

GOULD ECOLOGY LTD

Ecological Consultants

Proposed Redevelopment at

121 Heol Cae Gurnen

**Gwaun Cae Gurnen
Ammanford
Neath Port Talbot
SA18 1PD**

**Preliminary Ecological Appraisal including
Daytime Bat Walkover**

**June 2026
(Version 1 - Final)**



Document Information

Report Type	Preliminary Ecological Appraisal / Daytime Bat Walkover		
Project Details	Site Location	Commissioned By	Date
Proposed redevelopment	121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot SA18 1PD Grid Ref. SN 70393 11624	GJ Planning (Agents)	March 2026

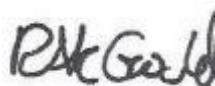
Fieldwork	Personnel	Date
Extended Phase 1 Habitat Survey / Daytime Bat Walkover	Richard Gould ACIEEM MA BSC(Hons) <i>(Experienced ecologist and licensed bat surveyor)</i>	5 th May 2026

Document Version	Details	By	Date
1 - Draft	Prepared by	Richard Gould	10 th June 2026
	Checked by	Richard Gould	10 th June 2026
	Issued to Client		10 th June 2026
1 - Final	Client Approved		18 th June 2026

Disclosure

"The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. I confirm that the opinions expressed are our true and professional bona fide opinions"

Signed



Richard Gould

Executive Summary

Preliminary Ecological Appraisal and Daytime Bat Walkover Survey in relation to a proposed redevelopment at 121 Heol Cae Gurnen, Gwaun Cae Gurnen, Neath Port Talbot SA18 1PD.

Survey Work

The survey work comprised an **Extended Phase 1 Habitat Survey** and **Daytime Bat Walkover** conducted on 5th May 2026. This survey was commissioned to update a previous **Bat Survey and Ecological Walkover** at the site (Gould Ecology Ltd in 2022).

Key Findings

Designated Sites

The site was located 860m from the Tairgwaith SSSI and within 2km of several SINC's.

Habitats

The site was a large, derelict club building set within a small plot comprising vegetated hard-surfaces and compacted stone. No Section 7 habitats occurred on site.

Species

The building contained multiple opening, small gaps and cavities which could provide opportunities for bats. It was considered to have **moderate bat roost suitability**.

The building and boundary hedgerows have potential to be used by **nesting birds** during the breeding season. Furthermore, **house sparrow were seen to be nesting** within a soffit gap on the north-west corner of the building.

Habitats at the site had **suitability for common lizard**. However, the probability of reptiles occurring within the site was considered to be very low due to the isolation of the site and low value of surrounding habitats. **Hedgehog have** been recorded in the near vicinity of the site, and could potentially occur within the plot on an occasional basis.

Japanese knotweed and **Wall Cotoneaster** (both non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act, 1981) occurred within the plot.

Appraisal

In the absence of further information there would be a (low) risk of disturbing, killing or injuring bats during demolition works, and of destroying bat roosts (potential legal offences).

The proposed development would represent a low risk of killing or injuring reptiles (such as common lizard) or hedgehog during works. Risks could be minimised by adopting careful working practices.

The proposed development would risk transporting wall cotoneaster off site - potentially a legal offence. This could be avoided by implementing suitable working methods and controls.

Recommendations Summary (Refer to Section 7 for Full Details)

A further bat survey (comprising 2 x dusk emergence survey visits) is recommended in order to confirm the current status of bat roosting at the site.

Demolition works shall be conducted outside of the bird nesting season, or the building must be checked and confirmed clear of active nests prior to proceeding.

Vegetation within the site shall be cleared carefully in order to minimise risks to reptiles, hedgehog or other fauna during site clearance works.

Japanese knotweed and wall cotoneaster shall be managed/controlled on site or removed using a licensed waste carrier.

A designated habitat area shall be created within the plot to benefit biodiversity at the site in the long term. Further ecological enhancement could be delivered by installing build-in bat boxes and bird nest boxes within building.

Contents

	Page
Executive Summary	2
1. Introduction & Background	4
2. Legislative and Planning Context	5
3. Methodology	8
4. Results	9
5. Survey Limitations	17
6. Appraisal	18
7. Recommendations	20
8. Conclusions	22
References	24

List of Figures and Tables

<i>Figure 1: Site Location</i>	5
<i>Figure 2: Site Setting</i>	12
<i>Table 1: Designated Sites</i>	9
<i>Table 2: SINC's within 2km of the site</i>	9

Appendices

Appendix A: Photographs

Appendix B: Bat Licensing Information

Appendix C: Summary of Planning Policy Guidance relating to Bats and Biodiversity

Appendix D: Ecological Enhancement

1 Introduction & Background

- 1.1 In March 2026, Gould Ecology Ltd were commissioned by GJ Planning (Agents) to carry out a Preliminary Ecological Appraisal and Daytime Bat Walkover survey at 121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot SA18 1PD.
- 1.2 The purpose of the survey was to accompany a planning application for a proposed redevelopment at the site, which would include removal of an existing derelict building.
- 1.3 The site was located within the settlement of Gwaun Cae Gurnen, approximately 7km east of Ammanford as shown in Figure 1, below.

Figure 1: Site Location Map



- 1.4 The aims of this survey were to:
 - Identify and describe the habitats and ecological features within the site and immediate surrounding area;
 - Identify any designated sites, priority habitats and protected or priority species which are present (or potentially present) within the zone of influence of the project and could be affected by the proposed works;
 - Provide an appraisal of the significance and implications of any potential ecological impacts which may be caused by the project;
 - Identify any further surveys or other work necessary to complete the impact assessment.
 - Provide recommendations for delivering appropriate impact avoidance, mitigation and ecological enhancement strategies in line with legislative and planning requirements.

Personnel

- 1.5 The survey and report was conducted by Richard Gould ACIEEEM MA, BSc (Hons). Richard is licenced to survey bats in England and Wales. He holds a current Bat Survey Licence from Natural Resources Wales (S096176-1).

- 1.6 Richard Gould has over 20 years' experience as a consultant ecologist and is experienced at conducting ecological assessments, Preliminary Ecological Appraisals and Bat Surveys for a range of projects within West Wales.

2 Legislative Context

- 2.1 Wildlife and biodiversity in Wales are protected to varying degrees through legal statute and planning policy.

- 2.2 The following key wildlife legislation is relevant to this project:

- **The Conservation of Species and Habitats Regulations 2017, as amended.** Species protected under this legislation are known as European Protected Species (EPS).
- **The Wildlife & Countryside Act (1981, as amended);**
- **The Environment (Wales) Act (2016), in conjunction with the Wellbeing of Future Generations (Wales) Act (2015), the Nature Recovery Plan for Wales (2015) and the Planning (Wales) Act (2015);**
- **The Protection of Badgers Act (1992).**

- 2.3 A number of Sites, Habitats and Species are included within the legislation. The following paragraphs summarise the key aspects relating to each, with particular reference to those relevant to development proposals.

