

# Preliminary Ecological Assessment



# Project: Mitchell Court, Tonypandy

# Instructed by: Trivallis

Reported by: Ecological Services Ltd 10 Mount Pleasant, Llanelly Hill, Abergavenny, Monmouth NP7 0NT Reported by

Author	Checked By	Date	Version
Ash Harris	Beth Lewis	August 2024	V1.0
T: 07305143857	E: ash@ecologicalservices	s.wales W: www	.ecologicalservices.wales

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# 1. Introduction

The development proposals are in the very early stages and detailed designs are not available. At present the site consists of a three buildings, Mitchell Court residential block, a row of garages and an office block, tarmac hardstanding, scattered trees and small areas of semi improved grassland. It is understood that all buildings within the site boundary will be demolished and the entire site re-developed to create a residential complex. The development site is centred at SS 99128 92871.

This report will assess the potential of the land within the site boundary to support habitats and species and the implications that any future development proposals could have on them.

# 1.1 Site Description

The site is located fairly central within the town of Tonypandy and slopes roughly downwards from west to east. Residential properties are located directly to the west of the site and to the east of the site a bus station is present. Roads form the north and southern boundary of the site with residential properties present further north and south.

The wider landscape around the development site is predominantly urban with housing and shops in the local area. The Rhondda River is located approximately 245m to the east of site. Areas of woodland are located approximately 490m to the south west and woodland and open grassland approximately 350m to the north.

# 1.2 Survey Constraints

The site visit was completed during July which is an optimal time of year to undertake habitat assessments. It was possible to draw broad conclusions on habitat types within the site boundary.

The absence of desk study records cannot be relied upon to determine absence of particular species/habitat. Often, the absence of records is a result of under-recording within the given search area.

The optimal time period to carry out ground-based visual assessments of trees for bat roosting potential is between December to March inclusive, when broadleaved trees are devoid of leaves and features are more readily visible. It should be noted that ground based assessments are inherently constrained and potential roosting features present upon the skyward facing surfaces of limbs and branches will most likely be missed.

## 1.3 <u>Surveyor Experience</u>

Aislinn Harris is a full member of Chartered Institute of Ecology and Environmental Management (CIEEM). Aislinn is an ecologist with 14 years experience undertaking a wide range of flora and fauna surveys. All survey work is undertaken following JNCC Phase 1 Survey Guidelines and CIEEM Guidelines for Preliminary Ecological Appraisal (2nd Ed 2017). Aislinn is a licensed bat, great crested newt and dormouse ecologist with a wide variety of experience undertaking ecological surveys.

# 1.4 Previous Survey Work

There are three buildings within the proposed development site boundary. Ecological Services Ltd visited the site on the 10th March 2023 to undertake an external assessment of Mitchell Court, the garage block and trees to the south west of Mitchell Court. The Ground Based Visual Roost Assessment (GBVRA) of the trees to the south west of Mitchell Court found four of them to have low bat roost potential.

The residential block was considered to have low potential for roosting use by bats while the garage block was assessed as having negligible potential. A single bat activity survey was recommended for Mitchell Court only. The bat activity surveys was completed 15th June 2023 and found no evidence of roosting use of the building by bats.

The Rhondda Principal Social Services Office building, to the north east of the development site, was subject to an external assessment for bat roosting potential by Ecological Services Ltd on the 20th July 2023. The building was assessed as having low potential for roosting use by bats. A single bat activity survey was recommended and undertaken on the 20th July 2023. No evidence of roosting use of the building by bats was found during the survey.

Full details of the survey methodology and findings can be found in the original surveys reports:

- Ecological Services Ltd ' Bat Survey; Mitchell Court, Tonypandy, CF40 2RD' v1.0 dated June 2023
- Ecological Services Ltd ' Bat Survey; Rhondda Principle Social Services Office, Bert Road, Tonypandy, CF40 2HH' v1.0 dated July 2023

# 2. Desktop Study

A data search was undertaken via Aderyn for the proposed development site and surrounding area (ref: 0245-369). A 1km buffer zone was searched and records returned within 500m of site are noted below:

- Unidentified Bat bats found within house approximately 200m away,
- Hedgehog (*Erinaceus europaeus*) closest record approximately 200m away,
- Pipistrelle (Pipistrellus sp) bat roost approximately 390m away,
- Slow Worm (Anguis fragilis) closest record approximately 330m away,
- Grass Snake (Natrix helvetica) closest record approximately 330m away,
- Common Pipistrelle (*Pipistrellus pipistrellus*) bat roost record approximately 400m away,
- Bird species listed under <u>Section 7</u> of the Environment (Wales) Act 2016 (EWA 2016) recorded within 500 m of the site include Herring Gull (*Larus argentatus*), Reed Bunting (*Emberiza schoeniclus*), Tree Pipit (*Anthus trivialis*), Starling (*Sturnus vulgaris*), House sparrow (*Passer domesticus*), Bullfinch (*Pyrrhula pyrrhula*), Dunnock (*Prunella modularis*), Song Thrush (*Turdus philomelos*) and Black Headed Gull (*Chroicocephalus ridibundus*),
- Bird species listed under <u>Schedule 1</u> of the Wildlife & Countryside Act 1981 (WCA1.1) recorded within 500 m of the site include Kingfisher (*Alcedo atthis*).

