A Preliminary Ecological Appraisal, Bat Survey Report
And Green Infrastructure Statement

on behalf of
Mr Chris Wreford

for
Former Salvation Army Building
Perrott Street
Treharris
Merthyr Tydfil
CF46 5P

Produced by: Little Wing Ecology CYF (A Not-for-profit Company Limited by Guarantee)
Company no: 13743223
Address: 24 Alma Street, Brynmawr, Blaenau Gwent, NP23 4DY
Email: nic@littlewingecology.cymru
Telephone: 07985 395251

Project Overview

Client	Mr Chris Wreford
Site / Job	Former Salvation Army Building, Perrott Street, Treharris, CF46 5P
Report Type	A Preliminary Ecological Appraisal, Bat Survey and GIS
Report Reference	LT285-PEA/BAS-24
Grid Refence	ST 09909 96980

Versioning and Quality Assurance

Status	Date	Author(s)	Reviewed by
Draft	18.06.2025	Nic Aldridge	Yvette Amos
Version 1	18.06.2025	Nic Aldridge	Sam Haycock

Limitations

Little Wing Ecology (CYF) has prepared this Report for the sole use of the above-named Client or their Agents in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of Little Wing Ecology (CYF).

The assessments made assume that the site(s) and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Little Wing Ecology (CYF).

Executive Summary

The owners of the 'Former Salvation Army Building, Perrott Street, Treharris, CF46 5P,' are preparing a planning application for Merthyr Tydfil County Borough Council, (the local authority) for conversion of the building into 10 residential units (apartments). To support the planning application, Little Wing Ecology (CYF) was commissioned to undertake a Preliminary Ecological Appraisal Report, Bat Survey and Green Infrastructure Statement. This was undertaken between the May and June of 2025.

The preliminary ecological appraisal was undertaken in accordance with standard phase 1 habitat techniques and following national guidelines for preliminary ecological appraisals (2nd Ed, 2017). This included a desktop study and field survey. In addition, a preliminary roost assessment and daytime bat walkover was conducted in accordance with the "Bat Conservation Trust's good practice guidelines (4th Edition, 2023)."

The site comprises an area of disturbed land that has been cleared as part of on-going development and is composed predominantly of bare ground and stone (hardcore). The site's centre has a National Grid Reference (NGR) ST 09909 96980 (Appendix A), at an altitude of 148m above Ordnance, the site is dominated by a derelict, four-storey, Victorian structure with solid stone walls and slate roof. While no statutory sites will be impacted by the proposals, the site has good connectivity east to Bargoed Tâf SINC (127 m) and a large semi natural ancient woodland.

No standing water bodies were identified on-site, and due to the recent site clearance, few opportunities remain for small mammals and amphibians, which include a lack of foraging and shelter. However, some building materials are present on site which offer limited potential as shelter (refugia).

No evidence was recorded for protected or priority species on-site during the PEA survey. Following the preliminary assessment, this report contains the results from three dusk activity surveys and 14-day internal passive survey, conducted in accordance with national survey standards during September 2025. During two dusk emergence surveys conducted between May and June of 2025, evidence was recorded of two bat species using Building A as a day roost – common pipistrelle (No2) and soprano pipistrelle (No1). Of the 99 recordings made, three species were identified foraging and commuting near the site – common pipistrelle, soprano pipistrelle and noctule. The majority of observed behaviour was for animals foraging over an adjacent amenity grassland and along the woodland edge. The vast majority of behaviour was for common pipistrelle – 76.8% of recordings were for this species.

All bat species and their places of rest are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The legal protection for bats concerns impacts from disturbance, loss of roost locations, modifications to roosts and loss of access or obstruction to roost locations. As impacts of this nature will arise during the proposed works, a European Protected Species (EPS) licence will be required from NRW before any work commences.

Birds were also considered at the same time as the bat surveys. The building supports limited features that could be exploited by nesting birds, and no active nest was identified during the survey visits. All nesting birds, their chicks' eggs and active nests are protected under the Wildlife and Countryside Act 1981 (as amended). As nesting opportunities have been identified, a precautionary approach will be required. Therefore, mitigation for bird species and general advice on the legal status of breeding birds is given in this report.

Recommendations are presented in Section Six.

Under the Natural Environment and Rural Communities (NERC) Act (2006) the planning authority has a statutory duty to have regard for the conservation of biodiversity. Details of planned site enhancements are also made in this report.

This Executive Summary is intended to provide an overview of the assessment of the proposed development site based on information received by Little Wing Ecology (CYF).

CONTENTS

List of Tables

List of Plates

Appendices

SECTION ONE: INTRODUCTION

1.1 Background

1.1.1 The owners of the 'Former Salvation Army Building, Perrott Street, Treharris, CF46 5P,' are preparing a planning application for Merthyr Tydfil County Borough Council, (the local authority) for conversion of the building into 10 residential units (apartments). To support the planning application, Little Wing Ecology (CYF) was commissioned to undertake a Preliminary Ecological Appraisal Report, Bat Survey and Green Infrastructure Statement to inform the client of any constraints, and associated planning requirements with regards to habitat and protected species, and to inform a planning application. For the purposes of this report, this will be referred to as 'the site.' This survey was undertaken in the summer months of 2025.

Following the preliminary investigations, an assessment of the likely impact of proposed works on protected and priority species at the site was carried out. This report has been prepared with recommendations for enhancement features to improve opportunities for local species post-development.

1.1.2 Following the results of a Preliminary Roost Assessment, this report contains the results from two dusk activity surveys and 14-day internal passive survey, during May and June 2025, conducted in accordance with national survey standards. The survey was carried out with the purpose of identifying the presence/likely absence of bat roosts at Building A. Following survey, an assessment of the likely impact that the proposed works will have on bat interest at the site was carried out. This report has been prepared with recommendations for enhancement features, to improve opportunities for local species post-development.

1.2 Site Description

1.2.1 Located at National Grid Reference (NGR) ST 09909 96980 (Appendix A), at an altitude of 148m above Ordnance, Building A is a derelict, four-storey, Victorian structure with solid stone walls and slate roof. The frontage of Building A is located on a main service road (Perrot Street) on the eastern boundary of the settlement of Treharris. The rear faces a green space and overlooks the Tâf Bargoed river.

1.3 Policy and Legislation

1.3.1 Under Regulations 9 (1 & 5) of the Habitat Regulations, local authorities have a duty to have regard for the requirements of the Habitats Directive. This includes maintaining populations of European Protected Species in "favourable conservation status", and potential for such protected species (for example, bats) should be considered when carrying out a preliminary assessment.

1.3.2 The framework for this protection is provided within several pieces of legislation from the Government of Wales and the UK Government. Furthermore, several pieces of legislation exist that are specifically relevant to individual species. These include:

- Conservation of Habitats and Species Regulations 2010.
- The Conservation of Habitats and Species Regulations (2017) - as amended.
- The Environment (Wales) Act 2016.
- The Wildlife and Countryside Act (1981) - as amended.
- Conservation of Habitats and Species Regulations 2017.

1.1.1 In Wales, all bat species and their roosts are legally protected, by both domestic and international legislation. This means you may be committing a criminal offence if you:

- Deliberately take, injure, or kill a wild bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a place used by bats for breeding or resting (roosts) (even if bats are not occupying the roost at the time).
- Possess, advertise, sell or exchange a bat, or part of a bat species found in the wild in the EU (dead or

alive.
- Intentionally or recklessly obstruct access to a bat roost.

1.1.2 The framework for this protection is provided within three pieces of legislation from the Government of Wales and the UK Government.

1.1.3 These are:
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019
- The Environment (Wales) Act 2016.
- The Wildlife and Countryside Act (1981) – as amended.

1.3.3 Additional information on the legal scope of these acts can be found in the Appendix, and a link to the full documentation can be found in the references and bibliography section and the Appendix.

1.4 Survey Aims and Objectives

1.4.1 Considering the legal framework and local planning requirements, the objectives have been broken down as follows:
- Assessing whether proposals are reasonably likely to impact protected species or ecologically valuable habitats,
- Using survey findings to recommend appropriate mitigation measures for safeguarding biodiversity; and,
- Proposing measures for enhancing biodiversity in line with Planning Policy Wales 12 (PPW12).

1.1.4 In addition, Bats were identified as the group of animals with the potential to be affected by the planning proposal, and in this regard the objectives of the survey were to:

- Determine the presence/likely absence of bat roost(s) at Building A.
- Determine the species of bat present.
- Determine the type of roost present (maternity, day roost etc).
- Identify any bat foraging or commuting behaviour in relation to the location.
- Consider if there will be impacts on bats from the proposed works.
- Consider if nesting birds are present which might be affected by the proposed development.
- Gather sufficient information to enable appropriate recommendations, inform mitigation and licencing.

SECTION TWO: THE SURVEY METHOD

2.1 Desktop Survey: Local Records (Methodology)

2.1.1 Prior to visiting the site, pre-existing information relevant to the location was assessed as part of a desktop survey. Good practice guidelines recommend a desktop survey to incorporate data from the local biodiversity records centre. To this end, a request was placed with the South-East Wales Biodiversity Records Centre (SEWBReC) for records of protected and priority species within the local vicinity of the development site, along with records of statutory and non-statutory sites (within 1km).

2.1.2 This data was supplemented with a search of several online resources for the 10km square containing the site. This included, but was not limited to:
- The utilisation of the Magic Map, incorporating some habitats and protected sites e.g., Special Areas of Conservation, Sites of Special Scientific Interest etc.
- Study of OS maps and aerial photography (Google Maps).
- The website of Natural Resources Wales (NRW) for details on designation reasons of protected sites.

- An assessment of known data relating to previous surveys within the vicinity of the Site (by Little Wing Ecology and others) was also carried out. Only those species records occurring within the last ten years were considered relevant, although consideration was taken of earlier records.

2.1.3 Some species, such as bats and reptiles, are considered cryptic and it can subsequently be difficult to confirm whether they are present or not. Although the provision of a Local Environmental Records Centre data search would provide a range of information; such records can only be relied upon as relative where they are reasonably recent and when supplied by an experienced ecologist. Due to the nature and proximity of the site to local habitat features, care was taken to identify foraging and commuting potential and identify connectivity with the surrounding habitat.

2.1.4 It was therefore considered necessary to undertake a detailed survey for bats regardless of the data search results, as this is most likely to be beyond the acceptability of current data as defined in BS 42020:2013 Biodiversity: Code of practice for planning and development and will not be as effective as spending time examining and/or monitoring the buildings for the presence of bats.

2.1.1 A review of aerial photography was undertaken to assess the provision of suitable foraging and commuting habitat within proximity to Building A. This information was used in combination with a review of statutory designated sites, via the Data Map Wales website, including Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) to help in confirming the presence of bat species locally.

2.2 Preliminary Habitat Assessment (Methodology)

2.2.1 A habitat assessment was made using standard phase 1 habitat techniques as the guiding principle. The surveyor(s) walked a rough zig-zag style pattern, making notes systematically and methodically of the habitat and conditions of the Site. This was then followed by a circuit/loop of the relevant site boundaries with additional notes being made where necessary. Photographs were taken of the site's boundaries along with areas of interest and areas that characterised the in-situ habitat.

2.2.2 During the survey, the potential for protected species was assessed and any signs and/or evidence of its use was noted. This included, but was not limited to:

- Nesting potential for birds at the time of the survey, with the surveyor(s) looking for signs of bird activity, nests, nest building, feeding at nest sites, and evidence of collections of bird droppings, feathers, or any other indications of use by birds.
- Features such as piles of rubble, banks or tree roots that could be used as refugia or hibernacula for reptiles and hedgehogs.
- Water bodies that could provide opportunities for amphibians and/or reptiles.
- Physical signs of other relevant species (if seen), such as droppings and/or latrines, footprints, hair, food remains or foraging marks.
- Features that could be utilised by bats e.g., hollows in trees, peeling bark etc.
- Any flora or fauna that may be endangered or protected under the Countryside Act.
- Identify potential commuting and foraging corridors, and suitable foraging sites. This enables the suitability of the site for bats to be determined.

2.2.3 A daytime bat walkover (DBW) was carried out with the aim of identifying opportunities for roosting bats / potential roosting features (PRFs) and the need for further survey and/or mitigation. During the field survey, an assessment of the habitats on-site and beyond the site boundary was undertaken. The aim of this was to identify potential commuting and foraging corridors, and suitable foraging sites. This enabled the suitability of the location for bats to be determined.

2.3 Preliminary Roost Assessment

2.3.1 A potential nest and roost assessment survey was carried out on the interior and exterior of Building A by a suitably experienced ecologist and Natural Resources Wales (NRW) licenced bat worker. The external

fabric of the structure was methodically inspected using close-focusing binoculars and a high-powered torch for identifying potential access points, such as gaps in the fabric of the building, beneath lifted roof materials or other gaps in the roof. Loose flashing, smudge marks and droppings on walls directly below eaves and gables etc were also searched for. A description of the building, including construction material and current condition was recorded. Internally, the building was searched using a high-powered torch to identify possible links to exterior roost entrances and clear signs of presence via urine staining, feeding remains, odour, piles of droppings, live bats, and bat carcasses. The space was also examined in the dark to identify areas where the presence of light would identify potential entry points for birds and bats. The aim of this survey was to determine the actual or potential presence of bats and the need for further survey and/or mitigation. During the field survey, an assessment of the habitats on-site and beyond the site boundary was undertaken. The aim of this was to identify potential commuting and foraging corridors, and suitable foraging sites. This enabled the suitability of the location for bats to be determined.

2.3.2 Nesting birds were also considered at the time of the survey, with the surveyor looking for signs of bird activity, nests, nest building, feeding at nest sites, and evidence of collections of bird droppings, feathers, or any other indications of use by birds.

