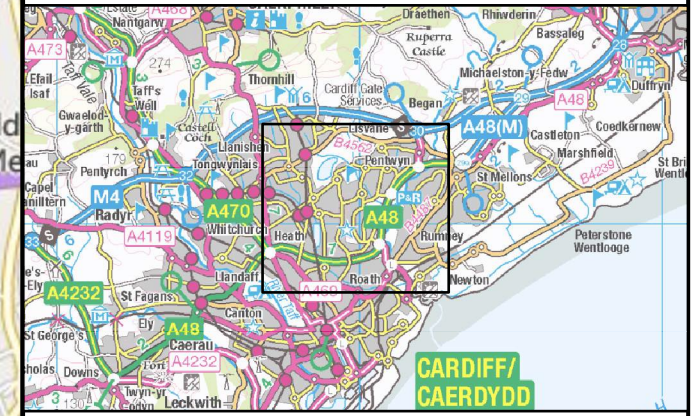
- 1.1.3 Individual species may be protected under National legislation. Such protection is relevant to the assignment of value to such species, but additional factors, such as population size and the nature of the distribution of the species are also considered. These factors affect the value of species.
- 1.1.4 The assignment of undesignated features, such as UK Priority and Section 7 habitats and species or areas of ancient woodland may not fall clearly into the designations as described above. Therefore, a number of other criteria are used to assess the nature conservation value of a defined area of land.
- 1.1.5 Some features that are currently of no particular ecological interest in themselves may nevertheless perform an ecological function. For example, they may act as a buffer against adverse effects. This affects their value.

DRAWINGS



KEY

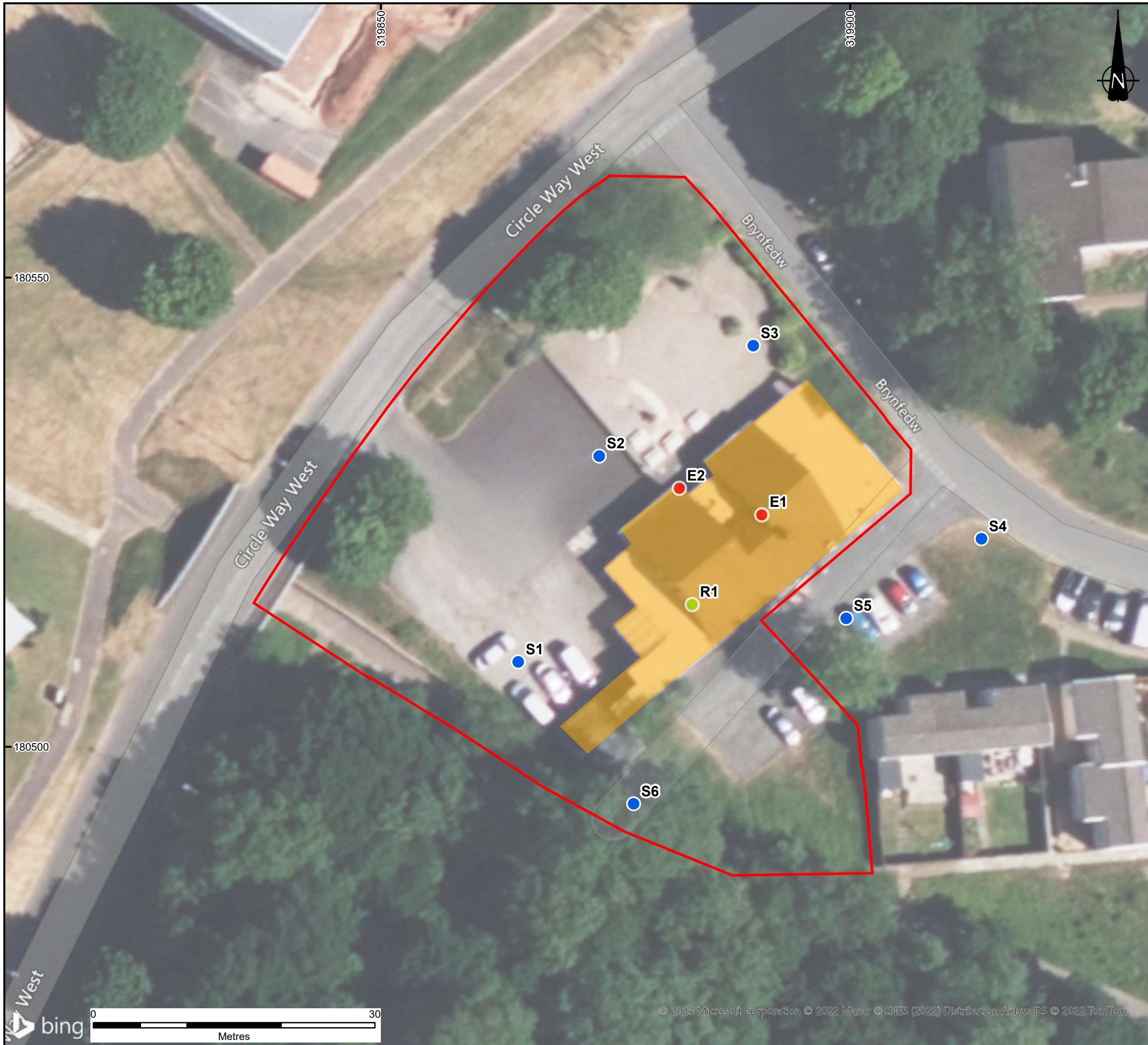
- Site Boundary
- 2km Radius



Notes:

Boundaries are indicative.
 Aerial imagery shown for context purposes only.
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A	FIRST ISSUE	5/07/2022	EL	TS	JH
REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
CARDIFF COUNCIL					
PROJECT					
NEW PENN, CARDIFF					
DRAWING TITLE					
SITE LOCATION PLAN					
DRG No.	CA12409-002	REV	A		
DRG SIZE	A3	SCALE	1:20,000	DATE	15/07/2022
DRAWN BY	EL	CHECKED BY	TS	APPROVED BY	JH



KEY

- Site Boundary
- Building with Moderate Bat Roost Suitability
- S: Surveyor Locations
- E: Bat Emergence Location
- R: Bat Re-entry Location

Notes:
 E1: 25/7/22 - 1x Common Pipistrelle
 1x Soprano Pipistrelle
 E2: 25/7/22 - 1x Common Pipistrelle
 R1: 19/08/22 - 1x Common Pipistrelle

Notes:
 Boundaries are indicative.
 Aerial imagery shown for context purposes only.

A	FIRST ISSUE	20/02/23	MAB	CK	JH
REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT	CARDIFF COUNCIL
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PROJECT	NEW PENN, CARDIFF
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DRAWING TITLE	BUILDING B1 SURVEYOR AND BAT EMERGENCE/RE-ENTRY LOCATIONS
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DRG No.	CA12409-005	REV	A
DRG SIZE	A3	SCALE	1:400
DRAWN BY	RCB	CHECKED BY	CK
DATE	20/02/2023	APPROVED BY	JH



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