

Ecological Impact Assessment

Former General Hospital Merthyr

October 2023

Ecology | Green Space | Community | GIS

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CONTENTS

	Page(s)
SUMMARY	3
1 INTRODUCTION	4
2 POLICY AND LEGISLATION	6
3 METHODOLOGY	9
4 BASELINE ECOLOGICAL CONDITIONS	16
5 DESCRIPTION OF THE PROPOSED DEVELOPMENT	24
6 ASSESSMENT OF IMPACTS AND MITIGATION MEASURES	27
7 ENHANCEMENTS	29
8 MONITORING	30
9 CONCLUSIONS	31
APPENDIX 1 BAT SURVEY DATA	33

SUMMARY

Purpose of the Report	This Report has been produced by Ethos Environmental Planning on behalf of Signature Realtors Ltd. It provides an assessment of the likely ecological effects associated with the proposed renovation project of the 'Former General Hospital Merthyr.'
Description of the scheme	The development proposals for the site are for the demolition of part of the existing structure and development of residential properties.
Methodology	A structures inspection and emergence surveys for bats were undertaken for the site in May, August and September 2023.
Baseline Ecological Conditions	• The site comprised a former hospital building, in an advanced state of disrepair with surrounding hardstanding. • The structure had low potential for bats, based on the previous surveys assessment by Just Mammals Consultancy (2016) and the advanced state of dereliction seen in 2023, with otherwise suitable features exposed to the elements. • There were no bats identified emerging from the structure and only one species of bat was identified using the site during the surveys, namely common pipistrelle. • Breeding bird activity was seen on the site; with both robin and feral pigeon observed exhibiting breeding behaviours.
Mitigation and Enhancements	• To safeguard breeding birds, precautionary consideration during construction is recommended by carrying out pre-works checks of structures to be impacted. • The building does not currently support a bat roost, however precautionary mitigation has been recommended during construction works to ensure bats are safeguarded throughout this phase of the project. • New bat boxes and bird boxes could be provided on the building to provide enhancements to bats and birds.
Conclusion	• Assuming the implementation of effective mitigation measures, as set out in this report, no significant adverse ecological effects are predicted. • The proposed development is therefore in accordance with relevant national and local planning policies in relation to nature conservation and relevant wildlife legislation.

1 INTRODUCTION

- 1.1 This Ecological Impact Assessment (EclA) report has been prepared by Ethos Environmental Planning (Ethos) on behalf of Signature Realtors Ltd. The EclA was written by Kate Downes MSc BSc (Hons), Assistant Ecologist, and reviewed by Stephanie Green MSc BSc (Hons), Principal Ecologist and approved by Jim Phillips, BSc (Hons), MA, Managing Director at Ethos. The details and experience of the authors and field survey team are provided in Section 3.7.
- 1.2 The report provides the results of an EclA in relation to the proposed development of the Former General Hospital Merthyr (Central Grid Reference SO 052069), hereafter referred to as 'the site' and shown in Figure 1.
- 1.3 The development site comprises 0.24 hectares and contains one main structures, a former hospital building now in advanced disrepair.



Figure 1 Site location

- 1.4 The proposals for the site are for the redevelopment of the existing structure; with part demolition and retention of sections to be incorporated into the design of residential properties.

- 1.5 Surveys carried out by Just Mammals Consultancy (2016) and their survey report is referred to within this assessment, where they add to evidence gathered during Ethos' 2023 surveys.
- 1.6 The aims of this EclA report are to:
- provide an assessment of the likely effects of the proposed development on ecological features on site;
 - identify the measures required to mitigate impacts on site biodiversity;
 - identify opportunities to deliver ecological enhancements and measurable gains for biodiversity as part of the development proposals;
 - to enable the Local Planning Authority to assess whether the proposals comply with relevant planning policy or legislation.
- 1.7 This report has been produced following the approach set out in CIEEM's 'Guidelines for Ecological Report Writing' (CIEEM, 2017).

2 POLICY AND LEGISLATION

2.1 National Policy

2.1.1 National Policy in relation to biodiversity in Wales is set out in Section 6.4 Biodiversity and Ecological Networks in Planning Policy Wales Edition 11 (February 2021). The policy is focused around the requirement for development plan strategies, policies and development proposals to consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

2.2 Local Policy

2.2.1 Merthyr Tydfil County Borough Council adopted the **Replacement Local Development Plan (LDP) 2016-2031** in January 2020. It supersedes and replaces the adopted Merthyr Tydfil County Borough Council Local Development Plan (LDP) 2006-2021. The following policies relate to nature conservation and development:

Policy EnW1: Nature Conservation and Ecosystem Resilience

Development proposals will be required to promote the resilience of ecosystems. In particular, proposals will be required to maintain and enhance biodiversity interests unless it can be demonstrated that:

- 1) *The need for the development clearly outweighs the biodiversity value of the site; and*
- 2) *The impacts of the development can be satisfactorily mitigated and acceptably managed through future management regimes.*

Policy EnW2: Internationally and Nationally Protected Sites and Species

Development proposals likely to affect protected species will only be permitted where it is demonstrated that:

