



Sylvan Ecology

BAT SURVEY REPORT

HOOVER SITE,
MERTHYR TYDFIL

For:

WALTERS

Project: Hoover Site, Merthyr Tydfil		
Project Number	K001	
Title	Bat Survey Report	
Document Number	K001- Bat Report-V1.1	
Client	Walters	
Issue Date	29/09/2025	
Prepared by:	David Price - Consulting Ecologist 29/09/2025	
This report has been prepared by Sylvan Ecology, with all reasonable skill, care, and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client, and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.		
Executive summary		
Site	1The immediate surrounding landscape is mainly industrial and commercial units. In the wider surrounding area there are residential areas, fields and wooded areas. The Cardiff to Merthyr railway line is adjacent to the west of the site. The River Taff is located on the far side of the railway line approximately 30m to the west of the site boundary. The town of Merthyr Tydfil is located to the northwest.	
Protected Spp (Bats)	An internal inspection and subsequent emergence surveys were undertaken. No evidence of bats was found.	
Conclusion	Given the results of the survey, it is considered that the redevelopment of the site is unlikely to result in any impacts on bats and it is considered that an EPS Licence will not be required	

Contents

1	INTRODUCTION	4
2	METHODOLOGY	6
3	RESULTS	9
4	REFERENCES	44



1 INTRODUCTION

Background

- 1.1 Sylvan Ecology were commissioned to carry out a *Bat Survey* and desk study for a proposed development at *Hoover Site, Merthyr Tydfil*.



Ecological Context

- 1.2 The site lies approximately 2km to the southeast of Merthyr Tydfil. All associated land for the proposed development (herein referred to as the site) is located at:
- central OS grid reference: SO 05768 04156;
 - nearest post code: CF48 4TU.
- 1.3 The immediate surrounding landscape is mainly industrial and commercial units. In the wider surrounding area there are residential



areas, fields and wooded areas. The Cardiff to Merthyr railway line is adjacent to the west of the site. The River Taff is located on the far side of the railway line approximately 30m to the west of the site boundary. The town of Merthyr Tydfil is located to the northwest.

Aims of Study

1.4

The aims of the study are to:

- estimate the size and status of any existing bat roost;
- determine the potential impact on any bat roosts from the proposed works; and
- outline the mitigation strategy which will be required to minimise impact on bats within the site and to comply with any legal requirements.



2 METHODOLOGY

Desk Study

2.1 Existing ecological and nature conservation data relevant to the site were collated from various sources:

- Information relating to protected and notable species within 2 km of the site was provided by South East Wales Biodiversity Records Centre (SEWBRc) who also provided information relating to statutory designated sites;
- The Magic website (<http://www.magic.gov.uk/>) was reviewed to determine whether there are any internationally important statutory designated sites for nature conservation, and for other statutory designated sites for nature conservation, within 2km of site; and
- Google Earth was used to review aerial photographs of the application site and surrounding area in order to better understand the setting and ecological context of the application site.

Building survey

2.2 Surveys were carried out in accordance with the standards set out in *Bat Conservation Trust's Bat Surveys – Good Practice Guidelines (2023)*. The survey was conducted under optimal condition by a suitably experienced ecologist. The site was inspected by licenced bat worker David Price MCIEEM. Mr Price has 22 yrs. professional consultancy experience and has worked on a large variety of bat related projects throughout the UK.

2.3 Bright torches and ladders were used to search for bats and evidence of bats. The following signs were searched for:

- live bats;
- dead bats, as either complete or partial skeletons;
- insect remains (mainly wings & legs) below feeding perches;
- droppings;
- urine beneath roosting positions, or discolouring of entrance holes;
- scratch-marks on roofs & ceilings;
- grease or rub-marks on roofs or ceilings; and
- evidence of wear on potential access points.

2.4 Where possible, cavities, cracks and crevices were thoroughly inspected for bat evidence using a *Ridgid 40613* and/or *FLIR C2* where



appropriate.

2.5 The building was assessed for bat suitability taking into account the following general criteria:

- surrounding habitat;
- temperature regime;
- light levels;
- protection from the elements;
- construction detail;
- potential roosting locations; and
- potential bat-access points.