Records of note returned for the rest of the 1km buffer zone are detailed below:

- Invertebrate records including Cinnabar (*Tyria jacobaeae*), Dot Moth (*Melanchra persicariae*), Small heath (*Coenonympha pamphilus*), Grayling (*Hipparchia semele*), Dusty Brocade (*Apamea remissa*), Broom Moth (*Ceramica pisi*), Small Phoenix (*Ecliptopera silaceata*), Rosy Minor (*Litoligia literosa*) and Grey Dagger (*Acronicta psi*),
- Commuting / Foraging records for Soprano Pipistrelle (*Pipistrellus pygmaeus*),
- Common frog (Rana temporaria),
- Common Toad (Bufo bufo),
- Great Crested Newt (Triturus cristatus),
- Bird species listed under <u>Section 7</u> of the Environment (Wales) Act 2016 (EWA 2016) returned within the rest of the buffer zone include Nightjar (*Caprimulgus europaeus*),

Kestrel (Falco tinnunculus), Lesser Redpoll (Acanthis cabaret) and Skylark (Alauda arvensis),

• Bird species listed under <u>Schedule 1</u> of the Wildlife & Countryside Act 1981 (WCA1.1) returned within the rest of the buffer zone include – Peregrine (Falco peregrinus) and Goshawk (*Accipiter gentilis*).

# 2.1 Protected Sites

The search also considered statutory and non-statutory protected sites within 1km of the site boundary.

# **Statutory Protected Sites**

There is a single Statutory Protected Site within 1km of the site. Craig Pont Rhondda Site of Special Scientific Interest (SSSI) is located approximately 620m away to the north at its closest point. The SSSI extends northwards into the wider landscape.

# Non- Statutory Protected Sites

There are three areas of <u>Ancient Semi Natural Woodland (ASNW)</u> within 1km of the site boundary. The closest areas are approximately 100m south of the site. These are broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400 years. The ground vegetation will reflect the naturalness of these woodlands and will frequently feature species which provide clear indication of long and continued woodland cover. They will have been woodland for centuries and contribute substantially to our natural and cultural heritage.

There are six <u>Plantation on Ancient Woodland Sites</u> within 1km of the site boundary. The closest area is approximately 380m north west of the site. These are also designated natural resources Wales (NRW) Priority woodland areas (PAWS). These are sites which are believed to have been continuously wooded for over 400 years. They have been replanted with native or non-native species, most commonly with conifers. They currently have a canopy cover of more than 50% non-native conifer tree species.

There are three <u>Ancient Woodland Sites of Unknown Category</u> within 1km of the site. The closest such site is approximately 380m north west of the site. These are woodlands which may be ASNW, RAWS or PAWS. These areas are predominantly in transition where the existing tree cover is described as shrubs, young trees, felled or ground prepared for planting. This woodland is also designated as a NRW (Natural Resources Wales) Priority Woodland Area. These Priority woodland habitat areas are large scale areas which were prioritised for targeted conservation work, based on factors including the habitats within them.

## 2.2 Potential Impacts to Protected Sites

Due to the localised nature of the development plans, it is considered highly unlikely that any protected sites within the local area will be affected by the development proposals.

## 3. Phase 1 Survey

#### 3.1 Habitats

A walkover survey of the site was completed on the **22nd July 2024.** A species list can be found in Appendix 1, photographs of the site can be found in Appendix 2 and a map of the habitats found within the site is provided in Appendix 3.

The majority of the site is made up of **buildings** and various areas of **tarmac and paved hardstanding**. The tarmac areas include roads, footpaths and parking areas. Detailed building descriptions are available within the original bat survey reports for each building. All buildings on site were not in use at the time of the survey visit.

To the north of Mitchell Court and west of the former council offices is an expanse of **bare earth** and **tall ruderal vegetation.** This portion of the site has been subject to Japanese knotweed removal work and repair work to a damaged wall to make it safe. Species noted within the area include bramble, rosebay willowherb, a species of dock, common cat's-ear, Yorkshire fog, scarlet pimpernel, enchanters nightshade, hedge bindweed, hedge woundwort, sapling alder and butterfly bush.

An area of **semi improved grassland** is present to the east of the office building, east of Mitchell Court and along the western boundary of the site. The species composition in all areas of grassland habitat appeared to be the same. Species noted in the grassland areas include creeping buttercup, herb Robert, ribwort plantain, ragwort, false oat grass, white clover, knapweed, cock's-foot, Yorkshire fog, common bent, common mouse-ear, silverweed, bird's foot trefoil and yarrow. An occasional common mallow was noted in the edges of grassland along the western boundary of the site.

There are a small number of **mature trees** scattered across the site and a **tree line** along the south western boundary of the site. Species noted within the **tree line** include ash, field maple, alder, holly, privet and a species of oak tree. The understory along the tree line is predominantly bramble, ivy, cleavers, cock's-foot, ragwort and hogweed.