- 1) *The population size, range, distribution and long-term prospects of the species will not be significantly adversely impacted;*
- 2) *There is no suitable alternative to the proposed development;*
- 3) *The benefits of the development clearly outweigh the adverse impacts on the protected species; and*
- 4) *Appropriate, avoidance, minimisation, mitigation, compensation and enhancement measures are provided.*

Policy EnW3: Regionally Important Geological Sites, Sites of Importance for Nature Conservation, Local Nature Reserves and Priority Habitats and Species

Development proposals likely to have an adverse impact on Regionally Important Geological Sites, Sites of Importance for Nature Conservation, Local Nature Reserves, or Priority Habitats and Species will only be permitted where it can be demonstrated that:

- 1) *The need for the development clearly outweighs the conservation value of the site;*
- 2) *Adverse impacts on nature conservation features or geological features can be avoided;*
- 3) *Appropriate and proportionate mitigation and compensation measures can be provided; and*
- 4) *The development maintains and where possible enhances biodiversity and geodiversity interests.*

Policy EnW4: Environmental Protection

Development proposals will be required to demonstrate they will not result in an unacceptable impact on people, residential amenity, property and / or the natural environment from either:

- *Pollution of land, surface water, ground water and the air;*
- *Land contamination;*
- *Hazardous substances;*
- *Land stability;*
- *Noise, vibration, dust, odour nuisance and light pollution; or*
- *Any other identified risk to public health and safety.*

Where impacts are identified the Council will require applicants to demonstrate that appropriate measures have been incorporated to reduce, or minimise the impact identified to the lowest possible acceptable level. Planning conditions may be imposed or legal obligation entered into, to secure any necessary mitigation and monitoring processes.

- 2.2.2 The **Merthyr Tydfil County Borough Council Nature Recovery Action Plan (2019-2014)** replaces the previous Merthyr Tydfil Biodiversity Action Plan (2014-2019), and represents the S6 plan for Merthyr Tydfil County Borough, in accordance with Welsh Government Guidance: 'Environment (Wales) Act 2016 Part 1: Guidance for Section 6

– The Biodiversity and Resilience of Ecosystems Duty’. The objectives relating to development are as follows:

- 1) *Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels.*
- 2) *Safeguard species and habitats of principal importance and improve their management.*
- 3) *Increase the resilience of our natural environment by restoring degraded habitats and habitat creation.*
- 4) *Tackle key pressures on species and habitats.*

2.3 Relevant Legislation

2.3.1 The following pieces of legislation have been considered within this assessment with an explanation of their relevance provided.

Legislation	Relevance
The Habitats Directive (together with the Birds Directive) forms the cornerstone of Europe's nature conservation policy. It is built around two pillars: the Natura 2000 network of protected sites and the strict system of species protection. All in all, the Directive protects over 1,000 animals and plant species and over 200 "habitat types" (e.g. special types of forests, meadows, wetlands, etc.), which are of European importance. The Habitats Directive and parts of the Birds Directive are transposed into legislation by The Conservation of Species and Habitat Regulations 2017 (as amended) .	Presence of foraging bats onsite.
Wildlife and Countryside Act 1981 (as amended, including by the Countryside and Rights of Way Act 2000), which provides legislative protection for certain species. The Act also prohibits the spread of invasive plant species, as well as providing the mechanism for the designation and protection of Sites of Special Scientific Interest;	Presence of breeding birds in structures.
The Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (Section 6 Duty). This duty applies to public authorities in the exercise of their functions in relation to Wales and will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around the objectives for habitats and species.	Enhancements for biodiversity.

3 METHODOLOGY

3.1 Scope of Assessment

3.1.1 This assessment has been undertaken following the approach set out in the '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' (CIEEM, 2018). The assessment has considered 'Important Ecological Features' that are present within the 'Zone of Influence' of the project. Important Ecological Features for this project comprise¹:

- Designated nature conservation sites;
- Habitats and Species of Principal Importance for the Conservation of Biodiversity in England;
- Legally protected species; and
- Red Listed or rare species (based on Red Data Book lists, Birds of Conservation Concern and species considered to be nationally rare / scarce).

3.1.2 The Zone of Influence (Zoi) is the area over which the project could have an influence on ecological features. The Zoi is likely to vary for different features. However, in general terms the Zoi for this development proposal is considered to comprise the land within the red line boundary as well as immediate adjacent habitat features. It also includes designated nature conservation sites in the surrounding area.

3.1.3 The scope of the assessment was informed by an 'ecological walkover' undertaken in May 2023. The purpose of this was to identify the habitats on site, their potential for protected species and to establish the scope of surveys that would be required to inform a future planning application at the site.

3.1.4 The overall assessment has been informed by guidelines provided in CIEEM (2017) Guidelines for Ecological Report Writing.

3.2 Background Data Search

3.2.1 A background data search was requested from the South East Wales Biodiversity Records Centre (SEWBReC) covering bats and birds.

3.2.2 A search for statutory designated sites within 2km of the development site and granted European Protected Species (EPS) licences within 1km of the site boundary was undertaken using publicly available information (DEFRA Magic map).