2.6 A description of the building was made, with particular attention to the factors listed above. Where possible, voids, cracks and crevices were noted. Information including the type of building, number and size of potential bat-roosting locations and bat-access points allows it to be categorised according to a scheme published in Bat Conservation Trust's *Bat Surveys – Good Practice Guidelines* (2023) as follows:

- **High** - Buildings or structures with numerous or extensive locations that are suitable for roosting. Generally, they have sheltered roosting places, with a stable temperature regime, low light levels and suitable bat-access points. They could be suitable for maternity roosts or hibernation sites.
- **Moderate** - Buildings or structures with few or individual, small-sized areas that are suitable for roosting. They could be used by small numbers of bats for roosting and may be suitable for a maternity roost or a hibernation roost.
- **Low** - Buildings or structures that have limited potential roosting locations, are subject to wide temperature regimes, higher light levels and/or restricted bat-access points. They might be used as occasional, transient, or night roosts, by small numbers or individual bats, but are unsuitable for larger colonies.
- **Negligible** - Buildings or structures with no bat roosting potential that are unsuitable for roosting bats.

2.7 Evidence of bats and features of particular interest were noted and described in Section 3.

Emergence survey

2.8 Best practice survey guidelines published by the *Bat Conservation Trust*



(2023) state that for buildings of moderate value to bats, the minimum visit frequency and timing is for two emergence surveys; to be conducted between May - Sep. The surveys were to assess if the features identified during the initial survey were being used by roosting bats. A total of six surveyors were used on multiple nights enabling all aspects of the building to be observed. Surveys were led by licenced bat ecologist David Price and assisted, Richard Jenkins, Gareth Price Scott Bailey, Rhys Alan and Alice Wheeler. Survey equipment included two *Echo Meter Touch 2 Pro* detectors, a *Batbox Griffin* time expansion bat recorder, an *Anabat Scout* full spectrum bat recorder and two *Elekon Batlogger Ms*. Where applicable bat echolocation calls were analysed using *Batscan*, *Anabat Insight* and *Batexplorer software*.

2.9

The survey was recorded using two *Sony FDR-AX43A* 4k night vision camcorders, two *Nikon D800* IRs, and a *Cannon XA60* night vision camcorder; these were illuminated with separate IR lamp rigs; surveyors were also equipped with *Nightfox Swift 2*, head mounted night vision goggles.



3 RESULTS

Desk Study

- 3.1 Aderyn provided 86 records for at least six species of bat within 2 km of the site, LERC Reference: 0256-437. These are common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), Greater horseshoe bat (*Rhinolophus ferrumequinum*), Lesser horseshoe bat (*Rhinolophus hipposideros*) and brown long-eared bat (*Plecotus auritus*). In addition, Aderyn also provided records of unidentified pipistrelle bat species (*Pipistrellus sp.*), unidentified Myotis species (*Myotis spp*) and unidentified bat species (*Chiroptera*).
- 3.2 The nearest bat records provided by Aderyn is located approximately 350 m from site on the Taff Trail and is for a common pipistrelle bat recorded in 2011.

Building Description

- 3.3 Multiple buildings were located within the site boundary, a breakdown of the bat suitability of the structures is detailed below.

Building 1

- 3.4 Building 1, is an art deco style brick fronted, flat roofed, office building that backs onto a corrugated steel warehouse with transparent plastic and glass panels. Though it's the same building, for the purpose of this report we're referring to the office section as 1a, and the warehouse section as 1b.

Photo 1: Overview of building 1.





3.5

Internally the offices of building 1a are in poor condition with damp throughout. There is a suspended ceiling that offers negligible opportunities for crevice dwelling bats. The building has been empty for some time and a thick layer of dust is visible showing the building hasn't been cleaned. No evidence of bats was found within the office.

Photo 2: Example of the typical office space within building 1a.



Photo 3: Uncleaned window sills with no bat evidence.





3.6

Externally the brickwork for building 1a is in relatively good condition. There were multiple areas where the roofing material had lifted to create gaps that could be utilised by crevice dwelling bats. Some small gaps were present within the brick work but likely not large enough to provide potential for roosting bats. The building is part of an area well used at night, as result it is heavily flood lit reducing its suitability for bats. Considering the size of the building and the number of possible PRFs, the building has been classified as having moderate bat potential.

Photo 4: Lifting in roof felt



3.7

Building 1b's exterior cladding has multiple gaps and damaged or missing panels throughout. There are also small brick and breezeblock storage building on the western aspect. These building are in a poor state of repair with damaged roof, broken windows and access throughout. The building is part of an area well used at night, as result it is heavily flood lit reducing its suitability for bats. The buildings are also lit internally at night.

Photo 5: Example of damaged boarding



Photo 6: Example of the brick structures adjacent to the building and further examples of the steel boarding.