Designated Sites

- 2.4 *Designated Sites* are sites which are protected for their importance to biodiversity. These include:

- Special Areas of Conservation (SACs), Special Protected Areas (SPAs) and Marine Protected Zones (MPZs) - sites of international importance, protected under UK legislation (*The Conservation of Habitats and Species Regulations 2017 as amended*);
- Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) - sites of national importance, protected under UK legislation (*Wildlife and Countryside Act (1981)*).
- Sites of Interest for Nature Conservation (SINCs) and Local Nature Reserves (LNRs) are of importance at the regional or local level, and are protected within planning policy guidance.

Protected Species

- 2.5 A range of *legally protected species* are included within different pieces of legislation, which offer varying forms of protection. Many protected species are also priority species, but also have specific legal protection from particular actions.

- 2.6 Commonly occurring examples of protected species include:

- **Bats** (*Conservation of Species and Habitats Regulations and Wildlife and Countryside Act (WACA), 1981, as amended*);
- **Dormice** (*Conservation of Species and Habitats Regulations & WACA*);
- **Otter** (*Conservation of Habitats and Species Regulations & WACA*);

- **Great crested newt** (*Conservation of Species and Habitats Regulations and WACA*);
- **Water Vole** (*Wildlife and Countryside Act, 1981 - Full protection*)
- **Marsh Fritillary Butterfly** (*Wildlife and Countryside Act, 1981 - Full Protection, Conservation of Species and Habitats Regulations 2017 - protection of core habit areas*);
- **Reptiles**- slow worm, grass snake, common lizard and adder - (*Wildlife and Countryside Act, 1981 - Partial protection*). Rare and locally occurring species (Smooth snake, Sand Lizard) have additional protection under the *Conservation of Species and Habitats Regulations*.
- **Badgers** (*The Protection of Badgers Act, 1992*). Includes protection of badger setts from digging or disturbance;
- **Nesting Birds** (*Wildlife and Countryside Act, 1981*) Protected from disturbance when active, additional protection is given to certain rare or sensitive species listed in Section 1 of the Act).
- **Certain rare plants and invertebrates** are also protected within the *Wildlife and Countryside Act, (1981)*.

- 2.7 This list is not exhaustive, and there are many more protected species which may occur within specific locations in the country and/or in particular habitats. Where relevant, any legislative constraints around other species are described within the report text.

The Conservation of Habitats and Species Regulations 2017 (as amended)

- 2.8 The **Conservation of Habitat and Species Regulations** provide for the designation and protection of 'European sites' and the protection of 'European protected species (EPS)'. All **UK bat species** are included within this legislation.
- 2.9 Aspects of this legislation relevant to development projects mean that it is an offence to:
- Deliberately capture, injure or kill an EPS (i.e. a bat);
 - Deliberately disturb an EPS;
 - Damage or destroy a breeding site or resting place of an EPS (e.g. a bat roost).
- 2.10 In particular, the term '*disturbance*' relates to any action 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.' This includes obstructing access to any place used by bats for shelter (i.e. a roost) whether they are present or not at the time.
- 2.11 It should also be noted that to damage or destroy a breeding site or resting place of an EPS (such as a bat roost) is an offence, whether or not the action was deliberate.
- 2.12 In some cases, otherwise illegal actions may be permitted through gaining a **derogation licence** from the statutory nature conservation body (in Wales, this is **Natural Resources Wales (NRW)**). This process is often used for development projects where disturbance to (or destruction of) a bat roost is likely to be caused by the proposed works. Further details of licensing requirements are provided in Appendix B.

The Wildlife and Countryside Act (1981, as amended)

- 2.13 Much of the protection previously afforded to bats under the **Wildlife and Countryside Act (WACA)** is now superseded by the Conservation of Habitats and Species Regulations (2017).
- 2.14 However, the WACA specifically protects against:
- Intentional or reckless obstruction of access (of a bat) to a structure or places used for shelter or protection (i.e. blocking of bat access to roosts);
 - Intentional or reckless disturbance of a bat when occupying a place of shelter or protections.
- 2.15 These acts would cause an offence under the WACA, unless the act was '*the incidental result of a lawful operation and could not have reasonably been avoided*'.
- 2.16 The Wildlife and Countryside Act also affords legal protection to **nesting birds**, including to:
- Intentionally kill, injure or take any wild bird (*certain authorised persons are permitted to kill or take certain species using permitted methods under licence*);
 - Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built (unless it can be demonstrated that the act was '*the incidental result of a lawful operation and could not have reasonably been avoided*');;
 - Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Invasive Species

- 2.17 A number of invasive plant species are listed within the Wildlife and Countryside Act (Schedule 9, part II), which includes the commonly occurring Japanese Knotweed and Himalayan balsam, as well as several other terrestrial and aquatic plants. In the context of construction or engineering works, these must not be caused to spread off site.

The Environment (Wales) Act 2016

- 2.18 **Section 6 of the Environment Act** includes a 'Biodiversity and Resilience of Ecosystems Duty', which places a duty on planning authorities to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems"
- 2.19 **Section 7 of the Environment Act** contains a list of species and habitats of principal importance in Wales. All habitats and species on this list are treated as a 'material consideration' within the planning process, and planning is unlikely to be granted where adverse impacts to any of these are expected.
- 2.20 Currently, the Section 7 list includes the following bat species: barbastelle, common and soprano pipistrelle, brown long eared, Bechstein's, noctule, greater and lesser horseshoe bats.

- 2.21 Consideration should therefore be made for ensuring that biodiversity is not adversely affected (and actively promoted) by the project proposals. This duty has been integrated into Planning Policy Wales 12, which requires that a 'stepwise' approach is adopted for mitigation and that ecological enhancements are integrated into all planning applications to deliver an overall 'Net Benefit to Biodiversity' (NBB).

3 Methodology

Desk Study

- 3.1 Ordnance survey maps and overhead photography (Google Earth Pro) were used to assess the site's context within the wider area.
- 3.2 The MAGIC interactive map (magic.defra.gov.uk) was used to search for statutory designated sites within the vicinity of the development.
- 3.3 A search for existing biodiversity records within 2km of the site was ordered from South-East Wales Biological Records Centre in May 2026.

Daytime Bat Walkover (DBW) Survey methodology

- 3.4 The building on site was assessed for its potential to support roosting bats by Richard Gould, in line with the methodology provided within Collins (2023) '*Bat Surveys for Professional Ecologists - Good Practice Guideline (4th Ed)*'
- 3.5 A thorough and systematic inspection was made of the external building faces and features, paying particular attention to areas where signs might be expected to occur. It was not possible to access the building interior due to safety reasons, so the results of a previous inspection of the site were referred to (Gould Ecology Ltd, 2022).
- 3.6 All building features with 'bat roost potential' were identified, and the habitat quality of the site and surrounding area were noted. These details were used in order to provide an assessment of the overall suitability of the site for bats, and to inform any further survey requirements, with reference to the guidance provided in BCT (2023).
- 3.7 Live or dead bats, signs of their presence or habitat features which could support bats were noted. Indications of bat presence include bat droppings (this is the most commonly encountered sign), as well as urine staining, staining around crevices, cobweb-free holes and flying spaces, and feeding remains.