¹ Box 14 in CIEEM's ECiA Guidelines (2018)

3.3 Bat Surveys

Habitats assessment

- 3.3.1 The habitats on site were assessed for their suitability to support foraging and commuting bats. This assessment was also contextualised through examination of suitable habitat and ecological features in the wider landscape and possible wildlife corridors across the proposed site following natural linear features such as hedgerows.

Preliminary roost inspection

- 3.3.2 A physical external inspection of all buildings on site were undertaken. The physical search includes a search for live animals and a search for other signs that give an indication of past or present occupancy as outlined below. In the case of bats, typical indicators include droppings (which are characteristic and can often be speciated or at least be indicative of species type), signs of staining, urine splashing, characteristic odours, and accumulations of discarded prey remains. An internal inspection was not undertaken due to safety concerns; see Section 3.5.
- 3.3.3 The search included the use of binoculars to investigate potential bat roost features.

Emergence surveys

- 3.3.4 Three emergence survey were undertaken on the structure on 10th May, 9th August and 7th September 2023.
- 3.3.5 The emergence surveys commenced 15 minutes before sunset and finished approximately 1.5 – 2 hours after sunset.
- 3.3.6 Four surveyors were positioned to view all aspects of the structure that could be safely accessed, each surveyor also used a thermal imaging camera as a survey aid. Positions are shown in Figure 2 below. Images from surveyor and camera locations are shown at photos 1 – 8.
- 3.3.7 For all three surveys, four Flir T540 thermal imaging cameras with were used and videos were recorded as non-radiometric files. The video files were transferred into standard video analysis software for later analysis.
- 3.3.8 The Flir T540 camera has a thermal resolution of 464 × 348 with a 42° lens which allows for the detection of bats up to a distance of 51m. The Flir T540 is a high quality professional thermal camera, the specification allowing for a wide coverage of the structure, which significantly reduces the numbers of surveyors required and increases the accuracy of detecting bats above that can be achieved by surveyors alone (or with less advanced NVAs).
- 3.3.9 The thermal imaging surveys were lead by Jim Phillips, a licensed bat surveyor who has attended two training courses on the use of thermal imaging cameras for bat surveys

(Wildlifetek, 2020, 2022) and considered to be 'suitably qualified' in the use of the cameras as both a survey aid and method. For these surveys, thermal imaging was used as a 'survey aid' in accordance with the Thermal Imaging Bat Survey Guidelines (Fawcett Williams, 2021).

- 3.3.10 Echo Meter Touch (EMT) bat detectors were used for the survey. All calls recorded were analysed using the Echo Meter Touch app software. All calls recorded were cross referenced to a call reference collection library of known bat species to confirm species presence.



Figure 2 Location of surveyors during emergence survey



Photo 1: Position 1 (Thermal image)



Photo 2: Position 1



Photo 3: Position 2 (Thermal image)



Photo 4: Position 2 (image)



Photo 5: Position 3 (Thermal image)



Photo 6: Position 3



Photo 7: Position 4 (Thermal)



Photo 8: Position 4

3.4 Bird Survey

- 3.4.1 The bird survey included an assessment of the habitats on site for their potential to support protected and notable species of bird as well as their potential to support breeding birds.
- 3.4.2 The externals of the building were inspected for evidence of nesting birds during the structure inspection.

3.5 Limitations

- 3.5.1 The structure on site was in a very poor condition, with collapsing roof features, fallen debris and trip hazards. A risk assessment was undertaken which determined it was not safe for the surveyors to enter the building to undertake an internal inspection. Furthermore, it was assessed that surveyors would not be able to access the areas inside the protective boundary hedges fencing for night time surveys due to potential risk from falling debris, trip hazards and an element of anti social behavior that was present on site.
- 3.5.2 Due to the above issues it was not possible to complete an internal structures survey, not safe to leave static bat monitoring equipment on site and night time surveys had to be undertaken from outside of the site. It was also not possible to safely access the northern aspect of the structure, so this part of the building has not been surveyed in detail. It will also not be possible to carry out a hibernation check for bats for safety reasons.
- 3.5.3 An initial emergence survey was undertaken in May 2023, and this proved problematic with surveyors encountering anti-social behaviour which caused concerns for safety of surveyors and the expensive equipment being used. At this point, an initial decision was made to cease surveys as the client also wanted to submit the planning application at this time.
- 3.5.4 Following on from this, and as the project progressed, the client agreed that extra resources could be made available to ensure that additional security could be provided to accompany the ecologists on site. This enabled two additional surveys to be completed in August and September 2023. These surveys were subject to the same previous limitations (i.e. no internal access to buildings or courtyards), but did allow the surveyors to stay on site for a longer period of time and safely use the thermal imaging cameras.
- 3.5.5 The previous bat surveys at the site in 2016, undertaken by Just Mammals also encountered issues with safely accessing the building. The building has deteriorated in the intervening period and is now significantly more unsafe than 2016. The surveys in 2016 did not record any roosting bats.
- 3.5.6 Overall, considering the limitations to the survey, it is considered that a pragmatic and proportional approach has been undertaken to survey effort and methodology, particularly in light of the 'context' of the building in an urban environment with high levels of municipal street lighting which reduces the potential of the structure for roosting bats.