3.8

Internally building 1b; the warehouse is large, open, light with water ingress throughout. The internal microclimate of the building would vary greatly, and many of the structures are damp. The brick buildings are simple storage sheds and have negligible internal roosting opportunities for crevice-dwelling bats, they also have water and light ingress and would have an unstable internal microclimate. No evidence of bats was found within any of the structures. Despite internal and external artificial lighting, the building is classified as having moderate bat potential due to its size and number of possible PRFs.



Photo 7: Overview of the buildings internal structure.



Photo 8: An example of the internal structure of one of the small storage rooms adjacent to the main building.



Building 2

3.9

Building 2 is a modern steel warehouse. The building is in good order with no visible access points or crevices. Internally there were no visible PRFs for crevice-dwelling bats, and no evidence of bats was found within the building. The building is part of a well-used area that is heavily flood lit at night, reducing its suitability for bats. Considering the size of the building its possible some PRFs may be present but not



visible; as a result it's been classified as having low bat potential.

Photo 9: overview of the external structure of building 2



Photo 10: Overview of the internal structure of building 2.



Building 3

3.10

Building 3 is a brick and corrugated asbestos workshop. The building has been permanently sealed due to asbestos contamination, as a result an internal inspection wasn't undertaken. There is significant damage to the roof and some of the windows are broke allowing access into the building. There are windows all along the roof and along the top of the walls. Consequently, the building receives ample natural light during the



day, and the damaged roof may allow moisture to enter. It's unlikely the building has a stable internal microclimate. Considering the available access to the building and the inability to conduct an internal assessment, the building is classified as having moderate bat potential.

Photo 11: Damage to the barge boards allowing possible access for bats



Photo 12: Shows how the building g has been closed for H&S reasons. The windows show the light levels from the roof lighting.



Photo 13: overview of building 3.



3.11

Building 4

Building 4 is a two storey, flat roofed office building. The southern and eastern elevations of the building feature small sections of lean-to pitched roofing above the ground floor. The lead flashing where the roof meets the exterior wall offers the potential for crevice dwelling bats. The roofs appear in good order with no visible signs of damage. There was no access available into the loft space of the small, pitched roofs. There is a crack in the wall on the western aspect of the building. The crack has negligible potential for roosting bats. Internally the offices are in moderate condition with evidence of damp. There is a suspended ceiling that offers negligible opportunities for crevice dwelling bats. The building has been empty for some time and a thick layer of dust is visible showing the building hasn't been cleaned. No evidence of bats was found within the offices. As a thorough internal inspection of the loft spaces couldn't be undertaken, as a precaution the building has been classified as having high bat potential.



Photo 14: Overview of building 4



Photo 15: The flat roof is generally in good order with negligible PRFs, the small, pitched roof has lead flashing all around offering roosting opportunities.



Photo 16: Minor damage to the small roof.



Photo 17: A crack in the wall, and inspection with an endoscope shows the crack has negligible potential for bats. An inspection was also made behind any signage; no evidence of bats was found.





Photo 18: Overview of the internal structure of the building, there is evidence of damp in the walls.



Building 5

3.12

Building 5 is a brick and corrugated metal building adjacent to the western site boundary. The building has been significantly damaged with large open gables, and damaged windows throughout. The building has asbestos contamination, and an internal inspection wasn't possible. The internal microclimate of the building would vary greatly, and the brickwork is likely damp. The building is part of an area well used at night, as result it is heavily flood lit reducing its suitability for bats. There are areas of the building that couldn't be seen externally and its possible this section may be dark at night and have more stable microclimate, as a precaution this building has been classified as having high bat potential.



Photo 19: overview of building 5, the large open gable has been highlighted, and some broken windows are clearly visible.



Photo 20: Example of the patched repair to building. There are gaps around many of the panels.



*Building 6*

- 3.13 The old water pumping station building 6 was a brick building with a felt roof. The building had cracks within the brickwork which may provide potential for roosting bats. The crack did not allow access into the building. A thorough examination of the crack was made using an endoscope and a thermal imaging camera.
- 3.14 The crack didn't extend further than is visible, there were negligible opportunities for crevice dwelling bats, and no evidence of bats was found. The crack is open from the top so it would allow water into the space further limiting any roosting opportunities. After a thorough inspection the crack is considered to offer negligible opportunities for bats.
- 3.15 Internally there are negligible opportunities for crevice dwelling bats, no evidence of bats was found. An external ventilation brick has an internal cover limiting potential access opportunities. Internally the walls have a light, oily, slickness from years of use, making the internal environment unsuitable for bats. Considering the results of the endoscope examination, the building has been classified as having negligible potential for roosting bats.