Nesting Birds

- 3.8 Evidence of nesting birds was recorded during the building inspection, and the potential for the building and adjacent habitats to support nesting birds was noted.

Ecological Walkover Methodology

- 3.9 The proposed site area was walked and habitats identified in accordance with the JNCC's Phase 1 Habitat Survey methodology. Any priority habitats listed under Section 7 of the Environment (Wales) Act, 2016 or those which could meet SINC criteria were identified.

- 3.10 An assessment was made of the connectivity of the site to habitats in the wider area and how the site contributes to ecosystem resilience
- 3.11 The suitability of habitats and features within the site for any other protected and priority wildlife was assessed (including bats, dormice, otter, water-vole, badger, birds, reptiles, amphibians and invertebrates).
- 3.12 Non-native invasive plant species within the site were identified.

4 Results

Desk Study

Statutory Designated Sites

- 4.1 Table 1, below summarises the statutory designated sites within 2km of the proposed development, and the bat-related Special Areas of Conservation (SAC) and SSSIs within 10km. Table 2 provides details of the *Sites of Interest for Nature Conservation (SINCs)* within 2km.

Table 1: Designated Sites

Name of Designated Site	Distance from Development Site	Reason for designation
Tairgwaith SSSI	860m east (nearest point)	Species-rich grasslands and associated rare plants

- 4.2 The Tairgwaith SSSI, of value for species-rich grassland habitats and associated species, occurred 840m from the site.

Table 2: Sites of Interest for Nature Conservation (SINCs), and Sites meeting SINC criteria within 2km

Name of SINC	Distance from Development Site	Description
NPT Watercourses	Within	The project site falls within an area designated as NPT Watercourses, due to proximity to the Garnant and Nant Hir Rivers
Derwydd Avenue	83m at nearest point	The Derwydd Avenue SINC occupies an area to the east of the project site. It is designated for its mosaic habitats which support areas of Purple Moor-grass & Rush Pasture, Willow carr/wet woodland, ponds and tall herb (fen). It is potentially suitable for bats, birds, reptiles and amphibians.
NPT Ancient Semi-Natural Woodland	193m	Location details not provided. Small blocks of Ancient Woodland occur within the search area, primarily associated with or adjacent to watercourses. The nearest area occurs on the west margin of the Garnant River, west of the project site.
GCG Common (Gwaun Cae Gurnen)	303m	The site consists of a species rich mosaic of wet and dry meadow, with Purple Moor-grass and heath elements. It contains whorled

		caraway and has potential suitability for the Marsh Fritillary Butterfly. It lies adjacent to the Tairgwaith SSSI.
Maerdy Playing Fields	368m	A species rich area of lowland meadow in Tairgwaith, including on reclaimed colliery spoil. Important assemblages of invertebrates have been recorded.
Abernant Road Playing Field	614m	Neutral grassland with possible areas of acid, forming a mosaic, area of rush pasture. Contains <i>Lowland meadow</i> and <i>Lowland Dry Acid Grassland habitats</i> . Important assemblages of invertebrates have been recorded.
Tiroedd Comin Cwm Amman Uchaf	875m	Mosaic habitats - The commons support typical upland habitats including Mat grass dominated acid grasslands, areas of Purple Moor grass and rush pastures, heathland, and bogs and flushes. Of importance to birds, plants and potentially suitable for Brown Hare.
Betony Field	1550m	Lowland meadow habitat containing a diverse grassland sward. Japanese knotweed present.

- 4.3 Several SINCs occur within 2km of the site, which include several priority habitat types: *Lowland Meadows*, *Lowland Dry Acid Grasslands*, *Purple Moorgrass* and *Rush Pasture* and *Mosaic Habitats*. Several blocks of *Ancient Semi-Natural Woodland* occur in the surrounding area.
- 4.4 Several SINCs provide habitats of importance to invertebrate populations, whilst some offer habitats potentially suitable for other priority species including bats, reptiles, amphibians, skylark, lapwing, marsh fritillary and brown hare.
- 4.5 The site falls within an area designated for NPT watercourses (which occupies a large proportion of the search area), due its general proximity to priority river habitats in the surrounding area .

Species Records

- 4.6 The following paragraphs summarise the records of protected and priority species (relevant to the proposals) within 2km of the site held by SEWBREC (as of 2nd June 2026).

Bats

- 4.7 There were 32 records for bats within the search area, which included common pipistrelle, soprano pipistrelle, myotis, brown long-eared and noctule.
- 4.8 The nearest bat records comprised records for common pipistrelle and soprano pipistrelle bat flight passes during a survey of the site in 2022; a record for bat droppings in a loft 295m from the site (2017), common and soprano pipistrelle bats 390m from the site (2012), a common pipistrelle bat maternity roost 812m from the site (2006) and small numbers of roosting pipistrelle bats 976m from the site (2012).

- 4.9 Records for myotis species bats were made 1.2km from the site (2023) and historical records for brown long eared bats occurred just over 2km from the site.

Previous Bat Survey at the Site

- 4.10 A Bat Survey was conducted at 121 Heol Cae Gurnen by Gould Ecology Ltd in 2022, which comprised 2 x dusk emergence survey visits and 1 x dawn re-entry survey visit.
- 4.11 No bat roosts were recorded within the building. Low numbers of common pipistrelle and soprano pipistrelle bats were recorded foraging in the vicinity.

Terrestrial Mammals (other than bats)

- 4.12 There were 18 records for **hedgehog** in the search area, with some in the near vicinity of the site, with the nearest record 42m from the site (2011).
- 4.13 The nearest record for **badger** was just over 1.2km from the site, with two further records just over 2km distant
- 4.14 **Brown hare** have been recorded at just over 1.8km from the site (2019).
- 4.15 There were 3 records for **otter** (all just over 2km from the site) and 1 record for **dormouse** (2.2km from the site)

Reptiles and Amphibians

- 4.16 There were 5 records for **slow worm** (nearest record 870m from the site), 12 records for **grass snake** (nearest record 720m from the site (2012) and 17 records for **common lizard** (nearest record 870m from the site).
- 4.17 **Common toad** and **common frog** have been recorded within the search area, with the nearest records 868m and 1.1km from the site respectively. **Smooth newt** and **palmate newt** have also been recorded 1.2km from the site.

Birds

- 4.18 There were 140 records for priority, red-listed and Schedule 1 birds within 2km of the site. Bird records within 500m of the site included grey wagtail, red kite, lesser redpoll, goldcrest, starling, house sparrow, bullfinch, cuckoo and meadow pipit.

Invertebrates

- 4.19 Marsh fritillary butterfly have been recorded in two locations between 160 and 360m of the site (2018).
- 4.20 Other priority invertebrate species recorded within 1km of the site included small heath, broom moth, grey mountain carpet moth and small pearl-bordered fritillary.