3.6 Evaluation of Ecological Features

- 3.6.1 In line with CIEEMs guidelines on EcIA, this assessment has focused on relevant Important Ecological Features. The scale of importance of these features has been

determined based on available contextual information, which for this project are considered to include:

- **International** – of internationally and protected through international legislation;
- **National** – of importance in Wales and protected through national legislation;
- **County** – of importance to the county (Mid Glamorgan) but not sufficiently important to warrant 'National' scale of importance; and
- **Local** – of importance to the local area (Merthyr Tydfil), but not sufficiently important to warrant County scale of importance.

3.6.2 Potential impacts on Important Ecological Features are identified and assessed; likely significant effects are those likely to result in a change to the conservation status of a habitat or species population or undermine/support nature conservation policy. Mitigation measures have been devised following the mitigation hierarchy; appropriate mechanisms for securing mitigation measures have been identified.

3.7 Personnel

3.7.1 The qualifications and experience of the surveyors for the project are provided at table 1.

Table 1 Site surveyors

Ecologist	Position	Qualifications/ Licences	Experience	Surveyor Activities
Jim Phillips	Managing Director	MSc BSc (Hons), MA, MCIEEM NE: Class 2 Bat Licence Registered on BLICL and level 2 Earned Recognition NRW bat license Class 1 GCN Licence	Jim's experience in ecology covers a wide range of projects and clients and his focus is on interpreting relevant policy and legislation to ensure projects are delivered efficiently and meet the needs of the client. He holds survey licenses for bats and great crested newts in England and Wales and is a registered consultant on Natural England's Bat Low Impact Class License (BLICL) and holds a level 2 accreditation on the Bat Earned Recognition scheme	Report review Emergence survey
Kane Burchill	Senior Ecologist	Level 2 Certificate and Diploma in Work-based Environmental Conservation Tree Climbing and Rescue, City and Guilds NPTC Level 2 Award (206 and 306)	Kane has over nine years' experience in ecological field survey and consultancy. As an Senior Ecologist with Ethos; Kane is responsible for leading and undertaking comprehensive habitat assessments protected species surveys and is a	Project management and bat survey.

Ecologist	Position	Qualifications/ Licences	Experience	Surveyor Activities
		ACIEEM Class 1 Bat Licence (NE) Class 1 Hazel Dormouse Licence (NE) Class 1 GCN Licence (NE)	licenced bat, GCN and dormouse worker.	
George Clutterbuck	Senior BNG Consultant	Level 2 Certificate and Diploma in Work-based Environmental Conservation Level 2 Certificate and Diploma in Work-based Environmental Conservation	George has over seven years' experience in ecological field survey and consultancy. George is responsible for undertaking comprehensive habitats and protected species assessments. Much of his time is spent digitising using GIS software to achieve Biodiversity Net Gain.	Bat survey.
Sarah Roberts	Assistant Ecologist	MSc, BA, Qualifying CIEEM Class licence WML-CL29 To survey for barn owl (<i>Tyto alba</i>)	Sarah has over three years' of consultancy and biodiversity project management experience. Sarah assists with fieldwork and report-writing for habitats and protected species. She specialises in ornithology and ecological provisions for urban developments.	Structures inspection and bat survey.
Kate Downes	Assistant Ecologist	MSc, BSc (Hons) Qualifying CIEEM	Kate is an assistant ecologist at Ethos with a special interest and relevant field survey experience in ornithology. Kate assists with fieldwork and report-writing for habitats and protected species.	Report author, structures inspection and bat survey.

4 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory designated sites

- 4.1.1 There are two statutory designated sites present within 2km of the site, which are shown in Figure 3 below.

Cwm Taf Fechan Woodlands

- 4.1.2 Cwm Taf Fechan Woodlands is a Local Nature Reserve (LNR) and Site of Special Scientific Interest (SSSI) and is located 1.6km north-east of the development site. The site comprises an area of ancient, broadleaved woodland with the River Taf Fechan running through a steep valley of Carboniferous limestone and calcareous grasslands. The valley is one of the best recorded sites for bryophytes in Glamorgan.

- 4.1.3 Cwm Taf Fechan Woodlands (LNR/SSSI) is of County Importance for nature conservation, in line with its designation. There are no functional habitat links from the development site to the designated site and there is sufficient distance between them, therefore there are assessed to be no impacts on the LNR/SSSI. Cwm Fat Fechan Woodlands is not considered further in this assessment.

Cwm Glo a Glyndyrys

- 4.1.4 Cwm Glo a Glyndyrys is a Site of Special Scientific Interest (SSSI) and is located 1.4km south-west of the development site. The site comprises extensive areas of marshy grassland, species-rich neutral grassland and acid grassland. In particular, the site is of scientific interest for its diverse assemblage of grassland fungi, including 32 species of waxcap *Hygrocybe spp.*, making it one of the best sites in Britain.