2.3 Activity Surveys

2.3.1 Following the PRA and in line with guidelines set out in, 'Bat Conservation Trusts Good Practice Guidelines (Collins, J. (Ed.) (2023),' Building A was subsequently categorised for the level of risk of supporting bats, and recommendations made as to the requirement (if any) for dusk activity surveys to determine the presence/likely absence of roosting bats, species identification, population size, roost type, and the requirement for any associated mitigation. If required, dusk survey(s) for bats will be conducted no less than 21 days apart. During any subsequent activity surveys, sufficient surveyors will be required to adequately cover all features identified during the PRA. Nocturnal bat surveys can be undertaken May to mid-September, inclusive. Taking a precautionary approach, and dependent on the outcome of these surveys, additional survey work may be required; but only if higher than expected activity is recorded. Details of our surveyors and their experience is recorded in Appendix J.

2.4 Equipment (Activity Surveys)

2.4.1 The equipment used for dusk activity surveys provides high quality recordings of bat calls, which are analysed using BatSound and AnalookW software. Recordings are annotated by the surveyors to provide contextual information on bat behaviour and flight patterns. At Little Wing Ecology (CYF) we use Pettersson D240x time expansion bat detector and Tascam DR-05X Portable Digital Recorder, Peersonic RPA3B full spectrum recorders and Anabat SD2 Frequency Division detectors. As night vision aids (NVA) we use a MELCAM Video Camera Camcorder 1080P IR Night Vision Digital Camera and Nightfox Swift 2 Pro. Audio for the NVAs is supplemented by an Anabat SD2. In addition, we use Audiomoth – a full-spectrum acoustic logger, based on the Gecko processor range from Silicon Labs.

2.5 Survey Constraints and Limitations (PEA)

2.5.1 Whilst a full ecological appraisal was not undertaken at the site, a note was made of any additional ecological considerations identified during the survey. For ease of reference, these have been included within the results section of this report (Section 3).

2.5.2 No major constraints were encountered during the PEA and all habitats on site were broadly identified with confidence. However, it must be noted that this PEA assessment is not intended to confirm the presence or absence of all plant species on site. This would require a more detailed botanical assessment over multiple site visits between April and September. At any given time of year, it is not possible to identify all plant species by conducting a single visit, as different species emerge and flower at different times of the year. The sward height, management regime and weather conditions can hinder the identification of specimens. However, it is possible to classify habitats and identify many species throughout the year in

most circumstances. The baseline conditions described in this report were accurate at the time at which the survey was undertaken. Since the assessment took place during spring, it is likely that some species were not recorded. However, it does provide a comprehensive ecological assessment of habitat types and dominant species at the time of the survey and highlights areas where further survey effort would be required.

2.6 Limitations of the Survey Method (Bats Activity Survey)

2.6.1 A record was made of any constraints that limited the results of this survey report and is presented in Section 3.

SECTION THREE: RESULTS OF THE DESKTOP SURVEY

3.1 The survey location was examined by consulting Data Map Wales and other available resources. No part of the site contains, or is within, any statutory sites of nature conservation interest, such as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), National Nature Reserves (NNRs) or Local Nature Reserves (LNRs). The nearest SSSI is Nelson Bog at 1.8km to the east.

Site Name	SAC	SSSI	NNR	Relationship with the identified Species
Aberbargoed Grasslands / Glaswelltiroed Aberbargoed	X	X	X	Potential foraging habitat
Caeau Nant y Groes		X		Potential foraging habitat
Cefn y Brithdir		X		Potential foraging habitat
Craig Pont Rhondda		X		Potential foraging habitat
Gweunydd Nant y Twyn		X		Potential foraging habitat
Nant Gelliwion Woodland		X		Potential foraging habitat
Nelson Bog		X		Potential foraging habitat
Penllwyn Grasslands		X		Potential foraging habitat
Rhos Tonyrefail		X		Potential foraging habitat
Waun Goch, Penrhiw-Caradog		X		Potential foraging habitat

Table 3.1: Statutory Sites Within 10km Radius

3.2 SEWBREC's record search **(unique reference 0256-054)** reported nine SINCs within 1km.

- Afon Bargoed Taf (127m)
- Berthlwyd (202m)
- Nant Caiach (373m)
- Treharris Park & Cardiff Road Woodlands (404m)
- Coed Cefn-fforest & Cwm Cothi (505m)
- Craig Berthlwyd (703m)
- Lower Cwm Bargoed (891m)

3.3 In addition, there are several Priority Areas within 1km including 33 ancient semi natural woodlands, two restored woodlands and 4 ancient woodlands of unknown category. The site is located adjacent to several sections of ancient, semi-natural woodland. The site's eastern boundary is located <30m from an ancient semi-natural woodland. The character of these designations will inform mitigation for the site.

3.4 SEWBReC's / BIS's record search reported 1240 species records. No records were documented on or directly adjacent to this site. These are briefly summarised in the bullet list below:

- Land mammals excluding bats accounted for 54 records (i.e., 4.4% of all species records). These are for badger (2 records – between 774-787m), grey squirrel (12 record – between 137-1,502m), hazel dormouse (one unconfirmed record at 1718m), hedgehog (18records between 338-97m), and otter (12 records - between 459-1,536m).

- Bats accounted for 82 species records (i.e., 6.6% of all species records), including 17 roost records, the nearest of which are for an unidentified species at 382m, 409m and 488m, and a brown long eared roost at 442m. Several other bat species are recorded locally, including Brandt's bat (576m), brown long-eared bat (243m), common pipistrelle (243m), Daubenton's bat (618m), lesser horseshoe (1412m), Noctule (348m), and soprano pipistrelle (243m).
- Reptiles and amphibians accounted for 48 species records (i.e., 3.9%), including adder (two records between 1309-1487m), common frog (10 records between 631-1594m), common lizard (two records between 975-1010m), common toad (20 records between 731-1594m, grass snake (one record at 734m), palmate newt (one record at 949m), slow worm (11 records between 166-955m) and smooth newt (one record at 301m).
- Birds accounted for 561 species records (i.e., 45.2% of species records), 44.7% of which were for CAT1 species including the nearest records for dunnock, song thrush, house sparrow, bullfinch and swallow at 234m.
- Flowering plants accounted for 146 species records (i.e., 11.8%) including 12 CAT1 records, all of which are for bluebell (359-1394m). Sixty-eight records were returned for CAT4 species records (invasive species), the nearest of which were for Himalayan honeysuckle (116m) and Japanese knotweed (155m).

SECTION FOUR: RESULTS OF THE FIELD SURVEY

4.1 Survey Details

4.1.1 A phase 1 habitat survey and preliminary roost assessment was conducted on 23rd April 2025 by the author, and subsequently two dusk emergence surveys were conducted on 15th May 2025 and 17th June 2025. Weather conditions during the survey were recorded and these are presented below. In addition, details of the surveyor's experience are presented in the Appendix.

Date	Timings (BST)		Notes, Sunset Times	Weather Conditions		
	Start	End		Variable	Start	End
23.04.2025	10.00	12.00	PEA and PRA	Temp (°C)	15.4	15.8
				Cloud Cover (Oktas)	8	8
				Precipitation	Nil	Nil
				Beaufort Scale	F1	F1
15.05.2025	20.25	22.30	Dusk Activity Survey Sunset: 20.59	Temp (°C)	15.7	9.8
				Cloud Cover (Oktas)	3	1
				Precipitation	Nil	Nil
				Beaufort Scale	F3	F0
05.06.2025	20.50	22.05	Dusk Activity Survey Ended early due to rain Sunset: 21.25	Temp (°C)	16.1	14.4
				Cloud Cover (Oktas)	8	4
				Precipitation	Nil	Rain
				Beaufort Scale	F1	F1
17.06.2025	21.05	23.06	Dusk Activity Survey Sunset: 21.36	Temp (°C)	20.1	16.8
				Cloud Cover (Oktas)	8	8
				Precipitation	Nil	Nil
				Beaufort Scale	F0	F0

Table 4.1: Field Survey Details and Weather Conditions

4.2 Habitat and Satellite Imagery - Suitability for Commuting and Foraging

4.2.1 The site is situated within a predominantly urban landscape, with the immediate surroundings to the north, west, and south-west dominated by residential development and associated impermeable surfaces. A

network of linked residential gardens abuts the western elevation of the on-site structure, providing a degree of local habitat connectivity.

4.2.2 The eastern elevation overlooks a significant green corridor. Approximately 30 m east of the site boundary lies an area of broadleaved woodland, a portion of which is designated as Ancient Woodland. This habitat occupies the steep-sided valley slopes that descend to the Bargoed Taf river, a tributary of the River Tâf.

4.2.3 Collectively, the woodland and river system form a key ecological corridor, providing excellent connectivity to the wider landscape mosaic of wooded valleys and pastoral fields. This corridor facilitates species movement north towards Merthyr Tydfil and south towards Pontypridd.

4.3 Habitat Assessment

4.3.1 The site comprises an area of disturbed land that has been cleared as part of on-going development and is composed predominantly of bare ground and stone (hardcore). Habitats present within the development footprint have been mapped (see Appendix F), broadly following the codes and conventions described in the Phase 1 Habitat Survey Handbook (JNCC 2010). Table 4.2 below describes the on-site habitats. Photography is provided in Appendix C.

Phase 1 Habitat	Category	Field Notes
Disturbed ground (J2.5)	Miscellaneous	A small area of cleared ground at the north-east corner of the plot and a second along the eastern boundary.
Wall (J2.5)	Miscellaneous	A Victoria stone garden wall marks the boundary between the plot and the adjacent library. A block-work wall marks the boundary to the north and subdivides areas of sloping ground.
Building (J3.6)	Miscellaneous	Building A dominates the plot.
Other (J5)	Miscellaneous	One small area of concrete marks the base of the original fire escape at the southern border of the rear garden. The majority of the site has been laid to hardcore.

Table 4.2: Preliminary Habitat Assessment

Target Note(s)	Description	Field Notes
Target Note 1	Stumps	Several stumps were identified near the northern boundary of the rear garden these are likely birch (x1), ash (x1) and leylandii (x3).
Target Note 2	Japanese knotweed	One small plant was identified growing withing the disturbed ground near the eastern boundary.

Table 4.3: Target Notes

4.4 Preliminary Roost Assessment

4.4.1 A Preliminary Roost Assessment (PRA) was conducted on 23rd April 2025 by the author. Weather conditions during the survey are detailed in Table 4.1, and the surveyor's experience is outlined in the Appendix.

4.4.2 The structure is a four-storey, split-level Victorian building, accessible via a temporary Heras fence gate from a rear unclassified lane. It presents three storeys on the western elevation and four on the eastern. Constructed in the late Victorian/Edwardian era, the building features stone, brick, and lime mortar walls with a slated roof.

4.4.3 The building has sustained internal fire damage within the last 18 months, primarily affecting the western internal elevation. While the roof timbers and bitumen membrane remain intact, smoke damage likely

impacted the entire structure, including the roof. Much of the internal structure has since been removed, exposing the bitumen roof membrane to the main volume of the building.

4.4.4 Despite the fire damage, several Potential Roosting Features (PRFs) were identified within the building's fabric, offering potential access for a range of local bat species. These include:

- Northern Elevation: Four gaps behind the bargeboard, each measuring approximately 3-4cm x 20cm.
- Southern Elevation: Gaps present behind the bargeboard, which is noted to be in poor condition.
- Eastern Elevation (Rear): Multiple openings providing direct access to the interior, with various dimensions: 40cm x 40cm, twelve openings of 20cm x 20cm, 30cm x 60cm, and 120cm x 10cm. Additionally, two areas of missing or damaged fascia were observed, potentially allowing access to the bitumen membrane.
- Roof: Numerous raised and missing slates were noted across all roof elevations, including two on the western elevation measuring 5cm x 15cm.
- Visibility of the western elevation was limited during the survey.

4.4.5 Collectively, these features present opportunities for a diverse range of bat species, including crevice-dwelling species like pipistrelles, and those requiring direct flight paths into a roost, such as lesser horseshoe bats.

4.5 Evidence of Protected Species

4.5.1 No protected species were recorded during the field survey.

4.6 Reptiles

4.6.1 Neither the on-site nor directly adjacent habitats exhibit characteristics typical of reptile-associated grassland mosaics, and reptiles such as common lizards and adders are likely absent. Approximately 350m to the north, beyond an adjacent settlement boundary, the habitat opens up to one with a more upland characteristic, preferred by reptile species.

4.6.2 However, there are five local records for slow worm between 166m and 519m. The lack of vegetative cover on the site likely precludes its use by these reptiles.

4.7 Amphibians

4.7.1 No standing water bodies were identified on-site. The site is located approximately 127m west of Bargoed Tâf river. There is only one record within 500m, for smooth newt at 301m, near the river. Within 1km there are records for three additional species, common frog, common toad and palmate newt. Of these, common toads are perhaps the most well-known for their long migrations. They can travel up to 5 kilometres from their breeding ponds to their summer feeding grounds. While toads may be the most notable for long-distance travel, other amphibians, such as frogs and newts, also undertake significant terrestrial journeys. Distances of several hundred meters to over a kilometre are not uncommon. The surrounding habitat, with its grassland, and scrub mosaic, is suitable for amphibian dispersal, refuge, and foraging. There are no records for great crested newts locally. While the site is negligible, and amphibians likely absent, a cautionary approach is necessary to mitigate any risk.