Plants

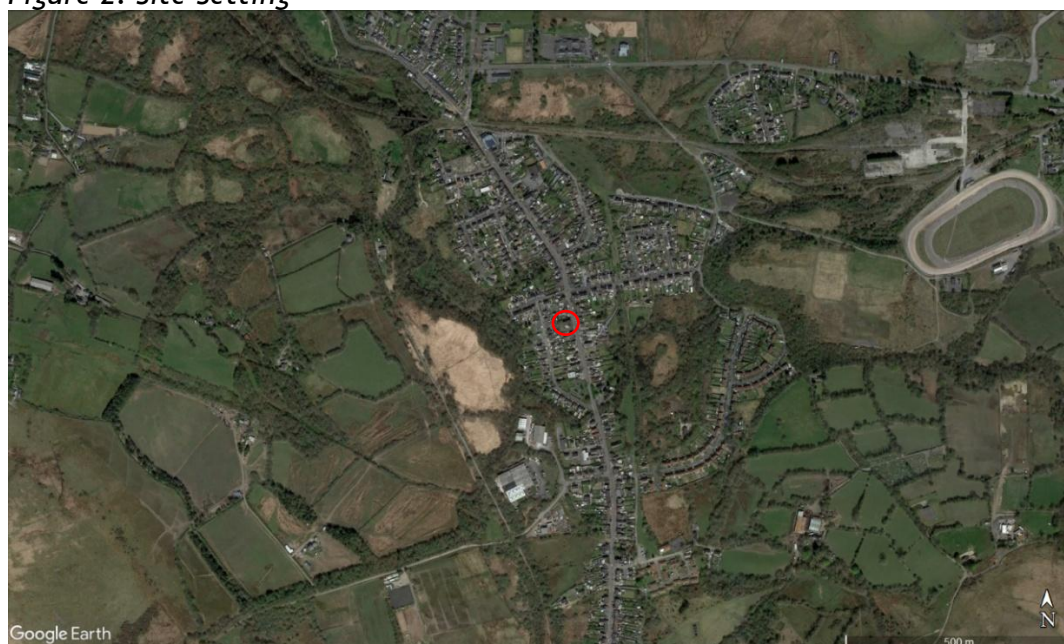
- 4.21 Japanese knotweed, Himalayan balsam, *Montbretia crocosmia* and wall cotoneaster (Schedule 9 listed non-native invasive species) have been recorded within the search area, with the nearest records 150m from the site.

- 4.22 The only protected/ priority plant species recorded within the search area comprised native bluebell which has been recorded in several locations, with the nearest record 150m from the site.

Site Setting and Overview

- 4.23 The site was a large, derelict club building comprising a main section at the front with rear extensions. It was set within a small plot containing vegetated hard-surfaces and was located adjacent to the A474 and surrounded by residential houses with small gardens.
- 4.24 Habitats in the wider area included watercourses, woodland, marshy grassland and agricultural grassland, but these habitats were not well connected to the site (due to intervening urban development).

Figure 2: Site Setting



Phase 1 Habitat Survey

- 4.25 The following paragraphs describe the habitats and features at the site, with an assessment of their value to protected and priority species. Flora are referred to by their common names within the text, with scientific names provided on their first occurrence only. Species abundance (for each habitat type) was described using the DAFOR scale: 'Dominant', 'Abundant', 'Frequent', 'Occasional' or 'Rare'.
- 4.26 Photographs are provided in Appendix A. Species

Main area of plot (excluding building and boundaries)

- 4.27 Habitats within the plot comprised hard surfaces (tarmac and compacted stone) which had become colonised by a range of grasses and herbs tolerant of poor soil (Ephemeral / short perennial habitat), as well as small areas of scrub, non-native shrubs and willow saplings.

4.28 Species recorded within the plot included:

Abundant:

A fescue *Festuca* species, ribwort plantain *Plantago lanceolata*, Springy turf moss *Rhytidiadelphus squarrosus*;

Frequent:

Bellis perennis, common cat's ear *Hypochaeris radicata*, tormentil *Potentilla erecta*, rosebay willowherb *Chamaenerion angustifolium*, white clover *Trifolium repens*, wild strawberry *Fragaria vesca*, bramble *Rubus fruticosus*, Yorkshire fog *Holcus lanatus*, wall cotoneaster *Cotoneaster horizontalis*;

Occasional:

Sweet vernal grass *Anthoxanthum odoratum*, common sedge *Carex nigra*, grey willow *Salix cinerea* (saplings), dandelion *Taraxacum officinale*, False oat grass *Arrhenathenum elatius*, common vetch *Vicia sativa*;

Rare:

Cocksfoot *Dactylis glomerata*, Meadow buttercup *Ranunculus acris*, a speedwell *Veronica* sp., Japanese knotweed *Reynoutria japonica* (small patch near rear margin).

4.29 Areas of recently disturbed bare ground occurred within the main area of the plot, which revealed the shallow soil and underlying hard surfaces. Patches of dense vegetation (bramble and encroachment from boundary hedges) occurred on the margins.

4.30 The plot supported a relatively diverse range of plant species associated with poor soils and hard surfaces. The vegetation potentially supports a moderate diversity of invertebrate species, but offers limited shelter or foraging opportunities for other species groups. The habitat was considered to have ecological value at the site scale.

4.31 The plot was surrounded on all sides by urban habitats (residential and commercial properties with small gardens of low ecological value) and connectivity from the site to the surrounding area was poor.

Site Margins

4.32 A Leyland Cypress hedge bordered the site to the west, and a garden privet hedge bordered the site to the north. A hawthorn tree occurred in the rear garden. Hedges were dense and encroaching the site area on the northern margin, providing suitable habitat for nesting birds.

4.33 Boundary hedges were considered to have ecological value at the scale of the site.

Daytime Bat Walkover (DBW)

- 4.34 The following paragraphs describe the building on site, with an assessment of the extent and quality of any features with potential for bat roosting. Photographs are provided in Appendix A.

External Inspection

- 4.35 The roof of the main building was of slate, but only the front (eastern) elevation had a complete roof, with slates missing from the majority of the rear sections.
- 4.36 The front (east) elevation was generally well sealed, with rendered wall and boarded doors and windows. Gaps were noted at the corners of the fascia, and beneath flashing where dormer windows joined the main roof.
- 4.37 The southern elevation comprised a series of roof elevations and extensions. The majority of the main roof was open, and large gaps were noted around soffits on the single-storey extensions.
- 4.38 The rear (west) extension comprised two storey extensions with missing roofs and doorway/ window openings. Occasional gaps were noted in rotting timber fascias and in soffits.
- 4.39 The north elevation was generally well sealed, with no potential bat access points and cement sealed wall tops. A small outbuilding / external cellar occurred on the northern elevation with a doorway opening and corrugated metal roof. The feature was overgrown with dense vegetation and was flooded internally. No potential bat roost features were noted in this area.
- 4.40 In general, the building was in similar condition to that recorded during the 2022 survey, although some parts of the roofs appeared to have deteriorated, with larger areas missing roof coverings.

