East Bay Close

Cardiff

Preliminary Ecological Appraisal Report

December 2025

T: **029 2065 0331** | E: **enquiries@acerecology.co.uk** | W: **www.acerecology.co.uk**

16 Wordsworth Avenue, Penarth, Vale of Glamorgan, CF64 2RL

Registered in England and Wales No. 7563601

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East Bay Close, Cardiff Preliminary Ecological Appraisal				
Revision	Date	Prepared by	Checked by	Verified by
1.0	04 December 2025	Evan Smith Assistant Ecologist E. Smith	Martha Tingey Consultant Ecologist Martha Tingey	Paul Hudson MCIEEM Principal Ecologist Paul Hudson
2.0	04 December 2025	Dee Kozlowska Assistant Ecologist D Kozlowska	Dee Kozlowska Assistant Ecologist D Kozlowska	Paul Hudson MCIEEM Principal Ecologist Paul Hudson

Summary

Brief and Site Location	Acer Ecology Ltd. were instructed by to conduct a preliminary ecological appraisal of land at Central Link Bridge, Tyndall Street, Newtown, Butetown, CF10 4HE, within the boundary of Cardiff City Council (Ordnance Survey Grid Reference centred at: ST 19132 76079)
Development Proposals	The proposed development site measures approximately 0.35ha, and comprises trees, grassland, scrub and bare ground. The site is situated 0.15km from the former Bute East Dock. The entire surroundings of the site comprise of urban infrastructure. The wider landscape is also urban with the exception of former Bute East Dock. The site is characterised by a flat topography and sits 8.4m above sea level.
Impacts to Key Receptors	The development will not result in any adverse impacts to statutory on non-statutory nature conservation sites. The proposed development will involve the clearance of an area of ephemeral and short perennial (J1.3),dense scrub (A2.1), semi-improved neutral grassland (B2.2) and the removal of broadleaved woodland treeline. Given that clearance of these habitats and the tree cannot be avoided, significant enhancement and mitigation of the retained habitats will be required. The proposed development could potentially have adverse impacts of varying degrees on a range of legally protected species. There is a high risk of impact to reptiles, and a lower risk of impact to nesting birds, hedgehogs, bats, invertebrates and small mammals. It is considered essential that appropriate mitigation measures are set out in place to avoid or minimise impacts to these species.
Invasive Species	The development may result in the spread of buddleia. Measures to prevent this are set out in Section 4.
Further Surveys	Further surveys are recommended so that the potential for further impacts can be established.
Required Actions	The following provisional recommendations have been formulated based on the development proposals available at the time of writing. They may be subject to change upon receipt of the final design: • Reptile surveys (April to September); • Precautionary measures – Soft-felling approach for PRF-I trees; Timing of vegetation clearance for birds; Good Construction Practices for Badgers, Hedgehogs and Other Mammals, CEMP and LEMP (can be completed after the planning application has been determined, and be subject to a planning condition; • Mitigation measures – Invasive non-native species, Sensitive lighting strategy for bats and Tree retention and hedgerow protection measures; and • Compensation and enhancement measures – Bat Boxes, Bird boxes and Sustainable Urban Drainage Systems (SuDs).
Licensing Requirements	None required.
Conclusions	The full extent of ecological impacts and potential constraints of the proposed development cannot be fully determined, based on the results of the preliminary ecological appraisal survey alone. Further survey work is required before the ecological impacts of the proposed development can be assessed, as detailed in Section 4.2.

1. Introduction

1.1. Brief and Site Location

Acer Ecology Ltd. were instructed by to conduct a preliminary ecological appraisal of land at Central Link Bridge, Tyndall Street, Newtown, Butetown, CF10 4HE, within the boundary of Cardiff City Council (Ordnance Survey Grid Reference centred at: ST 19132 76079)[1]. The assessment documents the baseline ecological condition of the survey area, which is shown by the red line boundary on Plan 1. Designated sites, habitats, protected and notable species of conservation interest that could be affected by the proposed works are identified, and subsequent recommendations provided.

1.2. Site Description

The proposed development site measures approximately 0.35ha, and comprises trees, grassland, scrub and bare ground and is situated 0.15km from the former Bute East Dock. The area is under ownership of two different owners with an area to the west (Area 1) and an area to the east (Area 2) separated by fencing. The wider landscape comprises urban infrastructure. The site is characterised by a flat topography and sits 8.40m above sea level.

1.3. Proposed Works

The proposed development works comprise clearance of the site to facilitate a Purpose-Built Student Accommodation (PBSA) scheme.

Existing and proposed development plans can be found in Appendices 1 and 2.

1.4. Scope of the Study

The study comprised the following:

- A desk study to identify existing information on statutory and non-statutory sites of nature conservation interest, and records of notable or protected habitats or species within the site and its surrounding area;
- A Phase 1 Habitat Survey of the site, extended to search for evidence of, and potential for, protected fauna; and
- Identification of potential ecological constraints to the proposed development and assessments of impacts including appropriate mitigation measures where necessary.

1.5. Reporting

This report aims to:

- Outline the methodology used during the survey;
- Present the baseline ecological information;

[1] Latitude and Longitude: 51.477865 , -3.1658403 / what3words: tolls.rate.audit

- Provide an ecological evaluation of on-site habitats, including an assessment of the potential for protected species;
- Assess the potential impacts of the proposed development on ecological receptors;
- Assess the potential ecological constraints to the proposed development; and
- Provide recommendations for further survey, avoidance, mitigation and enhancement where appropriate.

2. Methods

2.1. Scope of Assessment

This assessment has been undertaken following the approach detailed in the Chartered Institute of Ecology and Environmental Management's 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (CIEEM, 2018). The assessment has focussed on 'Important Ecological Features' that are present within the 'Zone of Influence' of the project. Important Ecological Features, as detailed in Box 14 of CIEEM's Guidelines comprise:

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

The Zone of Influence (ZoI) is the area over which a development proposal could have an influence on ecological features. The Zone of Influence (ZoI) varies depending on the ecological receptor. Following CIEEM (2018), a precautionary ZoI of up to 0.5km is typically applied for great crested newt, up to 1km for notable plants and invertebrates, and up to 10km for bat populations associated with designated sites such as SACs. However, for the current proposal the ZoI for most receptors is considered to comprise the land within the red line boundary and immediately adjacent habitats, as potential effects are expected to be highly localised.

2.2. Desk Study

2.2.1. Protected Sites, Habitats and Species

Existing information on designated sites and protected species was obtained from the sources detailed in Table 1.

Table 1: Sources of Data

Source	Data	Radius of Search
Natural resources Wales (NRW) Geographical Information Systems (GIS) Layers	Statutory and non-statutory nature conservation designated sites	Ramsar/Special Area of Conservation (SACs)/Special Area of Protection (SPAs)/Site of Special Scientific Interest (SSSIs) National Nature Reserves (NNRs), Local Nature Reserves (/LNRs), Ancient Semi-Natural Woodland, (ASNW), Restored Ancient Woodland Sites (RAWS) and Plantation on Ancient Woodland Sites (PAWS) - 2km^2 SACs (designated for bats) - 10km
South East Wales Biological Records Centre (SEWBReC)	Protected species records (SEWBReC unique reference: 0256-417) Site of Importance for Nature Conservation (SINC)	1km. 1km.

All available records of bat roosts, badger, dormouse, amphibians and reptiles were considered. For other species, only records collected within the last 10 years were considered relevant.

2.2.2. Landscape Context

The site and wider landscape were assessed and characterised using aerial images, Ordnance Survey maps and SEWBReC data. The presence of off-site features and habitats which add to the ecological value within the wider area were identified (for example, ponds within 0.5km of the site). Where appropriate, such features were scoped into the detailed assessment of impacts presented in Section 3.

2.2.3. Ancient Woodland

Although ancient woodland is not a designated site as such, it is often listed as a designated site due to its ecological significance and associated protection. Ancient woodland has therefore been included within the non-statutory designated site section of this report.

2.2.4. Planning Authority

The City of Cardiff Council Planning Portal [2] was consulted to determine if any previous survey information was available for the site or immediate surroundings.

2.3. Field Study

[2] https://www.cardiffidoxcloud.wales/publicaccess/

2.3.1. Personnel

The field survey was undertaken in fair weather on the 18th September 2025 by Martha Tingey[3] and Evan Smith[4]. Update walkover survey was undertaken on the 4th December 2025 by Dee Kozlowska[5] and Paul Hudson[6].

2.3.2. Vegetation and Habitats

The vegetation and habitat types present within the survey area were categorised and mapped following the standard[7] Phase 1 Habitat assessment methodology (Joint Nature Conservation Committee, 2010) codes. Dominant and conspicuous plant species were recorded for each habitat. Target notes were used to record information on features of ecological interest such as evidence of, or habitats with potential to support, protected species, or where any features of interest too small to map were recorded. Following the completion of the survey, a colour-coded habitat plan was digitised using QGIS to show the extent and distribution of the different habitat types present within the site (see Plan 6).

Habitats of principal importance detailed within Section 7 of Environment Wales Act 2016 within the site were identified.

2.3.3. Protected and Notable Species

Evidence of, and habitats with, potential to support protected or notable species were noted, especially species meeting any of the following criteria:

- Listed under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species (Amendment) (EU Exit) ['CHSAEU'] Regulations 2019;
- Listed under Section 7 of the Environment (Wales) Act 2016 as being of principal importance for maintaining and enhancing biodiversity in Wales;
- Listed as a local priority for conservation, for example in the relevant Local Biodiversity Action Plan (LBAP);
- Red Listed using International Union for the Conservation of Nature (IUCN) criteria (e.g. in one of the UK Species Status Project[8] reviews, in the Species of Conservation Concern Red, Amber or

[3] Martha graduated with an BSc (Hons) in Zoology from Swansea University. She has previously worked for 4 years at SWT Ecology Services before working as a Consultant Ecologist from Acer Ecology Ltd.
[4] Evan graduated with a degree in Conservation Biology and Ecology from the University of Exeter. Evan is currently working as an Assistant Ecologist and receiving training from Acer Ecology. Further details of his qualifications and experience can be found at https://www.linkedin.com/in/evan-smith-9b73a719a
[5] Dee graduated with a BSc (Hons) in Biology and Biotechnology and studied for an MSc in Molecular Biotechnology, including courses in Molecular Ecology, Field Surveys, Plant In Vitro Cultures and their Importance for Species Protection, and Invasive Species. Her passion lies in nature conservation and the ecology of Bryophytes. Dee is now working as an Assistant Ecologist and receiving training from Acer Ecology.
[6] Paul graduated with a degree in Environmental Biology from Reading University and a Postgraduate Diploma in Conservation Management from the University of East Anglia. He is experienced in undertaking preliminary ecological appraisals and has been involved in ecological survey work since 2001. He has undertaken extensive training in protected species assessment, phase 1 habitat surveys and botanical surveying. Further details of his qualifications and experience can be found at https://www.linkedin.com/in/batsurvey.
[7] Some additional categories were also used if applicable e.g. hard standing and Japanese knotweed.
[8] The Species Status project is the successor to the JNCC's Species Status Assessment project, providing up-to-date assessments of the threat status of various taxa using the internationally accepted Red List guidelines (http://jncc.defra.gov.uk/page-1773).

Near Threatened List[9], Birds of Conservation Concern in Wales[10], or, where a more recent assessment of the taxonomic group has not yet been undertaken, listed in a Red Data Book);

- Listed as a Nationally Rare or Nationally Scarce species (e.g. in one of the Species Status Project reviews) or listed as a Nationally Notable species where a more recent assessment of the taxonomic group has not yet been undertaken; and/or
- Endemic to a country or geographic location (it is appropriate to recognise endemic sub-species, phenotypes, or cultural behaviours of a population that are unique to a particular place).

Only those species with potential to be present on-site are mentioned within this report. The methodologies used were as follows:

Birds

Any birds observed during the field survey were recorded, in addition to features capable of supporting nesting birds (e.g. trees, hedgerows, buildings, bramble, ruderal vegetation and rough grassland etc.). The site was also assessed for its actual and potential suitability to support Wildlife and Countryside Act 1981 (as amended) Schedule 1 species.

A comprehensive bird survey, such as a breeding bird survey, was not undertaken as this was beyond the scope of the assessment.

Bats

Preliminary Ground-level Roost Assessment

A preliminary ground-level roost assessment of the trees within the survey area was undertaken, looking for features that bats could use for roosting (Potential Roost Features[11] (PRFs)) and evidence of bats (i.e. droppings in, around or below a PRF; odour emanating from a PRF; audible squeaking at dusk or during warm weather; or staining below the PRF). A systematic inspection was carried out around all accessible aspects of the tree, from both close to the trunk and further away. A high-powered torch (Clulite), an endoscope (Snake vision), binoculars and a ladder were used as appropriate during the survey. The location of the trees surveyed are shown on Plan 2.

The trees were assessed for their suitability to support roosting and hibernating bats in accordance with Table 4.2 of the Bat Conservation Trusts Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023) whereby trees were categorised into the following categories:

- None – Either no PRFs in the tree or highly unlikely to be any;

[9] Eaton *et al.* (2015) Birds of conservation concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. British Birds 108: 708-746.
[10] Johnstone, I. and Bladwell, S. (2016) Birds of Conservation Concern in Wales 3: the population status of birds in Wales. Birds in Wales 13 (1).
[11] Potential Roost Features that bats may use identified by Andrews include: woodpecker-holes; squirrel-holes; knot-holes; pruning-cuts; tear-outs; wounds; cankers; compression-forks; butt-rots; lightning strikes; hazard-beams; subsidence-cracks; shearing cracks; transverse cracks; welds; lifting bark; frost-cracks; fluting and ivy.

- FAR – Further assessment required to establish if PRFs are present in the tree; or
- PRF – A tree with at least one PRF present.

Where possible, PRFs were further categorised in accordance with Table 6.2 of the above survey guidance as detailed below:

- PRF-I - PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats;
- PRF – M PRF is suitable for multiple bats and may therefore be used by a maternity colony; and

Trees with dense ivy coverage have been assessed as PRF-I as ivy coverage can cover PRF's within the trees. If they are to be pruned or felled at any point during the development works, it is recommended this should be undertaken under supervision of a suitably qualified ecologist using a soft-felling technique.

The bat survey assessment was added into the table from the Tree Survey & Arboricultural Impact Assessment Report (Tree Scene Ltd., 2025), detailed within Table 13 of this report.

Buildings Assessment

There are no buildings present within the survey area, therefore a building assessment was not carried out.

Terrestrial Habitat Assessment

A preliminary assessment of the value of the site for bats (and any potential roost sites therein) was made in accordance with Table 4.1 of the Bat Surveys for Professional Ecologists (Collins, 2023) (see Appendix 4). The assessment was based on the relative abundance and quality of habitat features within the site, and surrounding landscape, suitable for roosting, foraging and commuting bats.

Landscape features suitable for foraging and commuting bats include linear landscape features such as watercourses, transport corridors (e.g. roads, sunken lanes railways), walls, hedgerows, coppice, woodland fringe, tree lines, ditches and areas of scrub and pasture.

Dormice

The site was assessed for its suitability to support dormice (*Muscardinus avellanarius*) in accordance with Section 3.2 of the third edition of the Hazel Dormouse Conservation Handbook (Bullion *et al.*, 2025) with the key considerations being food availability, nesting opportunities, structural complexity and landscape connectivity.

No hazel was present on site and, therefore, it was not possible to undertake a search for hazelnut shells to determine if they had been opened by dormice.

A full nest tube/box/footprint tunnel survey was not undertaken as this was beyond the scope of the assessment. In addition, no records of dormice within 1km of the site were provided by SEWBReC.

Therefore, no adverse impacts to this species are envisaged to occur. This species is therefore not mentioned further in this report.