- 4.1.5 Cwm Glo a Glyndyrys SSSI is of County Importance for nature conservation, in line with its designation. There are no functional habitat links from the site to the SSSI and the development site is a sufficient distance away from the SSSI, therefore there are assessed to be no impacts on the SSSI. The SSSI is not considered further in this assessment.

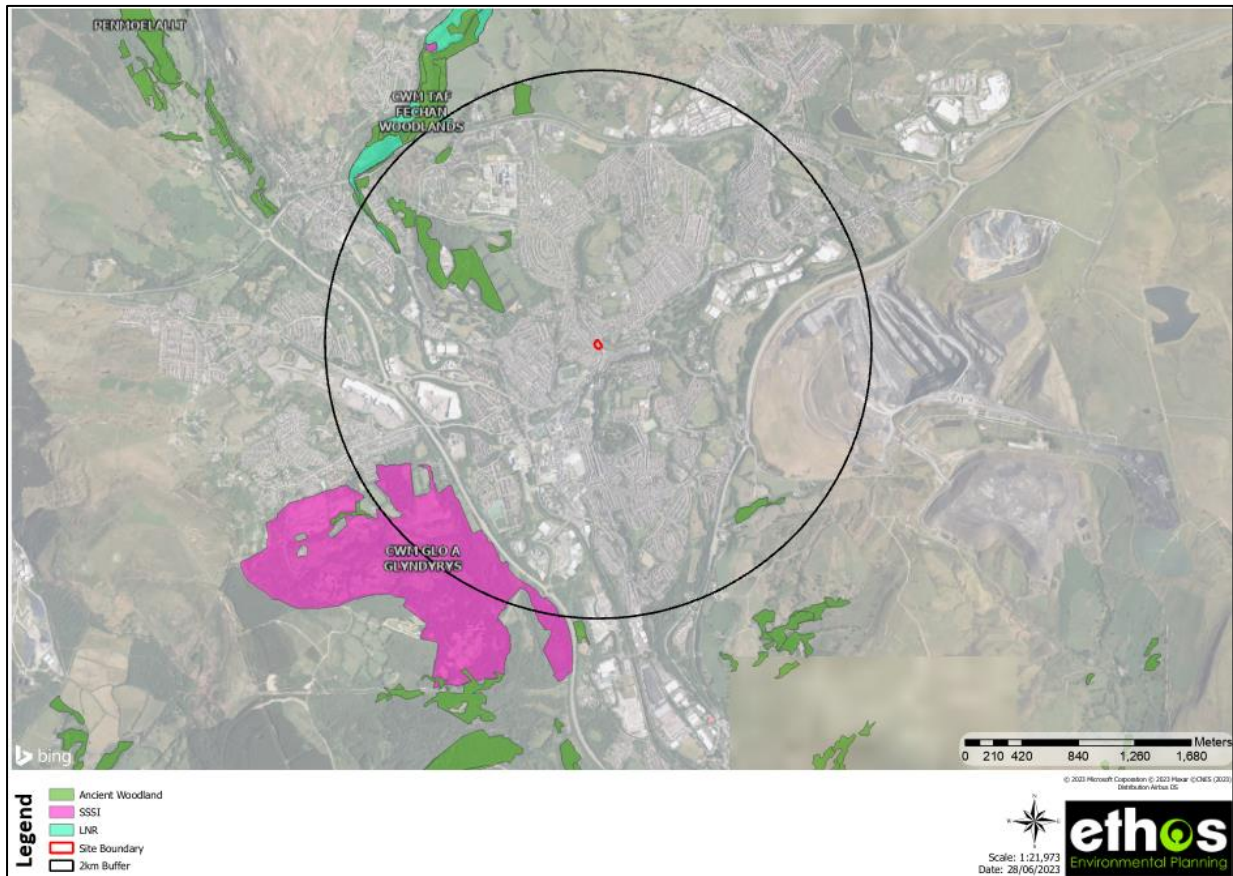


Figure 3 Statutory designated sites within 2km of the site

4.2 Protected Species

- 4.2.1 The data search returned a number of records of bats and birds, the location of which are shown at figure 4. Bats within the data search include Brown Long Eared bat, Common Pipistrelle, Daubenton's Bat, Greater Horseshoe Bat, Lesser Horseshoe Bat, Myotis Bat species, Natterer's Bat, Noctule Bat, Serotine and Soprano Pipistrelle.
- 4.2.2 The closest records (within 200m) were Common Pipistrelle and Soprano Pipistrelle, although none of these were roosting.
- 4.2.3 The nearest bat roost record was 358m, a common pipistrelle in 2003.
- 4.2.4 Moving beyond this the nearest void dwellings bat species recorded roosting (which could use a structure of this nature) were brown long eared bat (414m) and lesser horseshoe bat (414m) both recorded in 2019.

Species Map

Species records are mapped below. Records are mapped as centred points (centre of grid reference polygon).