Internal Inspection

- 4.41 It was not possible to access the interior of the building due to safety considerations. However, it was considered likely that conditions were similar (but potentially with further deterioration) to that recorded during the 2022 survey).

Internal Inspection (2022 Results Reproduced Below)

- 4.42 The main internal space of the building was derelict and damp. The lower floors were unused with rendered walls and timber ceilings. Upper floors were in poor condition with roofs partially or completely open. Occasional small gaps were noted in the roof frame and between roof timbers and walls.
- 4.43 A small, flooded basement occurred on the southern elevation. No potential crevices roost features were noted in this area.
- 4.44 No evidence of bats was noted in any part of the building.

Other Protected and Priority Species Accounts (excluding bats and birds)***Dormouse***

- 4.45 Habitats at the site had *negligible* suitability for dormice.

Otter and Water vole

- 4.46 No watercourses occurred within the survey area and habitats at the site were of negligible value to otter or water vole.

Badger

- 4.47 No evidence of badger was seen at the site or within the wider area. Habitats at the site and the vicinity were considered to have low value to badger, and connectivity to suitable habitats was poor.

Priority Mammals

- 4.48 Hedgehog have been recorded in the near vicinity of the site, and individuals could potentially occur within the site whilst foraging or dispersing. Areas of dense vegetation on the margins could potentially offer refuge and dispersal routes for the species.
- 4.49 The site had very limited suitability to other priority mammals.

Nesting Birds

- 4.50 The club building and dense hedges on the site margins could potentially be used by nesting birds. House sparrow were seen within the dense vegetation on the northern margin, and a pair were seen to be entering a and leaving a soffit gap on the north-western corner of the building, indicating a nesting site.

Reptiles and Amphibians

- 4.51 Habitats at the site were potentially suitable for common lizard. However, the site was surrounded on all sides by developed habitats of low value to reptiles and risks of presence were considered likely to be low. The site had negligible suitability to any other reptile species due to its urban setting and poor connectivity.

Invertebrates

- 4.52 The range of plant species within the plot could provide suitable habitat for a moderate diversity of invertebrate species, but was considered unlikely to support significant populations of protected or priority species. Habitats at the site were not suitable for the protected marsh fritillary butterfly (recorded in the vicinity)

Invasive Species

- 4.53 Wall Cotoneaster (an invasive cotoneaster species, listed on Schedule 9 of the Wildlife and Countryside Act) was noted frequently throughout the plot.
- 4.54 Furthermore, a small stand of Japanese knotweed (listed on Schedule 9 of the Wildlife and Countryside Act) was recorded near to the western margin (rear) of the plot.

Walkover Survey Summary and Interpretation

Designated Sites

- 4.55 The site was located 860m from the Tairgwaith SSSI and within 2km of several SINCs, including NPT Watercourses, Derwydd Avenue, NPT Ancient Semi-Natural Woodland, GCG Common, Maerdy Playing Field, Abernant Road Playing Field, Tiroedd Comin Cwm Amman Uchaf, Betony Field

Habitats

- 4.56 Habitats on site comprise the derelict building and a vegetated hard surfaces (including short ephemeral/perennial and small areas of bramble scrub and invasive species). No Section 7 habitats occurred on site.

Bats

- 4.57 The building was very open and contained numerous doorway and window openings on the western and southern elevations, as well as a largely open roof. Small cavities were noted beneath soffits and fascias on external walls, and small gaps and cavities were noted around the roof frame and walls internally. These features provided multiple openings that could provide access to bats.
- 4.58 Taking into account the deteriorating condition of the building and the results of the previous Bat Survey (Gould Ecology Ltd, 2022) which did not record bats roosts and relatively low levels of bat activity, the site was considered to have *moderate* bat roost suitability.

Other Species

- 4.59 The club building and boundary hedgerows have potential to be used by nesting birds during the breeding season. Furthermore, house sparrow were seen to be nesting within a soffit gap on the north-west corner of the building.
- 4.60 Habitats at the site had potential suitability for common lizard. However, the probability of reptiles occurring within the site was considered to be very low due to the isolation of the site and low value of surrounding habitats.
- 4.61 Hedgehog have been recorded in the near vicinity of the site, and could potentially occur within the plot on an occasional basis.
- 4.62 Japanese knotweed and Wall Cotoneaster (both non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act, 1981) occurred within the plot.

5 Survey Limitations

Daytime Bat Walkover

- 5.1 Visibility around the exterior of buildings was generally good, but some of the roofs were high and inaccessible. Binoculars were used in this case, and the external assessment was considered to be adequate.
- 5.2 It was not possible to conduct an internal inspection of the building for safety reasons. The results of the 2022 internal inspection were referred to for context.
- 5.3 The condition of buildings (and hence suitability for bat roosting) may change over time. Hence, a follow-up check may be required if there is a delay of over 2 years between the date of survey and commencement of works.

Walkover Survey

- 5.4 The walkover survey was based on Extended Phase 1 Habitat Survey methodology which provides an assessment of the broad habitat types in the area, along with an appraisal of the habitat suitability, and presence of field signs, for protected or notable species.
- 5.5 Various species of flora and fauna may only be apparent at certain times of year and, in some cases, may not be apparent every year. Zero observation of a species during a single site visit cannot therefore confirm absence. The Extended Phase 1 Habitat survey can only provide an indication of habitat suitability for the species assessed, and to inform further survey requirements.
- 5.6 The walkover survey was conducted in April 2026. This within the optimal season for botanical survey, but would favour recording of early emerging plant species.

Data Search

- 5.7 Data from the local Biological Records Centre provides evidence of historical records within the search area. Absence of records in an area does not necessarily indicate absence of a species, but could reflect a paucity of recording effort.

Invasive species

- 5.8 Japanese knotweed, Himalayan balsam and other invasive species are usually likely to be detected during a walkover survey, if present. However, under some circumstances invasive plants may not be detected.
 - 3.1 For instance, it is possible for the presence of invasive species to be concealed by management practices (such as regular cutting and removal of stems), or invasive species seeds or rhizomes may remain undetected within soil until being triggered to grow due to changes in management practices.
 - 3.2 Therefore a Preliminary Ecological Appraisal alone should not be used as evidence to confirm absence of invasive species.

6 Appraisal

Designated sites

- 6.1 No adverse impacts to designated sites were anticipated (either statutory sites or SINC's), due to their separation from the project site by intervening areas of urban development.

Habitats

- 6.2 Habitats at the site were valued at the *site* scale - vegetation would support a moderate diversity (and relatively low abundance) of invertebrates within an urban setting, as well as providing suitable nesting sites and a small amount of forage for small birds (such as house sparrow).

Section 7 (Priority) Habitats

- 6.3 No Section 7 habitats occurred on site or in the immediate surrounding area. Therefore, no loss of Section 7 habitats would be anticipated.
- 6.4 The site was separated from priority habitats (Ancient woodland, Rivers) in the wider area by intervening areas of urban development. No connecting watercourses were noted on site. Provided standard pollution control measures are implemented, risks of accidental spills entering watercourses could be avoided or minimised.