Three mature lime trees are present to the south east of Mitchell Court. Two lime trees and one ash tree are present to the south of the council office block. One ash tree is present to the north west of the site. One species of cherry tree is present to the west the garages.

#### 3.2 Great Crested Newts (GCN)

Great crested newts (*Triturus cristatus*) are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

• Deliberate capture, killing and injuring,

- Deliberate disturbance of a breeding site or resting place,
- Deliberate taking or destroying of eggs,
- Damage or destruction of a breeding site or resting place.

Great crested newts (GCN) are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a GCN. GCN and Common toad are listed in section 7 of the Environment (Wales) Act 2016 which makes them key species to sustain and improve biodiversity.

The closest record for the presence of GCN returned via the data search is approximately 1km away from site.

The majority of the proposed development site is considered to be unsuitable for use by GCN. The buildings and areas of hardstanding provide no cover for predation or foraging habitat suitable for GCN. The grassland areas and tall ruderal vegetation are superficially suitable for GCN use however the site is surrounded by housing, roads and shops and has no connectivity to habitat suitable for GCN use in the immediate area.

GCN generally like to have a necklace of suitable waterbodies for breeding purposes within a local area. There are no ponds present within the development site boundary and aerial images do not show any ponds within 500m of the site. Although ponds in residential gardens and woodland areas maybe present.

The lack of records within close proximity to the site and lack of habitat connectivity makes it unlikely that GCN will be utilising the site. GCN are considered unlikely be present within the site. **No further survey recommendations are made for this species.** 

## 3.3 Dormouse

The dormouse (*Muscardinus avellanarius*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Dormouse is listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a native

dormouse. Dormouse is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

There were no records of dormouse within 1km of the site returned within the data search.

The areas of grassland, tall rudetral vegetation, bare earth, hardstanding and buildings within the site are considered to have negligible potential for dormouse. The site is located within an urban setting and has no connectivity to habitat suitable for dormouse use in the immediate area. The trees within the development site appear superficially suitable for dormouse use but they do not connect to any surrounding habitat which dormouse may use.

Given the limited suitable habitat within the site boundary, poor habitat connectivity into the wider landscape and lack of local records for this species, dormouse are not considered present. No further survey recommendations are made for this species.

#### 3.4 <u>Bats</u>

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, Bechstein, Noctule, Brown long-eared, Common pipistrelle, Soprano pipistrelle, Greater horseshoe and Lesser horseshoe are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Four bat roost records were returned within 1km of the site for Common pipistrelle and an unknown bat species with the closest being approximately 420m south of the site. 31 commuting and foraging bat records were returned within 1km of the site for species including Common pipistrelle, Soprano pipistrelle, Noctule and an unknown bat species.

## Building Assessment

There are three buildings within the development site boundary.

• **Mitchell Court** residential block is located at SS99139286. The building is a large detached, brick and modern roughcast rendered building with areas of timber cladding

and a flat roof. The building is five storeys in height which reduces to four storeys as the ground slopes backwards in an approximate north western direction.

- The **Garage Block** is located at SS 99096 92894. The garage block is single storey with brick walls and a corrugated metal sheet roof and divided into nine units.
- Rhondda Principal Social Services Office Block is located at SS 9914 9290. The building is
  a large, detached, brick-built office block which is two storeys in height with an
  undercroft car parking area. The building has a flat felt roof and there are no fasciae or
  soffits present. There is a two storey, brick and brick rendered extension to the western
  elevation of the main building with a flat felt roof.

At the time of the 2023 surveys, internal access into the buildings was not possible as they were in use by residents and staff. The buildings have since been vacated and internal access into the Council Office block was gained during the 2024 survey visit. Aislinn Harris (S092780/2) undertook the internal and external surveys of the building. There is no roof void within the building. The building is flat roofed and has a suspended ceiling throughout the interior. It was possible to see through gaps in the suspended ceiling to a gap around 30cm in height. No evidence of the presence of bats were noted at any location within the building.



Example View of internal roof view

Example View of internal roof view

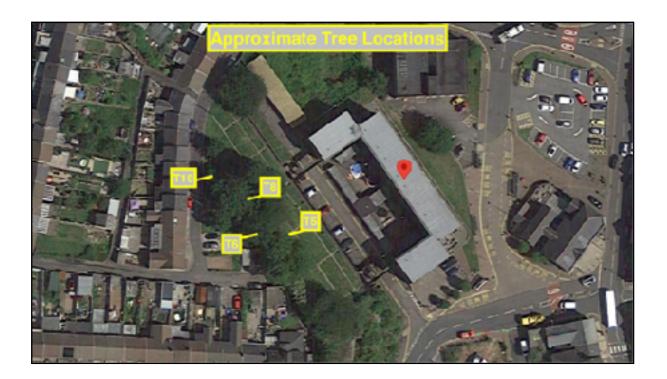
No further survey work for bats is recommended in relation to any building within the development site boundary. A suite of bat activity survey work has been completed at site and no evidence of the presence of roosting bat use of any building identified.