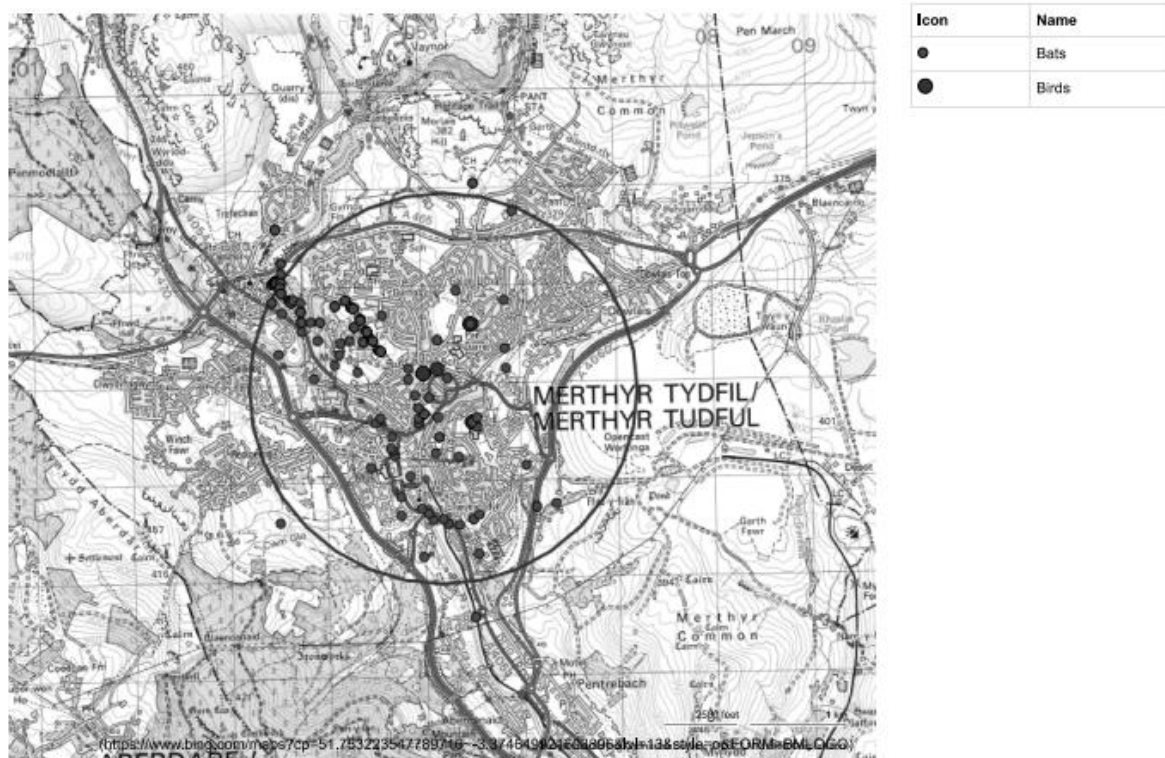


Figure 4 Bat and Bird records from the data search

4.3 Habitats

General site description

- 4.3.1 The site comprises a semi-derelict former general hospital, located immediately within a residential area, with three residential streets curving around the site boundary; Alexandra Road, Gwaelodygarth Road and the High Street. The wider area is built-up, with the site situated a short distance north from the town centre, in the middle of three major roads; the A465 to the north, the A4060 to the east and the A470 to the west.

4.4 Bats

Habitats

- 4.4.1 The former hospital structure is set within an area of hardstanding with a low stone wall and wrought iron fencing. There is minimal vegetation present, with individual buddleia (*Buddleja davidii*) growing out from the roof in places and ivy (*Hedera helix*) present on parts of the external walls. Within the central courtyard and adjacent to the structure's northern and eastern elevations, overgrown areas of buddleia and bramble (*Rubus fruticosus*) are present and there is a small group of leylandii on the southern

boundary. The habitats onsite offer very low potential foraging opportunities for bats, however residential gardens in the immediate area may offer additional limited foraging opportunities for a range of bat species. There are no suitable features onsite for commuting bats to utilise and there are high levels of municipal street lighting in the streets surrounding the building. Overall, the site is assessed to have very low potential for foraging and commuting bats.

Structures inspection

- 4.4.2 The survey area comprised one main structure (Figure 5) and is described in relation to its potential for bats below.



Figure 5 Assessment of structure's potential for bats

Main structure

- 4.4.3 The former hospital comprises separate, rectangular wings, set around a central courtyard (Photos 1-8). It is a two-storey, brick-built structure, with decorative turret style projections and frontage features. The structure is sloped to the south-east, resulting in the ground floor level at the rear becoming the first-floor level at the front.
- 4.4.4 There are a series of roof structures which are pitched, timber framed and slated. Additionally, there are some flat roofed sections. The roof structures are present in varying heights and sizes with vents and skylights present. In some parts, the roof is still intact, however several areas on the southern, western and eastern elevations

show missing slate tiles and areas where the roof voids are exposed due to roof collapse (Photos 9-13).

- 4.4.5 Several windows and doorways are open (Photo 4, 9 & 14-16), where timber security boarding has been partly or wholly removed. Overall, the structure shows signs of gaps around window frames and doors, as well as in the brickwork. **No evidence of bats** was identified during the structure inspection.
- 4.4.6 Given that the previous bat survey and structural inspection by Just Mammals Consultancy (2016) found no evidence of bats using the structure and reported that the building was already in advanced states of disrepair, the structure is assessed as having **low potential** for roosting bats. However, due to limitations with regards to surveying the building (see section 3.5), three emergence surveys were undertaken on the structure.