Photo 21: The crack in the exterior brickwork, open at the top.

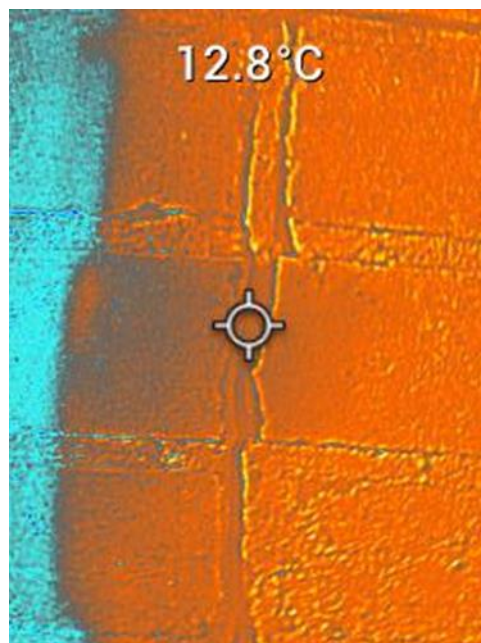




Photo: 22. The black internal bricks in contrast to the brown external bricks above are the result of a light coating of oil, making the internal environment of this building unsuitable for bats.



Photo: 23. A thermal imaging photo from the onsite inspection.



3.16

Building 7

Building 7 is a cricket pavilion to the south of the site. The building is positioned out of the industrial estate adjacent to areas of unilluminated trees and grassland. The building is comprised of wooden boards and a possibly plastic roof. The wood was rotten in many areas creating gaps



and lifted boards. Internally the ceiling is vaulted, with space between the vaulted ceiling and the roof being full of fibreglass insulation, meaning roosting opportunities through the majority of the roof are negligible. There is significant damage to soffit boxes throughout the entire building. Some of the external cladding is damaged offering roosting opportunities behind exterior cladding. The building remains unlit at night and it's possible that space behind the exterior cladding would offer a stable roosting location for a small number of bats. Due to the vaulted ceiling a thorough investigation into spaces beneath the roof couldn't be undertaken; because of this and due to the fact the building is unlit and surrounded suitable habitat, as a precaution this building has been classified as having high bat potential.

Photo 24: Shows a lift along the roofing material, offering transitional roosting opportunities for small numbers of bats.





Photo 25: Shows a hole in the exterior cladding that could allow bats too access possible roosting locations.



Photo 26: There is extensive damage to soffit boxes. Access is available for bats however it's likely the internal space is damp with little long term roosting potential.



Photo 27: Example of the rot and damp within the roof.



Photo 28: The ceiling vaulted, the insulation between the ceiling and the roof reduces the buildings suitability for bats.



Building 8

3.17

Building 8 is a reception and security office at the site entrance. The building is a single storey brick building with a flat roof. The building is in good condition with no obvious PRFs for crevice dwelling bats. The

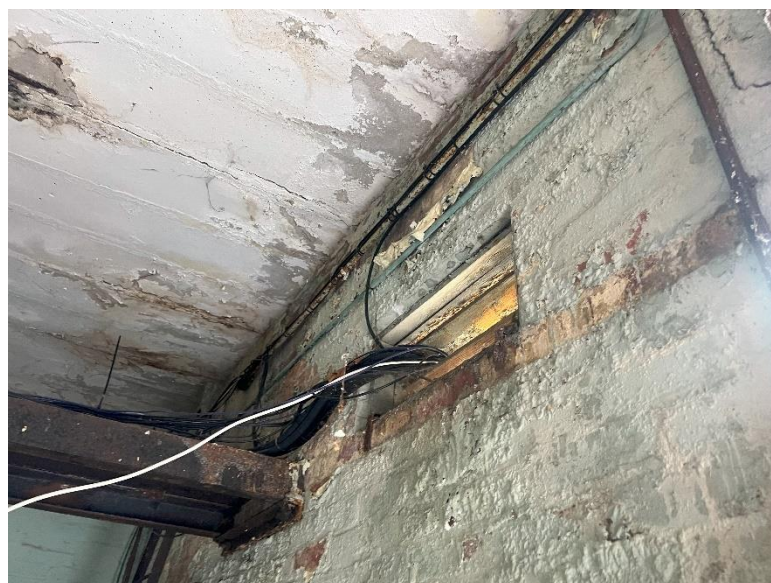


building is part of an area well used at night, as result it is heavily flood lit reducing its suitability for bats. On the western aspect of the building there is a ventilation block that allows cables to pass into a storage area. This ventilation block would allow bats to access the storage shed; however the internal structure offers few suitable roosting opportunities for bats and there is signs of damp throughout. No evidence of bats was found. Considering the possible access into the storage area, the building has been classified as having low potential for bats.