#### Bat Tree Assessment

Trees within the site were subject to a cursory ground level assessment for the potential presence for roosting bats. The optimum time for such surveys is during the winter months when trees have lost their foliage. Should any tree be considered likely to have above low potential for roosting bat use, further detailed survey work will be recommended following the ground based visual assessment methodology provided in the BCT Survey Guidelines 2023 (4th Ed).

The majority of trees within the site boundary were considered to have negligible potential for roosting use by bats. The trees were well spread out and access around each tree was possible allowing good visibility up into the canopy. The trees within the tree line along the western boundary of the site were closer together with a dense understory restricting access around the entirety of each tree.

These trees were previously subject to a Ground Based Visual Roost Assessment (GBVRA) for bats on the 10th March 2023. The trees do not appear to have changed since the previous survey visit and therefore the results are still considered to be the same. The BCT Bat Surveys for Professional Ecologists - Good Practice Guidelines 2023 (4th Edition) would categorise **T10, T8, T6 and T5 as being PRF-I trees**.



Low Potential Trees	Description of Trees	
T5 (Ash)	Located approximately at the west of the site. Moderate ivy coverage.	
Т6	Located approximately at the west of the site. Moderate ivy coverage.	
Т8	Located approximately at the north west of the site. Moderate ivy coverage.	
T10	Located approximately at the north west of the site. Moderate ivy coverage.	

#### Table 1. Bat Roosting Potential of Tree

Whilst no further survey work is recommended for these trees, ideally they would be retained as part of any development proposals at site. If they require removal they must be removed over winter when bats are least likely to be present.

## Habitat Assessment

The habitat within the site is considered to have **limited** suitability for use by commuting and foraging bats. The site has limited habitat connectivity into the wider landscape. The site is immediately surrounded by roads and housing with street lighting further reducing the suitability of the site for bat use. The site is considered to be suitable for use by a small number of common bat species for foraging use on an occasional basis.

Providing a wildlife lighting strategy, that minimises light spill onto areas of soft landscaping bat transect survey work is unlikely to be required. A wildlife friendly lighting strategy will be required as part of the development proposals.

## 3.5 Otters

The Otter (*Lutra lutra*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale an otter. Otter is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

No records of otter were returned within 1km of the site boundary.

Otters tend to prefer secluded locations for their holts to help prevent them being disturbed by other animals. It is accepted that otters can travel long distances from river corridors to find acceptable holt sites.

The vast majority of the site is considered to be unsuitable for otter holt creation as much of the site is dominated by buildings, hardstanding and tall ruderal vegetation and located within an urban setting. The nearest watercourse is the Rhondda River, located approximately 250m to the east. However there is no habitat connectivity to this feature with housing, shops and roads between the development site and river.

Given the limited suitable habitat within the site boundary, poor habitat connectivity into the wider landscape and lack of local records for this species, otter are not considered present. No further survey recommendations are made for this species.

#### 3.6 Badger

Badgers (*Meles meles*) are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;
- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive. NRW are the licensing body for any actions which may contravene the above legislation.

Badgers favour a dry sloping site for digging their setts preferably within woodland or even under a large hedgerow bank. Badgers are creatures of habit and tend to follow regular pathways between their setts and foraging grounds. There was one record of badger returned within 1km of the site, located approximately 800m east.

The vast majority of the site is considered to be unsuitable for badger as much of the site is dominated by buildings, hardstanding and tall ruderal vegetation with regular disturbance by onsite traffic and workers.

Although no mammal runs or field signs for badger were identified during the site visit, much of the woodland area along the steep bankings could not be accessed due to dense scrub vegetation and the steep topography.

It is presumed that badger could utilise the proposed development area of the site, on occasion, for commuting and foraging purposes. Given the high levels of human disturbance, the presence of a badger sett within the woodland habitat is considered highly unlikely.

It is understood that development proposals will seek to retain the woodland and stream corridor along the west and southern edges of the site. Providing a wildlife friendly lighting strategy can be provided which avoids light spill onto retained habitat, there is unlikely to be any impact on badger in the local area.

Whilst no further surveys are recommended for badger in this instance, a site design which demonstrates habitat connectivity and a wildlife sensitive lighting strategy will be required and precautionary working methods should be adopted to avoid harm or potential disturbance to this species.

# 3.7 <u>Birds</u>

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

• 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.

The buildings and scattered trees within the development site are considered to be suitable for nesting use by bird species. The grassland, tall ruderal and bare earth areas are likely to be used by local common bird species for foraging and commuting purposes. **A**  precautionary approach to the removal of habitat with bird nesting potential will be required. Compensation measures for the loss of bird foraging and nesting habitat will be required.

## 3.8 <u>Reptiles and Amphibians</u>

Reptiles such as the Slow-worm, Common lizard, Adder and Grass snake are protected under the Wildlife and Countryside Act 1981 (as amended). They are protected from killing, injuring and sale. They are protected from killing, injuring and sale. They are also listed in section 6 of The Environment (Wales) Act 2016.