Photo 9 Front (south-eastern) elevation



Photo 10 Front (southern) elevation



Photo 11 Western elevation



Photo 12 Western elevation



Photo 13 Eastern elevation



Photo 14 Eastern elevation



Photo 15 Northern elevation



Photo 16 Northern elevation



Photo 17 Missing tiles on southern elevation



Photo 18 Missing tiles on western elevation



Photo 29 Missing tiles on eastern elevation



Photo 20 Missing tiles on eastern elevation



Photo 21 Missing tiles on eastern elevation



Photo 22 Open window on eastern elevation



Photo 23 Open window on eastern elevation



Photo 24 Open window on eastern elevation

Emergence surveys

4.4.7 Details of the bat survey results including environmental variables are provided at appendix 1. The following section provide a summary of the surveys.

Survey 1: 10th May 2023

- From all four surveyor positions, no bats were seen emerging from the structure.
- Only one species of bat was recorded using the site; common pipistrelle (*Pipistrellus pipistrellus*). The species was recorded in very low numbers, with a maximum count of three individuals observed throughout the survey.

9th August 2023

- From all four surveyor positions, no bats were seen emerging from the structure.
- Only one species of bat was recorded using the site; common pipistrelle (*Pipistrellus pipistrellus*). The species was recorded in very low numbers, with a maximum count of four individuals observed throughout the survey.

7th September 2023

- From all four surveyor positions, no bats were seen emerging from the structure.

- Only one species of bat was recorded using the site; common pipistrelle (*Pipistrellus pipistrellus*). The species was recorded in very low numbers, with a maximum count of two individuals observed throughout the survey.

Summary

- 4.4.8 There were no bats observed emerging from the structure. The building is assessed to not currently support roosting bats, however, easy access into the damaged roof structure may mean occasional day roosting could occur. To avoid impacts on bats which may arise if the structure becomes occupied by bats prior to construction, mitigation during demolition will be required. Requirements are described further in Section 6 to safeguard bats during works.

4.5 Birds

- 4.5.1 The former hospital structure offers nesting opportunities for a wide range of bird species, in addition to vegetation onsite including more mature stands of buddleia, denser areas of bramble and Leylandii trees. These vegetative habitats also provide some limited opportunities for foraging birds.
- 4.5.2 Several species of bird were observed onsite during the May 2023 surveys, which are likely to be nesting. A robin (*Erithacus rubecula*) carrying food was observed entering a metal grate on the south-western corner of the building and a large flock of feral pigeon were seen entering and exiting via the collapsed roof on the southern elevation. Blackbirds (*Turdus merula*), house martin (*Delichon urbicum*) and swifts (*Apus apus*) were all also seen foraging around the structure, the latter two being Birds of Conservation Concern (BoCC) Red listed species.
- 4.5.3 Other birds recorded during the May 2023 visit also using the site, included swifts (*Apus apus*), a Birds of Conservation Concern (BoCC) Red listed species.
- 4.5.4 As the proposals are limited to the renovation of the building, impacts on the assemblage of birds present on site is not considered likely. Birds will be only discussed further in this assessment in relation to precautionary mitigation during construction, due to the limited impact on habitats within the red line boundary.

4.6 Summary

Table 1 Important ecological features

Important Ecological Features	Scale of Importance
Bats	Precautionary
Birds	Precautionary

5 DESCRIPTION OF THE PROPOSED DEVELOPMENT

- 5.1 The development proposals comprise the part-demolition of the existing structure, its renovation and overall creation of residential dwellings.
- 5.2 The layout of the development has been developed to minimise impacts on site ecology as follows:
- The construction footprint is limited to the existing building and hard standing, which is not of importance for nature conservation.



Figure 6 Development proposals



Figure 7 Proposed plan view of eastern elevation



Figure 8 Proposed plan view of western elevation

6 ASSESSMENT OF IMPACTS AND MITIGATION MEASURES

6.1 Bats

Construction impacts

6.1.1 The former hospital building was assessed as having low potential for roosting bats. Precautionary measures have been recommended to avoid impacts on potential roosting bats during construction, as detailed below:

- Pre-works check for bats by a licensed ecologist, who will identify the presence of bats.
- Soft demolition of suitable bat features on buildings, comprising potential slipped tiles, under the supervision and guidance of the licensed ecologist.

6.1.2 Overall, with the implementation of precautionary mitigation during construction, no significant effects are predicted on bats as a result of development.

6.2 Birds

Construction impacts

6.2.1 The former hospital building was assessed as providing nesting opportunities for feral pigeon and robin. Precautionary measures will be required to avoid impacts on nesting birds during construction, as detailed below:

- Where possible, renovation works and any vegetation removal should take place outside of the breeding bird season (March to August inclusive).
- If this is not possible, the building should be subject to a pre-works check for nesting birds by a Suitably Qualified Ecologist (SQE), who will identify the presence of any active nests.
- The SQE will set up exclusion zones around the active nests, with no works being undertaken within the exclusion zone until the chicks have fledged.