Photo 29: ventilation block on the western aspect of building 8



Photo 30: internal structure of building 8





3.18

Building 9

Building 9 is a series of single storey, flat roofed garage and storage buildings with a water tower. The buildings have large openings where ventilation blocks once were. Though access was available into the building, internally there were no visible PRFs for crevice-dwelling bats, and no evidence of bats was found within the building. The building is part of a well-used area that is heavily flood lit at night, reducing its suitability for bats. Though the building is artificially lit externally, considering the access points, the building has been classified as having moderate bat potential.

Photo 31: Overview of structure, missing ventilation bricks are clearly visible allowing unobstructed access into the building.



Photo 32: view from northern aspect, ventilation blocks are clearly visible.





Photo 33: Internally the buildings are brick walled with no visible PRFs, the walls are damp, and no evidence of bats was found.



Building 10

- 3.19 Building 10 A small single storey, single room, gatehouse near a side entrance. The room is approximately 3x3 m fully glazed on the southern, eastern and northern aspects. The building is considered to have negligible bat potential.

Building 11

- 3.20 Building 11 is a large warehouse constructed of brick and breezeblock with metal panelling. The roof is corrugated steel with skylights. Internally some of the brick windows that have been bricked up and broken creating a space for bats to roost. A tough inspection with an endoscope revealed no evidence of bats. There are void in the metal cladding that offer potential roosting opportunities for bats.
- 3.21 The building are currently in use, with internal lighting on 24hrs a day and strong floodlights at night. No evidence of bats was found within any of the structures. Considering the size of the building and the number of possible PRFs, the building has been classified as having moderate bat potential.



Photo 34: Overview of building 11.



Photo 35: The external panelling is not flush to the wall and access is available throughout.