The four widespread species of amphibian i.e. the Smooth and Palmate newts, Common frog and Common toad, are protected under the Wildlife and Countryside Act 1981 (as amended) by Section 9(5) of the Wildlife and Countryside Act 1981. This section prohibits sale of these species. Common toad is listed in section 6 of The Environment (Wales) Act 2016.

There are a limited number of reptile and amphibian records within the local area. This is thought to indicate under recording rather than a lack of species presence. The closest records for reptile species are for Grass snake and Slow worm approximately 330m to the north of site. Records for the presence of Common frog and Common toad are available approximately 740m away to the north.

Reptiles prefer a mosaic of habitats with diverse vegetation structure creating open areas and nearby cover to provide protection from predators and the elements. Common amphibian species require still pools of water for breeding purposes and damp conditions with foraging habitat during their terrestrial life stages.

There are no waterbodies within the development site. There do not appear to be any ponds present within 500m of the development site, however the potential presence of ponds within residential garden spaces cannot be ruled out. The site is unsuitable for breeding amphibians due to there not being any permanent waterbodies present in the local area.

The vast majority of the site is considered to be unsuitable for use by reptiles and amphibians as it is mostly hardstanding and buildings. The semi improved grassland and tree line do appear suitable for reptile use. However, the site is fairly isolated from suitable habitat in close proximity and has roads and housing surrounding the site. It is accepted that reptiles such as Slow worm can thrive in residential gardens.

Given the relative habitat isolation, if reptiles are present they are considered likely to be present in small numbers making them difficult to detect. Whilst no further survey work for reptiles is recommended in this instance, a reptile mitigation strategy will be required.

Timed and directional habitat manipulation measures will be required. Species enhancement measures will need to be incorporated into the development design to allow reptiles to colonise the site once construction work has been completed.

## 3.9 Other Mammals

Other notable mammal species listed under Section 7 of the Environment (Wales) Act 2016 which had records returned during the data search include hedgehog.

<u>Hedgehog</u> - closest record being approximately 200m to the north west. This species is considered likely to be present within the site at least on an occasional basis for foraging and overwintering with the adjacent woodland and tall ruderal vegetation providing a variety of suitable areas for hedgehogs to reside and forage. Hedgehog is considered to be a species of principal importance, for the purpose of maintaining and enhancing biodiversity in relation to Wales. As such, consideration must be given to this species in any plans proposed for the site.

#### 3.10 Invertebrates

Notable invertebrate species records, those species that are listed under Section 7 of the Environment (Wales) Act 2016, returned from the data search within a 1km buffer of the site include: Cinnabar (*Tyria jacobaeae*), Dot Moth (*Melanchra persicariae*), Small Heath (*Coenonympha pamphilus*), Grayling (*Hipparchia semele*), Dusty Brocade (*Apamea remissa*), Broom Moth (*Ceramica pisi*), Small Phoenix (*Ecliptopera silaceata*), Rosy Minor (*Litoligia literosa*) and Grey Dagger (*Acronicta psi*).

The site comprises of mainly hardstanding and buildings with some short perennial vegetation and matures trees. Mosaic habitats are important for invertebrates as many require two or more habitats to complete their lifecycle. The variety of habitats present therefore allows the site to support a wide range of invertebrate groups.

The habitats of the site and immediately adjacent habitats were assessed for their potential to support invertebrates using the Invertebrate Habitat Potential Assessment (IHPA) as found in CIEEM in practice Issue 112, June 2021. See Table 2 for results. The IHPA protocol has been produced to allow ecologists without specialised entomological expertise to identify key habitats and features likely to support important invertebrate assemblages. Full details of habitat types can be found in Appendix 5.

Habitat Element	Grade
Decaying Wood – H1	E - Negligible/Absent
Rotational Management – H2	E - Negligible/Absent
Nectar Resources – H3	D - Minor
Wet Substrates – H4	E - Negligible/Absent
Other Water Habitats – H5	E - Negligible/Absent
Structural Patchwork – H6	D - Minor
Still Air (S) – H7	D - Minor
Still Air (H) – H8	D - Minor
Connectivity – H9	E - Negligible/Absent
Ecoclines – H10	E - Negligible/Absent
Bare Earth – H11	D - Minor

#### Table 2. Invertebrate Habitat Potential

Based on the Invertebrate Habitat Potential Assessment (IHPA) the site, in its current state, is considered to have potential to support common and widespread species of invertebrate. **No further survey work is recommended for invertebrates** but steps should be incorporated into the new site design to create and enhance habitats that encourage invertebrate populations.

# 4. Recommendations and Mitigation

The development proposals are in the very early stages and detailed designs are not yet available. It is understood that all buildings within the site boundary will be demolished and the entire site re-developed to create a residential development. The development proposals are likely to result in the loss of the majority of habitats present within the site boundary.