Ecosystem Resilience

Diversity

- 6.5 The site was located within an area comprising urban habitats (built areas, gardens of low ecological value). In this context, vegetation within the site would contribute to the diversity of the local area by providing a small area of habitat for invertebrates and birds.

Connectivity

- 6.6 Connectivity to and from the site was poor, and primarily suited to flying animals (such as birds or invertebrates), which could move from the site to gardens in the surrounding area, as well as potentially to semi-natural habitats in the wider area (such as grasslands, woodland and watercourses). Small mammals such as hedgehog could potentially between the site and adjacent linked gardens, but surrounding roads would be a significant barrier to the movement of ground-based animals.

Scale

- 6.7 Habitats present at the site were small in extent. Whilst buildings and hard surfaces are common in the surrounding area, the range of vegetation associated with the neglected plot is likely to be less frequent.

Condition

- 6.8 The condition of the building was poor and deteriorating. This could currently provide bat roosting and bird nesting opportunities, but in the long term its value to wildlife would likely decrease.
- 6.9 The condition of habitats in the main part of the site would represent an early successional stage which might later develop dense scrub dominated by bramble and

grey willow, as well as invasive species. It's current condition was therefore considered to be moderate.

Adaptability

- 6.10 Habitat conditions at the site are not likely to be very adaptable, as (in the absence of intervention) there would be a tendency for the building to deteriorate further and for scrub and invasive species to develop within the plot, reducing the diversity of plants (as discussed above).

Assessment

- 6.11 Proposals for developing the site could potentially result in minor loss to the resilience of the wider ecosystem by removing features which support a moderately diverse plant assemblage, invertebrates, small mammals and birds. However habitats at the site are inherently unstable, and the inclusion of suitable habitats and features within the design could potentially contribute to ecosystem resilience in the longer term (Refer to Section 7, below).

Bats

Roosting

- 6.12 The site was considered to have *moderate* suitability for bats - there was a wide variety of potentially accessible openings and potential crevice roost features. Previous bat survey work at the site (2022) did not identify any roosts and recorded relatively low levels of bat activity. However, bats were seen flying near to (and occasionally within) the building.
- 6.13 In the absence of further information there would be a (low) risk of disturbing, killing or injuring bats during demolition works, and of destroying bat roosts (potential legal offences).
- 6.14 In these circumstances, further dusk emergence survey would be required in order to adequately confirm the presence or absence of bats at the site (according to current good practice guidelines - Collins, 2023)

Foraging and Commuting

- 6.15 Habitats at the site had relatively low value to bats, although boundary hedges could provide some value to local bats for foraging and commuting.

Birds

- 6.16 Demolition of the building, or clearance of dense bramble or hedgerow vegetation would risk disturbing nesting birds if conducted during the breeding season (1st March to end August). This could potentially result in a legal offence under the Wildlife and Countryside Act (1981) as amended.
- 6.17 This risk could be avoided by working outside of the nesting season, or by checking suitable features prior to working.
- 6.18 Habitats at the site would potentially provide limited foraging to local birds (such as house sparrow, blackbird, robin, pigeons, corvids). Brambles would provide berries during the autumn, and the site would support a moderate abundance of invertebrate prey. However, the habitats would not be likely to support important assemblages of birds or notable bird species.

Reptiles, Hedgehog and other fauna

- 6.19 Site clearance works would represent a low risk of killing or injuring reptiles (i.e. common lizard), hedgehog (a priority mammal species) or other fauna such as common frog.
- 6.20 Killing or injuring reptiles would potentially cause a legal offence under the Wildlife and Countryside Act (1981) as amended. Priority mammals such as hedgehog are protected within Planning Policy as directed by the Environment (Wales) Act (2016).
- 6.21 Due to the generally low suitability of the site, these risks could be adequately avoided or minimised by implementing precautionary working methods
- 6.22 In the long term, retention / provision of hedges or habitat area on the margins of the plot could be used to provide connectivity, refuge and foraging opportunities for local fauna.

Invasive Species

- 6.23 Site clearance or excavation works could potentially cause Japanese Knotweed and Wall Cotoneaster, (Schedule 9 invasive species), to spread off-site (potentially a legal offence under the Wildlife and Countryside Act (1981), as amended).
- 6.24 This could be avoided by ensuring that appropriate controls are implemented.

7 Recommendations

- 7.1 This section contains recommendations for mitigating the potential ecological impacts described in Section 6.

Further Survey

- 7.2 Further bat survey is recommended in order to provide up to date information on the presence/absence of bat roosts at the site (and hence to confirm whether potential impacts to bats or bat roosts could be caused).
- 7.3 The further survey work would comprise 2 x dusk emergence survey conducted in suitable weather conditions conducted between May - September.

Outline Mitigation Measures***Bats***

- 7.4 The requirement for bat mitigation shall be determined following the recommended further survey work. However, the following paragraphs describe the likely mitigation requirements:
- Should bat roosts be found to be present, working methods would need to be designed to ensure that risks of harming bats during the demolition works are minimised - potentially requiring supervision by an ecologist and capture/transport of bats to a refuge roost site.
 - In the longer term, equivalent bat roost features would need to be integrated into the project design to compensate for any loss of bat roosting habitat.

- 7.5 If bats would be disturbed during the works, or if any identified bat roosts would need to be damaged or destroyed, a derogation licence from Natural Resources Wales would be required in order to permit an otherwise unlawful action (Refer to Appendix B).

Nesting Birds

- 7.6 Preferentially, the building shall be demolished (and any areas of dense vegetation cleared) outside of the bird nesting season (i.e. not between 1st March and 31st August).
- 7.7 As an alternative, works could proceed between March and August if the site was checked for bird nesting and no active nests were found.
- 7.8 However, presence of active nests is considered likely within the main breeding season (given the findings of the current survey). Any nests found must be protected from disturbance until chicks have fledged, potentially leading to delays if attempting to work within the breeding season

Reptiles, Hedgehog and other fauna

- 7.9 Prior to commencing works on site, a protected habitat area shall be demarcated within the site. This area shall be used as a refuge for any fauna encountered during site clearance, and as an area of new habitat of benefit to wildlife in the long term.
- 7.10 As a precaution to avoid the low risk of killing or injuring reptiles (such as common lizard), hedgehog or other fauna during site clearance, precautionary working methods shall be implemented. Indicative measures are provided below:
- Vegetation shall cut down sequentially prior to bringing large vehicles, machinery or materials on to site.
 - Vegetation shall be cut down 15cm above ground level using hand-held tools and working from the centre of the site outwards All arisings (cut vegetation) shall be removed from the construction zone
 - Within 24 - 48 hours, a second cut of vegetation to 5 - 10cm above ground level shall be implemented using the same process.
 - Any loose materials, rocks, debris, etc, that could potentially provide a refuge for wildlife shall be dismantled by hand and removed from site.
- 7.11 In the event that common lizard are encountered in large numbers (>10) or if any other protected species are encountered, works shall halt and a consultant ecologist shall be called for advice before proceeding.