6.2.2 Overall, with the implementation of precautionary mitigation during construction, no significant effects are predicted on birds as a result of development.

6.3 Summary

6.3.1 A summary of the predicted significance of any effects, as well as the proposed mitigation/ compensation measures and how these may be secured are outlined in Table 2.

Table 2 Summary of significance of effects and mitigation/compensation

Ecological Feature	Mitigation	Mechanism for securing delivery	Residual Effects
Bats	- Pre-works check by a licensed ecologist. - Soft demolition of suitable bat features under ecological supervision.	Recommendations within this EclA subject to compliance condition.	N/A
Birds	Timing of renovation works and vegetation removal to avoid nesting bird season, or pre-works check by SQE.	Recommendations within this EclA subject to compliance condition.	N/A

6.4 Cumulative Effects

6.4.1 As no likely significant effects have been identified as part of the works, it is predicted that there will also be no cumulative effects.

7 ENHANCEMENTS

7.1 Protected Species

7.1.1 The proposals could include several provisions for protected and notable species which are as follows:

- Four Schwegler bat tubes to be installed on a sunny and sheltered elevation, suitable for crevice-dwelling species such as pipistrelle bats, which were the only recorded species on site.
- Three swift bricks to be installed together on a sunny elevation, as this species was observed foraging on the site.

8 MONITORING

- 8.1 The mitigation measures set out in Section 6 which will be supervised by the SQE and licensed ecologist will be recorded as a 'site note' and if required, made available to the LPA.
- 8.2 The provision of the ecological enhancements as set out in Section 7 will be subject to an ecological compliance report undertaken by the SQE.

9 CONCLUSIONS

- 9.1 The structure inspection identified the former hospital to contain low potential for bats, with the subsequent emergence surveys determining that the building does not currently support roosting bats. As the building could potentially be used as a roost prior to construction, due to the presence of bat features, mitigation for the construction phase has been recommended.
- 9.2 Mitigation measures for bats have been provided, which is focused on avoiding impacts during the demolition and construction phase of the development.
- 9.3 Mitigation measures for birds have been provided, which focus on avoiding impacts during the construction phase.
- 9.4 The mitigation and enhancement measures described could be secured by way of appropriately worded planning condition relating to compliance with the recommendations of this EclA. The proposed development is therefore in accordance with relevant national and local planning policies in relation to nature conservation and relevant wildlife legislation, as set out in Section 2.
- 9.5 The enhancement measures proposed will allow the proposed development to support Policy EnW1 Nature Conservation and Ecosystem Resilience of the Merthyr Tydfil County Borough Council adopted Replacement Local Development Plan, which relates to development proposals seeking to promote the resilience of ecosystems and enhance biodiversity interests.

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APPENDIX 1 BAT SURVEY DATA

The following section details the results of the bat survey at the site. Codes used in the description of bat species are as follows:

CP - Common pipistrelle (*Pipistrellus pipitrellus*)

A summary of the bat emergence survey is included below, and the environmental variables recorded during the surveys are shown in Table 3.

Table 3 Emergence surveys environmental variables

Date	10/05/2023		09/08/2023		07/09/2023	
Sunset/Sunrise	20:51		20:48		19:47	
Start / End time	20:36	22:21	20:30	22:45	19:30	21:45
Temperature (°C)	11	10	19	17	21	20
Humidity (%)	84	89	84	83	90	91
Cloud cover (oktas)	7/8	7/8	3/8	3/8	1/8	0/8
Avg. Wind speed (m/s)	3	3	4	3	2	1
Rain	During		None		None	

Survey 1: 10th May 2023 (sunset 20:51)

Position one (P1)

No bats were recorded throughout the survey.

Position two (P2)

21:30 - CP commuting south-west to north-east over the building.

No bats emerged from the structure. Activity was very quiet with no notable activity.

Position three (P3)

21:14 – CP commuting over the structure towards position from the west.

No bats emerged from the structure. One bat recorded for the entire survey, which was a commuting CP.

Position four (P4)

21:15 – CP pass heard not seen.

21:20 – CP pass heard not seen.

21:22 – CP pass heard not seen.

No bats emerged from the structure. Three instances of CP pass but heard and not seen. Very low activity.

Survey 2: 9th August 2023 (sunset 20:48)

Position one (P1)

21:46 Single CP heard but not seen off site.

No bats emerged from the structure.

Position two (P2)

21:40 CP brief pass south of site.

Position three (P3)

21:55 CP heard south of site.

22:11 CP heard south of site.

No bats emerged from the structure.

Position four (P4)

No bats recorded throughout survey.

Survey 3: 7th September 2023 (sunset 19:47)

Position one (P1)

No bats were recorded throughout the survey.

Position two (P2)

20:43 - CP commuting south-west to north-east over the building.

No bats emerged from the structure.

Position three (P3)

20:47 CP in brief foraging in trees south of site.

No bats emerged from the structure.

Position four (P4)

No bats were recorded throughout the survey.