Broad recommendations are made below to help inform the design process. Once the development proposals are progressed and finalised and the considerations to development within the site are addressed, further ecological input may be required. Our recommendations are:

- Mature trees are retained where possible. Mature trees provide a wide range of ecological and biodiversity benefits to the local area.
- A root protection zone (RPZ) must be implemented around any retained trees which lie adjacent to or within the boundary of the proposed development site. British Standard BS 5837, Trees in relation to design, demolition and construction Recommendations will be followed. Measures will include clear marking of the RPZ to guarantee no machinery is used or digging carried out in that area. This will ensure that there is no detrimental impact to the trees and the flora or fauna it supports.
- A reptile mitigation strategy will be required to inform the development. Vegetation clearance must be undertaken in two stages as below and during the summer months of April to September inclusive to ensure reptiles are active. This should ideally begin away from the east of the site and continue towards the western boundary which site adjacent to residential areas.
  - <u>First Stage Cut</u> All vegetation including scrub, grasses and flowers are to be cut no shorter than 150 mm. Once the cuttings have been collected and removed from site the site must then be left for 24 hours.
  - <u>Second Stage Cut</u> Once all steps within the first stage cut have been undertaken the remaining vegetation can be cut to 50 mm high or shorter. Cutting will look to push any resident reptiles south into adjacent habitats (gardens) beyond the site boundary. All cuttings must be collected and removed from site.
  - Enhancement measures will be required within any future development proposals.
     Measures can include habitat connectivity, reptile hibernacula and compost areas.
     An indicative reptile hibernacula design can be found in appendix 6.
- The scattered trees and tree line have the potential for use by **nesting birds**. Any vegetation removal must be completed outside of the bird nesting season of March to

August inclusive. If this is not achievable an ecologist must inspect any vegetation with the potential for birds to be present for active birds' nests prior to removal works beginning. If an active nest is identified a buffer zone of at least 5m around the nest must be observed until the chicks have fledged. Only then can the vegetation be removed. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.

- Ideally all excavations within the site will be securely covered over if left unattended. Any
  excavations that have a depth in excess of 0.5m and that are left open overnight will
  have a means of escape let for any mammals (e.g. hedgehog) that may fall into them. A
  wooden board or equivalent will be left from the bottom to the top of the hole at an
  angle no steeper than 45 °. This will allow any mammal to escape and avoid increased
  stress from being trapped.
- Careful consideration must be given to the use of lighting within the development site, as this can adversely affect the activity of a variety of fauna, particularly foraging bats, nesting birds, badger, otter and dormice. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats. All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and Artificial Lighting at Night. <u>https://theilp.org.uk/publication/ guidance-note-8-bats-and-artificial-lighting/</u>.
- No night time working will be permitted to prevent incidental light spillage onto retained vegetation and habitats where nocturnal species may use at night. No work between the hours of 7 pm and 7 am which requires the use of artificial lighting will be allowed.

# 5. Biodiversity Enhancements & Green Infrastructure

The Environment Act (Wales) 2016 places a duty on competent authorities and councils including Rhondda Cynon Taff County Borough Council to conserve and enhance biodiversity. Chapter 6 of Planning Policy Wales (version 12), paragraph 6.2.5 requires Green Infrastructure considerations to be included with all planning applications. Development proposals must detail how green infrastructure considerations which are proportionate to the scale and nature of the plans are being provided.

Green infrastructure currently within the site takes the form of semi improved grassland and mature trees. Mature trees have a high biodiversity value for wildlife and environmental conditions. The site sits in a urban context and does not have direct habitat connectivity to any areas of green space in the local area other than residential garden spaces.

General considerations to green infrastructure to be considered as part for the development include:

- Paragraph 6.4.42 of Planning Policy Wales (version 12) requires that at least three trees of a similar type and compensatory size are planted for every tree lost. The site layout must avoid tree loss where possible. If loss is unavoidable, space within the development plans to allow a suitable amount of compensatory planting is required.
- Creating habitat connectivity around the site would be a positive step for biodiversity. Pulling plot boundaries away from the edge of the development site boundary and providing green areas around the periphery of the site that are managed to benefit wildlife can help wildlife continue to commute across the site.
- Wildlife friendly lighting that avoids light spill onto retained habitat and any habitat corridors created across the site will be required. By reducing light spill onto vegetated features wildlife are more likely to commute and forage across a development site.

The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the site:

 The use of native species within the soft landscaping works on the site. Suitable long term management of soft landscaping also helps ensure spaces are useful to wildlife. Management measures will need long term funding and must reflect the different habits to be retained and created within the development site. Tree and hedgerow planting would help to create screening around individual units for privacy and also integrate the development into the landscape.