Great Crested Newts

There are no ponds within 500m of site. In addition, SEWBReC did not return any records of GCN within 1km of the site. Additionally, no records of common amphibians were received from within this search radius. Due to the lack of ponds, there is negligible potential for GCN to be present within the site.
This species is therefore not mentioned further in this report.

Otters, Water Voles and White-Clawed Crayfish

The nearest watercourse is the Bute East Dock, approximately 0.11km south of the proposed development site. This watercourse is separated from the site by busy roads, buildings and the walls surrounding the dock. Due to the urbanised nature of the development to the area between the site and this watercourse, there is negligible likelihood of otters, water voles or white-clawed crayfish being present within the site, thus they are not mentioned any further in this report.

Badgers

Earth embankments, wooded copses, hedgerows and dense bramble beds are habitat features that often contain evidence of badgers (*Meles meles*). Where present on-site, these and other suitable habitat features were searched for such evidence. Where present, the location of badger signs such as setts, runs, dung pits or latrines, prints, hair and foraging snuffle holes, were recorded.

Reptiles

An assessment of the suitability of on-site habitats to support reptiles was made. Reptiles require a diverse range of habitats to meet their needs such as hedgerows, scrub, rough grassland, woodpiles, rubble, banks and compost heaps. The potential of the site to provide hibernation opportunities and spring/ summer/autumn habitat was also assessed, with reference to guidance provided in the Herpetofauna Workers' Manual (Joint Nature Conservation Committee, 2003), the Reptile Management Handbook (Edgar, Foster & Baker, 2011) and the Reptile Mitigation Guidelines Technical Note TIN 102 (Natural England, 2013). The following factors were considered: vegetation type and structure; insolation (sun exposure); slope aspect; topography; surface geology; habitat connectivity; habitat size; prey abundance; refuge opportunity; hibernation opportunity; egg-laying potential for grass snake (*Natrix helvetica*); public pressure; percentage of shade; levels of disturbance and management regime.

A targeted presence/likely absence reptile survey was not undertaken as it was beyond the scope of this assessment.

Hedgehogs

The site's potential to support hedgehog was assessed using guidance on habitats of importance in Hedgehogs and Development (People's Trust for Endangered Species and British Hedgehog Preservation

Society, 2023)[12] with the following habitats particularly favoured: dense scrub to build hibernation nests in during the winter; short grass to forage in for invertebrate prey; longer grass to forage in and to make nests in during the summer; areas of leaf litter to collect and use for hibernation nests; log piles and decaying vegetation to forage in and hibernate in; and hedgerows and boundary vegetation that are important corridors for travel and nesting sites.

Other Species

General habitat suitability and incidental sightings of other animal species were also noted.

2.3.4. Assessment of Ecological Value

The value of the habitats and features of the site have been provisionally evaluated and graded in accordance with the Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (CIEEM, 2023). The level of value of specific ecological receptors is assigned using a geographic frame of reference, i.e. international value being most important, then national, regional, county, district, local and, lastly, within the immediate zone of influence of the site only. Brief descriptions of how Acer Ecology interprets these categories are set out in Appendix 4.

Potential impacts on important ecological features (species, habitats and ecosystems[13]) are identified and assessed. Mitigation measures have been devised following the mitigation hierarchy and appropriate mechanisms for securing mitigation measures have been identified.

2.3.5. Limitations

General Temporal Limitations

Any ecological survey can only identify what was present on-site at the time the survey was conducted and habitat usage by species can change over time.

Seasonality of Survey

The present survey was undertaken outside of the optimal survey period for certain species of flora and fauna, with many species having died back or having become inconspicuous at the time of the survey. The survey can be considered as providing a reasonable, though not exhaustive or full, plant list. The survey noted the habitat types present on site and the dominant vegetation at the time of the survey, which is likely to be constant and a fair reflection of the habitat quality present.

Incomplete Survey Information

12 PTES-BHPS-Developers-leaflet-Sept-23.pdf
13 The 2018 EcIA Guidelines from CIEEM make it clear that an EcIA should consider the impacts upon ecosystems, as well as habitats and species. Statements to this effect are found throughout the document including in sections 1.3, 1.9, 2.3, 4.1 and 4.8 etc.

Full surveys for the protected species listed previously have not yet been carried out. For some species of fauna for which evidence has been found or which are considered likely to occur on site, further targeted survey is advisable at a more appropriate time of year (see Section 4).

Tree Assessments

As detailed in Figure 1 of Bat Surveys for Professional Ecologists (Collins 2023), tree surveys should preferably be undertaken when no leaves are present on the trees. This was not possible in this instance due to the survey being conducted September when trees still hold the majority of their leaves.

This is not considered a significant constraint as a thorough and robust inspection of the trees was still possible.

3. Baseline Ecological Conditions, Evaluation and Development Impacts

The baseline conditions and evaluation of the *in-situ* habitats and the actual/potential presence of protected species are discussed in this section. Potential impacts on protected sites, *in-situ* habitats and protected or notable species arising from the proposed development are identified, including both direct and indirect impacts and those associated with construction and operational stages.

A summary of relevant legislation and planning policies relating to protected sites, habitats and species is provided in Appendices 3 and 4.

3.1. Statutory Nature Conservation Designated Sites

Statutory Sites (SACs or SSSIs) Designated for Bats within 10km of Site

No SACs or SSSIs specially designated for bats lie within 10km of the site.

SACs and LNRs within 2km of Site

The proposed development site lies within 2km of the following statutory sites (see Plan 3):

Table 2: Statutory Sites Designated Within 2km

Site Name and Designation	Description	Distance and Direction from Development Site	Development Impacts
Cardiff Bay Wetlands and Hamadryad Park LNR	The site comprises around 14 hectares of land in Butetown, Cardiff. Much of the park is playing fields and open grassland crossed by broad, metalled pathways, screened from the Butetown Link Road by earth bunds which have been planted with trees. The Cardiff Bay Wetlands nature reserve is located south and east of the Butetown Link Road. Good views of the wetlands and the bay are afforded from the boardwalk, which is also a good place for bird watching.	1.80km south-west	The small scale of the development proposals mean that works are not anticipated to adversely affect the character of the LNR. It is, therefore, not mentioned any further in this report.
Severn Estuary SAC[14] , SSSI[15], SPA[16] and RAMSAR[17]	The Severn Estuary is designated as a SAC and SSSI and supports 'internationally important populations of waterfowl; invertebrate populations of considerable interest; and large populations of migratory fish,	1.82km to the south-east	The small scale of the development proposals mean that works are not anticipated to adversely affect

[14]https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK0013030&SiteName=severn&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
[15]https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002284&SiteName=severn&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
[16]https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK9015022&SiteName=severn&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
[17]https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK11081&SiteName=severn&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

	including the nationally rare and endangered Allis shad (Alosa alosa).' It is also designated as a Ramsar site and Special Protected Area (SPA) due to its 'international importance for wintering and passage wading birds, with total winter populations averaging about 44,000 birds'.		the character of this site. It is, therefore, not mentioned any further in this report.

3.2. Non-statutory Nature Conservation Designated Sites

SINCs

The proposed development site lies within 2km of the following non-statutory sites (see Plan 4):

Table 3: Non-Statutory Sites Designated Within 2km

Site Name and Designation	Description	Distance and Direction from Development Site	Development Impacts
Blackweir & Dock Feeder SINC	An area of secondary ornamental woodland bisected by the abandoned dock feeder canal with a variety of natural and introduced ground flora. The SINC runs from the back of Talybont Sports centre near Blackweir, in a southerly direction, the canal follows the eastern boundary of Bute Park to the back of Cardiff Castle. The woodlands alongside the River Taff from Blackweir to the education centre in the middle of Bute Park are also included within this SINC. The River Taff gives the site importance for waterfowl. Ground flora indicator species suggest that the area once supported ancient semi-natural woodland including Bluebell, Dog's Mercury, Field Maple and Red Currant.	0.88km to the north-west	No adverse impacts due to: • the nature of it's designating features; and • the distance between the proposed development site and the SINC.

B-Lines

The site lies within a designated B-line (see Plan 5). B-lines comprise a Wales-wide network of habitats, including grassland and hedgerows, that are of ecological importance for maintaining viable pollinator populations[18]. Due to the small scale of the proposals, there is not considered to be any impacts to the B-line as a result of the development. It is therefore not mentioned further in this report.

[18] https://www.buglife.org.uk/our-work/b-lines/b-lines-wales/

Ancient Woodland Sites

The following table shows the ancient woodland sites within 2km of the site:

Table 4: Ancient Woodland Sites Within 2km

Ancient Woodland Site	**Number within 2km of Site**
Ancient Semi-Natural Woodland (ASNW)[73]	Two.
Restored Ancient Woodland Sites (RAWS)[74]	Six.
Plantations on Ancient Woodland Sites (PAWS)[75]	None.
Ancient Woodland Sites of Unknown Category[76]	None.
Nearest Area of Ancient Woodland	Unnamed area of RAWS located 1.20km to the north-east of the site.
Development Impacts	None due to the distance distances between these woodlands and the proposed development site, together with the small-scale nature of the works. They are therefore not mentioned further in this report.

3.3. Habitats and Vegetation

The results of the general survey of habitats and vegetation are shown on Plan 8 A botanical species list is provided in Appendix 6.

The habitats of the site are described in detail in the table overleaf.

Phase 1 Habitat	Description	Ecological Value	Development Impacts
Broadleaved Semi-Natural Woodland (A1.1.1)	Detailed tree descriptions are provided in Section 3.5.3.	Listed under Section 7 of the Environment Wales Act 2016 as a priority habitat within Wales[19]. Local value.	Under current development proposal the broadleaved semi-natural habitat will be cleared with all but two trees being felled (T15 and T16 are retained). The trees abutting onto the site boundary will be retained with the exception of T1, T5 and T9 (arboricultural reasons). Retained trees could be subject to root damage as a result of heavy plant movement over the root protection area, or accidental damage during general construction activities. Recommendations to avoid and mitigate such impacts are presented in Section 4.
Dense Scrub (A2.1)	Multiple areas of dense scrub across the site. Species recorded on site include, buddleia (*Buddleja davidii)*, black poplar (*Populus × canadensis*), bramble (*Rubus fruticosus* agg.), ribwort plantain (*Plantago lanceolata*), hard rush (*Juncus inflexus*) and itali alder (*Alnus cordata*).	Site value.	Clearance of the site to facilitate the new development will result in the permanent loss of areas of this habitat. Recommendations to avoid and mitigate impacts are presented in Section 4.
Semi-Improved Neutral Grassland (B2.2)	Area of grassland in Area 1 Species recorded on site include: yarrow (*Achillea millefolium*). red fescue (*Festuca rubra*), cat's ear (*Hypochaeris radicata*), ribwort plantain, white clover (*Trifolium repens*), common bent (*Agrostis capillaris*),creeping buttercup (*Ranunculus repens*), Yorkshire fog (*Holcus lanatus*), Daisy (*Bellis perennis*), wild strawberry (*Fragaria vesca*), poppy (*Papaver rhoeas*), hawthorn (*Crataegus monogyna*), dog rose (*Rosa canina*), hemp agrimony (*Eupatorium cannabinum*), cock's foot (*Dactylis glomerata*), self-heal (*Prunella vulgaris*), dandelion (*Taraxacum officinale*), Franchet's cotoneaster (*Cotoneaster franchetii*), false oat grass	Site value.	Clearance of the site to facilitate the new development will result in the permanent loss of areas of this habitat. Recommendations to avoid and mitigate such impacts are presented in Section 4.

[19] Section 7 list available at https://www.biodiversitywales.org.uk/environment-wales-act

	(*Arrhenatherum elatius*), wood false brome (*Brachypodium sylvaticum*), wood avens (*Geum urbanum*) and herb robert (*Geranium robertianum*) Some calcareous grassland indicators were found such as, glaucous sedge (*Carex flacca*), common knapweed (*Centaurea nigra*) and perforate St-John's wort (*Hypericum perforatum*).		
Spoil (I2.2)	One rubble heap is present at the north-western corner of Area 2. One leaf pile (TN5) is also present at the south-eastern corner of Area 1.	Site value	The leaf pile may be cleared to facilitate the proposed development works. The leaf pile may have potential for reptiles and hibernating mammals. Recommendations to avoid and mitigate such impacts are presented in Section 4. The rubble heap will be permanently cleared. No adverse impacts are anticipated to occur to any protected species from clearing the rubble heap.
Ephemeral and Short Perennial Vegetation (J1.3)	Some species recorded on site include: buddleia, hawkweed oxtongue (*Blackstonia perfoliata*), hybrid ragwort (*Senecio aquaticus x S. jacobaea)*, broad-leaved dock (*Rumex obtusifolius*), creeping buttercup (*Ranunculus repens*), ribwort plantain, false oat-grass (*Arrhenatherum elatius)* and yellow-wort (*Picris hieracioides*).	Site value.	Clearance of the site to facilitate the new development will result in the permanent loss of areas of this habitat. Yellow-wort and hawkweed oxtongue are classed as contributory species in SINC selection and therefore translocated of these species may be required.
Wall (J2.5)	A wall is present at the southern boundary of Area 1.	Site value.	Sections of the wall may be demolished as part of the development proposals. No adverse impacts are anticipated to occur to any protected species
Fence (J2.4)		Negligible value.	Permanent loss to the development. No adverse impacts are anticipated to occur to any protected species
Bare Ground (J4)	Urban - bare ground with low distinctiveness.	Negligible value.	Permanent loss to the development. No adverse impacts are anticipated to occur to any protected species

Arable (J1.1)	Flower and vegetable beds and pots were present next to the greenhouse at the eastern boundary.		Permanent loss to the development. No adverse impacts are anticipated to occur to any protected species

As the impact of the proposals are to be confined to the development footprint, it is not anticipated that there will be any adverse impact to the habitats off site apart from potential tree removal along proposed access route to the south of the site.

Photos of Area 1

Photo 1: South-Western Corner

Photo 2: North-Western Corner

Photo 3: Bramble Scrub in Culvert at Centre of Area

Photo 4: Small Drain at Culvert

Photo 5: Semi-improved Neutral Grassland at Eastern Elevation

Photo 6: Line of Trees and Dense Scrub at the Centre of Site Adjacent to Fencing

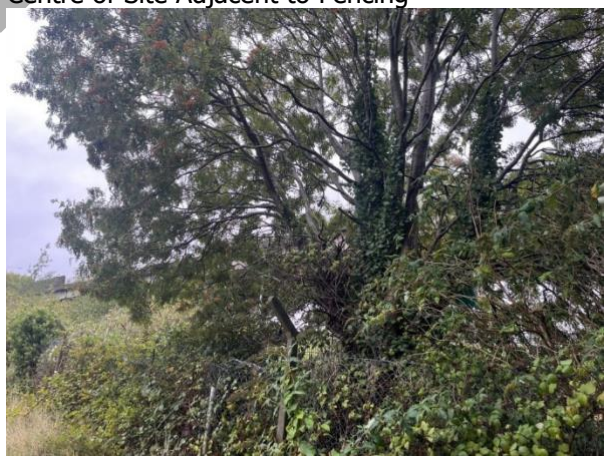


Photo 7: Leaf Pile at South-Eastern Corner (TN5)

Photo 8: Ornamental Garden Plantings Around Greenhouse

Photos of Area 2

Photo 9: South-Eastern Corner

Photo 10: North-Western Corner

Photo 11: Bare Ground Bordering Grassland

Photo 12: Buddleia On Site

Photo 13: Spoil Heap at North-Western Corner

Photo 14: Rubbish Pile at North-Western Corner

3.4. Invasive Plant Species

Details of the invasive species on site are described in detail below:

Species	Occurrence on Site	Legislation	Assessment of Potential Development Impacts
Buddleia	Occassional throughout Areas 1 and 2 (TN01, TN02 and TN03).	Whilst this species is not listed as a Schedule 9 invasive species, it is a non-native species that poses a conservation threat to native biodiversity and habitats, such that further releases should be regulated. This species has a negative effect on the biodiversity of the site.	The proposed development could potentially result in the spread of buddleia, an invasive ornamental species. Current guidelines from the Non-Native Species Secretariat should be followed when removing this plant, as outlined in Section 4.