Habitats

Pollution Prevention

- 7.12 Risks of pollution events reaching nearby watercourses were considered likely to be low. However, careful working methods shall be implemented to avoid pollution of any drains, culverts or watercourses in the vicinity of the site in accordance with GPP6 'Working at Construction and Demolition Sites'.

Habitat Creation

- 7.13 A designated habitat area shall be created at the edge of the plot. This area shall be planted with a range of native species of known value to wildlife (refer to Appendix E for examples). In addition, at least 1 x habitat pile/refuge of potential benefit to hedgehog, reptiles and other fauna shall be created using stone, inert rubble and/or cut wood.

Invasive Species

- 7.14 Working methods shall be implemented to prevent the non-native invasive species present at the site from being spread off-site (Japanese knotweed and Wall Cotoneaster).
- 7.15 Soil and excavated material from the site shall not be removed from the site except by a licensed waste carrier as controlled waste in order to ensure that cotoneaster seeds or Japanese knotweed root fragments are not inadvertently spread.
- 7.16 Care shall be taken that equipment, footwear and vehicles (particularly tyres and tracks) are cleaned prior to leaving the site.
- 7.17 Use of a contractor specialising in invasive species control and management could be considered in order to ensure that Japanese knotweed is controlled within the site (and does not spread off-site) in the longer term.

Ecological Enhancement

- 7.18 The creation of a habitat area planted with a range of native species will benefit wildlife at the local scale (as described in Paragraph 7.16, above).
- 7.19 In addition, ecological enhancements could be delivered by installing integrated bird and bat boxes in appropriate locations within the new building.
- 7.20 Bat boxes should be installed in darker areas on building walls near to the site margins, just beneath eaves height or beneath the apex of gable walls. Recommended models include the Schwegler 2FR bat tube or the Vivara Pro Build-in Woodstone Bat Box.
- 7.21 Bird nest boxes should be chosen to support species likely to occur in the local area, such as house sparrow, robin or blue-tit. In addition, swift bricks and/or house martin cups could be installed on building walls at height (just beneath eaves level).
- 7.22 It is recommended that 2 x bat boxes and 3 x bird nest boxes suitable for small birds would deliver a proportionate scale of enhancement for these species groups. Recommended bat and bird box models are provided in Appendix D.

8 Conclusions

- 8.1 Further dusk emergence survey works have been recommended in order to confirm the current status of bat roosting at the site.
- 8.2 The site was identified as supporting nesting house sparrow and could potentially support small numbers of hedgehog or common lizard.
- 8.3 Wall cotoneaster and Japanese knotweed (non native, invasive species) were present at the site.
- 8.4 Outline recommendations for mitigating any potentially adverse ecological impact and for delivering a net benefit to biodiversity have been provided.

References

- Bat Conservation Trust and Institute of Lighting Professionals (2023)** - *Guidance Note 08-23: Bats and Artificial Lighting*. Bat Conservation Trust. London.
- Bright P & Morris P (2005)**. *The Dormouse. Second Edition*. The Mammal Society London.
- Bright, P., Morris, P. & Mitchell-Jones, A. (2006)**. *Dormouse Conservation Handbook* (2nd Ed.) EN, Peterborough.
- CIEEM (2022)**. *Welsh Government's Approach to Net Benefits for Biodiversity and the DECCA Framework. CIEEM Briefing Paper - September 2022*. Chartered Institute of Ecology and Environmental Management, Romsey.
- CIEEM (2018)** *Guidelines for Ecological Impact Assessment in the United Kingdom*. Chartered Institute of Ecology and Environmental Management. Winchester.
- CIEEM (2017)** *Guidelines for Preliminary Ecological Appraisal* (2nd Ed). Chartered Institute of Ecology and Environmental Management. Winchester.
- Collins, J. (ed) (2023)**. *Bat Surveys for Professional Ecologists - Good Practice Guidelines* (4th Ed.). The Bat Conservation Trust. London
- Dean, M., Strachan, R., Gow, D., Andrews, R. (2016)** *The Water Vole Mitigation Handbook 3rd Ed (The Mammal Society Mitigation Guidance Series)*. Eds. Fiona Matthews and Paul Chanin. The Mammal Society, London
- Gould Ecology Ltd (2022)** *Proposed Redevelopment at 121 Heol Cae Gurnen, Gwaun Cae Gurnen, Ammanford, Neath Port Talbot - Bat Survey - October 2022*
- Harris, S., Cresswell, P. & Jefferies, D. (1989)**. *Surveying Badgers*. Occasional Publication of the Mammal Society No 9. Available from the Mammal Society, London.
- Joint Nature Conservation Committee (JNCC) (2010)** *Handbook for Phase 1 habitat survey: a technique for environmental audit* (revised reprint). JNCC: Peterborough.
- Joint Nature Conservation Committee (JNCC) (2011)** *UK Biodiversity Action Plan; Priority Habitat Descriptions*. Ed. Ant Maddock. <http://www.jncc.gov.uk/page-5155>
- Nature Conservancy Council (NCC) (1989)** *Guidelines for the Selection of Biological SSSIs*. NCC, Peterborough.
- Natural Resources Wales (2018)** *Badgers - A Guide for Developers*.
- Reason, P.F. and Wray, S. (2023)**. *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management
- Rose, F. (1991)** *Wild Flower Key*.
- Strachan, R and Moorhouse, T (2006)**. *Water Vole Conservation Handbook* (2nd Ed.)
- Welsh Assembly Government (2021)** *Planning Policy Wales, Edition 12 - February 2024*
- Welsh Assembly Government (2017)** Section 7 lists of priority habitats and species downloaded from <https://www.biodiversitywales.org.uk/Environment-Wales-Act>
- Wales Biodiversity Partnership 2008 - Wildlife Sites Guidance Wales -**
<http://www.biodiversitywales.org.uk>

Appendix A: Photographs:

Image 1: Front elevation



Image 4: Gaps in side of dormer



Image 2: Window opening in dormer



Image 5: Gaps in soffit - side extension



Image 3: Gaps in roof - front elevation



Image 6: Rear section - multiple gaps, no roof



Image 7: Openings and soffit gaps on rear elevations. House sparrow nesting site indicated



Image 10: Main area of plot, looking east from rear



Image 8: Side elevation



Image 11: Plot to rear of building



Image 9: Overview of site



Image 12: southern boundary of plot



Image 13: Japanese knotweed - adjacent to rear boundary



Image 16: Dense vegetation on northern margin



Image 14: Example of wall cotoneaster at the site



Image 17: Dense vegetation in north-west corner of plot - potential bird nesting site



Image 15: Wall cotoneaster - close view



Image 18: Example of bare ground within plot



Appendix B: Bat Licensing Information

In some cases, actions which would otherwise be illegal under the Conservation of Species and Habitats Regulations (2017) may be permitted through gaining a derogation licence from the statutory nature conservation body (in Wales, this is Natural Resources Wales / NRW). This process is often used for development projects where disturbance to (or destruction of) a bat roost is likely to be caused by proposed works to buildings and other structures.