4.8 Bats - Results of a Preliminary Nest and Roost Assessment

4.8.1 Photographic evidence supporting the PRA is presented in the Appendix.

4.9 Suitability for Hibernating Bats

4.9.1 No opportunities for hibernation were recorded on-site. No cellars or underground spaces were identified.

4.10 Evaluation of the Preliminary Roost Assessment

4.10.1 Taking into account the impact of the recent fire, Building A represents a structure with one or more potential roost sites that could be used due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation significance (with respect to roost type only, such as maternity and hibernation – the categorisation described here is made irrespective of species conservation status, which is established after presence is confirmed). While the adjacent urban habitat to the west proffers no significant habitat features that could be used as flight paths or by foraging bats, the rear of the plot connects directly to high-quality habitat that is well connected to the wider landscape; such as broadleaved woodland, tree-lined watercourses, that is likely to be used regularly by foraging bats. .

4.11 Conclusions of the PRA

4.11.1 Following guidelines set out in 'Bat Conservation Trusts Good Practice Guidelines (Collins, J. (Ed.) (2023)', Building A was categorised as being of moderate risk (with breeding bats not a concern), requiring a dusk survey for bats on two occasions. This represents the minimum recommended number of visits to give confidence in a negative result for structures. As it cannot be ruled out that prior to the fire damage and removal of the internal structure, this building may have been categorised at a higher risk, one of these survey visits will be planned and conducted in June during the period of peak bat activity. Should higher than expected activity be recorded, then additional survey effort will be required. In addition, an internal passive survey will be required to identify nocturnal use of the structure and the possible presence/likely absence of a night roost in addition to the potential use of the interior of the structure as a day roost for species such as lesser horseshoe and brown long-eared bats.

4.12 Activity Survey Recordings

4.12.1 On 15.05.2025, one bat was confirmed roosting at Building A. This animal emerged from behind a barge-board near on the eastern elevation, near the north-eastern corner of the structure. It cannot be ruled out that two additional bats emerged from the western elevation and clarification of this will become an aim during follow-up survey effort. In total, 43 recordings were made, including for common pipistrelle (37), soprano pipistrelle (2), and four of an unidentified bat (the recordings of which were too faint to identify confidently to species level). Bat interest around Building A consisted predominantly of commuting for a small number of bats and foraging along the adjacent amenity grassland and tree-line.

4.12.2 On 05.06.2025, deteriorating weather conditions severely impacted the survey effort. No rain was forecast; however, drizzle began 5 minutes following sunset. This continued as intermittent heavier periods of rain and the survey effort was cancelled at 22.05. No bats were confirmed roosting at Building A. In total, seven recordings were made, including for common pipistrelle (6), and one of an unidentified bat (the recording of which was too faint to identify confidently to species level).

4.12.3 On 17.06.2025, two bats were confirmed roosting at Building A. One soprano pipistrelle was recorded emerging from the eaves at the northern elevation, near the north-western corner, and one common pipistrelle was recorded emerging from the eaves at the southern elevation (halfway along). In total, 49 recordings were made, including for common pipistrelle (33), soprano pipistrelle (15), and noctule (1). Bat interest around Building A consisted predominantly of commuting for a small number of bats and foraging along the adjacent amenity grassland and treeline.

4.12.4 A bat activity plan is presented in Appendix G and raw data for observations is presented in Appendix H.

4.12.5 Between 15.05.2025 and 06.06.2025 an internal static presence/absence survey was conducted within the Building A. No evidence was recorded.

4.13 Roost Characterisation

4.13.1 During the dusk emergence survey, **one common pipistrelle** was recorded emerging from the structure, confirming its use as a bat roost. The bat emerged from a gap located approximately halfway along the **northern bargeboard of the north-eastern dormer on the eastern elevation**. This specific roosting feature provides direct access to the cavity between the bitumen felt and the slate tiles.

4.14 Infrared Video Survey

4.14.1 In addition to active monitoring using bat detectors, an infrared camera was deployed on the dusk activity surveys as a night vision aid (NVA).

4.14.2 In this survey all NVAs worked effectively in supporting the work of the survey team.

Plate A: Infrared Monitoring (NVA - Image quality)

4.15 Additional Ecological Constraints (Results)

4.15.1 Contrary to the forecast, rain on the night of the second survey visit (05.06.2025) significantly impacted the period during which pipistrelles are likely to emerge and due to increasingly persistent rain, the survey was abandoned at 22.05, 40mins following sunset. This was mitigated for by planning and carrying out a third survey visit to the site.

4.15 A Summary of Evidence

Survey Location	Species (Recorded)	Notes
Building A	Common pipistrelle Noctule Soprano pipistrelle	**Droppings:** No droppings were recorded inside or outside Building A. **Live sightings:** During three dusk observations, three bats were recorded emerging from Building A. Two common pipistrelle and one soprano pipistrelle (Refer to Appendix G for locations). **Roost Type:** Likely a day roost for common pipistrelle and soprano pipistrelle bats in small numbers (possibly individual animals on an incidental basis).

Table 4.5: Summary of Evidence (Bat Survey)

4.16 Evidence of Nesting Birds

4.16.1 Gaps around the perimeter of the wall-plate provide suitable nesting conditions for a variety of bird species commonly found in garden and woodland environments such as house sparrows and jackdaws.

4.17 Non-native – Invasive species

4.17.1 A small Japanese knotweed plant was identified among disturbed soil near the eastern boundary of the site. In addition, it was noted that the adjacent residential garden contained several mature examples of Japanese knotweed. Local biological records returned 69 CAT4 species records within the search area. These include 16 records within 500m. The nearest record is for Himalayan honeysuckle (116m) and the subsequent nine records are for Japanese knotweed (155-331m).

SECTION FIVE: IMPACT ASSESSMENT & CONCLUSIONS

5.1 Impact Assessment

5.1.1 Based on current known plans for the Site, and considering the results from the desktop survey, field survey and other available data, the following will likely apply (impacts are assessed in absence of mitigation):

Impact	Conclusions
Short-Term Impacts (during development)	The loss of a bat roost(s); Direct injury/killing/disturbance of bats; A reduction in the Favourable Conservation Status (FCS) of bats in the local area; and An offence under relevant UK wildlife legislation, including: · The Wildlife and Country-side Act 1981 (as amended); and · The Conservation of Habitats and Species Regulations 2019. Potential impact on a dark space (commuting corridors).
Long-Term Impacts(post-development)	Potential impact on a dark space (commuting corridors).
Wider Impact	It is not expected that the planned development will have an impact on the wider landscape/or that this impact will be negligible.
Table 5.1: Impact Assessment	

5.2 Impacts on Protected Species from the Proposed Works (excluding bats)

5.2.1 Three records of protected species were made on-site during the survey (bats). Based upon the results from the desktop survey and field survey, the uncompensated re-development impacts have been summarised as follows:

Protected Species	Evaluation	Impact Assessment
Amphibians & Reptiles	The river Bargoed Taf is located at approximately 127m east of the site. This has good levels of connectivity. Opportunities for commuting and foraging around site margins and adjacent broadleaved woodland, specifically for amphibians and slow worms.	Negligible
Nesting Birds	Suitable nesting conditions for a variety of bird species commonly found in garden and woodland environments, particularly at the eaves.	High (Nesting)
Mammals	**Badger:** No evidence recorded on site.	Nil

	Due to the condition of the site and nature of the boundary fence, badger is unlikely to use this space for commuting or foraging.	
	Hedgehog: No evidence recorded on site. This site is suitable for commuting, but there is little available foraging and limited opportunities for shelter.	Negligible
	Hazel dormouse: There are no historic records for hazel dormouse on or adjacent to the Site. The Site does not offer any suitable habitat for this species.	Nil
	Otter: No evidence recorded on site. The site is sub-optimal for this species and lacks necessary habitat to support this species.	Nil
	Grey Squirrel: No evidence recorded on site. The site is sub-optimal for this species and lacks necessary habitat to support this species.	Nil
Botanicals	Low botanical diversity has been recorded on the Site.	Nil

Table 5.2: Evaluating the Impact on Protected Species

5.3 Impact Assessment (Bats)

5.3.1 Based on current known plans for Building A, and considering the results from the desktop survey, field survey and other available data; the following will likely apply (impacts are assessed in absence of mitigation):

5.3.2 No evidence was recorded for protected or priority species on-site during the PEA survey. Based upon the results from the desktop survey and field survey, the uncompensated re-development potential impacts have been summarised as follows:

- The loss of a bat roost(s);
- Direct injury/killing/disturbance of bats;
- A reduction in the Favourable Conservation Status (FCS) of bats in the local area; and
- An offence under relevant UK wildlife legislation, including: · The Wildlife and Countryside Act 1981 (as amended); and
- The Conservation of Habitats and Species Regulations.

5.3.3 When the nature conservation significance of the site is considered against recognised criteria ('Bat Mitigation Guidelines 2004','Good Practice Guide: NRW Approach to Bats and Planning October 2015' and 'IUCR Red List of Threatened Species'), the nature conservation status of the site is assessed to be low, due to the presence of a day-roost for a small number of a common species (common pipistrelle - Least Concern – IUCN Red List, soprano pipistrelle - Least Concern – IUCN Red List). If unmitigated, the scale of this development is not considered to affect the local bat population, with a low risk of detrimental impacts to the conservation status at a local level. Three species were identified commuting/foraging near Building A; common pipistrelle, soprano pipistrelle and noctule.

5.4 Impacts on Designated Areas

5.4.1 Based upon the results from the desktop survey and field survey, the uncompensated re-development impacts on local sites have been summarised as follows:

Protected Species	Evaluation	Impact Assessment
SSSI	No part of the Site contains, or is within, any statutory sites of nature conservation interest, such as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC) or National Nature Reserves (NNRs)	Nil

	etc.	
NRW Priority Area	No part of the Site contains, or is within, any statutory sites of nature conservation interest, including Natural Resources Wales (NRW) Priority Areas.	Nil
Wildlife Site / SINC (adopted)	Eight SINCs were reported in the search area. The character of these designations will inform mitigation for the site.	Nil
Non-statutory sites	The site is within a designated B-lines area.	Nil
Table 5.3: Evaluating the Impact on Designated Areas		

5.5 Discussion and Conclusions

5.5.1 With a focus on the aims of this report as set out in Section 1, the following conclusions have been drawn:

While no statutory sites will be impacted by the proposals, the site has good connectivity east to Bargoed Tâf SINC (127 m) and a large semi natural ancient woodland. While the site is located at the edge of urban development and is impacted by moderate levels of artificial lighting, the adjacent woodland (east) represents a dark site and likely supports high levels of commuting and foraging for a range of bird, mammals and invertebrate species. The combination of low light levels at the site and the quality of the available habitat at the adjacent woodland (for foraging and commuting bats, especially light-sensitive species such as the greater horseshoe bats, which have been recorded locally) requires mitigation to avoid any negative impact in the short and long term. To protect this valuable habitat, any development plans must minimise potential impacts, including light pollution.

5.5.2 Following guidelines set out in "Bat Conservation Trusts Good Practice Guidelines (Collins, J. [Ed.] 2023)', the structure was categorised as being of moderate risk (with breeding bats not a concern), requiring a dusk survey for bats on two occasions. This survey effort represents the minimum recommended number of visits to give confidence in a negative result for structures.

5.5.3 During two dusk emergence surveys conducted between May and June of 2025, evidence was recorded of two bat species using Building A as a day roost – common pipistrelle (2) and soprano pipistrelle (1). While the structure offers many PRFs, no other species were recorded roosting at the site.

5.5.4 Of the 99 recordings made, three species were identified foraging and commuting near the site. The majority of observed behaviour was for animals foraging over an adjacent amenity grassland and along the woodland edge. The vast majority of behaviour was for common pipistrelle – 76.8% of recordings were for this species.

5.5.5 At the time of writing, the proposals include a complete renovation of the roof and rendering of the exterior to the eaves.

5.5.6 All bat species and their places of rest are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The legal protection for bats concerns impacts from disturbance, loss of roost locations, modifications to roosts and loss of access or obstruction to roost locations. As impacts of this nature will arise during the proposed works, a European Protected Species (EPS) licence will be required from NRW before any work commences which affects the roosts and the bat exit/entry points. In the event that works do not start within two years of the original survey (i.e., June 2027) further survey and assessment will be necessary to qualify the results of this report and its recommendations. If at any point during works a protected species is encountered on-site, it is essential that all work is to cease and that a suitably experienced ecologist is contacted for advice.

5.5.7 As pipistrelle species are known to hibernate in buildings, a precautionary approach will be followed with reference to the wall plate, lintels, window frames and any exposed cavities for any works conducted during the winter months (October to April inclusive).

5.5.8 Building A supports features that could be exploited by nesting birds, e.g., house sparrows (*Passer domesticus*). A cautionary approach is recommended, in particular with reference to the eaves.

5.5.9 Due to the recent site clearance, few opportunities remain for small mammals and amphibians, which include a lack of foraging and shelter. However, some building materials are present on site which offer potential shelter (refugia). The most significant of which being the building materials along the western boundary. To mitigate risks associated with further site clearance, a finger-tip search will be conducted prior to work commencement. If protected species are encountered during work, all activities must cease, and a qualified ecologist must be consulted.

5.5.10 During any development conducted between March and September (inclusive), efforts must be made to avoid any adverse impacts on the commuting and foraging of bats near the site. External lighting must be restricted during the development period to that which is necessary for safety and security. This must be kept to a minimum and where possible, works restricted to daylight hours.

5.5.11 As European hedgehog have been recorded locally (338-974m), it is recommended that precautions are incorporated during the construction phase. This will be to create provisions for hedgehogs to escape, in the form of creating slopes or the inclusion of ramps - at the end of each working day - from all trenches dug into the ground. Additionally, any pipework left on-site that is greater than 150mm in diameter will need to be planked off. Should this information be strictly adhered to, then the development works will not negatively impact this local mammal population.