3.5. Protected and Notable Species

3.5.1. Notable Plant Species

Data Trawl Results

SEWBReC returned records of a large number of rare and 'notable' plants (including species regarded as 'Locally Important', LBAP species and UK Red Data Book-listed species).

16 priority plant species were recorded within 1km of the site, namely: field wormwood (*Artemisia campestris*), sickle-leaved hare's-ear (*Bupleurum falcatum*), cornflower (*Centaurea cyanus*), stinking goosefoot (*Chenopodium vulvaria*), green hound's-tongue (*Cynoglossum germanicum*), deptford pink (*Dianthus armeria*), large-flowered hemp-nettle (*Galeopsis speciosa*), sea barley (*Hordeum marinum*), bluebell (*Hyacinthoides non-scripta*), least lettuce (*Lactuca saligna*), rough marsh-mallow (*Malva setigera*), bastard balm (*Melittis melissophyllum*), tubular water-dropwort (*Oenanthe fistulosa*), corn buttercup (*Ranunculus arvensis*), meadow clary (*Salvia pratensis*), and small-flowered catchfly (*Silene gallica*). Bluebell is mainly protected from sale via its listing under Schedule 8 of the Wildlife and Countryside Act.

48 plant listed as species of conservation concern were recorded within 1km of the site, namely: maidenhair fern (*Adiantum capillus-veneris*), corn chamomile (*Anthemis arvensis*), deadly nightshade (*Atropa belladonna*), wild cabbage (*Brassica oleracea*), lesser quaking-grass (*Briza minor*), thorow-wax (*Bupleurum rotundifolium*), flowering-rush (*Butomus umbellatus*), gold-of-pleasure (*Camelina sativa*), caraway (*Carum carvi*), small bur-parsley (*Caucalis platycarpos*), red star-thistle (*Centaurea calcitrapa*), field mouse-ear (*Cerastium arvense*), bermuda-grass (*Cynodon dactylon*), corn cleavers (*Galium tricornutum*), french oat-grass (*Gaudinia fragilis*), fringed rupturewort (*Herniaria ciliolata*), smooth rupturewort (*Herniaria glabra*), henbane (*Hyoscyamus niger*), yellow vetchling (*Lathyrus aphaca*), field pepperwort (*Lepidium campestre*), darnel (*Lolium temulentum*), bur medick (*Medicago minima*), toothed medick (*Medicago polymorpha*), sickle medick (*Medicago sativa subsp. falcata*), weasel's-snout (*Misopates orontium*), whorled water-milfoil (*Myriophyllum verticillatum*), orange bird's-foot (*Ornithopus pinnatus*), upright goosefoot (*Oxybasis urbica*), curved hard-grass (*Parapholis incurva*), four-leaved allseed (*Polycarpon tetraphyllum*), annual beard-grass (*Polypogon monspeliensis*), red pondweed (*Potamogeton alpinus*), fen pondweed (*Potamogeton coloratus*), northern yellow-cress (*Rorippa islandica*), fiddle dock (*Rumex pulcher*), arrowhead (*Sagittaria sagittifolia*), bay willow (*Salix pentandra*), round-headed club-rush (*Scirpoides holoschoenus*), night-flowering catchfly (*Silene noctiflora*), charlock (*Sinapis arvensis*), greater water-parsnip (*Sium latifolium*), shrubby sea-blite (*Suaeda vera*), sea clover (*Trifolium squamosum*), suffocated clover (*Trifolium suffocatum*), hairy-fruited cornsalad (*Valerianella eriocarpa*), hoary mullein (*Verbascum pulverulentum*), bithynian vetch (*Vicia bithynica*) and purple fescue (*Vulpia ciliata subsp. ambigua*).

78 plants listed as locally important species were recorded within 1km of the site, namely: meadow coral (*Clavulinopsis corniculata*), handsome club (*Clavulinopsis laeticolor*), *Cuphophyllus virgineus var. ochraceopallidus*, snowy waxcap (*Cuphophyllus virgineus var. virgineus*), parrot waxcap (*Gliophorus psittacinus*), limestone waxcap (*Hygrocybe calciphila*), blackening waxcap (*Hygrocybe conica*), corncockle (*Agrostemma githago*), pyramidal orchid (*Anacamptis pyramidalis*), babington's orache (*Atriplex glabriuscula*), black horehound (*Ballota nigra*), barberry (*Berberis vulgaris*), yellow-wort (*Blackstonia perfoliata*), upright brome (*Bromopsis erecta*), sea rocket (*Cakile maritima*), plymouth thistle (*Carduus pycnocephalus*), greater pond-sedge (*Carex riparia*), whorl-grass (*Catabrosa aquatica*), rigid hornwort (*Ceratophyllum demersum*), midland hawthorn (*Crataegus laevigata*), flixweed (*Descurainia sophia*), viper's-bugloss (*Echium vulgare*), many-stalked spike-rush (*Eleocharis multicaulis*), glabrous whitlowgrass (*Erophila glabrescens*), treacle-mustard (*Erysimum cheiranthoides*), wood spurge (*Euphorbia amygdaloides*), sea spurge (*Euphorbia paralias*), nit-grass (*Gastridium ventricosum*), round-leaved crane's-bill (*Geranium rotundifolium*), common rock-rose (*Helianthemum nummularium*), stinking iris (*Iris foetidissima*), blunt-flowered rush (*Juncus subnodulosus*), sharp-leaved fluellen (*Kickxia elatine*), henbit dead-nettle (*Lamium amplexicaule*), grass vetchling (*Lathyrus nissolia*), ivy-leaved duckweed (*Lemna trisulca*), pale flax (*Linum bienne*), tree-mallow (*Malva arborea*), dwarf mallow (*Malva neglecta*), spotted medick (*Medicago arabica*), annual mercury (*Mercurialis annua*), early forget-me-not (*Myosotis ramosissima*), daffodil (*Narcissus pseudonarcissus subsp. pseudonarcissus*), yellow water-lily (*Nuphar lutea*), white water-lily (*Nymphaea alba*), parsley water-dropwort (*Oenanthe lachenalii*), bee orchid (*Ophrys*

apifera), ivy broomrape (*Orobanche hederae*), common broomrape (*Orobanche minor*), beech fern (*Phegopteris connectilis*), sand cat's-tail (*Phleum arenarium*), hawkweed oxtongue (*Picris hieracioides*), hoary plantain (*Plantago media*), blunt-leaved pondweed (*Potamogeton obtusifolius*), perfoliate pondweed (*Potamogeton perfoliatus*), goldilocks buttercup (*Ranunculus auricomus*), hairy buttercup (*Ranunculus sardous*), wild mignonette (*Reseda lutea*), buckthorn (*Rhamnus cathartica*), burnet rose (*Rosa spinosissima*), golden dock (*Rumex maritimus*), sea pearlwort (*Sagina maritima*), purple willow (*Salix purpurea*), wild clary (*Salvia verbenaca*), meadow saxifrage (*Saxifraga granulata*), greater sea-spurrey (*Spergularia media*), autumn lady's-tresses (*Spiranthes spiralis*), greater duckweed (*Spirodela polyrhiza*), knotted hedge-parsley (*Torilis nodosa*), strawberry clover (*Trifolium fragiferum*), cornish elm (*Ulmus minor subsp. angustifolia*), small-leaved elm (*Ulmus minor subsp. minor*), small nettle (*Urtica urens*), blue water-speedwell (*Veronica anagallis-aquatica*), wayfaring-tree (*Viburnum lantana*), spring vetch (*Vicia lathyroides*), mistletoe (*Viscum album*) and horned pondweed (*Zannichellia palustris*).

Field Survey Results

Notable species were recorded on site including yellow-wort and hawkweed oxtongue.

3.5.2. Birds

Desk Study Results

SEWBReC returned 52 records of priority bird species within 1km of the site, namely: skylark (*Alauda arvensis*), tree pipit (*Anthus trivialis*), goldeneye (*Bucephala clangula*), cetti's warbler (*Cettia cetti*), black-headed gull (*Chroicocephalus ridibundus*), marsh harrier (*Circus aeruginosus*), cuckoo (*Cuculus canorus*), reed bunting (*Emberiza schoeniclus*), pied flycatcher (*Ficedula hypoleuca*), brambling (*Fringilla montifringilla*), mediterranean gull (*Ichthyaetus melanocephalus*), wryneck (*Jynx torquilla*), herring gull (*Larus argentatus*), linnet (*Linaria cannabina*), grasshopper warbler (*Locustella naevia*), yellow wagtail (*Motacilla flava*), curlew (*Numenius arquata*), whimbrel (*Numenius phaeopus*), osprey (*Pandion haliaetus*), house sparrow (*Passer domesticus*), black redstart (*Phoenicurus ochruros*), marsh tit (*Poecile palustris*), dunnock (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*), turtle dove (*Streptopelia turtur*), starling (*Sturnus vulgaris*), redwing (*Turdus iliacus*), song thrush (*Turdus philomelos*), fieldfare (*Turdus pilaris*), lapwing (*Vanellus vanellus*), lesser redpoll (*Acanthis cabaret*), pintail (*Anas acuta*), black-tailed godwit (*Limosa limosa*), spotted flycatcher (*Muscicapa striata*), firecrest (*Regulus ignicapilla*), garganey (*Spatula querquedula*), scaup (*Aythya marila*), hawfinch (*Coccothraustes coccothraustes*), quail (*Coturnix coturnix*), merlin (*Falco columbarius*), red-backed shrike (*Lanius collurio*), crossbill (*Loxia curvirostra*), slavonian grebe (*Podiceps auritus*), black tern (*Chlidonias niger*), long-tailed duck (*Clangula hyemalis*), lesser spotted woodpecker (*Dryobates minor*), cirl bunting (*Emberiza cirlus*), leach's petrel (*Hydrobates leucorhous*), little gull (*Hydrocoloeus minutus*), tree sparrow (*Passer montanus*) and wood warbler (*Phylloscopus sibilatrix*),

34 birds listed as species of conservation concern were recorded within 1km of the site, namely: common sandpiper (*Actitis hypoleucos*), long-tailed tit (*Aegithalos caudatus*), meadow pipit (*Anthus pratensis*), swift (*Apus apus*), turnstone (*Arenaria interpres*), sanderling (*Calidris alba*), dunlin (*Calidris alpina*), greenfinch

(*Chloris chloris*), dipper (*Cinclus cinclus*), whitethroat (*Curruca communis*), fulmar (*Fulmarus glacialis*), snipe (*Gallinago gallinago*), swallow (*Hirundo rustica*), storm petrel (*Hydrobates pelagicus*), common gull (*Larus canus*), lesser black-backed gull (*Larus fuscus*), great black-backed gull (*Larus marinus*), jack snipe (*Lymnocryptes minimus*), wigeon (*Mareca penelope*), grey wagtail (*Motacilla cinerea*), wheatear (*Oenanthe oenanthe*), willow warbler (*Phylloscopus trochilus*), green woodpecker (*Picus viridis*), goldcrest (*Regulus regulus*), whinchat (*Saxicola rubetra*), woodcock (*Scolopax rusticola*), redshank (*Tringa totanus*), mistle thrush (*Turdus viscivorus*), pochard (*Aythya ferina*), grey plover (*Pluvialis squatarola*), sand martin (*Riparia riparia*), shoveler (*Spatula clypeata*), hooded crow (*Corvus cornix*) and redstart (*Phoenicurus phoenicurus*), spotted redshank (*Tringa erythropus*)

Two birds listed as locally important species were recorded within 1km of the site, namely: yellow-legged gull (*Larus michahellis*) and nightingale (*Luscinia megarhynchos*).

Field Survey Results

A low number of birds were recorded on site, including carrion crow (*Corvus corone*) and magpie (*Pica pica*). No birds nests were recorded on site.

Evaluation of Ecological Value of Site for Birds

The trees and scrub on site provide limited potential foraging and nesting habitat for birds.

Impact Assessment of Proposed Development on Birds

The loss of small areas of trees and scrub will result in a limited loss of foraging and potential nesting habitat for a range of nesting species. Recommendations to avoid destruction or disturbance of nests and to enhance retained areas of the site for birds are included in Section 4.

3.5.3. Bats

Desk Study Results

SEWBReC returned records of bat roosts within 1km of the site. The roost records are summarised in the table below.

Table 7: Bat Roost Records

Species	Total Number of Records	Distance to Nearest Record	Most Recent Record
Common pipistrelle (*Pipistrellus pipistrellus*)	10	0.42km	28th June 2017

In addition to the roost records, SEWBReC returned 12 records of bats foraging or commuting within 1km of the site. These included: soprano pipistrelle *(Pipistrellus pygmaeus),* common pipistrelle and Nathusius's pipistrelle *(Pipistrellus nathusii)*.

Field Survey Results and Evaluation of Ecological Value of Site for Bats

No direct evidence of bats were found on site.

Trees

The majority of scattered trees were semi-mature in age, with low numbers of PRFs. All trees within the site boundary were assessed for suitability for roosting bats (Collins, 2023) (Appendix 3). These have been described in detail in the table below, which should be read in conjunction with this section of the report. All tree numbers correspond with Arboricultural Impact Assessment prepared by Treescene in October 2025. Location of the surveyed trees is mapped on Plan 6.

Table 8: Trees Assessed for Bat Suitability

No.	Description	Evidence of Roosting Bats	PRF	Suitability for Roosting Bats (Collins 2023)	Impact of Development
T1	Poplar *(Populus* spp.*)* Height: *c.* 20m Poor health	None	Dense ivy	PRF-I	Tree proposed for removal (arboricultural reasons). Precautionary approach to be adopted: pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.
T2-T4	Poplar *(Populus* spp.*)* Height: *c.* 20m Fair health	None	Dense ivy	PRF-I	Category C tree to be retained.
T5	Poplar *(Populus* spp.*)* Height: *c.* 20m Poor health	None	Dense ivy	PRF-I	Tree proposed for removal (arboricultural reasons). Precautionary approach to be adopted: pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.
T6	Poplar *(Populus* spp.*)* Height: *c.* 20m Fair health	None	Dense ivy	PRF-I	Category C tree to be retained.

No.	Description	Evidence of Roosting Bats	PRF	Suitability for Roosting Bats (Collins 2023)	Impact of Development
T7	Poplar *(Populus* spp.*)* Height: *c.* 20m Fair health	None	Dense ivy	PRF-I	Category C tree to be retained.
T8	Poplar *(Populus* spp.*)* Height: *c.* 20m Poor health	None	None	None	Category C tree to be retained.
T9	Poplar *(Populus* spp.*)* Height: *c.* 20m Poor health	None	Dense ivy	PRF-I	Tree proposed for removal (arboricultural reasons). Precautionary approach to be adopted: pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.
T(G)[20]10-T14	Trees outside red line boundary.				
T15	Rowan *(Sorbus aucuparia)* Height: *c.* 9m Good health	None	None	None	Category B tree to be retained.
T16	Lawson's cypress *(Chamaecyparis lawsoniana)* Height: *c.* 18m Fair health	None	None	None	Category B tree to be retained.
T17	Poplar *(Populus* spp.*)* Height: *c.* 5m Fair health	None	None	None	Tree proposed for removal. Precautionary approach to be adopted for nesting birds as detailed in Section 4.
T18	Rowan *(Sorbus aucuparia)* Height: *c.* 4m Good health	None	None	None	Tree proposed for removal. Precautionary approach to be adopted for nesting birds as detailed in Section 4.

[20] Single trees are marked as "T"; trees that are grouped are marked as "G".