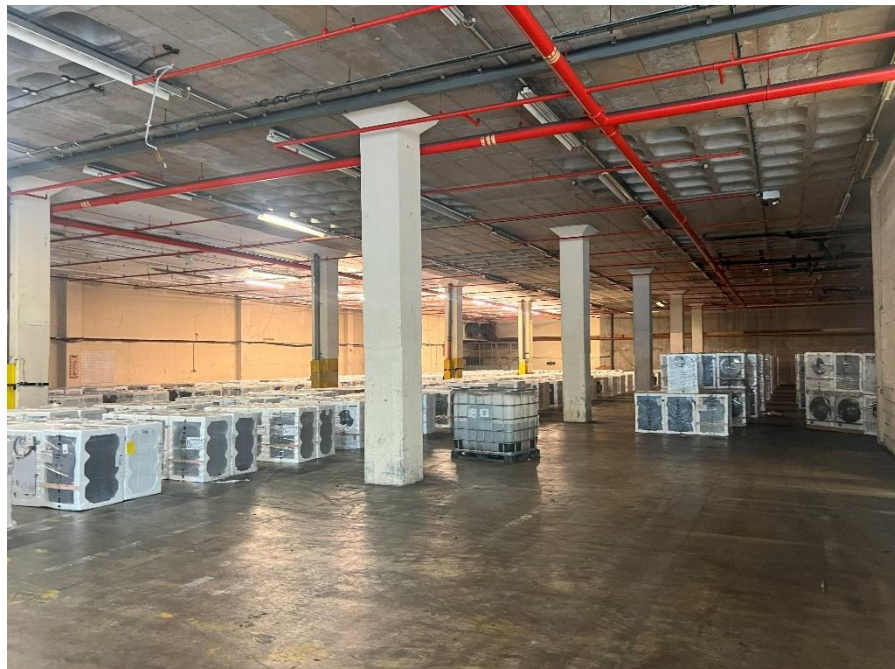


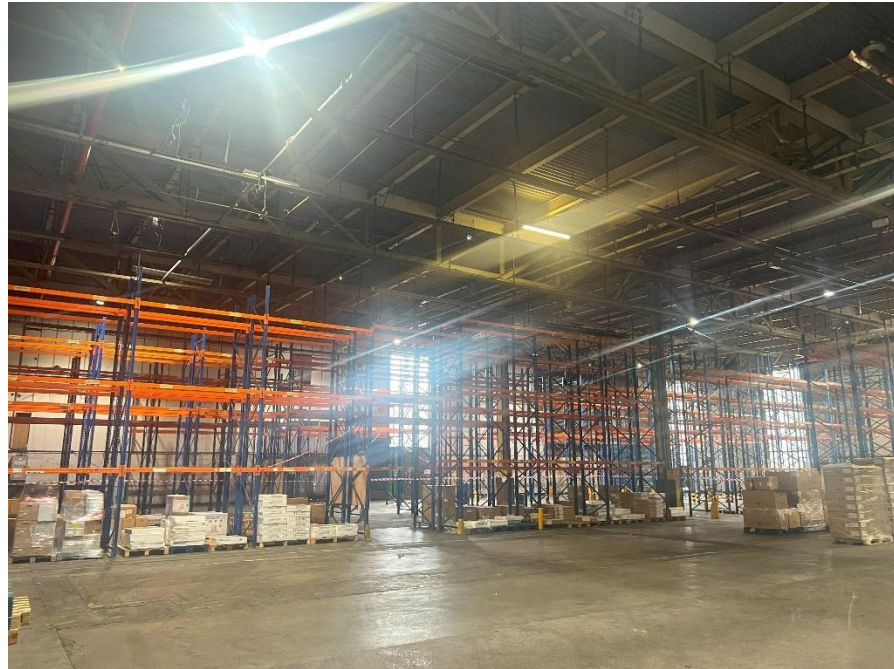


Photo 36: broken window PRFs with building.



Photo 37 and 38: Warehouse is active with internal lighting 24hrs a day.





3.22

Building 12

Building 12 is a small single storey, building adjacent to the railway. The building was in good order with no obvious access points or PRFs. As access wasn't available into the building, the building has been classified as having low potential.

**Emergence survey**

3.23 The emergence surveys didn't find any roosts within the buildings on site. Activity on site was low, likely due to the lack of good habitat and the high lighting levels. Examples of the high light levels can be seen in the stills from IR cameras presented below. More details regarding activity on site is detailed in the bat activity report.

3.24 The tables below summarise the results of the emergence surveys for each building, the location of the surveyors are detailed in *Fig 1.1*.

Building 1a emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
30 th May 2025	21.00 23:00	21:18	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building
30 th June 2025	21.10 23:10	21:33	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 1b emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
28 th June 2025	21.10 23:10	21:33	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building
16 th July 2025	21.05 23:05	21:22	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 2 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
15 th June 2025	21.10 23:10	21:31	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building

*Building 3 emergence surveys*

Date	Survey Time	Sunset Time	Conditions	Survey results
30 th May 2025	21.00 23:00	21:18	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building
30 th June 2025	21.10 23:10	21:33	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 4 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
15 th June 2025	21.10 23:10	21:31	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building
7 th July 2025	21.14 23:14	21:29	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building
25 th Aug 2025	19:50 22:00	20:13	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 5 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
23 rd May 2025	20.40 22:40	21:09	Cool 13°C, fine, no rain or wind.	No bats exited or entered the building
16 th July 2025	21.00 23:00	21:22	Warm 15°C, fine, no rain or wind.	No bats exited or entered the building
20 th Aug 2025	20:00 22:00	20:24	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

*Building 7 emergence surveys*

Date	Survey Time	Sunset Time	Conditions	Survey results
23 rd May 2025	20.40 22:40	21:09	Cool 13°C, fine, no rain or wind.	No bats exited or entered the building
16 th July 2025	21.00 23:00	21:22	Warm 15°C, fine, no rain or wind.	No bats exited or entered the building
20 th Aug 2025	20:00 22:00	20:24	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 8 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
7 th July 2025	21.14 23:14	21:29	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building

Building 9 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
23 rd May 2025	20.40 22:40	21:09	Cool 13°C, fine, no rain or wind.	No bats exited or entered the building
16 th July 2025	21.00 23:00	21:22	Warm 15°C, fine, no rain or wind.	No bats exited or entered the building



3.25

Building 10 emergence surveys

The building was assessed as having negligible bat potential; however, since an additional surveyor and camera was available one night, a single survey was nevertheless conducted on the building.

Date	Survey Time	Sunset Time	Conditions	Survey results
20 th Aug 2025	20:00 22:00	20:24	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building

Building 11 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
20 th July 2025	21.00 23:00	21:16	Warm 19°C, fine, no rain or wind.	No bats exited or entered the building
22 nd Sep 2025	18:50 20:50	19:10	Warm 15°C, fine, no rain or wind.	No bats exited or entered the building

Building 12 emergence surveys

Date	Survey Time	Sunset Time	Conditions	Survey results
20 th Aug 2025	20:00 22:00	20:24	Warm 18°C, fine, no rain or wind.	No bats exited or entered the building



3.26

Photographic evidence of findings.