5.5.12 All nesting birds, their chicks' eggs and active nests are protected under the Wildlife and Countryside Act 1981 (as amended). As nesting opportunities have been identified within the structure, a cautionary approach will be required to mitigate any associated risks.

5.5.13 In-line with statutory obligations and planning policy, mitigation will be required in regards net gain biodiversity. To enhance the Site and increase biodiversity, recommendations will be presented in section 6 (below).

SECTION SIX: RECOMMENDATIONS

6.1 Based on the results of this report, it is recommended that the following conditions be included:

- No further survey is recommended at this time. In the event that works do not start within two years of the survey date (i.e., June 2027), further survey may be necessary to qualify the roost status and recommended adaptations (if required) to the mitigation measures detailed below. If at any point during works a protected species is encountered on-site, it is essential that all work is to cease and that a suitably experienced ecologist is contacted for advice.
- Building A supports three day-roosts for common pipistrelle (2) and soprano pipistrelle (1) bats. Bats and their breeding sites and resting places are protected under the Conservation of Habitats and Species Regulations 2019. Where these species are present and a development proposal is likely to contravene the legal protection, the development may only proceed under licence issued by NRW, having satisfied the requirements set out in the legislation.
- The licence to include a replacement day roost to accommodate the identified species. The owner has informed me that they would be willing to incorporate a number of bat boxes into the planned work, which would satisfy the necessary requirements of the licence application.
- Subject to planning consent being granted by the local planning authority, an EPS licence will be required to facilitate the proposals. The EPS licence is issued under Regulation 55 of the Habitats Regulations by NRW. Once the planning application has been approved, the applicant must appoint a suitably qualified ecologist, known as the Ecological Clerk of Works (ECW), to prepare the following;

- European Protected Species Licence - Application form
- European Protected Species Licence - Method Statement
- The application form and method statement are to detail how the requirements of the Habitats Regulations will be met for managing the effects on bats during the renovation works. In addition, the applicant is also required to collate and pass on to the appointed ecologist the following documents:
- A copy of the 'Local Planning Authority Decision Notice.'
- A copy of either the Delegated Decision report or committee meeting minutes (whichever format was used to approve the planning application).
- Local Planning Authority Consultation Form.
- Architects' drawings containing the location of the bat mitigation measures (detailed below), any proposed external lighting and any proposed changes to the landscaping around the development.
- Once the planning application has been approved, it is advised that the ecologist is engaged as early as possible, as there can be a waiting time of approximately 40 working days / 8 calendar weeks for NRW to process the application, in addition to the time it takes to prepare and collate the documents. NRW now charge for issuing an EPS licence, but the exact charge is assessed on a case-by-case basis. It is not possible at this time to indicate what any likely charge might be.
- No further survey is recommended at this time. If works do not start within two years (i.e., June 2027) further survey may be necessary to qualify the roost status and recommended adaptations (if required) to the mitigation measure detailed below.
- To mitigate the low/negligible risk of encountering amphibians, reptiles, and small mammals, particularly within the footprint and specifically amongst stored materials, a fingertip search must be conducted by a suitably experienced and licensed ecologist prior to any further site clearance. This is essential to prevent the potential for accidental injury or mortality of these animals during works. Should any protected species be identified during the search, all work must cease, and a European Protected Species (EPS) license from Natural Resources Wales will be required before work can recommence. Given the potential for these species to be present year-round, a precautionary approach is advised.
- A suitably experienced ecologist is required to carry out a careful, detailed check of all features likely to be impacted (i.e., see target notes), no more than 24 hours prior to works commencing at any time of year for evidence of amphibians, reptiles, and any other small mammals.
- To prevent any adverse impact on the potential commuting and foraging habitats for bats (post development), the provision of any permanent lighting on-site will require a sensitive lighting scheme. A lighting plan for the Site must be functional and directional only and kept to a minimum, servicing the public areas of the proposed development (as required for safety and security). It must be achieved using baffles and screens, if necessary, to ensure no light spill on any retained or planted vegetation (including off-site vegetation - e.g., there is a potential to impact animals using the nearby habitat features). The sensitive lighting scheme must follow advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023)[1] (Appendix K).
- No external lighting to be installed along the eastern boundary of the site to prevent adverse impacts to the adjacent semi-natural ancient woodland.
- Between March and September (inclusive), external lighting during the development period to be limited to that which is necessary for safety and security. This must be kept to a minimum and where possible, works restricted to daylight hours. This is required in order to prevent incidental impacts on commuting and foraging bats at the Site.
- To prevent local habitat fragmentation and maintain connectivity for hedgehogs, it is recommended that access holes, of a suitable size to allow passage, are incorporated into the base of each new garden fence installed as part of the development.
- All nesting birds, their chicks' eggs and active nests are protected under the Wildlife and Countryside Act 1981 (as amended). If a nest is discovered during works and is active, it must be left undisturbed until all the chicks have fledged. If any features associated with nesting birds are required to be altered during the bird breeding season, then a further inspection by a suitably qualified ecologist is required no more than 24 hours before this process commences. If an active nest is found by a site inspection,

[1] https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released

an exclusion zone around the nest will be necessary to preserve this feature until the chicks have fledged the nest.

- These measures will allow the development to conform to current protective legislation as laid out in the Wildlife and Countryside Act 1981 (plus amendments)[2].
- To compensate for the loss of nesting bird habitat, an appropriate number of bird boxes must be installed on nearby trees or structures before site operations have been completed. Precise specifications and numbers of bird boxes must be advised once final layout designs have been finalised. However, suitable models will be of a woodcrete construction to ensure longevity.
- Implementation of the biodiversity enhancement features for net-gain biodiversity as outlined in Section Seven.

SECTION SEVEN: GREEN INFRASTRUCTURE STATEMENT AND BIODIVERSITY ENHANCEMENT

7.1 Green Infrastructure

7.1.1 Section Seven of this report presents a green infrastructure statement. This statement is proportionate to the scale and nature of the development and describes how green infrastructure has been incorporated into the proposal. This statement provides an effective way of demonstrating positive multi-functional outcomes which are appropriate to the development site.

7.1.2 In accordance with the provision of Chapter 6 of Planning Policy Wales (Distinctive and Natural Places) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. The proposed scheme seeks to follow the Stepwise Approach as detailed within the updated Chapter 6 of PPW.

7.1.3 The ecological condition of the Site before and following development has been identified through dialogue with the client and with the use of photographic evidence. The information present herein gives a broad overview of the Site circa Winter 2024 (prior to inspection / PEA survey). Using this available evidence, we can ascertain that prior to any works taking place, the Site was dominated by a bramble scrub with several large leylandii, at least one mature ash and at least one mature birch tree. In the UK, dense bramble thickets provide valuable habitat for a diverse range of wildlife. They offer shelter, nesting sites, and food sources for a variety of species, including birds like song thrushes and blackbirds, mammals like hedgehogs and small rodents, and numerous invertebrates, such as butterflies, bees, and spiders,whilst providing important ecological benefits. Policy Wales (12) emphasises the importance of high-quality replacement planting and securing a net gain in biodiversity. In order to achieve this, it is proposed to replace trees at a ratio of 3-to-1 with native trees/shrubs. This instance, this will be achieved with the introduction of a species-rich native hedgerow along a portion of the eastern boundary to include a species-rich under canopy (herbaceous) seed-mix. This mix of native shrubs and herbs will contribute to supporting biodiversity locally and maintaining connectivity along the eastern boundary.

7.1.4 **Avoid:** The location of the groundworks has been identified and developed with the intention of minimising impacts on the existing biodiversity and landscape features of the location, and features such as the existing building have been incorporated rather than demolished. The most significant area of notable habitat loss is of an overgrown bramble scrub, which dominated the outside space post-development. This was removed circa January 2025.

7.1.5 **Minimise:** To prevent any adverse impact upon the potential roosting, commuting and foraging habitats for bats adjacent to the proposed unit (post development), specifically on the adjacent tree-lined feature of semi-natural ancient woodland); a sensitive lighting scheme is recommended and where necessary should be incorporated into the plans. The lighting plan for the site should be functional and directional only and kept to a minimum, servicing the public areas of the proposed development (as required for safety and security). It is to be achieved using baffles and screens, if necessary, to ensure no light spill on any

[2] https://www.legislation.gov.uk/ukpga/1981/69

retained or planted vegetation (including off-site vegetation). The sensitive lighting scheme follows advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023)[3].

7.1.6 **Mitigate:** Habitat creation measures have been integrated into the site layout proposal to compensate for minor habitat losses. These measures include a sensitive landscape design within the amenity space, incorporating native and diverse grass seed mixes for lawns and under-canopy areas, the planting of native trees and shrubs, and the installation of structural enhancements such as roosting and nesting boxes.

7.1.7 **Compensation:** on-site compensation for impacts on nesting birds and roosting bats will be delivered by way of:

- new roosting opportunities for bats,
- new nesting opportunities for birds,
- new foraging opportunities for bees (and other invertebrates), and:
- the addition of species-rich hedge with under canopy seed-mix consummate with the eastern boundary.
- The addition of three native trees and lawn with a species-rich seed mix along the northern boundary.

7.1.8 **Implementation and Maintenance:** The owners of The Former Salvation Army Building will implement these plans and maintain the enhancement features in perpetuity. Should the bird or bat box fail or become damaged they will be replaced. Likewise, the planting scheme will be implemented and maintained by the owners.

7.1.9 **Summary:** It is concluded that appropriate and proportionate mitigation/compensation is to be delivered on-site through habitat creation and enhancement.

7.1.10 The proposed ecological mitigation and enhancements fit with the DECCA Framework by;

- Increasing diversity within local ecosystems by providing additional species and opportunities to further improve net-gain biodiversity. This will be achieved through structural enhancements to create a range of environmental conditions which will therefore have the potential to support a different and more diverse assemblage of species compared to baseline conditions.
- Improving/maintaining connections within and between ecosystems, by creating new habitat in locations that will directly link with existing habitats of value, e.g., existing hedgerows and tree lines.
- Improving ecosystem resilience and adaptability to future pressures, through the planting of trees (carbon capture, shading), the management of surface water runoff (continued vegetation cover, surface water interception) and the creation of greater variations in ground cover and vegetation structure capable of offering niche habitats to a wide range of flora and fauna.

7.1.11 Therefore, because of the ecological measures embedded within the proposed scheme, it is expected that there will be a demonstrable net benefit for biodiversity. The Site has been identified as being of low value, with immediate on-site impacts adequately mitigated on-site - and net gain being achieved primarily through the addition of features (see Section 7.2). All habitats retained/created/enhanced on site, will be subject to domestic management, with this management plan being proportionate for this setting and maintained in perpetuity.

7.2 Biodiversity Enhancement Plan

7.2.1 Under the Environment (Wales) Act 2016, public authorities (including local councils and the National Parks), 'must seek to maintain and enhance biodiversity in the exercise of functions; in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.' This replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006

[3] https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released

(NERC Act 2006), in relation to Wales, which states that; 'All public authorities have a statutory duty to conserve biodiversity in all of their functions.'

7.2.2 Local authorities are legally required to make efforts to protect and enhance wildlife and its habitat and this is executed, in part, through the requirement of an ecological assessment for planned development sites and, therefore, we recommend the following principles of design should be followed.

7.2.3 In accordance with the provision of Chapter 6 of 'Planning Policy Wales' (Distinctive and Natural Places) and 'Local Planning Policy', biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site.

- **Enhancement for Bats:** In line with the National Planning Policy Framework, the development should aim to enhance the Site for bats. Two Beaumaris Bat boxes[4], or similar artificial roost(s) should be installed on the southern elevation, near the south-eastern corner of the building, providing access to the adjacent woodland. This to be provided within the curtilage of the owners' property, with the purpose of providing roosting habitat for species such as pipistrelle. In general, bats seek warm places, and for this reason boxes should be located where they will receive full/partial sun, although installing features in a variety of orientations will provide a range of climatic conditions. Position boxes at least 3m (ideally 6m) above ground to prevent disturbance from people and/or predators. The most suitable location is at the southern elevation, directly below the eaves.
- **Enhancement for Birds:** This area is to be enhanced to provide additional opportunities for breeding birds. One 1SP Schwegler Sparrow Terrace[5] (or similar) be attached to the northern gable of the building, as high as possible, facing north or northeast. The nesting boxes must be of a woodcrete construction to ensure longevity.
- **Enhancement for Hedgehogs:** This area is to be enhanced to provide additional opportunities for hedgehogs. One hedgehog hole[6] (or similar) be attached to the base of any new garden fence.
- **Enhancements for Birds and Invertebrates:** Enhancement for the local bird and invertebrate populations to be provided in the form of tree planting and seed mixes for green areas (see below).
- To support invertebrates locally; the planting of native trees and shrubs including x1 hazel[7], x1 mountain ash[8], and x1 downy birch[9], and the inclusion of a species rich lawn mix[10] over the lawn and under canopy seed-mix[11] under a new hedge. These flowering lawn mixtures contain slow growing grasses with a selection of wildflowers that respond well to regular short mowing[12]. The establishment, and ongoing maintenance of broadleaves trees is provided by The Woodland Trust[13].
- The planting of a native hedge[14] is recommended along a proportion of the eastern boundary the boundary of the site. The exact location of this to be determined on completion of the plans. For hedges, double rows are better for wildlife than single rows, as they are wider and provide more shelter and habitat. The wider the hedgerow the better. Rows to be planted at least 40cm apart with 4-6 plants per metre. The UK Biodiversity Action Plan identifies 130 priority BAP species including 104 in Wales (following the 2007 revised list) known to be significantly associated with hedgerows, including their