No.	Description	Evidence of Roosting Bats	PRF	Suitability for Roosting Bats (Collins 2023)	Impact of Development
T19	Goat willow *(Salix caprea)* Height: *c.* 3m Good health	None	Dense ivy	PRF-I	Tree proposed for removal. Precautionary approach to be adopted: pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.
T20	Lawson's cypress *(Chamaecyparis lawsoniana)* Height: *c.* 15m Fair health	None	None	None	Tree proposed for removal. No PRFs recorded, however, a precautionary approach of pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.
T21	Birch *(Betula* spp.*)* Height: *c.* 3m Poor Health	None	None	None	Tree proposed for removal (arboricultural reasons). No PRFs nor bird nesting suitability due to tree's poor condition. No precautionary approach required.

Trees On Site with Potential for Roosting Bats

Photo 15: T1 – PRF-I for dense ivy

Photo 16: T2 – PRF-I for dense ivy

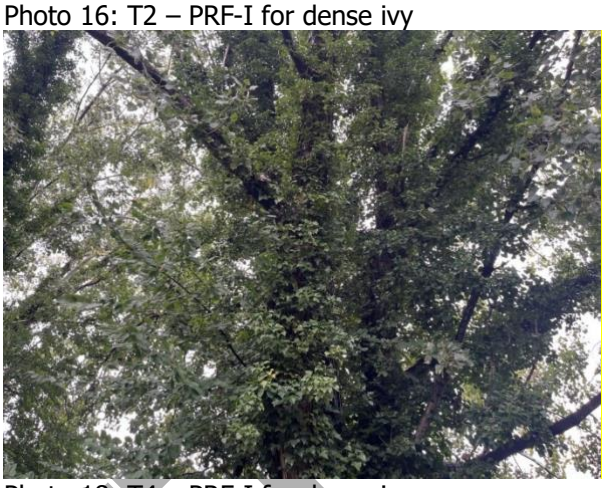


Photo 17: T3 – PRF_I for dense ivy

Photo 18: T4 – PRF-I for dense ivy

Photo 19: T5 - PRF-I for dense ivy

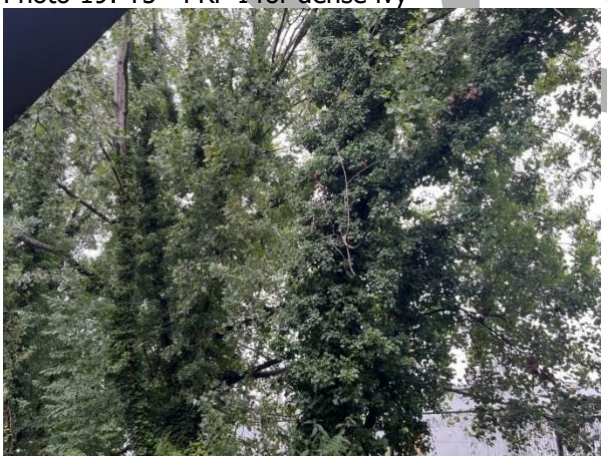
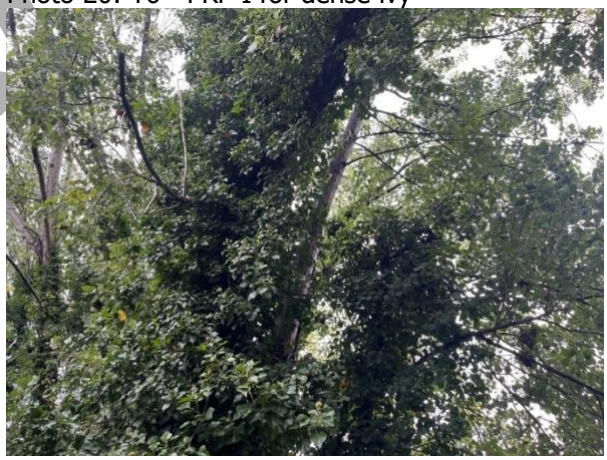


Photo 20: T6 - PRF-I for dense ivy



Foraging and Commuting Habitat

Suitable foraging and commuting habitat for bats were recorded on site including the line of trees to the south of the site, the line of trees and scrub the at the centre of the site, the patch of scrub at the centre of Area 1, grassland and scattered trees.

Potential Tree Roosts

PRF's on trees with potential for roosting bats could not be assessed due to the presence of dense ivy covering the trees.

Potential Foraging and Commuting Habitat

The site is collectively considered to provide low quality foraging and commuting habitat for bats. There is suitable habitat on site such as line of trees and scrub, but these are generally isolated and not very well connected to the surrounding landscape by other habitats.

Impact Assessment of Proposed Development on Bats

The following direct impacts to bats may occur as a result of the development:

- T6 (T1 in arb report) will be felled due to poor health. T6 has been assessed as having PRF-I bat roost potential. Felling may therefore result in the death, injury, or disturbance to any bats present at the time of works, or the loss of the roost. Recommendations are, detailed in Section 4;
- It is unknown whether the other trees on site assessed as PRF-I for bat roosting suitability (T1 – T5)) will be felled to allow future access to the site. If these trees are proposed for removal, felling may result in the death, injury, or disturbance to any bats present at the time of works, or the loss of the roosts. Recommendations will therefore be required if the trees are proposed for removal, as detailed in Section 4; a precautionary approach of pre-removal checks and supervision while the tree/trees are being removed using a soft-felling approach as detailed in Section 4.

The following indirect impacts to bats may occur as a result of the development:

- If trees T1 – T5 are proposed to be retained, there is a risk that they may be subject to root damage as a result of heavy plant movement over the roost protection area, or accidental damage during general construction activities. T1 – T5 have been assessed as having PRF-I bat roost potential. Protective barriers will therefore be installed prior to any site work, to ensure that no such inadvertent impacts occur (see Section 4). These will be established in line with the tree root protection zones detailed in the arboriculture report that has been produced for the site, as detailed in Section 4.
- Clearance of the line of trees/scrub in the centre of site will result in fragmentation of ecological connectivity for commuting bats; and
- Due to the change of use of the site, increases in artificial lighting levels will be significant, both during the construction phase and the operational phase of the development. If this lighting envelops retained scrub and trees of the site, it could adversely affect foraging and commuting bats.

3.5.4. Badgers

Desk Study Results

SEWBReC did not return any records of badgers from within 1km of the site.

Field Survey Results

No direct evidence of badgers, including badger setts or latrines, was recorded on site. The landscape surrounding the site is largely urban in nature and the site is not well connected to suitable habitat for badgers.

Evaluation of Ecological Value of Site for Badgers

Walls and fencing surround the site, preventing access for badgers to venture onto most parts of the site. Although one section of the fencing, this only allows into area 2, which is assessed as largely unsuitable habitat for commuting and foraging for badgers.

Impact Assessment of Proposed Development on Badgers

The likelihood of badgers sett building on site is considered to be negligible and no adverse impacts are subsequently anticipated. Likewise, there is considered to be a very low risk of badgers foraging or commuting across the site. They are therefore not mentioned further in this report.

3.5.5. Reptiles

Desk Study Results

SEWBReC returned no records of reptiles within 1km of the site.

Field Survey Results and Evaluation of Ecological Value of Site for Reptiles

No direct evidence of reptiles was recorded on site. Habitats on site were suitable forreptiles, including the grassland in Area 1 which varied in height and dense scrub and bramble scrub bordering the grassland. Additionally, the bare ground and ephemeral/short perennial in Area 2 may act as basking sites for reptiles. Further, potential refugia, basking spots and hibernacula features were present on site, including piles of leaves,

Impact Assessment of Proposed Development on Reptiles

The proposals will involve clearance of the dense scrub, bramble scrub, ephemeral and short perennial and semi-improved neutral grassland which will result in the loss of potential reptile habitat. The clearance of these areas may result in the accidental killing or injury of reptiles, as well as losses of suitable habitat. Additionally, indirect impacts such as fragmentation of small populations and increase in disturbance levels may occur. Recommendations for further survey are outlined in Section 4 to determine if reptiles are present on the site, and if so to determine the population size of the various species and best inform mitigation measures.

3.5.6. Other Mammals

Desk Study Results

SEWBReC did not return any records of other mammal species from within 1km of the site.

Field Survey Results

No direct evidence of other mammals was recorded on site.

Field Survey Results and Assessment of Ecological Value of Site for Mammals

No direct evidence of other mammals was recorded on site. Some habitats on site including the grassland, line of trees and line of scrub are suitable for mammals are suitable commuting and foraging. However, the landscape surrounding the site is largely urban in nature and the site is not well connected to other habitats suitable for other mammals.

Impact Assessment of Proposed Development on Other Mammals

There is the potential for small mammals to be directly affected by accidental death/injury through vegetation clearance and indirectly affected by permanent habitat loss. Precautionary measures to avoid such impacts and to enhance the retained areas of the site for small mammals are detailed in Section 4.

3.5.7. Invertebrates

Desk Study Results

SEWBReC returned 64 records of notable invertebrate records from within the study area, comprising:

35 priority invertebrate species were recorded within 1km of the site, namely: knot grass (*Acronicta rumicis*), beaded chestnut (*Agrochola lychnidis*), green-brindled crescent (*Allophyes oxyacanthae*), ear moth (*Amphipoea oculea*), mouse moth (*Amphipyra tragopoginis*), garden tiger (*Arctia caja*), centre-barred sallow (*Atethmia centrago*), mottled rustic (*Caradrina morpheus*), latticed heath (*Chiasmia clathrata*), sallow (*Cirrhia icteritia*), small heath (*Coenonympha pamphilus*), goat moth (*Cossus cossus*), small blue (*Cupido minimus*), small square-spot (*Diarsia rubi*), dusky thorn (*Ennomos fuscantaria*), august thorn (*Ennomos quercinaria*), double dart (*Graphiphora augur*), grayling (*Hipparchia semele*), rustic (*Hoplodrina blanda*), rosy rustic (*Hydraecia micacea*), currant shoot borer (*Lampronia capitella*), wall (*Lasiommata megera*), shoulder-striped wainscot (*Leucania comma*), white admiral (*Limenitis camilla*), rosy minor (*Litoligia literosa*), v-moth (*Macaria wauaria*), lackey (*Malacosoma neustria*), oblique carpet (*Orthonama vittata*), powdered quaker (*Orthosia gracilis*), large wainscot (*Rhizedra lutosa*), shaded broad-bar (*Scotopteryx chenopodiata*), white ermine (*Spilosoma lubricipeda*), buff ermine (*Spilosoma lutea*), hedge rustic (*Tholera cespitis*) and cinnabar (*Tyria jacobaeae*).

21 invertebrate listed as species of conservation concern were recorded within 1km of the site, namely: timberman beetle (*Acanthocinus aedilis*), *Acupalpus exiguus*, blue soldier beetle (*Ancistronycha abdominalis*), buff-tailed mining bee (*Andrena humilis*), red-backed mining bee (*Andrena similis*), *Aquarius paludum*, *Conopalpus testaceus*, *Deleaster dichrous*, *Dexiogyia corticina*, *Ectemnius sexcinctus*, *Eurydema (Rubrodorsalium) dominulus*, *Eurygaster maura*, *Microvelia (Microvelia) pygmaea*, catsear nomad bee (*Nomada integra*), *Ophonus ardosiacus*, rolled grass-moth (*Pediasia contaminella*), indolent ant (*Ponera*

coarctata), *Priocnemis coriacea*, *Protapion difforme*, *Saperda scalaris* and northern grey (*Scoparia ancipitella*).

Eight invertebrate listed as locally important species were recorded within 1km of the site, namely: banded demoiselle (*Calopteryx splendens*), beautiful demoiselle (*Calopteryx virgo*), variable damselfly (*Coenagrion pulchellum*), long-winged cone-head (*Conocephalus fuscus*), golden-ringed dragonfly (*Cordulegaster boltonii*), red-eyed damselfly (*Erythromma najas*), black-tailed skimmer (*Orthetrum cancellatum*), and dark green fritillary (*Speyeria aglaja*).

Field Survey Results

No incidental observations of invertebrates were recorded during the survey.

Evaluation of Ecological Value of Site for Invertebrates

Due to the habitats present it is assumed the site will support an assemblage of invertebrates but is unlikely to support notable or rare species.

Impact Assessment of Proposed Development on Invertebrates

The invertebrates using the site for habitat are unlikely to solely rely on the site for their continued survival. While some habitat loss will occur across the site, this can be more than offset by providing a range of new habitats within the development that will benefit invertebrates. Plans for widespread planting across the site have potential to greatly increase the floristic diversity of the site, therefore introducing more opportunity for a wider range of invertebrates to utilise the site post-development.

4. Required Actions and Conclusions

The following recommendations are likely to be secured through planning conditions. They have been developed based on the development proposals available at the time of writing. The implementation of these recommendations will ensure compliance with the Planning Policy Wales version 12 (Welsh Government, 2024)[21], TAN 5 *Nature Conservation and Planning* (2009), Section 6 and 7 of the Environment Wales Act, 2016, the Conservation of Habitats and Species Regulations 2017 which has been updated by the Conservation of Habitats and Species (Amendment) (EU Exit) ['CHSAEU'] Regulations 2019 and Cardiff Council Local Development Plan (2016).

The recommendations aim to avoid or minimise adverse impacts on the environment and protected species, mitigate and compensate for losses where damage is unavoidable and promote opportunities to enhance biodiversity. There is a requirement that developments must provide net benefit for biodiversity.

4.1. Biodiversity Enhancement

Local Authorities have a duty (known as the biodiversity and resilience of ecosystems duty) under the Environment (Wales) Act 2016 to seek to maintain and enhance biodiversity in the exercise of their functions. Where possible the existing on-site habitat will be retained to ensure that species are not adversely affected by the development. Native species of local provenance and grown in the UK will be used for any new planting on the site.

4.2. Further Work

It will not be possible to determine the planning application until the surveys outlined below have been carried out. Results from these surveys will inform and allow for targeted recommendations for the avoidance (timing of works), future mitigation and compensation measures required as part of the development and determine if any protected species derogation licences are required.

4.2.1. Reptile Surveys

Areas of habitat on site have been assessed as having a 'high potential suitability for reptiles' and the proposed works will result in the localised, low magnitude but negative and permanent loss of potential reptile habitat.

As such, the site should be subject to a standard presence/absence reptile survey consisting of the placement of reptile refugia, allowing 2 weeks for said refugia to 'bed in', followed by 7 site visits to assess presence/absence of reptiles.

These surveys should be carried out between April and September – ideally in the months of April, May, June or September (Natural England, 2011)[22]. The survey will need to follow the advice provided by the

[21] Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions … and in so doing promote the resilience of ecosystems. Development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity.
[22] The reptile mitigation guidelines were withdrawn in 2011

Herpetofauna Workers' Manual [23] (Joint Nature Conservation Committee, 2003), and comprise a 'direct search' and the monitoring of artificial and naturally occurring refugia placed in areas of the site assessed as being most attractive to reptiles (e.g., longer grass, scrub margins, bare ground etc.).

A variety of different types of refugia should be used. Approximately 30 refugia are required to be set across the whole site, including within the tall-ruderal vegetation, scrub, and ephemeral and short perennial vegetation. Refugia will comprise primarily of squares of roofing felt, carpet tiles, corrugated metal tins and corrugated bitumen-based roofing felt of varying sizes but at least 60cm x 60cm in size. Naturally occurring refugia including discarded logs, timber and large rocks etc. will also be checked. Where possible, artificial refugia should be laid in south-facing positions in areas deemed least likely to attract human interference. Refugia will be left undisturbed on site for two weeks.

Visits will be undertaken on non-consecutive days during peak reptile activity months by one surveyor, and subject to suitable weather conditions, being;

- Air temperature between 9-20°C; and
- Not during rain or high winds.