- The provision of integrated bird boxes within any new buildings created on site. At least 25% of new structures should include nesting provision for birds. A variety of bird boxes should be used but all boxes must be placed at least 2m high from ground floor.
- The provision of integrated bat boxes within any new buildings created on site and five tree mounted bat boxes. At least 25% of new structures should include roosting provision for bats. Integrated boxes are welcome but consideration to the creation of roosting provision with a roof should also be given. For example building roof spaces can be lined with a bitumen based roofing felt and suitable bat access points included to the space between the roofing felt and roof tiles.
- All fencing across the site must be hedgehog friendly in design. A friendly design is considered to allow passage of small animals across the site. Close board or mesh fencing should provide either a continuous gap between the bottom of the fence and ground of approximately 13cm or 13cm by 13cm gaps cut every 3m along fencing.
- A reptile hibernacula can be created within the grounds of the development site using rubble and brash from on site clearance works. The hibernacula must at least measure 0.5m in depth, 2m wide and 2m long each. It will be made by creating layers of wood, brash, rubble and soil. The hibernacula will create a mound approximately 0.3m above ground level which will be covered over with soil and seeded using a native seed mix. A diagram of a Reptile Hibernacula is located in appendix 6 for reference.
- The creation of at least one butterfly bank within the grounds of the site would be welcomed. A butterfly bank creates a range of micro climates and habitats for use by invertebrates. In simplified terms, a butterfly bank requires a mound of poor quality soil to be created ideally 30m long and 'C' shaped. At the base of the bank a gravel substrate should be spread a few metres in width. The mound can then be seeded with a native seed mix and subject to low intensity cut and collect mowing.

# Appendix 1 – Plant Species Recorded

Common Name	Scientific Name	
Trees & Shrubs	-	
Alder	Alnus glutinosa	
Ash	Fraxinus excelsior	
Hawthorn	Crataegus monogyna	
Holly	llex aquifolium	
Field Maple	Acer campestre	
Small leaved lime	Tilia cordata	
Cherry sp	Prunus sp	
Butterfly bush	Buddleja davidii	
Herbaceous Plants, Rushes and	Ferns	
Bird's foot trefoil	Lotus corniculatus	
Cock's-foot	Dactylis glomerata	
lvy	Hedra helix	
Common mouse-ear	Cerastium fontanum	
Common nettle	Urtica dioica	
Common ragwort	Senecio jacobaea	
Broad leaved dock	Rumex obtusifolius	
Creeping buttercup	Ranunculus repens	
Broad leaved dock	Rumex obtusifolius	
Knapweed sp.	Centaurea sp.	
Red clover	Trifolium pratense	
Ribwort plantain	Plantago lanceolata	
Rosebay wilowherb	Chamerion angustifolium	
Selfheal	Prunella vulgaris	
Hazel	Corylus avellana	
Hedge bindweed	Calystegia sepium	
Hedge woundwort	Stachys sylvatica	
Herb-robert	Geranium robertianum	
Hogweed	Heracleum sphondylium	
white clover	Trifolium repens	
Yarrow	Achillea millefolium	
Silverweed	Potentilla anserina	
Scarlett Pimpernell	Anagallis arvensis	
Common cat's-ear	Hypochaeris radicata	
Enchanters nightshade	Circaea lutetiana	
Common Mallow	Malva sylvestris	
Grasses		
False oat grass	Arrhenatherum elatius	
Yorkshire fog	Holcus lanatus	
Cock's foot	Dactylis glomerata	
Common Bent	Agrostis capillaris	

# Appendix 2 – Site Photographs



Eastern edge of sit looking northwards



Mature trees and parking to the south of Mitchell Court



Semi improved grassland to the west of Mitchell Court



Bare earth & tall ruderal habitat to the east of the garages



Semi improved grassland & tree line to west of site



Bare earth & tall ruderal habitat to the east of the garages

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#### Preliminary Ecological Assessment Mitchell Court, Tonypandy