[4] https://www.wildcare.co.uk/beaumaris-bat-box.html?gad_source=1&gclid=CjwKCAjw65-zBhBkEiwAjrqRMLWbfTavFlgGTv2ry0OGQEWnqN0eVseleG460NUFfHmj6NAF2TcGZhoCsKEQAvD_BwE

[5] https://www.nhbs.com/low-visibility-woodstone-nest-box?bkfno=266260&ca_id=1495&adlocale=uk&gad_source=1&gclid=Cj0KCQiAs5i8BhDmARIsAGE4xHwiHLu8WP7vkUqfAZoKOg_cA9fL_vaD1olk8ZvXt7bVFKn3txQfYl8aAu4AEALw_wcB

[6] https://www.nestbox.co.uk/products/eco-hedgehog-hole-plate?_pos=2&_sid=cfc475fd2&_ss=r

[7] https://www.chewvalleytrees.co.uk/products/detail/corylus-avellana?section=containerGrown&id=14873&gad_source=1&gclid=Cj0KCQiAs5i8BhDmARIsAGE4xHxX9wueKZOspFRjf8re706lHDs7ZujwttfybhOTvY6EKmVpPO_7W8caAgZ3EALw_wcB

[8] https://www.ashridgetrees.co.uk/p/garden-trees/sorbus/aucuparia-mountain-ash-rowan?utm_campaign=20731047289&utm_medium=cpc&utm_source=google&utm_content=&utm_term=&utm_marketing_tactic=20731047289&utm_creative_format=&utm_source_platform=g_x&gad_source=1&gclid=Cj0KCQiAs5i8BhDmARIsAGE4xHyWageA-shxSfoKQpKeKKFATX2GireaRG4BPw1P_iYAia5mMi2240IaAlz2EALw_wcB

[9] https://www.bowhayestrees.co.uk/product-page/betula-pubescens-downy-birch?utm_source=google&utm_medium=wix_google_feed&utm_campaign=freelistings&cmp_id=21862069660&adg_id=171090073353&kwd=&device=c&gad_source=1&gclid=Cj0KCQiAs5i8BhDmARIsAGE4xHwF4Hk0zhJmor672DBjKqDaMi6hlFnkTf6ESdaqi_auUynmfCvztkEaAmn4EALw_wcB

[10] https://www.cumbriawildflowers.co.uk/habitats/neutralhaymeadowmix

[11] https://www.pitchcare.com/products/shade-hedgerow-woodland-wildflower?gad_source=1&gclid=CjwKCAiA3JCvBhA8EiwA4kujZoajG-WP6tDAjs71P4QXzKHYHzOnsDjaD0cfR0j9fwOW1kwRX0LdLxoCqp8QAvD_BwE

[12] https://ehq-production-europe.s3.eu-west-1.amazonaws.com/c6d1aaea252b8babca757293ab301578fe4adc59/original/1649936554/a95f81812d7c47fd385c58fa177cf60c_Grass_Management.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIJHZMYNPA%2F20250114%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-Date=20250114T143626Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=367eb5fd2a8e6c0e0770cd770897de6742e59a0d1de4607fa464b1c622245b01

[13] https://www.woodlandtrust.org.uk/plant-trees/advice/care/

[14] https://hedgelink.org.uk/hedgerows/hedgerow-biodiversity/

trees, banks, basal flora and immediate margins. While few of these species are dependent on hedgerows alone, the loss of hedgerows, or a decline in their quality, would be likely to have an adverse effect on their populations. Hedgerows are of particular importance to the conservation of threatened lichens (10 species), invertebrates (72), reptiles and amphibians (5), birds (20) and mammals (11).

- The planting of species which attract night flying insects is encouraged as this will be of value to foraging bats, for example: evening primrose (*Oenothera biennis*), goldenrod (*Solidago virgaurea*), honeysuckle (*Lonicera periclymenum*) and fleabane (*Pulicaria dysenterica*).
- Invasive plant species: Vigilance should be used throughout the course of the works to ensure that the works are not causing invasive plant species to spread in the wild.
- The proposed native trees/hedging will maintain connectivity across the site and increase biodiversity at this species poor location.
- The proposed native trees/hedging will mitigate the loss of scrub at the site and provide additional nesting opportunities, increase local invertebrate diversity and therefore foraging opportunities, post development.

7.3 Management and Maintenance of Green Infrastructure Enhancements

7.3.1 **Long-Term Management Commitment:** The habitat enhancements detailed above will be managed and maintained for a minimum period of 25 years, ensuring their long-term effectiveness and contribution to green infrastructure objectives.

7.3.2 **Funding and Implementation:** The owners will integrate the management and maintenance of these enhancements into its general maintenance budget, ensuring consistent and sustainable implementation.

7.3.3 **Post-Implementation Monitoring:** A monitoring visit by a suitably qualified ecologist will be conducted in the year following completion of works to evaluate the establishment and maintenance of the habitat enhancements.

SECTION EIGHT: ADDITIONAL INFORMATION

8.1 Encountering a Protected Species During Works

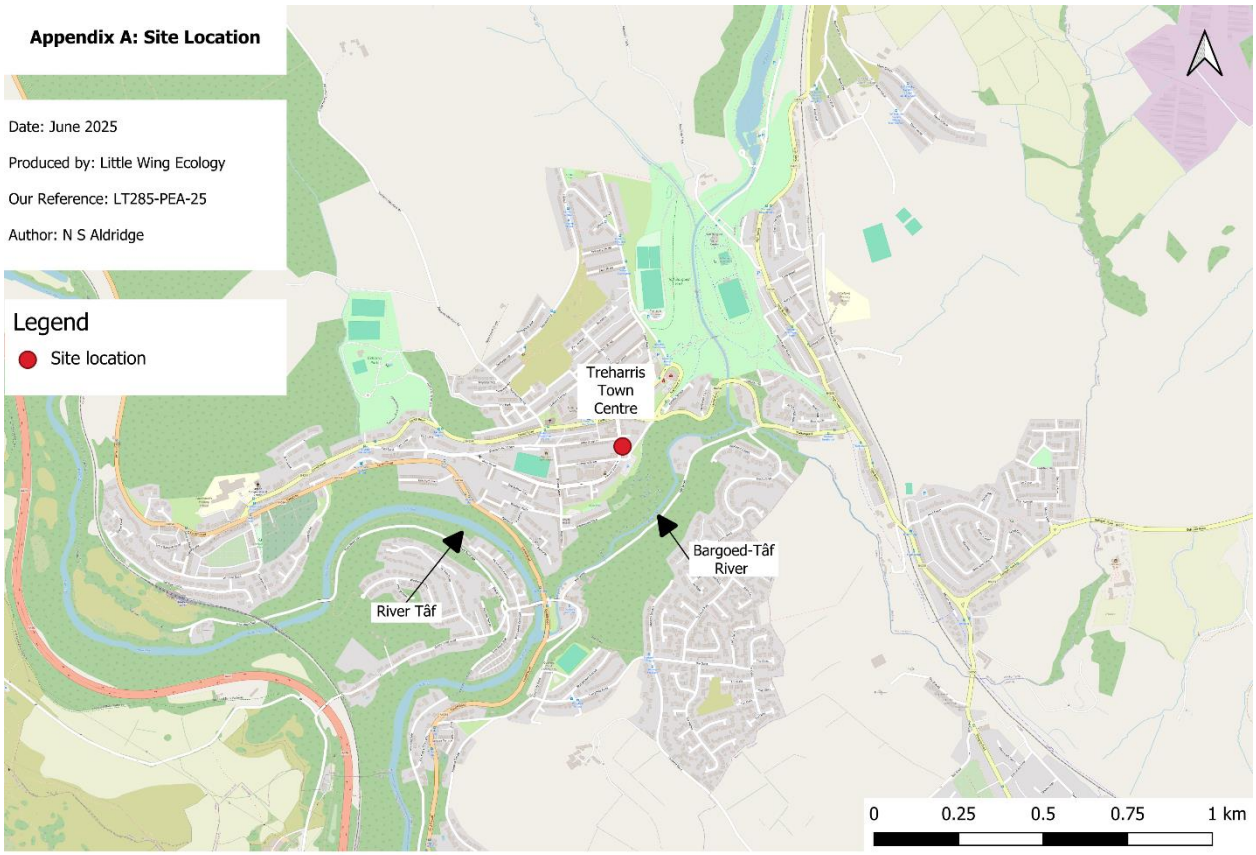
8.1.1 If at any point during works a protected species is encountered on-site, it is essential that all work is to cease and that a suitably experienced ecologist is contacted for advice.

8.2 Expiration of this Report

8.2.1 This report is valid for two years. In the event that works do not start within two years of the survey date (i.e., June 2027) further survey and assessment will be necessary to qualify the results of this report and its recommendations.

REFERENCES AND BIBLIOGRAPHY

ARC – Amphibian and reptile Conservation. Common Frog. https://www.arc-trust.org/common-frog#:~:text=Common%20frogs%20have%20smooth%20moist,metres%20from%20a%20breeding%20pond
Bat Conservation Trust. Bats and Artificial Lighting in the UK: Bats and the Built Environment Series Guidance Note 08/18 (2023). https://cdn.bats.org.uk/uploads/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?v=1542109349
Bat Conservation Trust: Bat Roosts. https://www.bats.org.uk/about-bats/where-do-bats-live/bat-roosts/roosts-in-trees
Bat Conservation Trust. Bats and Lighting in the UK: Bats and the Built Environment Series (A Working Document). https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released
Bat Conservation Trust (2010) UK Bats. http://www.bats.org.uk/pages/uk_bats.html
Biodiversity: Code of Practice for Planning and Development - BS 42020:2013 (2013). http://eoebiodiversity.org/pdfs/BS42020.pdf
Buglife: Saving the small things that run the planet - B-Lines. https://www.buglife.org.uk/our-work/b-lines/#:~:text=The%20B%2DLines%20are%20a,weave%20across%20the%20British%20landscape.
Collins, J. (Ed.) (2023). 'Bat Surveys for Professional Ecologists – Good Practice Guidelines, 4th Edition.' Bat. Conservation Trust, London.
English Nature: Great Crested Newt Mitigation Guidelines. https://mokrady.wbs.cz/literatura_ke_stazeni/great_crested_newt_mitigation_guidelines.pdf
First Nature. https://www.first-nature.com/
Froglife: Just Add Water: How to Build a Wildlife Pond. https://www.froglife.org/wp-content/uploads/2013/07/JAW2014-for-printing-HLF1.pdf
Government of Wales: Environment [Wales] Act (2016). https://www.legislation.gov.uk/anaw/2016/3/contents
Great crested newts: protection and licences. Great crested newts: protection and licences - GOV.UK (www.gov.uk)
Hundt, L. (Ed.) (2012). 'Bat Surveys: Good Practice Guidelines, 2nd edition.' Bat Conservation Trust, London.
Mitchell-Jones, A.J. (2004). 'Bat Mitigation Guidelines.' English Nature, Peterborough.
Mitchell-Jones, A.J. (1992). 'Focus on Bats.' English Nature, Peterborough.
Mitchell-Jones A.J. and McLeish A.P. (2004). 'The Bat Workers Manual, 3rd Edition,' English Nature, Peterborough.
National Amphibian and Reptile Monitoring programme. https://monitoring.arc-trust.org/
NestBox Company Ltd (undated) Bat Boxes & Hedgehog Holes. https://www.nestbox.co.uk/collections/bat-boxes
NHBS (undated). https://www.nhbs.com/
NHM – Natural History Museum – Five ways to help frogs and toads. https://www.nhm.ac.uk/discover/ways-to-help-frogs-and-toads.html
Ninnes, R. (2015). 'NRW Approach to Bats and Planning,' Natural Resources Wales, Bangor. https://cdn.naturalresources.wales/5436/gpg-3-nrw-approach-to-bats-and-planning-english.pdf
RSPB: House Sparrow. -https://www.rspb.org.uk/birds-and-wildlife/house-sparrow
Russ, J. (2012). 'British Bat Calls: A Guide to Species Identification.' Pelagic Publishing, Exeter.
Russ, J. (Ed.) (2021). 'Bat Calls of Britain and Europe: A Guide to Species Identification.' Pelagic Publishing, Exeter.
UK Government: Conservation of Habitats and Species Regulations 2010. https://www.legislation.gov.uk/uksi/2010/490/contents
UK Government: Conservation of Habitats and Species Regulations 2017. https://www.legislation.gov.uk/uksi/2017/1012/contents/made
UK Government: Magic Map Application. https://magic.defra.gov.uk/magicmap.aspx
UK Government: Natural Environment and Rural Communities Act 2006. https://www.legislation.gov.uk/ukpga/2006/16/contents
UK Government: The Conservation of Habitats and Species Regulations (2019) - as amended. https://statutoryinstruments.parliament.uk/instrument/P6fXwvK4/
UK Government: Wildlife and Countryside Act (1981) - as amended. https://www.legislation.gov.uk/ukpga/1981/69
University of Bristol (2005) The Bats of Britain. http://www.bio.bris.ac.uk/research/bats/britishbats/index.htm
Water voles: advice for making planning decisions. Water voles: advice for making planning decisions - GOV.UK (www.gov.uk)
Williams, C. (2010). 'Biodiversity for Low and Zero Carbon Building: A Technical Guide for New Build.' RIBA Publishing, London
Wray, S., Wells, D., Long, E., & Mitchell-Jones, A.J. 2010. Valuing bats in ecological impact assessment. In Practice, No 70, Institute of Ecology and Environmental.
Birds of Conservation Concern (2021). https://www.bto.org/our-work/science/publications/reports/birds-conservation-concern



QGIS Development Team, <2025>. QGIS Geographic Information System. Open-Source Geospatial Foundation Project.