The survey results will determine whether reptiles are present on the site, and if so, will provide the basis for designing and implementing a reptile mitigation strategy prior to the start of the development.

4.3. Precautionary Measures

4.3.1. Soft- Felling approach for PRF-I Trees

Trees that have been assessed as having PRF-I suitability to support roosting bats can be felled, provided the trees are cleared following the recommendations below:

- Works to the tree will take place between October and February to coincide with the period of lowest bat activity and likelihood of bats being present. This timescale would also eliminate the risk of causing accidental harm to nesting birds;
- The tree and features with potential for bats will be checked by a suitably experience ecologist prior to felling.
- Trees will be felled under the supervision of a suitably experienced ecologist. Any hollow sections of any tree, or any limbs with cavities etc, will be severed above and below the cavity, taking care not to cut through any potential cavities or hollows, and lowered to the ground with minimal force using rope slings. This technique will be employed if the trees are subsequently found to have large cavities or split limbs;
- Any removed hollow sections which cannot be fully examined for bats will be removed to a shaded location and left undisturbed on the ground in a safe condition for 24 hours. This will allow any bats present to rouse themselves and fly off after nightfall. The sections will be positioned on the

[23] Natural England guidance is referenced as no equivalent guidance has been produced by Natural Resources Wales.

ground so that access to the cavities is unobstructed, but so that the cavities will not become filled with rainwater;

4.3.2. Timings for Vegetation Clearance for Birds

Clearance of the dense scrub and scattered trees within the site will be undertaken from September to February outside the bird breeding season (March to August inclusive). Alternatively, any work undertaken from March to August should be subjected to a check from nesting birds by a suitably qualified ecologist immediately prior to removal of such habitats, especially if any of the retained mixed woodland is to be felled. If any active nests are found these should be protected, along with an a 5-10m buffer zone, until the nesting is complete, and the young have fledged.

4.3.3. Good Construction Practices for Badgers, Hedgehogs and Other Mammals

In line with good practice, any open trenches and excavations associated with the proposed development will either be closed at night, or a means of escape provided (e.g. a wide plank at no greater angle than 45°) to help any badgers or other trapped animals escape.

Additionally, it is recommended that any security fencing erected on site is permeable to wildlife movement. A gap of at least 25cm should be left at regular intervals along the bottom of the fence under which a badger could pass. This will also make the site permeable to other species such as hedgehog.

Finally, any exposed pipes and trenches must be checked for trapped wildlife each morning before starting construction activities.

4.3.4. Construction Environmental Management Plan

A Construction Environmental Management Plan (CEMP) is a document that outlines the environmental management processes, procedures and systems that will be implemented on a construction project. It outlines the project's environmental goals and objectives, identifies potential environmental issues, outlines measures to address any issues and identifies ways to monitor, review and report on progress. This is normally undertaken as part of a planning condition after planning consent has been granted.

4.3.5. Landscape Environmental Management Plan

A Landscape and Ecological Management Plan (LEMP) should be produced as part of the planning conditions for the site detailing the methodology, environmental considerations and maintenance specifications and monitoring requirements, if needed, for the scheme. The LEMP should include a long-term management plan for the site post-development. Two species on site (yellow-wort and hawkweed oxtongue) are classed as contributory species in the SINC selection criteria. Therefore, the LEMP may stipulate that these species be translocated to an area away from the work and require details of the transfer methodology for the contributory plant species provided within the LEMP.

4.4. Mitigation Measures

4.4.1. Invasive Non-Native Species

Buddleia were found in areas of dense scrub on site.

Biosecurity will be adhered to including:

• To dispose of invasive non-native plant waste off site you must: use a registered waste carrier and send it to an authorised landfill site or suitable disposal site – check with the site directly, contact your local council or check the NRW public register;

• Cleaning clothes and equipment thoroughly; and

• After cleaning, ensuring clothes and equipment are thoroughly dried.

Boots and vehicle wheels may require cleaning prior to leaving site. Wash stations will be provided by the site access.

4.4.2. Tree Retention and Hedgerow protection Measures

To prevent accidental damage, any retained vegetation within the site will be securely fenced-off with appropriate temporary fencing (e.g. Heras fencing) and treated in accordance with British Standard BS5837 (2012) Trees in Relation to Design, Demolition and Construction – Recommendations.

Fences will be erected prior to the commencement of works and will be left in place until development works have been completed.

4.4.3. Sensitive Lighting Strategy

Lighting for the proposed development should be designed as per best practice guidance (BCT & ILP, 2023). Methods of achieving this would include:

• Recess lighting within the building;

• Siting windows to avoid areas of particular interest for bats;

• Incorporating dark zones within the retained habitat as well as new areas of semi-natural habitat introduced as part of the landscaping proposals, in line with foraging and commuting habitat, and maintaining these post-development; and

• For outside areas, using LED lighting in the warm spectrum (<2700K) to minimise impacts on bats. Timers, dimmers and off-times could be considered, where possible.

4.5. Compensation and Enhancement Measures

Full details of compensation and enhancement measures will be devised after completion of the further surveys detailed above and the finalisation of development proposals.

4.5.1. Enhancement Measures for Bats

To enhance the site for bats, roosting opportunities should be provided on the site through the provision of artificial bat roosts. A variety of durable, woodcrete bat boxes, including maintenance free boxes suitable for trees are available from Schwegler (2F or 1FF). Two bat boxes will be installed on two separate mature trees (one bat box on each tree). They will face a westerly through south easterly aspect and placed in a position which is not overly exposed. Boxes should be located at least 3.5m (preferably 5m) above ground level, with bat boxes in positions where the entrance is not artificially illuminated at night.

4.5.2. Enhancement Measures for Birds

To enhance the site for nesting birds, two bird boxes will be fitted to trees with entrance holes facing to the north or east. They should be located in secluded positions, ideally within dense cover and at a minimum height of 3 metres from ground level.

A variety of durable, woodcrete bird boxes, including maintenance free boxes suitable for trees, are available from Vivara Pro.

- Open fronted – Open fronted nest boxes cater for a range of bird species, including robin (*Erithacus rubecula*), dunnock and wren (*Troglodytes troglodytes*). Due to the more exposed nature of these nest boxes, it is especially important to ensure that they are located in dense cover in order to avoid the attention of potential predators; and
- Standard nest boxes – An entrance hole of 32mm will attract species such as great tits (*Parus major*), blue tits (*Cyanistes caeruleus*), blackbirds and sparrows (*Passer* sp.).

4.5.3. Sustainable Urban Drainage Systems (SuDs)

As of 7th January 2019, all new developments of more than one dwelling house or where the construction area (including patios and driveways etc) is 100m² or more are required to have SuDS to manage on-site surface water. These SuDS must be designed and constructed in accordance with the Welsh Government Standards for Sustainable Drainage[24]. Proposals will need to be included within the landscape proposals for the site.

The SuDs could be in the form of a retention pond or linear swales. Ponds can be managed as a SuDs or a standalone wildlife enhancement area to benefit a range of species including common amphibians and reptiles. The periphery of the any ponds or linear swales created and incorporated into the development, could be planted with native species-rich aquatic plug plants[25] and a native species-rich marginal seed mix[26].

4.6. Longevity of Report

[24] https://gov.wales/sites/default/files/publications/2019-06/statutory-guidance.pdf
[25] Plant Collections | Aquatic Plants for Margins | British Pond Plants
[26] Welsh Meadow Seed | Packets | British Wildflower Seeds | British Wildflower Meadow Seeds

If development works do not begin within eighteen months to two years of the date of this report, an update survey is likely to be required in accordance with guidance from NRW[27] CIEEM (2019) and BS 42020:2013[28], to determine if conditions have changed since those described in this report.

4.7. Conclusions

The full extent of ecological impacts and potential constraints of the proposed development cannot be fully determined, based on the results of the preliminary ecological appraisal survey alone. Further survey is required before the ecological impact of the proposed development can made, as detailed in Section 4.2.

[27] As set out in Point 5 of the NRW *Bat Surveys - Frequently Asked Questions* and Point 4 of the guidance included within the NRW European Protected Species Development Application Form.
[28] As set out in Section 6.2.1, point 7 which states that ecological information should not normally be more than two/three years old, or as stipulated in good practice guidance).

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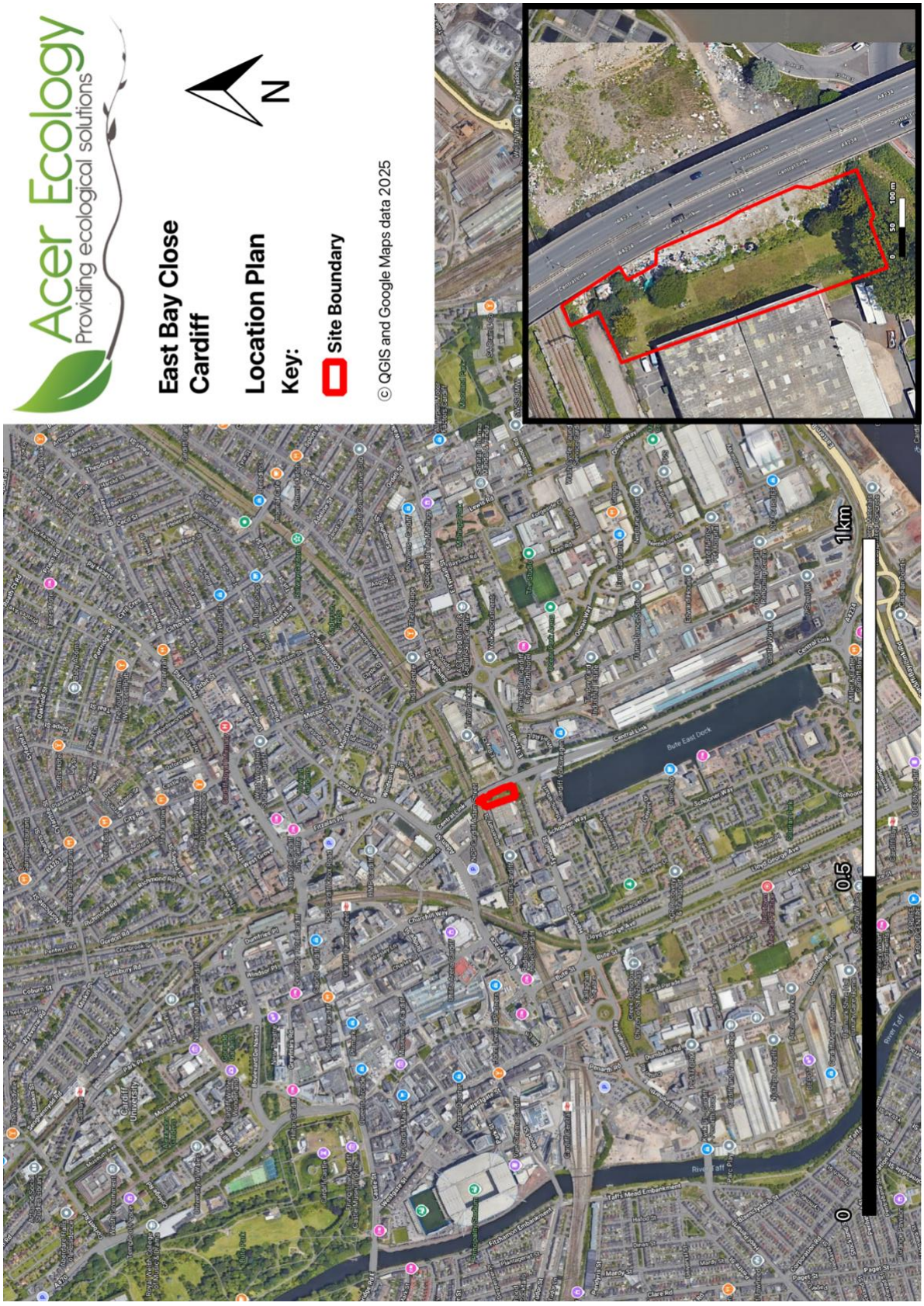
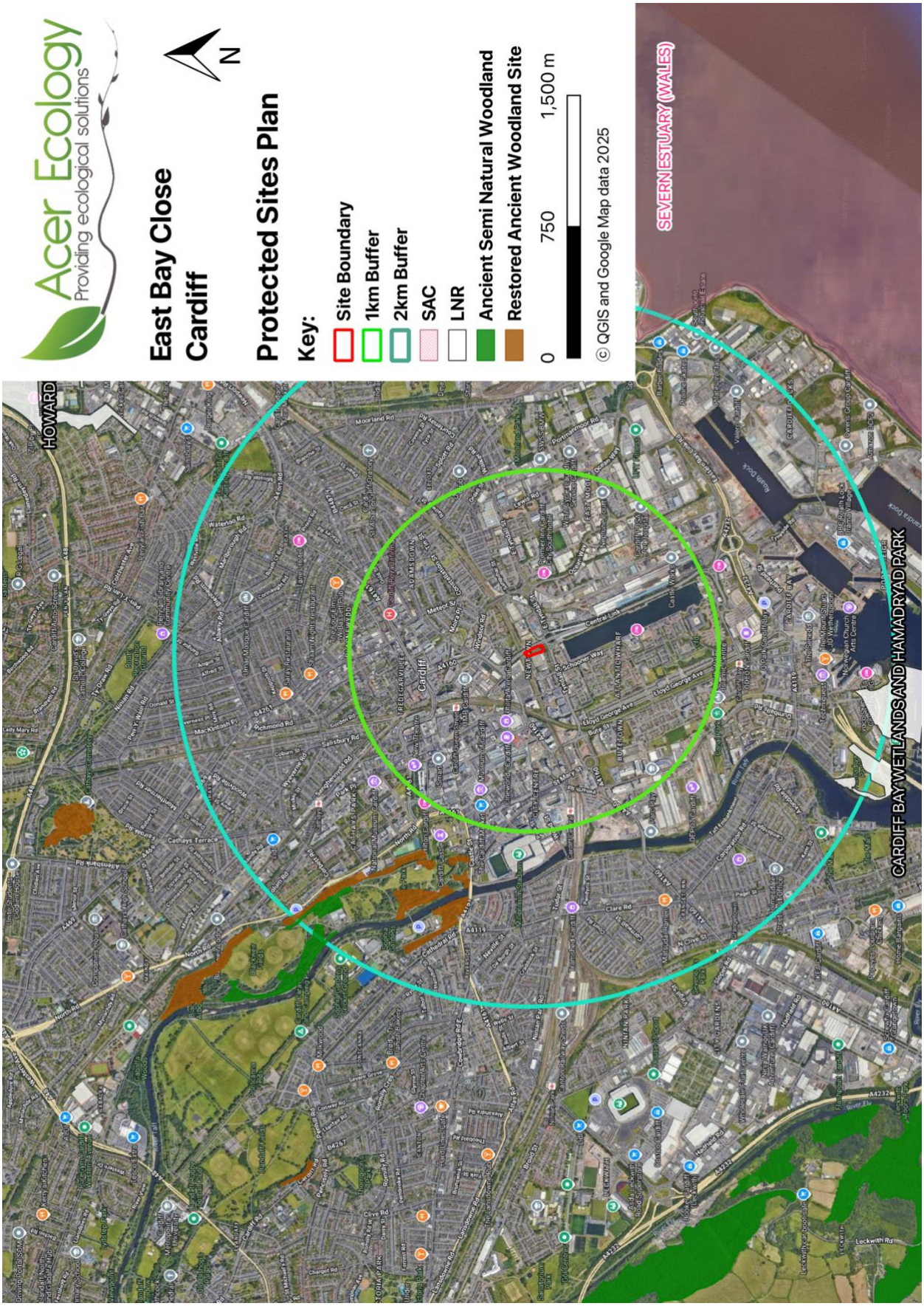
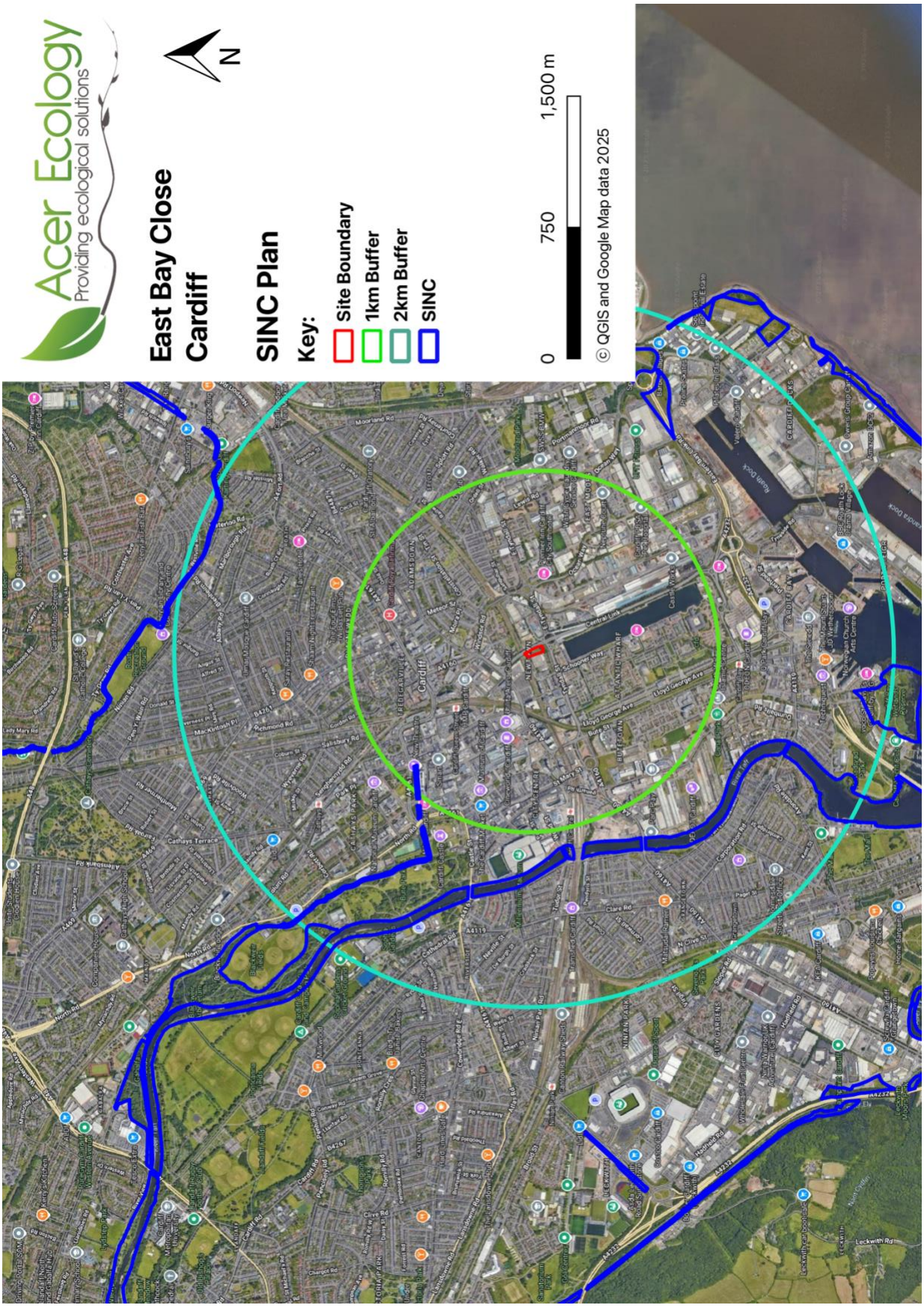
Plan 1: Site Location