The screenshots from the IR cameras are shown below; the high levels of light on site are clearly visible.

Building 1a.



Building 1b



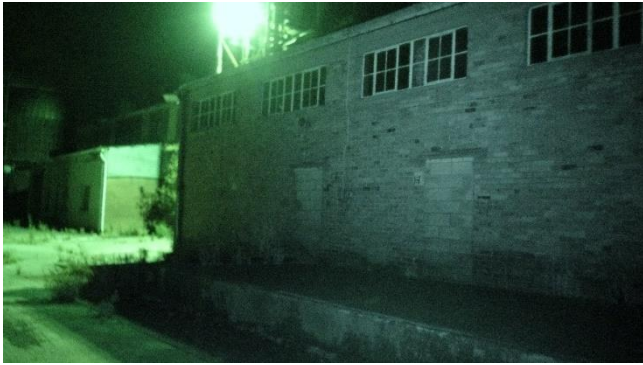


Building 2





Building 3



Building 4

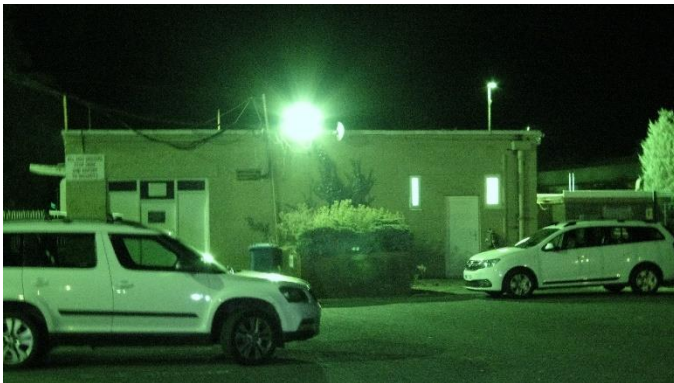




Building 5



Building 8





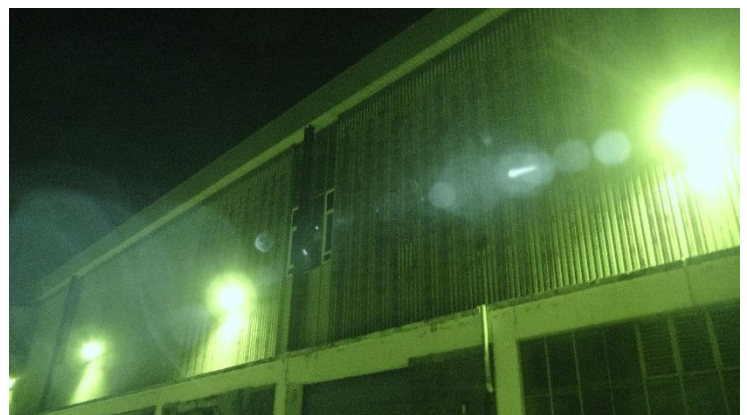
Building 9



Building 10



Building 11





Building 12





4 INTERPRETATION AND RECOMMENDATIONS

Interpretation

- 4.1 Given the results of the survey, it is considered that the redevelopment of the building is unlikely to result in any impacts on bats and it is considered that an EPS Licence will not be required. Based on the conclusion that bats are unlikely to be using the structure as a roost site, according to the "Bat Mitigation Guidelines" the impact on bats is likely to be negligible.
- 4.2 The site is considered generally unsuitable for hibernation, due to the damp, light, open nature of the buildings and the likely high fluctuations in internal microclimate.

Ecological Enhancement

- 4.3 Local Authorities have a duty (known as the 'Biodiversity and resilience of ecosystems duty') under the Environment (Wales) Act 2016 to seek to maintain and enhance biodiversity in the exercise of their functions.
- 4.4 Considering the high light levels on site, the poor condition of many of the buildings, the location of the site and its surrounding habitat, the future development of the site offers good opportunities to enhance the application sites ecological value.
- 4.5 A detailed enhancement plan is provided in the PEA report.