QGIS Development Team, <2025>. QGIS Geographic System. Open-Source eospatial Foundation Project.

Appendix C: Site Photographs - Habitat

	
Disturbed ground (J1.3)	Wall (J2.5)
	
Building (J3.6)	Other (J5)

Appendix D: Target Notes (Photography)

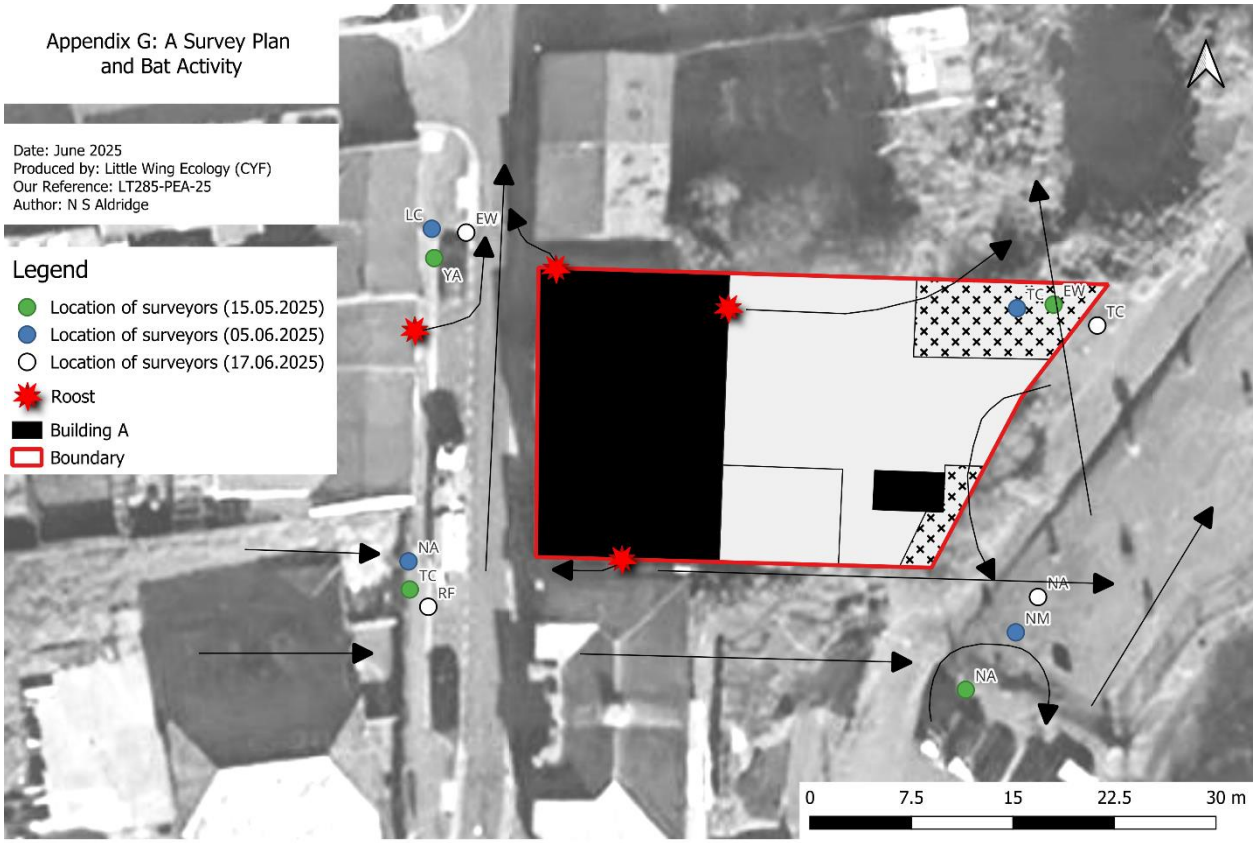
	
Target note 1 – Stumps – Likely birch and ash.	Target note 2 – Japanese knotweed (very small plant) – Mature specimens present in the grounds of the adjacent property.

Appendix E: PRA & Daytime Bat Walkover (Photography)

	
Western elevation – facing main service road.	Eastern aspect – facing Tâf Bargoed SINC
	
Eastern elevation – opening providing access to the interior of the building.	Eastern elevation – opening providing access to the interior of the building.
	
Eastern elevation – opening providing access to the interior of the building.	Eastern elevation – PRFs – missing bargeboards with gaps providing access to a cavity between a layer of bitumen felt and slate.

	
Eastern elevation – PRFs – missing bargeboards with gaps providing access to a cavity between a layer of bitumen felt and slate.	Eastern elevation – PRFs – missing bargeboards with gaps providing access to a cavity between a layer of bitumen felt and slate.
	
Northern elevation – PRFs – missing bargeboards with gaps providing access to a cavity between a layer of bitumen felt and slate.	Northern elevation – PRFs – potential access behind bargeboard.
	
Missing slate providing access to a cavity between a layer of bitumen felt and slate.	Missing slate providing access to a cavity between a layer of bitumen felt and slate.

QGIS Development Team, <2025>. QGIS Geographic System. Open-Source eospatial Foundation Project.



QGIS Development Team, <2025>. QGIS Geographic System. Open-Source eospatial Foundation Project.

Appendix H: Activity Survey – Recordings (Raw data)

DATE	Time (start)	Time (end)	SPECIES (COMMON)	No	Surveyor's Position	OBSERVER'S NAME	COMMENT	CLASS OF SITE
15.05.2025	21.35	21.39	Common pipistrelle	7	SW	Nic Aldridge	Foraging	Foraging
15.05.2025	21.60	21.38	Common pipistrelle	3	SW	Nic Aldridge	Commuting	Commuting
15.05.2025	21.28	21.28	Common pipistrelle	2	SW	Nic Aldridge	Heard-not-seen	Undetermined
15.05.2025	21.40	21.40	Common pipistrelle	1	NW	Elizabeth Winstanley	Emergence - NW rear gable. From behind the northern bargeboard.	Day roost
15.05.2025	21.28	21.57	Common pipistrelle	7	NW	Elizabeth Winstanley	Foraging	Foraging
15.05.2025	21.07	21.15	Common pipistrelle	4	NW	Elizabeth Winstanley	Commuting	Commuting
15.05.2025	22.05	22.12	Common pipistrelle	2	NW	Elizabeth Winstanley	Heard-not-seen	Undetermined
15.05.2025	21.48	21.48	Soprano pipistrelle	1	NW	Elizabeth Winstanley	Foraging	Foraging
15.05.2025	21.52	21.52	Common pipistrelle	1	SW	Tracey Cotterell	Foraging	Foraging
15.05.2025	21.18	21.38	Common pipistrelle	3	SW	Tracey Cotterell	Commuting	Commuting
15.05.2025	21.47	21.47	Common pipistrelle	1	SW	Tracey Cotterell	Heard-not-seen	Undetermined
15.05.2025	21.06	21.40	Common pipistrelle	3	NW	Yvette Amos	Commuting	Commuting
15.05.2025	21.57	22.32	Common pipistrelle	3	NW	Yvette Amos	Heard-not-seen	Undetermined
15.05.2025	20.48	22.30	Chiroptera	4	NW	Yvette Amos	Heard-not-seen	Undetermined
15.05.2025	22.05	22.05	Soprano pipistrelle	1	NW	Yvette Amos	Heard-not-seen	Undetermined
05.06.2025	21.54	21.54	Common pipistrelle	1	NW	Libby Cotterell	Commuting	Commuting
05.06.2025	21.46	21.50	Common pipistrelle	2	NE	Tracey Cotterell	Foraging	Foraging
05.06.2025	21.54	21.57	Common pipistrelle	2	NE	Tracey Cotterell	Commuting	Commuting
05.06.2025	21.54	21.54	Chiroptera	1	SE	Nadine Morgan	Heard-not-seen	Undetermined
05.06.2025	21.49	21.49	Common pipistrelle	1	SW	Nic Aldridge	Heard-not-seen	Undetermined
17.06.2025	22.22	22.52	Common pipistrelle	4	SE	Nic Aldridge	Foraging	Foraging
17.06.2025	21.34	21.34	Common pipistrelle	1	SE	Nic Aldridge	Commuting	Commuting
17.06.2025	22.22	22.48	Common pipistrelle	3	SE	Nic Aldridge	Heard-not-seen	Undetermined
17.06.2025	22.21	22.22	Soprano pipistrelle	2	SE	Nic Aldridge	Foraging	Foraging
17.06.2025	22.36	22.36	Soprano pipistrelle	1	SE	Nic Aldridge	Commuting	Commuting
17.06.2025	22.19	22.19	Soprano pipistrelle	1	SE	Nic Aldridge	Heard-not-seen	Undetermined
17.06.2025	21.38	21.38	Common pipistrelle	1	NW	Elizabeth Winstanley	Emergence - Neighbouring building	Day roost
17.06.2025	22.45	22.57	Common pipistrelle	2	NW	Elizabeth Winstanley	Foraging	Foraging
17.06.2025	21.35	22.02	Common pipistrelle	2	NW	Elizabeth Winstanley	Commuting	Commuting
17.06.2025	22.43	22.56	Common pipistrelle	4	NW	Elizabeth Winstanley	Heard-not-seen	Undetermined
17.06.2025	22.04	22.04	Soprano pipistrelle	1	NW	Elizabeth Winstanley	Emergence - Northern elevation at eaves.	Day roost
17.06.2025	22.30	22.54	Soprano pipistrelle	2	NW	Elizabeth Winstanley	Foraging	Foraging
17.06.2025	22.32	22.32	Noctule	1	NW	Elizabeth Winstanley	Commuting	Commuting
17.06.2025	22.19	22.55	Common pipistrelle	6	NE	Tracey Cotterell	Foraging	Foraging
17.06.2025	21.34	22.40	Common pipistrelle	5	NE	Tracey Cotterell	Commuting	Commuting
17.06.2025	22.29	22.29	Common pipistrelle	1	NE	Tracey Cotterell	Heard-not-seen	Undetermined
17.06.2025	22.19	22.25	Soprano pipistrelle	3	NE	Tracey Cotterell	Foraging	Foraging
17.06.2025	22.04	22.16	Soprano pipistrelle	2	NE	Tracey Cotterell	Commuting	Commuting
17.06.2025	22.07	22.07	Common pipistrelle	1	SE	Richard Farr	Emergence - Southern elevation at eaves.	Day roost
17.06.2025	22.02	22.02	Common pipistrelle	1	SE	Richard Farr	Commuting	Commuting
17.06.2025	22.29	22.45	Common pipistrelle	2	SE	Richard Farr	Heard-not-seen	Undetermined
17.06.2025	22.04	22.04	Soprano pipistrelle	1	SE	Richard Farr	Emergence - From northern elevation at eaves (As above).	Day roost
17.06.2025	22.31	22.51	Soprano pipistrelle	2	SE	Richard Farr	Heard-not-seen	Undetermined

Appendix I: Species List

Common name	Scientific name	Disturbed (J1.3)	Wall (J2.5)	Building (J3.6)	Other (J5)
Bindweed (Field)	*Convolvulus arvensis*	y			
Bluebell (Spanish - Horticultural)	*Hyacinthoides hispanica*	y			
Bramble (European blackberry)	*Rubus fruticosus*	y			y
Buttercup (Creeping)	*Ranunculus repens*	y			
Dandelion (common)	*Taraxacum officinale*	y			y
Ivy (Common)	*Hedera helix*		y		
Japanese knotweed	*Reynoutria japonica*	y			
Moss - Feather moss (Bishop's mitre)	*Calliergonella cuspidata*		y		
Moss - Wall screw moss	Tortula muralis		y		
Nettle (Common)	*Urtica dioica*				y
Tree - Ash (European)	*Fraxinus excelsior*	stump			
Tree - Layland spp.,	*Laylandii spp.,*	stump x3			
Tree/shrub - Birch spp.,	*Betula spp.,*	stump			