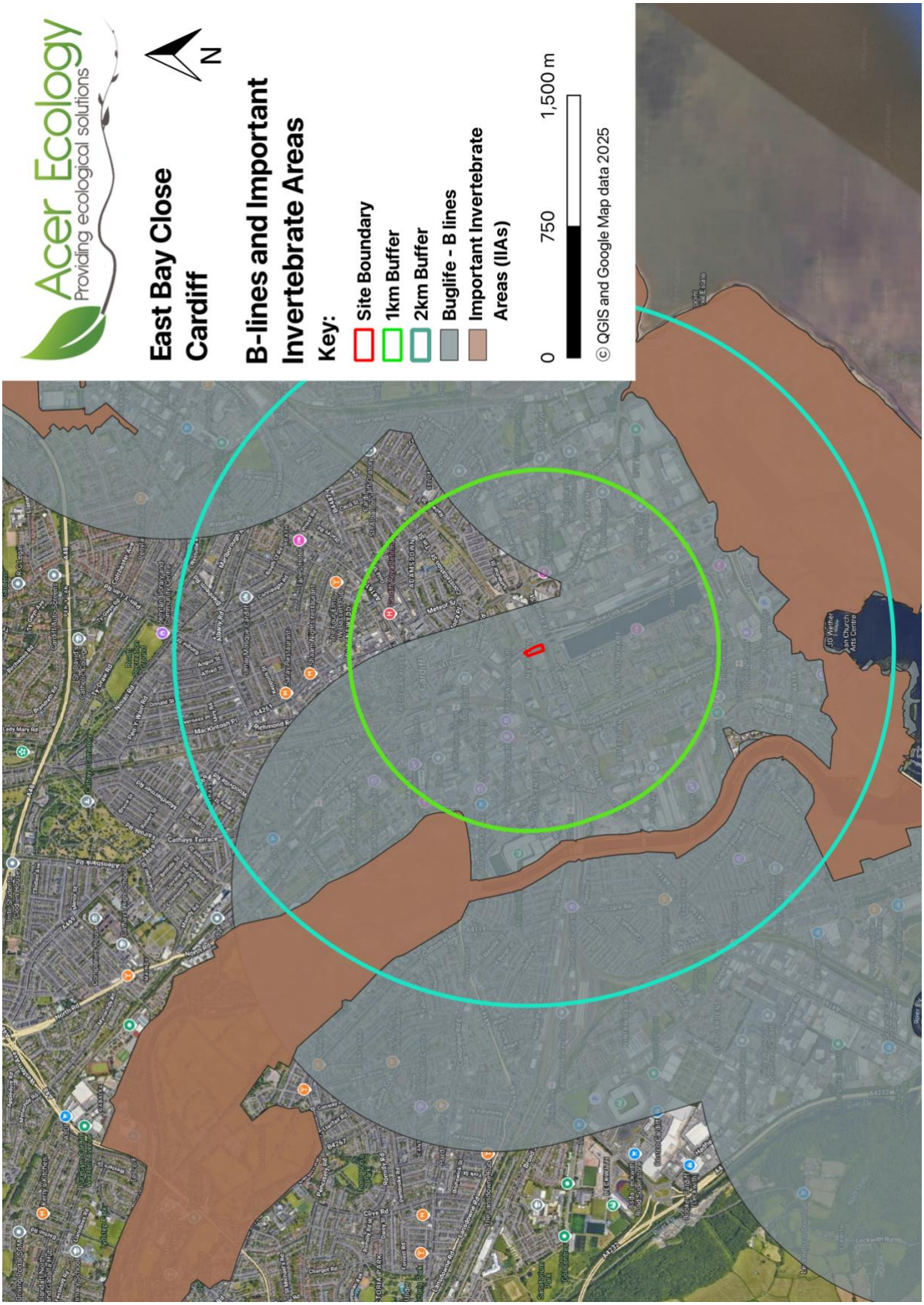
Plan 2: Site Location and Protected Sites Within 2km



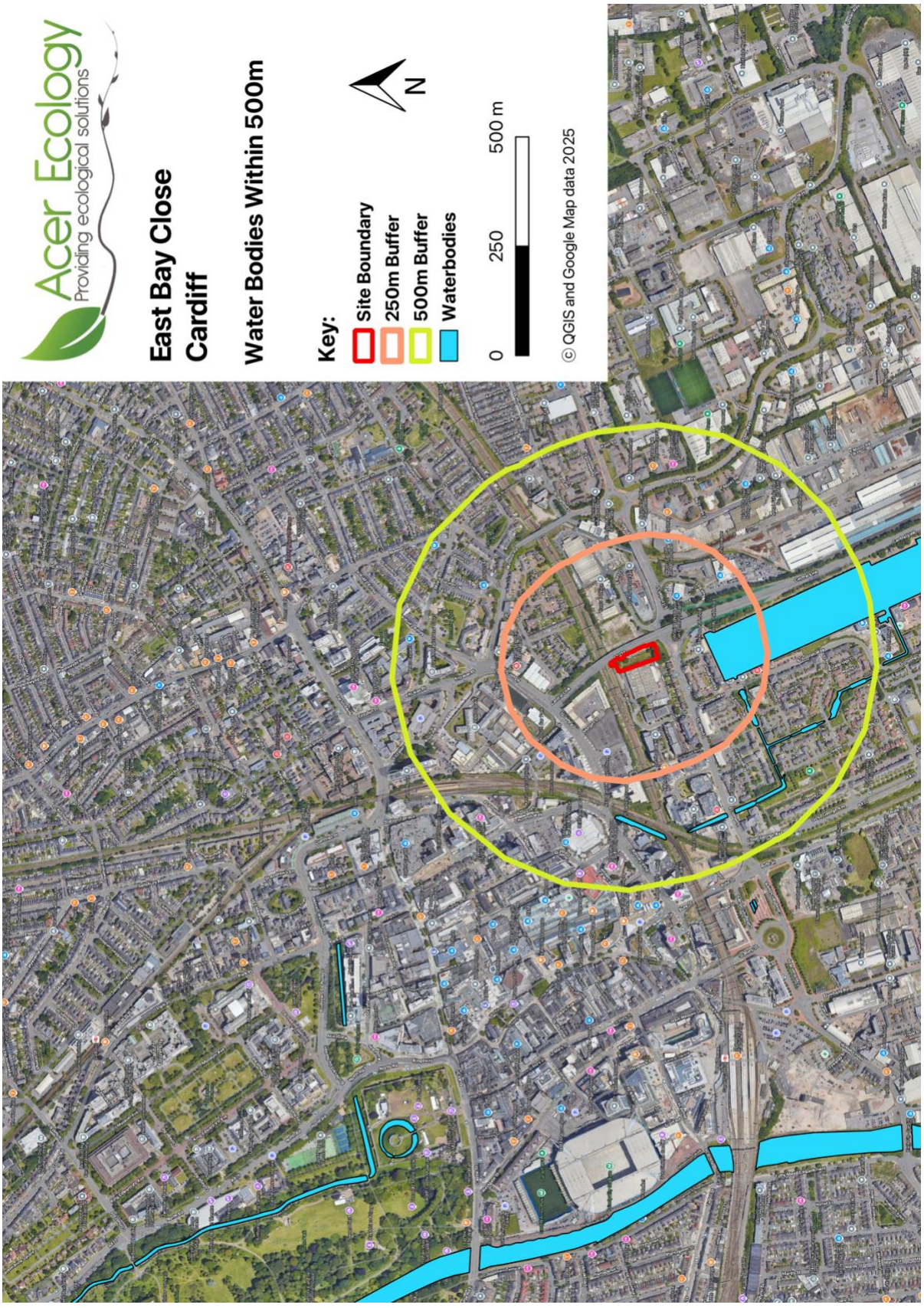
Plan 3: Site Location and SINCs Within 1km



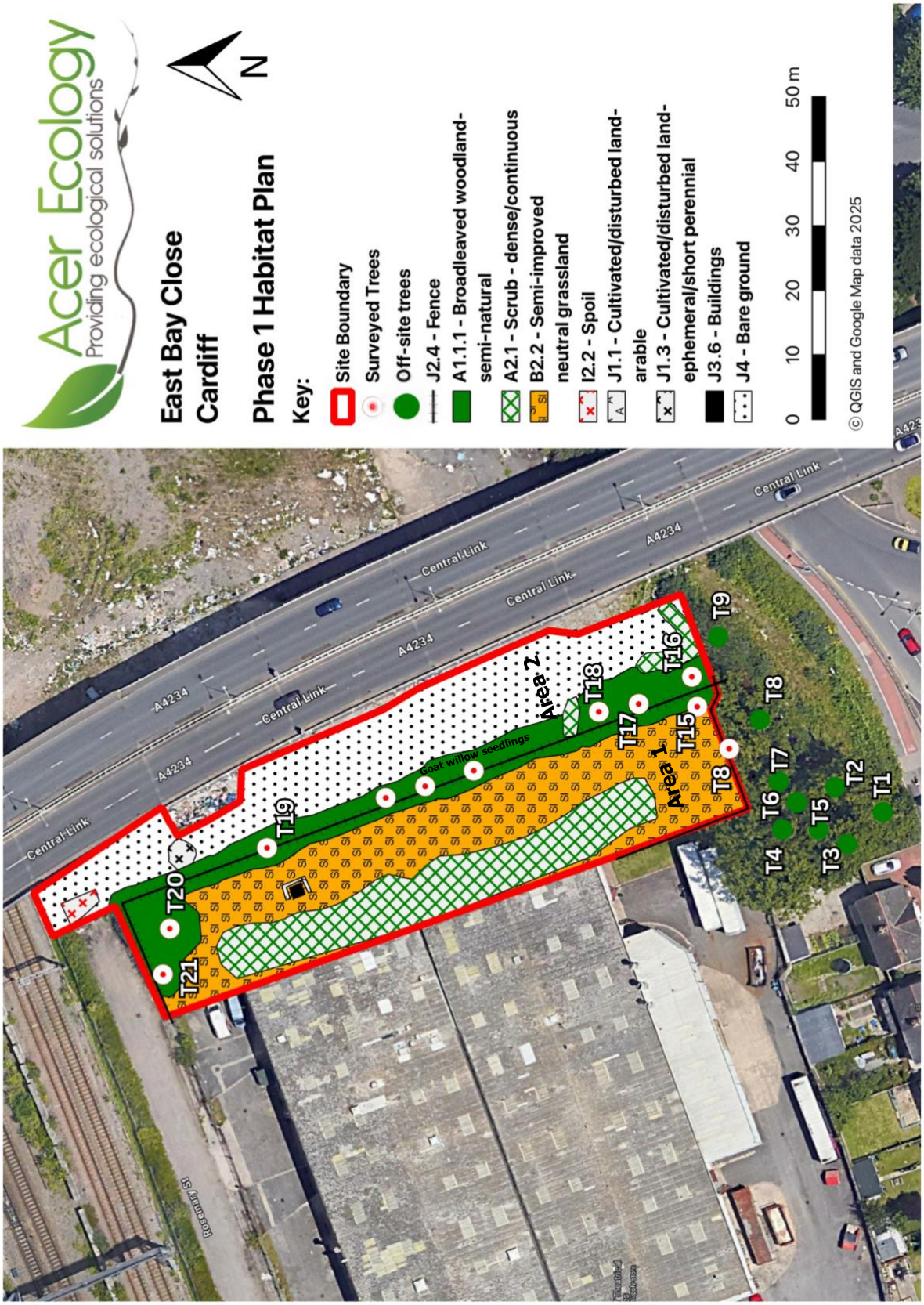
Plan 4: B-lines and Important Invertebrate Areas