Semi Improved Grassland to the east of Council Office Block



View between Mitchell Court & Office Block



Tree to the south of office block



Tree to the south of office block



Tree to the west of garages

#### Preliminary Ecological Assessment Mitchell Court, Tonypandy



T6 within tree line to west of site



T5 within tree line to west of site



T8 within tree line to west of site



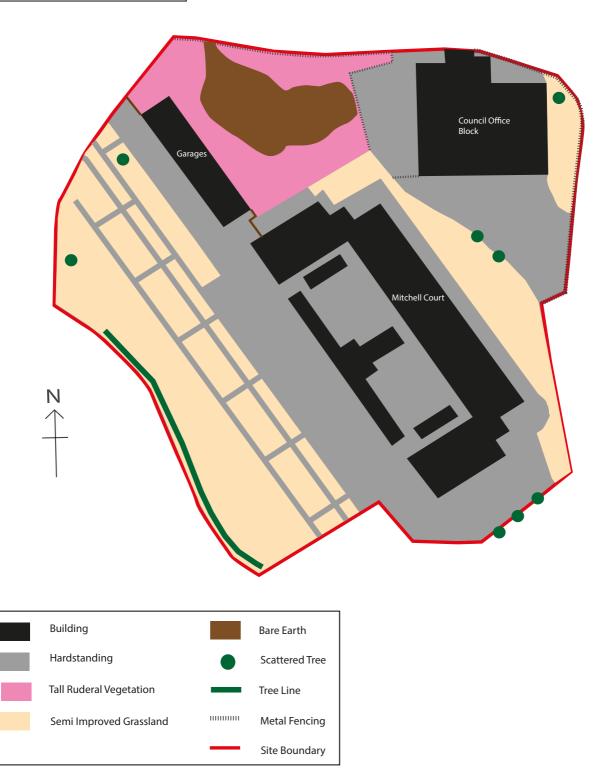
T10 - Tree to the north west of site

# Appendix 3– Site Habitat Map

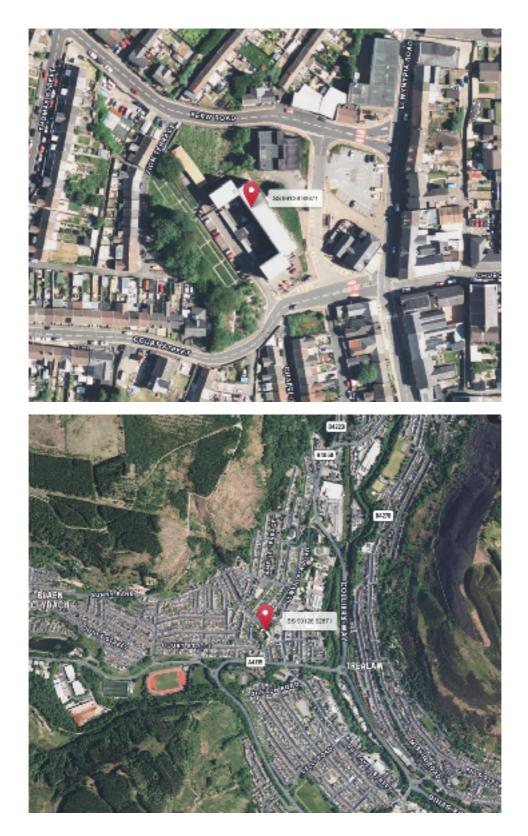
MITCHELL COURT, TONYPANDY

Habitat Map

July 2024



# Appendix 4- Aerial View of Site Location

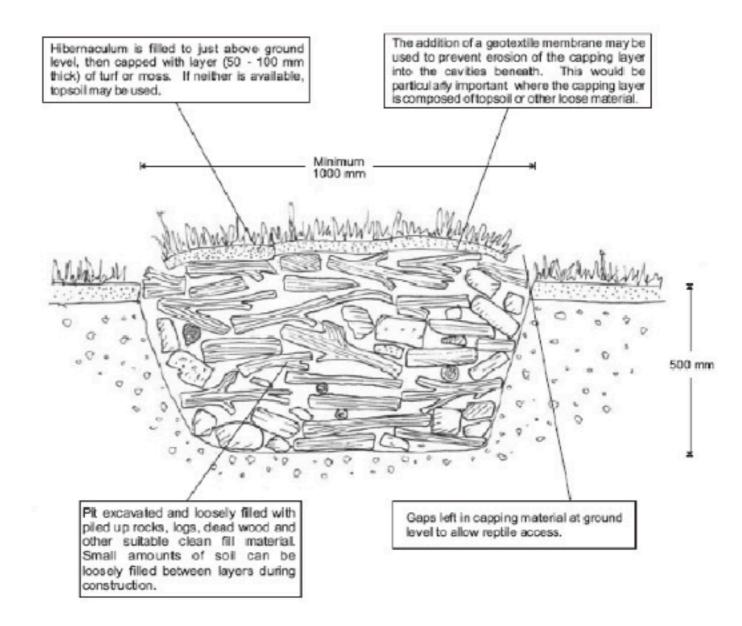


# Appendix 5 – Invertebrate Habitat Potential Assessment

Habitat element	No.	Comments
Decaying Wood	HE 1	In all its forms; from decaying wood on/in large trees to woodland floor debris
Rotational Management	HE2	Planned or serendipitous; and whether for nature conservation or other purposes
Nectar Resources	HE3	As a proxy for nectar- and polien resources, as assessment of pollen resources is impracticable on a walk-through survey
Wet Substrates	HE4	Including marginal, marshy, muddy and seasonally inundated habitats, as well as flushes
Open Water Habitats	HE5	The open water element of rivers, lakes, ponds, streams, ditches, etc.
Structural Patchwork	HEG	Habitat mosaics, including, but by no means restricted to open mosaic habitats on previously developed land
Still Air (S)	HE7	Suntraps and still-air microclimates in open situations; the term 'still air' is used in preference to 'wind breaks' as many rigid wind breaks are likely to produce turbulent air in their lee
Still Air (H)	HE8	Humid still-air microclimates in shaltered and shaded situations
Connectivity	HE9	Landscape-scale connectivity between the site and external habitats
Ecoclines	HE10	A graded transition between two or more broad habitats
Bare Earth	HE11	Unshaded bare or sparsely vegetated well-drained substrate, regardless of soil type

Table 1. Summary of the 11 habitat elements assessed by IHP survey.

# Appendix 6 - Reptile Hibernacula



Source: Highways Agency (2005) *Design Manual for Roads and Bridges: Volume 10* Section 4 Part 7 – Nature Conservation Advice in Relation to Roads and Reptiles