y = Present at this location

Appendix J: Meet the Team

Nic Aldridge (NA) is an ecologist with Little Wing Ecology and the author of this report. He is a licensed bat worker (S091427/1) with over 20 years' experience in education and conservation and over eight years' experience surveying built-structures, open habitats, and woodlands for bats. Following a degree in Botany and Zoology, Nic completed an MSc in Wildlife Management, Conservation and Control at the University of Reading. He has practical experience in field-based research with a focus on invertebrate and vegetation diversity and producing phase 1 habitat surveys and habitat management plans. He is experienced in hand netting common pipistrelle and soprano pipistrelle from maternity roosts, has carried out the ringing of Daubenton's bats as part of a multi-year project on the species and has undertaken monitoring work on several important lesser horseshoe bat roosts. Nic writes EPS licence applications, ecological reports and provides Ecological Clerk of Works services. He has attended courses with the Bat Conservation Trust to improve his knowledge and skills and has led voluntary projects to develop habitats and collect species data. Nic founded Little Wing Ecology in 2021 as a not-for-profit, to use the skills and expertise of an ecological consultancy to work with the local community, support local conservation projects and provide training and education for the next generation of ecologists.
Elizabeth Winstanley (LW) is a Nature Recovery Officer with a large Conservation Organisation, and a wildlife surveyor with Little Wing Ecology. She has over ten years' experience working in practical conservation. Following a degree in Outdoor Education, Liz volunteered with The Wildlife Trust before taking on her current responsibilities. She has held her current position since 2015. During this time, Liz has undertaken numerous surveys and monitoring projects, including work on butterfly transects, phase 1 habitat surveys, reptile and amphibian surveys, upland monitoring, BTO bird box round, intermediate tree survey and inspection, dormouse training and recording, bumblebee conservation – bee walks and many more. Currently Liz is responsible for the management of seven Nature Reserves including four SSSIs. Liz has also attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.
Tracey Cotterell (TC) is employed by the NHS as a Porter and a wildlife surveyor with Little Wing Ecology. Tracey has a lifelong love of nature and enjoys spending her spare time volunteering with organisations such as The Welsh Wildlife Trusts, Blaenavon Heritage and the TRF (Trail Riders Fellowship). She enjoys being outdoors, whether in a working capacity or for personal interest such as running, riding, or surfing. She has volunteered throughout her life in roles as varied as an NHS First Responder, to working for the Wildlife Trust. During this time, she has gained skills in volunteering with environmental conservation matters, and through being a signaller in a search and rescue team. Tracey enjoys the responsibility of conserving the surrounding environment, learning, and helping to regulate human activities to minimise direct and indirect negative impacts on both flora and fauna. Tracey has also attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.
Yvette Amos (YA) is a wildlife surveyor with Little Wing Ecology. She has a lifelong love of nature and enjoys spending her spare time and vacations centred around nature and wildlife focused destinations. Yvette enjoys being outdoors, where she expresses her love of photography along with her interest in the natural world. She is experienced in data collection at a high level, having formerly worked for Cardiff University, School of Social Sciences and Computer Science. Yvette has attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology and is dedicated to gaining experience in nature conservation, wildlife management and ecology.
Richard Farr (RF) is a wildlife surveyor with Little Wing Ecology. Richard has a life-long love of nature and has previously worked with the Gwent Wildlife Trust, where he gained a wide set of practical skills and experiences which have developed his knowledge and understanding of ecology and conservation at a range of the Trust's Local Nature Reserves. He has recently completed his bachelor's degree in ecology and conservation science at the University of the West of England (UWE), which has allowed him to develop knowledge and skills in numerous areas including field/survey techniques, geographical information systems, consultancy, habitat management/identification, data collection, data analysis using software such as RStudio. He has attended multiple training sessions to further develop skills and knowledge in bat monitoring, bat ecology, conducting surveys and writing ecological reports.
Libby Cotterell (LC) is a full-time student and a wildlife surveyor with Little Wing Ecology. She has a lifelong love of nature and the outdoors and enjoys learning new skills and engaging in practical work, in order to have a positive impact on local conservation issues. Libby has attended several training sessions with Little Wing Ecology to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.
Elise Winstanley (ELW) is a full-time student and a wildlife surveyor with Little Wing Ecology. She previously ran a college newspaper and is committed to community engagement - both in her academic life and in the local community, as shown by her willingness to integrate herself into the towns of both Ebbw Vale and Lampeter. Elise is currently studying creative writing and has a keen interest in nature and habitat preservation. She has attended several training sessions with Little Wing Ecology to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.
Sam Haycock (SH) is a founding director of Little Wing Ecology and a commercial assurance executive with a national company. Sam has over 20 years' experience in the education sector and four years' experience managing two rural enterprise companies, of which she was a director for three years. She brings a broad range of interdisciplinary skills to her role at Little Wing Ecology where she has responsibility for editing, reviewing, data management and finances. In 2021, Sam became a founding director of Little Wing Ecology, as a social enterprise, that aims to use the skills and expertise of an ecological consultancy, to work with the local community, support local conservation projects and provide training and education for the next generation of ecologists and conservationists.

Appendix K: Species potential defined by integrating national guidelines e.g. Hundt 2012

Confirmed Presence	Species recorded to be present during the survey. Evidence of species is recorded during the survey.
High	Buildings, trees or other structures with features of interest for use by protected species are recorded e.g. nesting habitat, roosting opportunities and/or ponds. Habitat with high quality foraging opportunities e.g. broadleaved woodland, tree-lined watercourses and grazed grassland. The site is connected to the wider landscape by strong linear features that have the potential to be used by commuting species e.g. a river, stream and/or hedgerows. The site is close to known locations of recorded protected species.
Medium	Several potential habitat opportunities in buildings, trees or other structures recorded during the survey. Habitat could be used for foraging e.g. trees, shrubs, grassland and/or water. The site is connected to the wider landscape by linear features that could be used by commuting species e.g. lines of trees, scrubs or linked back gardens.
Low	A small number of less significant features are recorded. Isolated habitat suitable for foraging e.g. a lone tree or patch of scrub. An isolated site which is not connected by significant linear features in the landscape.
Negligible	No suitable habitats observed.

Appendix L: Bat Friendly Lighting Scheme

A lighting plan is required to prevent any adverse impact upon the potential roosting, commuting and foraging habitats for bats adjacent to the Site (post development), specifically on the nearby mature trees. Lighting for the site must be functional and directional only and kept to a minimum, servicing the public areas of the proposed development (as required for safety and security). It must be achieved using baffles and screens, if necessary, to ensure no light spill on any retained or planted vegetation (including off-site vegetation - e.g., if there is potential to impact animals using the nearby habitat features).

- A sensitive lighting scheme is recommended and must be created. The sensitive lighting scheme must follow advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023) and comprise of:
- Light fixtures, filaments, light spill and artificial light must be directed away from bat roost entrances, both existing and those to be created as part of the mitigation.
- Luminaries are to be LED only, due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Luminaires must have a warm white spectrum (ideally <2700 Kelvins); reducing the blue light component and increasing the red-light component.
- Luminaries must feature peak wavelengths of 550nm to avoid the component of light most disturbing to bats.
- Heights of fixtures must be carefully considered to minimise light spill. Only luminaries with an upward light ratio of 0% and with good optical control must be used.
- Luminaries must always be mounted on the horizontal, i.e., no upward tilt.
- Any external security lighting must be set on motion sensors and short (15 second) timers.
- As a last resort, accessories such as baffles, hoods or louvres must also be used and directed away from any natural features and must not encroach outside the Site boundaries, particularly the surrounding trees, hedgerows, and other vegetation in the landscape.

A copy of 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023) can be found here:

https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released

Appendix M: Policy and Legislation in Wales

Under Regulation 9 (1 & 5) of the Habitat Regulations, local authorities have a duty to have regard for the requirements of the Habitats Directive. This includes maintaining populations of European Protected Species in "favourable conservation status", and potential for such protected species (for example, bats) should be considered when carrying out a preliminary assessment.

The framework for this protection is provided within several pieces of legislation from the Government of Wales and the UK Government. Furthermore, several pieces of legislation exist that are specifically relevant to individual species. These include:

- Conservation of Habitats and Species Regulations 2010.
- The Conservation of Habitats and Species Regulations (2017) - as amended.
- The Environment (Wales) Act 2016.
- The Wildlife and Countryside Act (1981) - as amended.
- Natural Environment and Rural Communities Act 2006.
- Conservation of Habitats and Species Regulations 2017.

A link to the full documentation can be found in the references and bibliography section.

Policy	Description
The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019	Bats are specifically protected by (The Habitat Regulations). The Habitat Regulations are the way in which EU legislation is transposed into UK law. All species protected via this legislation are defined as 'European Protected Species.' The Habitat Regulations make it an offence to deliberately capture, kill, disturb, or trade in European Protected Species (i.e., those listed in Schedule 2), of which all UK bats are included. However, these actions can be made lawful through the granting of a license by Natural Resources Wales (NRW). Licenses may be granted for a number of purposes, but only after the LPA and NRW is satisfied that there are no satisfactory alternatives, and that such actions will have no detrimental effect on the wild populations of bats.
The Environment (Wales) Act 2016	Section 7 of the Environment (Wales) Act 2016 requires all statutory authorities including Local Planning Authorities (LPA) to have due regard for living organisms and types of habitats that are of key significance to sustain and improve biodiversity in relation to Wales. Furthermore, the LPA have a duty under the Act to take all reasonable steps to maintain and enhance the living organisms and types of habitats included on any list published under Section 7, and to encourage others to take such steps.
Wildlife and Countryside Act 1981 (as amended)	The Wildlife and Countryside Act 1981 (as amended) (The WCA 1981) is the principal legislation by which most species are protected in Wales. Bats are protected under Schedule 5 of the WCA 1981, which makes it an offence to damage or destroy a bat roost, intentionally or recklessly disturb a bat or a roost, or intentionally or recklessly obstruct access to a roost. The interpretation of a bat roost is "any structure or place which any wild [bat]…uses for shelter or protection". As bats tend to reuse the same roosts, the legal opinion is that the roost is protected whether or not bats are present at the time. In relation to birds, the WCA 1981 makes it an offence to intentionally kill, injure or take any wild bird, or take, damage, or destroy the nest of any wild bird while that nest is in use or being built. Schedule 1 of the WCA Act 1981 includes bird species for which it is an additional offence to disturb these species at their nests, or their dependent young.

Bats and the Law

All species of bats are protected throughout the UK. However, there are differences in approach to the protection of bats taken by the different devolved administrations. This means that bat mitigation strategies will need to take account of the relevant legislation and licensing systems that apply in each. In this section, the legal framework underpinning these protections is outlined (CIEEM 2023).

The UK is a contracting party to the 1979 'Convention on the Conservation of European Wildlife and Natural Habitats' (commonly referred to as the Bern Convention). The Bern Convention has been described as the "European treaty for the conservation of nature." Its provisions with regards to bats are transposed into law in England and Wales via the Conservation of Habitats and Species Regulations 2019 (the England and Wales Habitats Regulations), and the Wildlife and Countryside Act 1981 (as amended) (the W&CA);

All species of bat, their breeding sites and their resting places in England and Wales are protected through a 'dual'

system of protection, under the England and Wales Habitats Regulations and W&CA. Because the two regimes give legal protection to bats, the implications of both regimes must be fully understood.

Regulation (Reg.) 43 of the England and Wales Habitats Regulations makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats (which includes any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young. Or in the case of animals of a hibernating or migratory species; to hibernate or migrate or to affect significantly the local distribution or abundance of the species to which they belong);
- damage or destroy a breeding site or resting place of a bat; or
- possess, control, transport, sell or exchange, or offer for sale or exchange, any live or dead bat or part of a bat or anything derived from a bat or any part of a bat.

Under Section 9 of the W&CA (s.9(4)(b), 9(4)(c) and 9(5), it is an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place of shelter or protection;
- intentionally or recklessly obstruct access to any structure or place used by a bat for shelter or protection; or
- sell, offer or expose for sale, or have in their possession or transports for the purpose of sale, any live or dead bat or any part of, or anything derived from a bat (or be responsible for adverts suggesting the intention to do this).

The government's statutory conservation advisory organisation, Natural Resources Wales, is responsible for administering European Protected Species (EPS) licences that permit activities that would otherwise lead to an offence.

A licence can be obtained if the following three tests have been met:

- Regulation 53(9)(a) - there is, "no satisfactory alternative," to the derogation, and;
- Regulation 53(9)(b) - the derogation, "will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range," and;
- Regulation 53(2)(e) - the derogation is for the purposes of, "preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment."

Planning Policy

Where relevant, the ecological assessment takes account of the legislative protection afforded to specific habitats and species where applicable. Under the Environment (Wales) Act 2016, public authorities (including local councils and the National Parks), 'must seek to maintain and enhance biodiversity in the exercise of functions; in relation to Wales, and in so doing, promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.' This replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, which states that; 'All public authorities have a statutory duty to conserve biodiversity in all of their functions.'

The Environment (Wales) Act 2016, provides a context for the delivery of multi-functional green infrastructure as documented within the Planning Policy Wales (Edition 11) and the Annex to Heads of Planning Letter Dated 11 October 2023: Addressing the Nature Emergency through the Planning System: Updated National Planning Policy for Chapter 6 of Planning Policy Wales.

Its protection and provision can make a significant contribution to the sustainable management of natural resources, and in particular to protecting, maintaining and enhancing biodiversity and the resilience of ecosystems in terms of the diversity within and connections between ecosystems and the extent and condition of these ecosystems, so that they are better able to resist, recover from and adapt to pressures. This means that the development of green infrastructure is an important way for local authorities to deliver their Section 6 duty113.

GREEN INFRASTRUCTURE DEFINITION AND TERMINOLOGY

Green Infrastructure (GI) has been defined by the Landscape Institute in their publication, Green Infrastructure: An integrated approach to land use (2013), as *"the network of natural and semi-natural features, green spaces, rivers*

and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions. When appropriately planned, designed and managed, the assets and functions have the potential to deliver a wide range of benefits – from providing sustainable transport links to mitigating and adapting the effects of climate change."

Natural Resource Wales (NRW) defines Green Infrastructure as *"a term that's sometimes used to describe a wide range of natural and semi-natural features, spaces, rivers and lakes including parks, fields, allotments, hedgerows, roadside verges and gardens, not to mention entire ecosystems such as wetlands, waterways and mountain ranges."*

Green infrastructure is broadly analogous to 'Natural Capital', which can be defined as '…the elements of nature that produce value (directly and indirectly) to people, such as the stock of forests, rivers, land, minerals and oceans. It includes the living aspects of nature (such as fish stocks) as well as the non-living aspects (such as minerals and energy resources). Natural capital underpins all other types of capital… and is the foundation on which our economy, society and prosperity is built.' (The Natural Capital Committee 2017).

The Landscape Institute position statement "Green infrastructure: connected and multifunctional landscapes" provides the following definitions for Green Infrastructure terminology:

- **Green Infrastructure Assets:** GI assets include the natural elements which provide social, environmental or economic benefit. They can be specific sites or broader environmental features within and between rural and urban areas. A useful approach to outlining the different types of GI asset is to classify them according to the spatial scale at which each would typically be found.

- **Connectivity:** Connectivity between different GI assets will help maximise the benefits that they generate. This connectivity can be visual or notional; however, physical connections make the most impact. This connectivity can enhance public engagement with the natural environment, improve opportunities for biodiversity migration and assist in encouraging sustainable forms of travel.