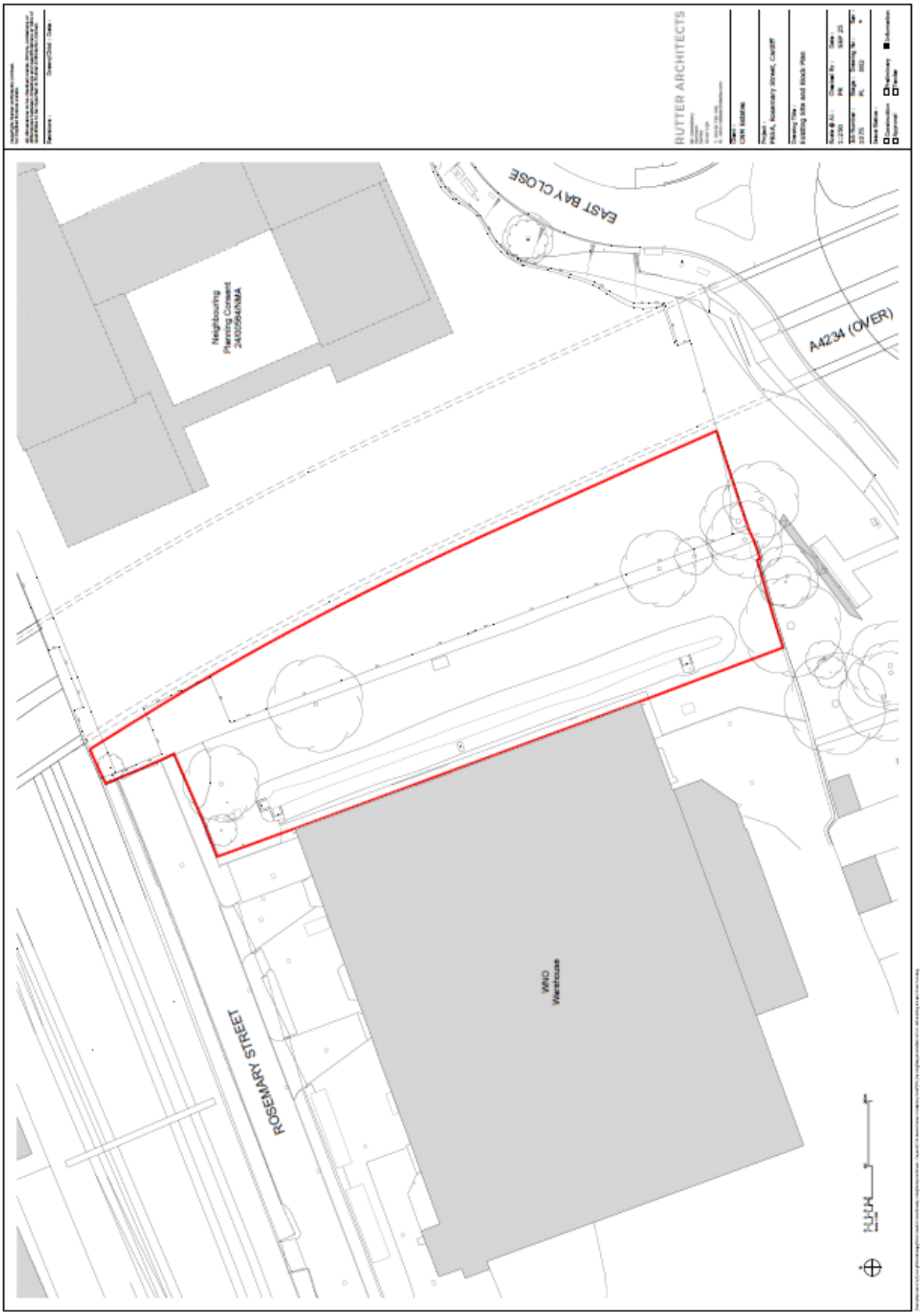
Plan 5: Location of Water Bodies Within 0.5km



Plan 6: Habitats and Vegetation

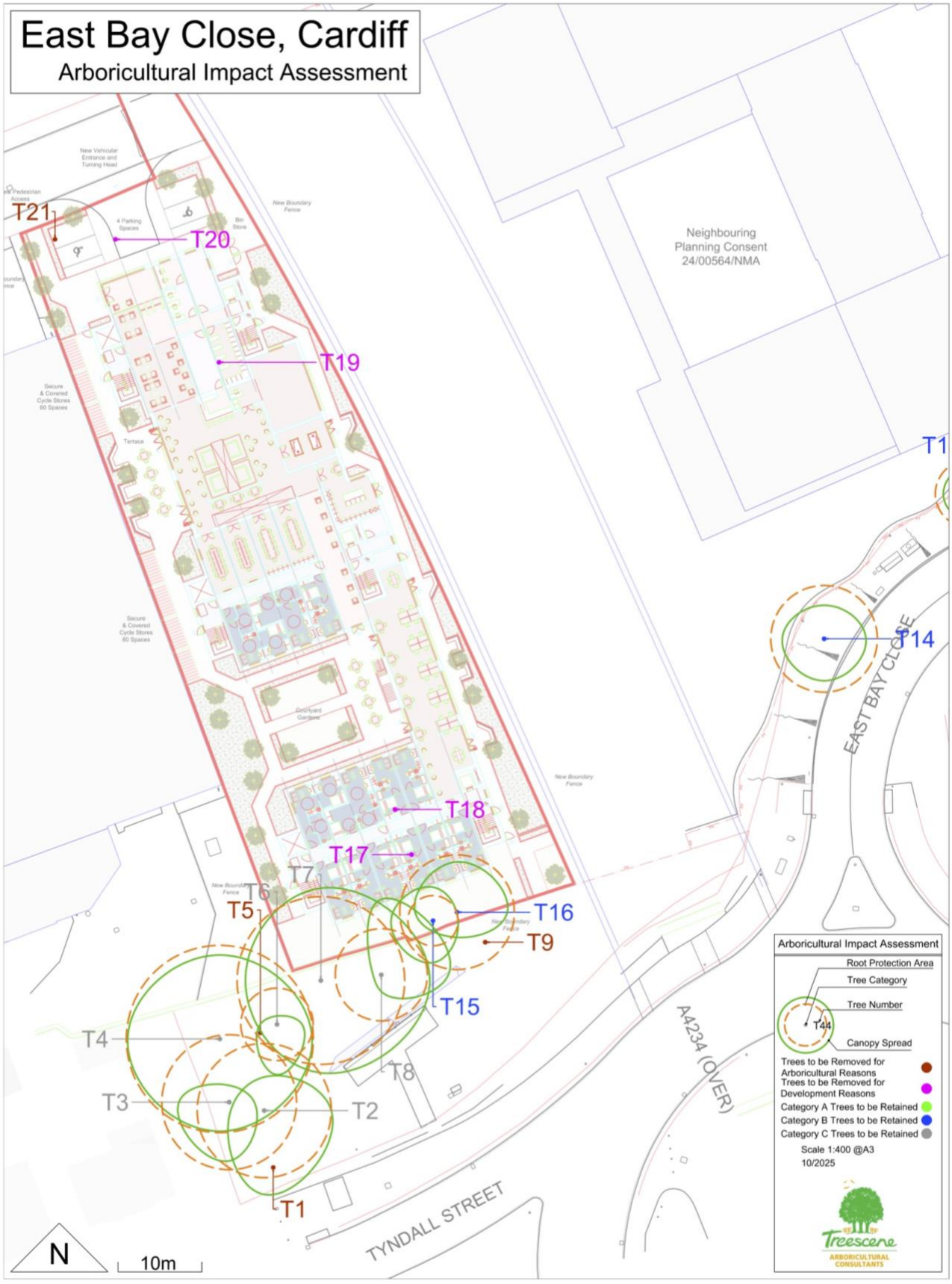


Appendix 1: Existing Plans



Appendix 2: Proposed Development Works

Appendix 3: Arboriculturist Report Tree Plan



Appendix 4: Legislation and Policy Relating to Statutory and Non-Statutory Designated Sites and Planning Policy Relevant to Site

SACs

SACs[29] are strictly protected sites designated under the:

- Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters),
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland,
- the Conservation (Natural Habitats, &c.) Regulations (Northern Ireland) 1995 (as amended in Northern Ireland, and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 in the UK offshore area.

These regulations require establishment of a network of important high-quality conservation sites that will make a significant contribution to conserving the habitats and species identified in Annexes I and II, respectively, of European Council Directive 92/43/EEC[30] on the conservation of natura habitats of wild fauna and flora, known as the Habitats Directive.

Environment (Wales) Act 2016

The Environment (Wales) Act Section 6 duty, or the Biodiversity Duty, requires public authorities to seek to maintain and enhance biodiversity and in so doing promote the resilience of ecosystems. In fulfilling this duty, planning authorities must have regard to the list of habitats and species of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016.

The Section 6 duty requires that developments should not be permitted which result in net loss of value to biodiversity, and must seek to achieve biodiversity net gain. Where net loss cannot be achieved through avoidance or mitigation.

Future Wales - the National Plan 2040

Future Wales is the national development framework, setting the direction for development in Wales to 2040. It is a development plan with a strategy for addressing key national priorities through the planning system, including sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of our communities. Future Wales - the national plan 2040 is the national development framework and it is the highest tier plan, setting the direction for development in Wales to 2040. It is a framework which will be built on by Strategic

[29] https://sac.jncc.gov.uk/
[30] https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en

Development Plans at a regional level and Local Development Plans. Planning decisions at every level of the planning system in Wales must be taken in accordance with the development plan as a whole.

Planning Policy Wales (2024)

The primary objective of PPW is to ensure the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.

Planning Policy Wales (PPW) Edition 12 (Welsh Government, 2024) states that planning authorities must follow a stepwise approach to maintain and enhance biodiversity and build resilient ecological networks by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible. The first priority for planning authorities is to avoid damage to biodiversity and ecosystem functioning. Where there may be harmful environmental effects, planning authorities will need to be satisfied that any reasonable alternative sites that would result in less harm, no harm or gain have been fully considered.

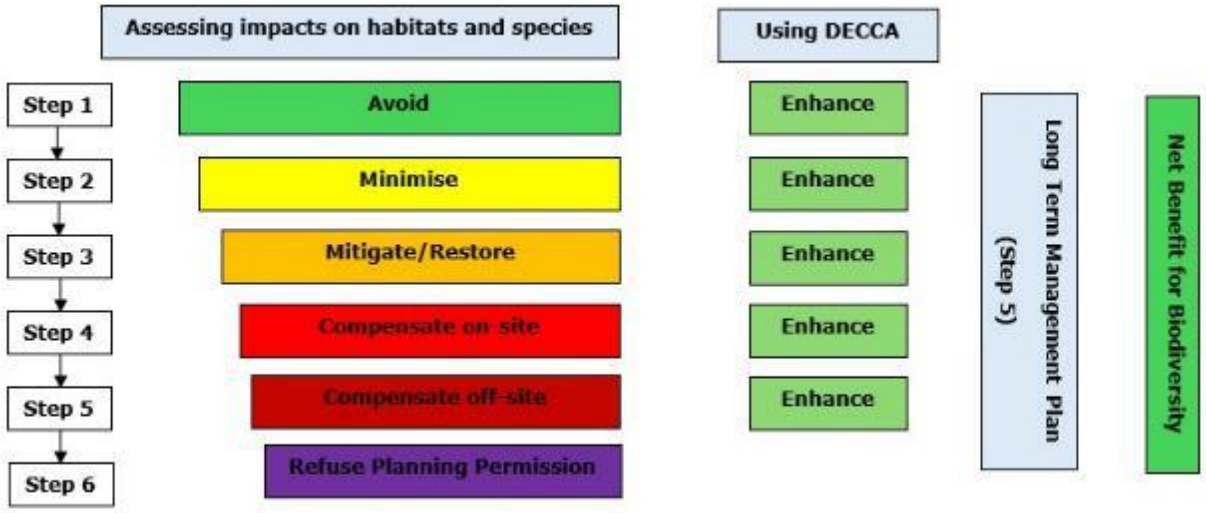
On 11th October 2023 Julie James MS Minister for Climate Change finalised policy for inclusion in the next iteration of Planning Policy Wales (version 12)[31]. The new chapter 6 came into force with immediate effect. This was followed by the publication of version 12 of Planning Policy Wales in February 2024. The main changes to policy can be summarised as follows:

Green Infrastructure: stronger emphasis on taking a proactive approach to green infrastructure covering cross boundary considerations, identifying key outputs of green infrastructure assessments, the submission of proportionate green infrastructure statements with planning applications and signposting Building with Nature standards.

Net Benefit for Biodiversity and the Step-wise Approach: further clarity is provided on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step.

[31] https://www.gov.wales/sites/default/files/publications/2023-10/annex-addressing-the-nature-emergency-through-the-planning-system.pdf

The use of the green infrastructure statement as a means of demonstrating the stepwise approach is made explicit. The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.



Trees and Woodlands: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place.

Technical Advice Notes

Planning Policy Wales is supported by a series of more detailed Technical Advice Notes (TANs), of which TAN 5: Nature Conservation and Planning (2009)[32] is of relevance.

Cardiff Council Local Development Plan

A local development plan is currently in progress covering the period from 2006-2026[1]. The current plan, was adopted in 2016

Policy EN6: Ecological Networks and Features of Importance for Biodiversity states that '*developments will only be permitted if it does not cause unacceptable harm to networks of importance for landscape or nature conservation*' and '*Particular priority will be given to the protection, enlargement, connectivity and management of the overall nature of semi natural habitats. Where this is not the case and the need for the development outweighs the nature conservation importance of the site, it should be demonstrated that there is no satisfactory alternative location for the development and compensatory provision will be made of comparable ecological value to that lost as a result of the development'*.

Policy EN7 focuses on Priority Habitats and Species. The developer must demonstrate that '*there is no satisfactory alternative location for the development which avoids nature conservation impacts'* and '*effective mitigation measures are provided' see* pg. 145.

[32] https://www.gov.wales/sites/default/files/publications/2018-09/tan5-nature-conservation.pdf

Section 5.127 states [pg. 146] *'The Council will encourage the applicant to identify and include measures that contribute to the restoration or expansion of important habitats, and these will be set out int he landscaping and planting conditions that accompany the planning permission. Any planning obligations required will be in accordance with Policy KP7'.*

Biodiversity Net Benefit

Paragraph 6.4.5 of Planning Policy Wales (PPW) 12 states that "*planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*" (NBB) and improve, or enable the improvement, of the resilience of ecosystems. This policy and subsequent policies in Chapter 6 of PPW 11 respond to the Section 6 Duty of the Environment (Wales) Act 2016.

DECCA is the framework that Natural Resources Wales (NRW) has developed for evaluating ecosystem resilience to demonstrate a net benefit for biodiversity (NBB)[33]. This is based on the following attributes:

- Diversity, extent, condition and connectivity;
- Adaptability, recovery and resistance; and
- Aspects of ecosystem resilience.

To comply with these requirements the main ecosystems on site and within the zone of influence need to be identified and set out how the diversity, extent, connectivity and condition of those ecosystems will be maintained and enhanced post-development. Recent changes to Planning Policy Wales[34] mean that some additional guidance will be required.

[33] https://cdn.cyfoethnaturiol.cymru/media/693356/resilient-ecological-networks-practitioner-guide.pdf?mode=pad&rnd=132612537900000000
[34] https://www.gov.wales/addressing-nature-emergency-through-planning-system-update-chapter-6-planning-policy-wales

Appendix 5: Protected and Invasive Species Legislation Relevant to Site

Birds

All wild British birds (while nesting, building nests and sitting on eggs), their nests and eggs (with certain limited exceptions) are protected by law under Section 1 of the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000. Included in this protection are all nests (at whatever stage of construction or use) and all dependent young until the nest is abandoned and the young have fledged and become independent. Particularly rare species such as barn owl (*Tyto alba*) are listed on Schedule 1 which gives them additional protection from disturbance whilst nest building, whilst near a nest with eggs or young, or from disturbing the dependent young.

Section 10.8 of the Conservation of Habitats and Species Regulations 2017 state that Local authorities must use all reasonable endeavours to avoid any deterioration of habitats of wild birds.

Bats

All species of bats and their roosting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 which continues to apply in UK law through the Conservation of Habitats and Species (Amendment) (EU Exit) ['CHSAEU'] Regulations 2019.