In order for a licence to be granted, the proposed development must demonstrate that it meets the *three tests*, as follows:

- That the development is 'in the **interests of public health and public safety**, or for other **imperative reasons of overriding public interest**, including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- That there is '**no satisfactory alternative**';
- That the derogation (i.e. any permission/licence granted) is 'not detrimental to the maintenance of the populations of the species concerned at a **favourable conservation status** in their natural range'.

Where the need for a derogation licence has been identified, an application must be made to NRW **following the granting of planning consent** (where this is applicable), and prior to site works commencing.

The application will need to demonstrate that the project meets the three tests (listed in above), and will need to be submitted with a **Method Statement** prepared by a consultant ecologist which provides detailed information on the status of bats at the site, the likely impacts to bats and the proposed mitigation measures. A consultation form completed by the Planning Officer will also be required.

As of July 2023, NRW will charge a fee for processing licenses (with the exception of home-owner applications and property maintenance not requiring planning consent). Details of current charges can be found at <https://naturalresources.wales/permits-and-permissions/species-licensing/species-licensing-charges/?lang=en>

Further general details on bat licensing and relevant forms and guidance are available at <https://naturalresources.wales/permits-and-permissions/species-licensing/list-of-protected-species/bat-licensing/?lang=en>

Appendix C - Summary of Planning Policy Guidance Relating to Bats and Biodiversity

National Planning Policy includes provision for protection of wildlife and biodiversity under Section 6 of Planning Policy Wales 12 (Feb 2024). This is implemented through the local development plan and supplementary planning guidance.

In general, development projects with the potential to cause significant adverse ecological effects or to breach the legislation are required to submit sufficient information to ensure that such risks are assessed. This will be based on site surveys which describe the existing 'baseline' ecological conditions.

Where the risk of causing a legal offence or a significant adverse ecological effect has been identified, the project design must incorporate appropriate impact avoidance, mitigation or compensation measures, as required under UK legislation and planning policy.

Section 6 of the Environment (Wales) Act 2016 also places a '*Biodiversity and Resilience of Ecosystems Duty*' on planning authorities to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems".

In response this duty, Planning Policy Wales 12 states that "*Resilient ecological networks are vital for nature recovery and are networks of habitat in good ecological condition linking protected sites and other biodiversity hotspots across the wider landscape, providing maximum benefit for biodiversity and well-being (Future Wales, Policy 9). Development plan strategies, policies and development proposals must consider the need to:*

- *support the maintenance and enhancement of biodiversity and the resilience of ecosystems;*
- *ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats, including the most recent targets set out in the 2022 UN Global Biodiversity Framework;*
- *ensure statutorily and non-statutorily designated sites and habitats are properly protected and managed and their role at the heart of resilient ecological networks is safeguarded;*
- *safeguard protected species and species of principal importance and existing biodiversity assets from direct, indirect or cumulative adverse impacts that affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water, air and soil, including peat; and*
- *secure the maintenance and enhancement of ecosystem resilience and resilient ecological networks by improving diversity, extent, condition, and connectivity."*

Furthermore, PPW 12 states that:

"Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species (not including non-native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. A net benefit for biodiversity is the concept that development should leave biodiversity and the resilience of ecosystems in a significantly better state than before, through securing immediate and long-term, measurable and demonstrable benefit, primarily on or immediately adjacent to the site. The step-wise approach outlined below is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity. In doing so, planning authorities must also take account of and promote the resilience of ecosystems, in particular the following attributes, known as the DECCA Framework":

- diversity between and within ecosystems;
- the extent or scale of ecosystems;
- the condition of ecosystems including their structure and functioning;
- the connections between and within ecosystems; and
- adaptability of ecosystems including their ability to adapt to, resist and recover from a range of pressures likely to be placed on them through climate change for example.

Appendix D: Ecological Enhancement

Integrated Bat Box Examples

Schwegler 2FR Bat Tube



Vivara Pro Woodstone Bat Tube



Example of Linked Bat Tubes



Integrated Bird Box Examples

Schwegler Swift Box



Terraced Sparrow Best-Brick



Woodstone Build-in Open Nest Box



Build-in Bird Box



House martin nest cup



Nest Boxes Suitable for Small Birds

Vivara Pro Barcelona Open Nest Box



Schwegler 1SP Sparrow Nesting Terrace



Woodstone Sparrow Nest Box



Woodstone Build-in Open Nest Box



Vivara Pro Seville Woodstone Nest Box



Wildlife Friendly Species for Garden Planting / Habitat Area**Trees / hedging**

- Sessile oak (*Quercus petraea*)
- Willow species (e.g. *Salix cinerea*)
- Barberry (*Berberis vulgaris*)
- Birch (*Betula pendula*, *Betula pubescens*)
- Rowan (*Sorbus aucuparia*)
- Hawthorn (*Crataegus monogyna*)
- Hazel (*Corylus avellana*)
- Dogwood (*Cornus sanguinea*)
- Guelder rose (*Viburnum opulus*)
- Wayfaring tree (*Viburnum lantana*)
- Elder (*Sambucus nigra*)
- Apple / Crab apple (*Malus spp*)
- Bullace / Damson (*Prunus spp*)
- Juneberry (*Amelanchier canadensis*)

Climbers for growing on fences

- Rose species e.g. Dog rose (*Rosa canina*, *Rosa arvensis*)
- Wild honeysuckle (*Lonicera periclymenum*)
- Wild clematis (*Clematis vitalba*)
- Ivy (*Hedera helix*)
- Passion flower (*Passiflora species*)
- Jasmine (*Jasminum species*)
- Wisteria species.

Perennial or self-seeding herbs (good for bees and pollinators)

- Yarrow (*Achillea millefolium*)
- Michaelmas daisy (*Aster novi-belgii*)
- Ox-eye daisy (*Leucanthemum vulgare*)
- St John's wort (*Hypericum perforata*)
- Chives (*Allium schoenoprasum*)
- Foxglove (*Digitalis purpurea*)
- Lavender (*Lavendula officinalis*)
- Rosemary (*Rosemarinus officinalis*)
- Marigold (*Calendula officinalis*)
- Marjoram / Oregano (*Oreganum spp.*)
- Honesty (*Launaria annua*)
- Thyme (*Thymus spp.*)
- Borage (*Borago officinalis*)
- Vervain / Verbena species
- Welsh poppy (*Meconopsis cambrica*)
- Mints (*Mentha spp.*)
- Lungwort (*Pulmonaria officinalis*)
- Orpine *Sedum telephium*
- Comfrey *Symphytum officinale*
- Echinacea *purpurea*
- Snowdrop *Galanthus spp.*
- Native bluebell *Hyacinthoides non-scriptus*
- Autumn & Spring flowering Croci
- Heathers e.g. *Calluna vulgaris* (Ling) / *Erica cinerea* (Bell Heather) - ericaceous/acid soil only