Tel: 07897558390

www.SylvanEcology.com

E-mail: david.price@SylvanEcology.com

BAT SURVEY MAP

Hoover

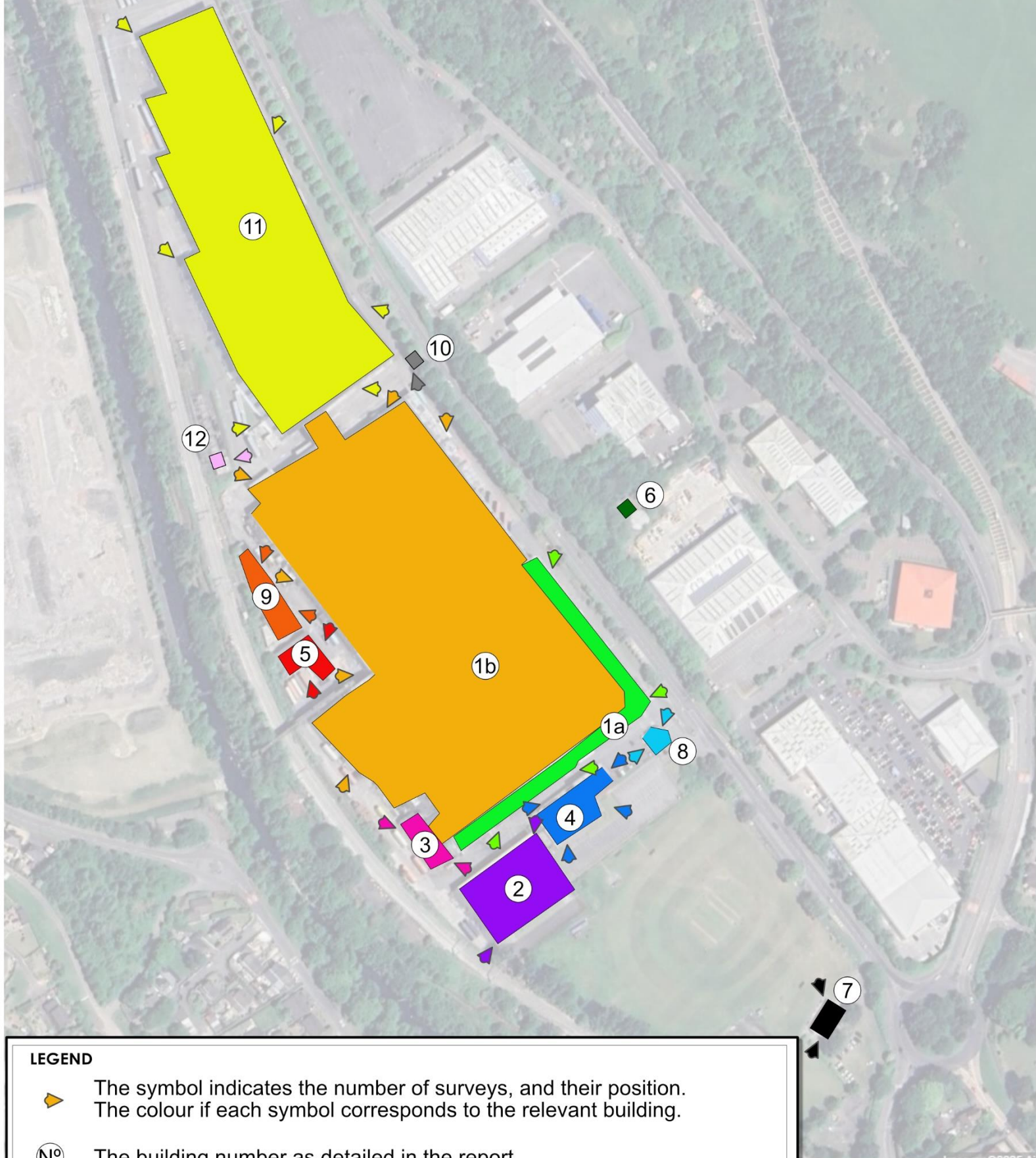
Date: Sep 25

Drawn by: D.P.

© OS open map data

Scale:

Drawing N°: v1.1



LEGEND

➤ The symbol indicates the number of surveys, and their position.
The colour of each symbol corresponds to the relevant building.

Ⓝ The building number as detailed in the report.



5 REFERENCES

Altringham, J.D. (2003) *British Bats*. Harper Collins, London.

Bat Conservation Trust, 2012. *Bat Surveys: Good Practice Guidelines*. Bat Conservation Trust, London.

Bat Conservation Trust, 2009. *Determining the potential ecological impact of wind turbines on bat populations in Britain*. Bat Conservation Trust, London.

Mitchell, A.J., 2004. *Bat Mitigation Guidelines*. English Nature, Peterborough.

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance

Bat Conservation Trust, 2021. *The National Bat Monitoring Programme Annual Report 2020*. Bat Conservation Trust, London



Ecology & Arboriculture

www.SylvanEcology.com