All species of UK bats are designated as 'European protected species'. Seven species of bat (soprano pipistrelle, barbastelle (*Barbastella barbastellus*), Bechstein's (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), brown long-eared (*Plecotus auritus*), lesser horseshoe (*Rhinolophus hipposideros*) and greater horseshoe bats (*Rhinolophus ferrumequinum*)) are listed under Section 7 of the Environment (Wales) Act 2016 as being of principal importance for maintaining and enhancing biodiversity in Wales.

Dormice

Dormice are a 'European protected species' and afforded full protection under UK legislation. Dormice are listed under section 7 of the Environment (Wales) Act 2016 as being of principal importance for maintaining and enhancing biodiversity in Wales. Since 2000, the UK population has declined by over a half (51%), decreasing on average by 3.8% per year (PTES, 2019).

Badgers

Badgers are protected under the Protection of Badgers Act 1992. Protection applies both to the animal itself and to its setts (tunnels and chambers where they live), and current interpretation of the Act also confers some protection to key foraging areas.

Reptiles

With the exception of smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) (which are afforded greater protection), common reptiles are protected under Schedule orpano5 of the Wildlife and

Countryside Act 1981 (as amended). They are given so-called 'partial protection', which prohibits the deliberate killing or injury of individuals. The habitats of common reptiles are not specifically protected. These species are listed as priority species in Wales under Section 7 of the Environment (Wales) Act 2016.

Hedgehogs

Hedgehogs are protected under Schedule 6 of The Wildlife and Countryside Act 1981 (as amended), which prohibits killing and trapping by certain methods. They are also listed on Section 7 of The Environment (Wales) Act 2016. This is a list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

Hedgehogs are listed as a Red List mammal species in Britain and are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended). They are "protected from being killed or taken by certain methods under Section 11(1) of the Wildlife and Countryside Act 1981. The methods listed are: self-locking snares, bows, crossbows, explosives (other than ammunition for a firearm), or live decoys. The species listed are also protected from the following activities: trap, snare or net, electrical device for killing or stunning, poisonous, poisoned or stupefying substances or any other gas or smoke, automatic or semi-automatic weapon, device for illuminating a target or sighting device for night shooting, artificial light, mirror or other dazzling device, sound recording, and mechanically propelled vehicle in immediate pursuit. They are also listed as priority species under Section 7 of the Environment (Wales) Act 2016 as being of principal importance for maintaining and enhancing biodiversity in Wales.

The legislation afforded to hedgehogs in Section 7 of the Environment (Wales) Act 2016 means that every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity[35]. In effect, 'conserving biodiversity' includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

[35] Biodiversity conservation in respect to hedgehogs is interpreted as a commitment to restoring or enhancing their population.

Appendix 6: Definitions of Site Value

International Value

Internationally designated or proposed sites such as Ramsar Sites, Special Protection Areas, Biosphere Reserves and Special Areas of Conservation, or non-designated sites meeting criteria for international designation. Sites supporting populations of internationally important species or habitats.

National Value

Nationally designated sites such as Sites of Special Scientific Interest (SSSIs), or non-designated sites meeting SSSI selection criteria (NCC 1989), National Nature Reserves (NNRs) or Nature Conservancy Review (NCR) Grade 1 sites, viable areas of key habitats within the UK Biodiversity Action Plan. Sites supporting viable breeding populations of Red Data Book (RDB) species (excluding scarce species), or supplying critical elements of their habitat requirements.

Regional Value

Sites containing viable areas of threatened habitats listed in a regional Biodiversity Action Plan, comfortably exceeding Site of Importance for Nature Conservation (SINC) criteria, but not meeting SSSI selection criteria. Sites supporting regionally significant areas of BAP habitats or large and viable populations Nationally Scarce species, or those included in the Regional Biodiversity Action Plan on account of their rarity, or supplying critical elements of their habitat requirements.

County Value/District Value

Site identified as a Site of Importance to Nature Conservation (SINC) at the district level; meeting South Wales Wildlife Sites Partnership (SWWSP) 2004 published designation criteria, but falling short of SSSI designation criteria, whether designated as a SINC or not. Ancient woodlands and sites supporting regionally significant areas of UK BAP habitat. Large scale examples of BAP habitats or areas supporting small populations of protected, UK BAP/ LBAP or threatened species (other than badger).

High Local

Habitats which just fail to meet Regional value criteria, but which appreciably enrich the ecological resource of the locality. Sites supporting species which are notable or uncommon in the county; or species which are uncommon, local or habitat-restricted nationally, and which might not otherwise be present in the area. Moderate scale examples of BAP habitats or areas supporting small populations of protected, UK BAP/LBAP or threatened species.

Local Value

Old hedges, woodlands, ponds, significant areas of species-rich grassland, small scale examples of BAP habitats or areas supporting small populations of protected, UK BAP/LBAP or threatened species. Undesignated sites or features which appreciably enrich the habitat resource in the context of their immediate surroundings, parish or neighbourhood (e.g. a species-rich hedgerow). Rare or uncommon species may occur but are not restricted to the site or critically dependent upon it for their survival in the area.

Site Value (within the immediate zone of influence)

Low-grade and widespread habitats. Woodland plantations, structured planting, small areas of species-rich grassland and other species-rich habitats not included in the UK or Local BAP.

Negligible

No apparent nature conservation value.

Appendix 7: Species Recorded

All species recorded by Acer Ecology, 2025

Taxonomic Name	Common Name	W	LM	CG	LDA	PMR	PIL	TF	Status
Trees and Shrubs									
Alnus cordata	Italina alder								
Betula pendula	Silver birch								
Betula pubescens	Downy birch								
Buddleja davidii	Buddleia								WCA9
Cedrus sp	Cedar								WCA9
Crataegus monogyna	Common hawthorn								
Populus deltoides x P. nigra (P. x canadensis)	Hybrid black poplar								
Rosa canina agg	Dog-rose								
Rubus fruticosus agg	Bramble								
Salix caprea	Goat willow								
Herbaceous Plants									
Achillea millefolium	Yarrow								
Agrostis capillaris	Common bent								
Arrhenatherum elatius	False oat-grass								
Artemisia vulgaris	Mugwort								
Bellis perennis	Daisy								
Blackstonia perfoliata	Yellow-wort			CG					CS
Brachypodium sylvaticum	False brome								
Calystegia sepium ssp roseata	Hedge bindweed								
Carex flacca	Glaucous sedge		LM	CG		PMR			
Centaurea nigra	Common knapweed		LM	CG					
Cirsium vulgare	Spear thistle								
Dactylis glomerata	Cock's-foot								
Epilobium angustifolium	Rosebay willowherb								
Eupatorium cannabinum	Hemp agrimony					PMR			
Festuca rubra	Red fescue								
Fragaria vesca	Wild strawberry								
Geranium robertianum	Herb-robert								
Geum urbanum	Wood avens								
Helminthotheca echioides	Bristly oxtongue						PIL		CS
Hirschfeldia incana	Hoary mustard								WCA9
Holcus lanatus	Yorkshire fog								
Hypericum perforatum	Perforate st john's-wort		LM						
Hypochaeris radicata	Common cat's-ear		LM						
Juncus inflexus	Hard rush								

Lathyrus pratensis	Meadow vetchling		LM						
Linaria vulgaris	Common toadflax						PIL		
Medicago lupulina	Black medick			CG					
Oenothera biennis	Common evening-primrose								
Papaver rhoeas	Common poppy							TF	
Picris hieracioides	Hawkweed oxtongue			CG					
Plantago lanceolata	Ribwort plantain								
Prunella vulgaris	Self-heal								
Ranunculus repens	Creeping buttercup								
Rumex obtusifolius	Broad-leaved dock								
Senecio aquaticus x S. jacobaea	Hybrid ragwort								
Solanum dulcamara	Bittersweet								
Sonchus oleraceus	Smooth sow-thistle								
Taraxacum officinale agg.	Dandelion								
Trifolium repens	White clover								
Tripleurospermum inodorum	Scentless mayweed								
Urtica dioica	Common nettle								
Vicia sativa	Common vetch								
'Habitat Indicator Species' Totals (Wales Biodiversity Partnership 2008[36])		None	Five	Five	None	Two	Two	One	
		W	**LM**	**CG**	**LDA**	**PMR**	**PIL**	**TF**	

'Primary' and 'Contributory' Totals (Wales Biodiversity Partnership 2008)			
		Primary Species	**Contributory Species**
		None	Hawkweed oxtongue Yellow-wort

Key to Indicator Species (Wales Biodiversity Partnership 2008[37])

W - Woodland, LM – Lowland meadow, CG - Calcareous Grassland, LDA – Lowland Dry Acid Grassland, PMR Purple moor-grass and rush pasture, PIL – Post Industrial Land, TF Species-rich Tillage Fields and Margins

PS – Primary Species, CS – Contributory Species

SINC Selection

Sites which support one primary species or five contributory species; or habitats which support eight lowland meadow, eight calcareous grassland, seven lowland dry acid grassland, twelve purple moor-grass

[36] Wales Biodiversity Partnership (2008) Wildlife Sites Guidance Wales: A Guide to Develop Local Wildlife Systems in Wales. Wales Biodiversity Partnership/Welsh Assembly Government.

and rush pasture or eight tillage field and margins indicator species, should be considered for SINC selection. Post-industrial sites supporting 20 or more indicator species from the combined post-industrial land, acid, neutral, calcareous and marshy grassland lists should be also considered for selection.

WCA 5 – Species protected under Schedule 5 of the Wildlife and Countryside Act

WCA 9 – Species listed under Schedule 9 of the Wildlife and Countryside Act

Appendix 8: Guidelines for Assessing the Suitability of Trees on Proposed Development Site for Bats

Suitability	Description
None	Either no PRFs in the tree or highly unlikely to be any.
FAR	Further assessment required to establish if PRFs are present in the tree.
PRF	A tree with at least one PRF present.

PRFs can be further categorised according to the below:

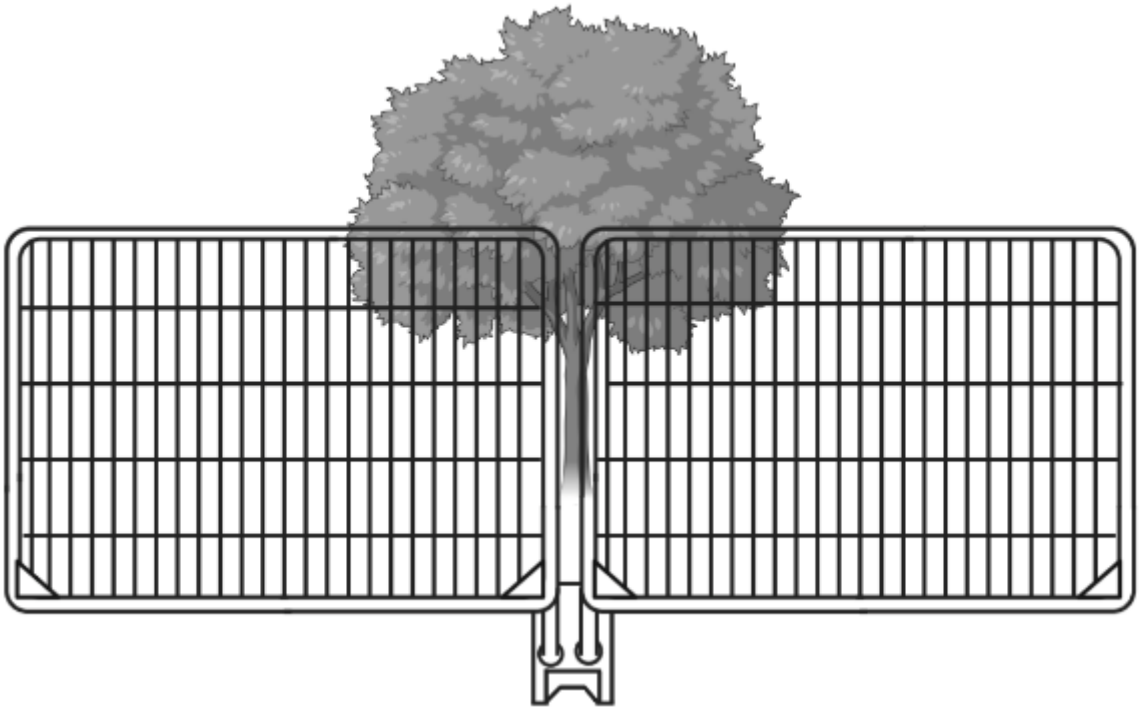
Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.
PRF-U	Unknown if PRF could only be used by individuals or could be used by multiple bats and therefore used as a maternity roost.

T1-T6 (Black Poplar). T6 to be proposed for removal as unstable.

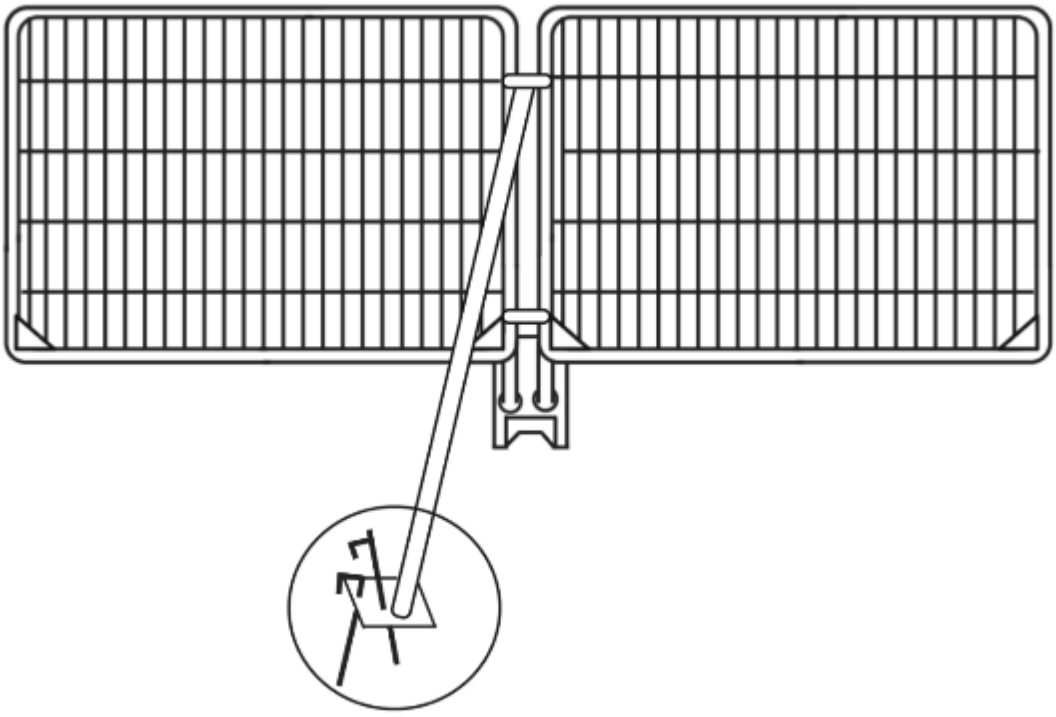
Appendix 9: Guidelines for Assessing Potential Suitability of Proposed Development Site for Bats

Suitability	Commuting and Foraging Habitat
Negligible	Negligible habitat features on-site likely to be used by commuting and foraging bats.
Low	Commuting Habitat Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Foraging Habitat Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Commuting Habitat Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Foraging Habitat Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Commuting Habitat Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. Foraging Habitat High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Proximity to Known Bat Roosts Site is close to and connected to known roosts.

Appendix 10: Protective Barriers



Wildlife barrier surrounding tree



Stabilizer strut with base plate secured with ground pins

Redrawn by Acer Ecology Ltd after BS 5837:2012 Figure 1