



McCarthy Stone

Maelgwyn Road, Llandudno

Preliminary Ecological Appraisal Report

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EXECUTIVE SUMMARY

This report presents the results of a preliminary ecological appraisal (PEA) carried out on 3 June 2021, at Maelgwyn Road Car Park, off Maelgwyn Road, Llandudno. This report has been produced to inform construction of 52 apartments and associated parking and communal garden at the site.

The site is an active car park formed of hardstanding and a small substation building, with small patches of amenity grassland, ornamental shrubs and scattered trees, bounded on all aspects by either fencing or walls..

There are one statutory designated site and five non-statutory designated sites within 2 km of the site. The proposed development may indirectly affect designated sites.

The habitats on site are not species-rich, have little botanical value and are ubiquitous in the wider area. None of the habitats qualify as priority or local BAP habitats, although the scattered trees on and adjacent to site do have some value. These and vegetation on site should be retained as far as practicable to minimise the ecological impacts of the works.

Himalayan Balsam, an invasive species listed under the Invasive Alien Species (Enforcement and Permitting) Order 2019, is present on the site. Although not a legal requirement, eradication by a specialist contractor is recommended.

Further assessments to determine the extent of potential constraints are recommended, including:

- Stage 1 Habitats Regulation Assessment (HRA): Assessment of Likely Significant Effects (HRA) is required to assess the impacts of proposed development on the designated sites.
- presence or likely-absence surveys for bats, to identify if the building on site supports a roost. Results of this survey would inform a licence application to Natural Resource Wales, if required.

Mitigation measures required include:

- nesting bird checks by an ecologist;
- eradication of invasive species on site by a specialist contractor;
- covering excavations; and
- a sensitive lighting plan.

Enhancement opportunities are suggested to meet any requirement for biodiversity net gain and local BAP objectives, including:

- native planting such as hedgerows, rough grassland and fruit-, nut- and seed-bearing species;
- grassland seeding and management;
- removal of invasive species;
- bird and bat boxes; and
- log piles and 'hedgehog highways'.

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1.0 INTRODUCTION

1.1 Purpose of this report

- 1.1.1 This report presents the results of a preliminary ecological appraisal (PEA), comprising a background data search (BDS) and a UKHab survey with assessment for protected species at Maelgwyn Road Car Park, off Maelgwyn Road, Llandudno (OS Grid Reference: SH 77757 82237). The survey included the land within the red-line boundary (the site – as shown in *Figure 1*), plus adjacent land up to 30 m where access was possible.
- 1.1.2 The report identifies ecological constraints on the project, specifies any further survey or mitigation requirements, gives recommendations for avoidance and protection through design changes, and suggests opportunities for ecological enhancement. The appraisal was carried out on behalf of McCarthy Stone.
- 1.1.3 The results of this report have been used to inform baseline biodiversity calculations which are presented in a separate report (RSK Biocensus, 2021).

1.2 Landscape context

- 1.2.1 The site is an active car park formed of hardstanding, with small patches of amenity grassland, ornamental shrubs and scattered trees, bounded on all aspects by either fencing or walls and a small substation building is present on site. Land within a 30 m buffer of the site includes residential properties and gardens, with supporting road infrastructure.
- 1.2.2 The site is in north Llandudno, with the wider landscape characterised by the town itself, wood, rural areas to the north with scattered woodland blocks, Liverpool Bay c.0.68 km to the west and Ormes Bay c.0.82 km to the east.

1.3 Development proposals

- 1.3.1 This assessment is based on the red line boundary of the site as shown in *Figure 1* and the proposed development shown in drawing AD102 received by email on 29 March 2021. The proposed works involve the construction of 52 apartments and associated parking, communal gardens and relocation of the existing substation.

1.4 Validity of data

- 1.4.1 According to CIEEM advice (CIEEM 2019), survey data are valid for a period of 12 to 18 months from the date of the survey. The report highlights any circumstances where data may be valid for less than 18 months. Between 18 months and 3 years a professional ecologist will need to undertake a site visit and may also need to update desk study information (effectively updating the PEA) and then review the validity of the report.

2.0 METHODS

2.1 Overview

- 2.1.1 The preliminary ecological appraisal (PEA) was undertaken broadly in line with guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017), and it therefore included:
- a desk study (including records of designated sites, protected and notable species; a review of aerial photographs; obtaining information from the DEFRA and JNCC websites, and the local authority website; and requesting data from the local records centre) here called a background data search (BDS); and
 - a field survey that informed habitat mapping (UKHab), an assessment of the possible presence of protected or priority species and the likely importance of habitat features.
- 2.1.2 The PEA report includes an ecological description of the site and information about species that may occur there. Notes and mapping of any incidental sightings of invasive non-native plant species and protected or priority mammal species are also provided.
- 2.1.3 The survey was carried out on 3 June 2021 by Tom West of RSK Biocensus Ltd. Tom is a senior consultant with over four years' experience in ecological consultancy. He is an associate member of CIEEM and is experienced in carrying out PEAs. For the purpose of the ground level tree assessment (GLTA) and preliminary roost assessment (PRA), Tom worked as an accredited agent under Lewis Wright's Natural Resource Wales (NRW) bat licence (Ref: S089006/1).