- **Green Infrastructure Functions**: GI functions are the roles that assets can play if planned, designed and managed in a way that is sensitive to, and includes provision for, natural features and systems. Each asset can perform different functions, a concept known as multifunctionality.

- **Multifunctionality:** Understanding multifunctionality is central to the GI approach to land use planning. Where land performs a range of functions, it affords a far greater range of social, environmental and economic benefits than might otherwise be delivered. Ecosystem services underpinning the multiple functions that GI assets perform is the concept of ecosystem services. Health and wellbeing depends on the range of services provided by 6 ecosystems and their constituent parts: water, soils, nutrients and organisms. These services include:

    - **Support:** necessary for all other ecosystem services, e.g. soil formation and photosynthesis; — provision: food, fibre, fuel;
    - **Regulation:** air quality, climate control, erosion control; and,
    - **Culture:** non-material benefits for people, including aesthetic qualities and recreational experiences.

- **GI approach**: GI approaches to land-use planning promote the widest range of functions which can be performed by the same asset, unlocking the greatest number of benefits. Such an approach enables us to demand more from the land in a sustainable way; by helping to identify when it can provide multiple benefits and to manage the many, often conflicting, pressures for housing, industry, transport, energy, agriculture, nature conservation, recreation and aesthetics. It also highlights where it is important to retain single or limited land use functions."

NATIONAL PLANNING POLICY

Future Wales - The National Plan 2040 (Welsh Government 2021)

Policy 9 Resilient Ecological Networks and Green Infrastructure of the Future Wales - The National Plan 2040 states the following with regards to green infrastructure:

"To ensure the enhancement of biodiversity, the resilience of ecosystems and the provision of green infrastructure, the Welsh Government will work with key partners to:

- *identify areas which should be safeguarded and created as ecological networks for their importance for adaptation to climate change, for habitat protection, restoration or creation, to protect species, or which provide key ecosystems services, to ensure they are not unduly compromised by future development; and*
- *identify opportunities where existing and potential green infrastructure could be maximised as part of placemaking, requiring the use of nature-based solutions as a key mechanism for securing sustainable growth, ecological connectivity, social equality and well-being.*

Planning Policy Wales sets out a range of policies to maintain and enhance biodiversity, promote the resilience of ecosystems, including the stepwise approach, and to maximise the provision of green infrastructure. The strategic focus of Future Wales on urban growth requires an increased emphasis on biodiversity enhancement (net benefit) in order to ensure that growth is sustainable.

As the population of Wales becomes increasingly urban, the opportunity to optimise well-being benefits from green infrastructure will be greatest in and around these areas. Innovative use of nature-based solutions and integrating green infrastructure in and around urban areas can help restore natural features and processes into cities and landscapes. Providing locally accessible, high quality green spaces and corridors help to maintain and enhance the strategic functioning of 8 of our natural resources and ecological networks and address physical and mental well-being. Local green infrastructure assets such as public rights of way, common land, parks, village greens and allotments can all make a cumulative contribution towards wider national scale ecological connectivity. The real-life importance of urban green spaces was demonstrated when people were restricted to taking exercise in immediately local green spaces during the COVID-19 lockdown."

Planning Policy Wales - Edition 11 (Welsh Government 2021)

Planning Policy Wales - Edition 11 states the following with regard to green infrastructure; *"Integrating Green Infrastructure and Development: Green infrastructure plays a fundamental role in shaping places and our sense of well-being, and are intrinsic to the quality of the spaces we live, work and play in. The planning system should protect and enhance green infrastructure assets and networks because of these multi-functional roles. The protection and enhancement of biodiversity must be carefully considered as part of green infrastructure provision alongside the need to meet society's wider social and economic objectives and the needs of local communities. The multiple benefits that resilient ecosystems and green infrastructure offer to society, including the economic and social contribution they make to local areas, should be taken into account when balancing and improving these needs.*

The quality of the built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design. With careful planning and design, green infrastructure can embed the benefits of biodiversity and ecosystem services into new development and places, helping to overcome the potential for conflicting objectives, and contributing towards health and well-being outcomes. There are multiple ways of incorporating green infrastructure, dependent on the needs and opportunities a site presents. Landscaping, green roofs, grass verges, sustainable urban drainage and gardens are examples of individual measures that can have wider cumulative benefits, particularly in relation to biodiversity and the resilience of ecosystems as well as in securing the other desired environmental qualities of places."

Update to Chapter 6 of Planning Policy Wales: Welsh Government recently made changes to Planning Policy Wales Edition 11 to address the nature emergency by publishing a revised Chapter 6 'Distinctive and Natural Placemaking and Well-Being'. The policy changes came into immediate effect in October 2023 and impacts on all planning applications. There is a great deal to consider in the revised Chapter 6, however the main policy changes relate to:

- Green Infrastructure
- Net Benefit for Biodiversity and the Step Wise Approach
- Protection for Sites of Special Scientific Interest
- Trees and Woodlands

One key change is the requirement for all planning applications to be submitted with a 'Green Infrastructure

Statement' (para 6.2.5). A 'Green Infrastructure Statement' is now required with all new applications and should describe how green infrastructure has been incorporated into the proposal.

The statement should be proportionate to the scale and nature of the proposed development, for example for householder and minor developments this would normally be a short description.

The Green Infrastructure statement will be an effective way of demonstrating positive multi-functional outcomes which are appropriate to the site in question and must be used for demonstrating how the 'Step-wise Approach' (Paragraph 6.4.21) has been applied.

Building Better Places, The Planning System, Delivering Resilient and Brighter Futures, Placemaking and the Covid-19 recovery (Welsh Government 2020)

Within the above document under 'Green infrastructure, health and well-being and ecological resilience' it states the following regarding green infrastructure: *"Resilient ecological networks, whilst vital for nature recovery, are also integral to our health and well-being and form part of our response to climate change. The crisis has highlighted the importance of access to green spaces and opportunities to connect with the natural and historic environment. It has highlighted that easy access and proximity to quality greenspace is severely lacking in some areas and to some sections of our communities and actions to reduce such inequalities should be prioritised as part of wider regeneration and improvement activities as a matter of social and environmental justice. At the same time it is notable how, with the advent of fewer unnecessary journeys and increased walking and cycling, biodiversity has the opportunity to thrive.*

We must reverse biodiversity decline and enhance the resilience of ecosystems, as well as enable opportunities for social and economic activity based on valuing and enabling access to the natural and historic environment. The planning system has a key responsibility in securing green infrastructure, which plays a fundamental role in shaping places and our sense of well-being and is intrinsic to the quality of spaces in which we live, work and play."

Active Travel (Wales) Act (2015) The Active Travel (Wales) Act (2015)

This Act sets out that Welsh ministers must publish annual reports on the amount of active travel journeys made in Wales. There is also a requirement for Local Authorities to identify and plan for active travel routes and increase the provision for walking and cycling, and to encourage users to rely less on cars. Local highway authorities are required to give greater consideration to the requirements of walkers and cyclists and provide greater 10 infrastructure provision to them. The act also highlights the need to build connections between key sites such as workplaces, hospitals, schools and shopping areas with active travel routes.

The Well-being of Future Generations Act (2015)

The Well-being of Future Generations Act requires public bodies in Wales to consider the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change.

The Planning Act (Wales) 2015 states that Local Planning Authorities must exercise their function in relation to the determination of planning applications *"...as part of carrying out sustainable development in accordance with the Well-being of Future Generations (Wales) Act 2015 (annex 2), for the purpose of ensuring that the development and use of land contribute to improving the economic, social, environmental and cultural well-being of Wales."* (PA(W), Sec.2(2)).

Technical Advice Notes (TANs)

Technical Advice Notes should be read in conjunction with Planning Policy Wales (PPW). TANs should be taken into account by the local planning authorities in the preparation of Development Plans. They may be material to decisions on individual planning applications and will be taken into account by inspectors and the Welsh Government in the determination of appeals and called-in planning applications. The following TANs are relevant to green infrastructure:

TAN 5: Nature Conservation and Planning (2009): This Technical Advice Note provides advice about how the land

use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It brings together advice on sources of legislation relevant to various nature conservation topics which may be encountered by local planning authorities. The key principles of planning for nature conservation are set out, followed by advice about the preparation and review of development plans, including the relevant statutory requirements.

TAN 12: Design (2016): The revised Technical Advice Notes (TAN) aims to equip all those that are involved in the design of development with advice on how sustainability, through good design, may be facilitated through the planning system. It sets out the core design principles that any development proposal must follow to help create a sustainable environment and exhibit a high level of design quality. These are structured following the five key objectives of good design:

- Access - Ensuring ease of access for all;
- Character - Sustaining or enhancing local character; promoting legible development; promoting a successful relationship between public and private space; promoting quality, choice and variety; and promoting innovative design;
- Community Safety - Ensuring attractive, safe public spaces and security through natural surveillance;
- Environmental Sustainability - Achieving efficient use and protection of natural resources and enhancing biodiversity; and,
- Movement - Promoting sustainable means of travel.

TAN 16: Sport, Recreation and Open Space (2009): This Technical Advice Note provides advice on the role of the planning system in making provision for sport and recreational facilities and informal open spaces, as well as protecting existing facilities and open spaces in urban and rural areas in Wales. The guidance includes advice on Open Space Strategies and Open Space Assessments and outlines the need to consider green corridors and natural and semi-natural greenspaces when forming development proposals.

Assessment of Existing Green Infrastructure

For all major developments, the existing green infrastructure resources in and around the site must be described and assessed. A thorough contextual analysis of the role of existing green infrastructure in and around the site (e.g. hydrology, habitats, public rights of way and parks) should be provided and appropriate to the scale of the proposed development. This should include a large-scale map identifying the role of existing green infrastructure in the connecting wider landscape and neighbourhood context. Evidence used to describe this resource can include novel approaches such as mapping of ecosystems and ecosystem services, and GIS network and opportunity analysis, as these and other resources become available.

An Ecological Assessment, proportionate to the size of the development is required to identify existing Green Infrastructure features such as;

- Streams/rivers;
- Woodland, hedgerows and scrub;
- Roadside verges and street trees;
- Footpaths; and
- Open mosaic habitat/previously developed land (Brownfield sites), etc.,

CYFYNGIADAU

Mae Little Wing Ecology (CYF) wedi paratoi'r Adroddiad hwn at ddefnydd y Cleient neu ei Asiantau uchod yn unig yn unol â'n telerau busnes, y cyflawnwyd ein gwasanaethau oddi tanynt. Ni roddir unrhyw warant arall, wedi'i mynegi neu ei hawgrymu, ynghylch y cyngor proffesiynol sydd wedi'i gynnwys yn yr Adroddiad hwn nac unrhyw wasanaethau eraill a ddarperir gennym ni. Ni all unrhyw barti arall ddibynnu ar yr Adroddiad hwn heb gytundeb ysgrifenedig penodol ymlaen llaw gan Little Wing Ecology (CYF).

Mae'r asesiadau a wnaed yn rhagdybio y bydd y safle(oedd) a'r cyfleusterau yn parhau i gael eu defnyddio i'w pwrpas presennol heb newid sylweddol. Mae'r casgliadau a'r argymhellion yn yr Adroddiad hwn yn seiliedig ar wybodaeth a ddarparwyd gan eraill ac ar y dybiaeth bod yr holl wybodaeth berthnasol wedi'i darparu gan y partïon hynny y gofynnwyd amdani. Nid yw gwybodaeth a gafwyd gan drydydd partïon wedi'i dilysu'n annibynnol gan Little Wing Ecology (CYF).

Cynhyrchwyd gan:	**Little Wing Ecology (CYF) (Cwmni Di-elw Cyfyngedig trwy Warant)**
Rhif cwmni:	**13743223**
Cyfeiriad:	**24 Stryd Alma, Bryn-mawr, Blaenau Gwent, NP23 4DY**
E-bost:	**nic@littlewingecology.cymru**
Ffôn:	**07985 395251**

About Us

Little Wing Ecology is a not-for-profit ecological consultancy based in the South Wales Valleys. Specialising in bat surveys for housing developments, and providing a wide range of ecological services, it provides appropriate expertise on behalf of a range of clients.

We are a small ecological consultancy dedicated to providing an easy-to-use and jargon-free service.

We produce the following products:

- Preliminary Ecological Appraisal
- Preliminary Roost Assessment
- Bat Surveys
- Mitigation Planning
- Green Infrastructure Statements
- European Protected Species License Applications
- On-site Services to Support Planning Applications and Development
- eDNA Reports
- Reptile Surveys

As a Consultancy, we use our experience, expertise, and love of wildlife to provide an easy to access and pragmatic service, that upholds the highest standards of conservation.

As a Not-for-Profit Social Enterprise, we reinvest our profits. We work with valleys communities, conservation groups, local authorities, and other groups to support these three key areas:

A. Helping Nature

Developing and supporting habitat gain in the valleys through:

- Habitat improvement.
- Developing the built environment for the benefit of wildlife.
- Long-term monitoring projects for wildlife populations in the valleys.

B. Working with People

- Providing employment, training and voluntary opportunities for the local community and young people to help them build their skills, develop a stronger relationship with nature and build confidence in themselves.

C. Supporting Communities

- Reinvesting in nature and people, locally.
- Supporting education within communities to promote a positive relationship between people and wildlife.
- Providing pro-bono surveys for worthwhile causes

Adroddiad Arolwg gan

Cynhyrchwyd gan:	Little Wing Ecology (CYF) (di-elw wedi'i gyfyngu gan warant)
Rhif Cwmni:	13743223
Address:	24 Stryd Alma, Brynmawr, Blaenau Gwent, NP234 DY
e-bost:	nic@littlewingecology.cymru
Ffon:	07985395251