2.2 Background data search

- 2.2.1 A search was made in May 2021 for reference materials relating to the ecology of the Maelgwyn Road site, and a list of sources is given in *Table 1*.

Table 1: Data sources

Information Obtained	Available From
Protected and Noteworthy species-records	Cofnod – North Wales Environmental Information Service
Designated site locations and citations	Natural Resources for Wales
Designated site locations and citations	Joint Nature Conservation Committee (JNCC) website
Designated site locations and citations	Cofnod – North Wales Environmental Information Service
Designated site information	https://www.first-nature.com/waleswildlife/n-nnr-orme.php
Designations and legal protection of noteworthy species	Joint Nature Conservation Committee (JNCC) website
Details of species and habitats listed on Conwy LBAP	Local BAP website https://www.biodiversitywales.org.uk/Conwy

2.2.2 A search was made for information on statutory designated sites (often internationally and nationally important sites for ecology) and non-statutory designated sites (often important in a local context) within 2 km of the site boundary. The search was extended to 10 km for internationally designated sites. A search was also made for records of noteworthy species within 2 km of the site boundary. Species included in the search parameters were:

- European protected species (listed on Schedules 2 and 5 of The Conservation of Habitats and Species Regulations 2017);
- nationally protected species under Schedules 1, 5 and 8 of The Wildlife & Countryside Act 1981 and The Protection of Badgers Act 1992;
- species listed as critically endangered, endangered or vulnerable based on the IUCN Red List Categories and Criteria 2001;
- all species listed on the RSPB *Birds of Conservation Concern 2002-2007* as red or amber, as updated in *The Population Status of Birds in Wales*3;
- Nationally rare or nationally scarce species;
- Notable invertebrates; and

2.3 Plants and habitats

UKHab Survey

2.3.1 The field survey was based on the UKHab survey approach (Butcher et al., 2020, 2020a) and habitats were identified down to at least level 4, where possible. This is in line with guidance from CIEEM (CIEEM, 2017) and involved the following elements:

- habitat mapping using a set of standard colour codes and secondary codes to indicate habitat types on a UKHab habitat map (*Figure 2*); and
- a description of features of possible ecological or nature conservation interest in notes relating to numbered locations on the UKHab habitat map, called 'target notes' (*Appendix A*).

2.3.2 Vascular plant species were recorded during the survey though, at this level of survey, no species lists should be regarded as exhaustive (additional species would almost certainly be found in more detailed surveys or repeat surveys at various times of the year). A plant species list was recorded for the site and is given in *Appendix B*.

2.3.3 Plant nomenclature in this report follows Stace (2019) for native and naturalised species of vascular plant, and mosses and liverworts follow Hill et al. (2008). Introduced species and garden varieties were identified using relevant Floras. Plant names in the text are common names with the scientific names in brackets afterwards on the first occurrence only. Doubtful identifications are preceded by 'cf.' placed before the specific epithet where the plant is very probably the species indicated, but it could not be distinguished from similar members of the genus with certainty.

Invasive non-native species (INNS)

2.3.4 UKHab survey does not involve exhaustive surveying for individual plant species, and various invasive species may be little in evidence at various times of year (depending on

the species). A survey seeking to identify habitat types cannot therefore be relied upon to provide firm information about the presence or extent of any invasive non-native species (even though some things may be evident). However, we have noted any such species seen during the course of the survey, e.g. Giant Hogweed (*Heracleum mantegazzianum*), Himalayan Balsam (*Impatiens glandulifera*) or Japanese Knotweed (*Reynoutria japonica*) among others, as well as any invasive non-native species of animals recorded during the survey.

2.4 Protected and notable animals

General

- 2.4.1 The site was assessed for its suitability for the protected animals that are likely to occur in the area. Taking into account the results of the BDS, the geographic location, connectivity to natural habitats in the wider landscape, and the nature and extent of habitats at the site, specific assessment was also carried out for the species/species groups outlined below.

Invertebrates

- 2.4.2 The site was assessed for its suitability to support notable species and/or assemblage of invertebrates, but no specific surveys were undertaken. The habitat requirements of particular invertebrates are often species-specific. The assessment focused on the presence of features and habitats suitable for the notable species identified in the BDS.

Great crested newts

- 2.4.3 The suitability of aquatic and terrestrial habitat on the site and in the immediate vicinity to support great crested newts was considered, taking into consideration habitat connectivity between suitable habitat areas. Aerial photography and Ordnance Survey maps were examined for ponds or other suitable breeding habitat within 500 m of the site.

Reptiles

- 2.4.4 The site was assessed for its suitability for the four most widespread reptile species, with particular attention given to those features that provide suitable basking areas (e.g. south-facing slopes), hibernation sites (e.g. banks, walls, piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).
- 2.4.5 Specific habitat requirements differ between species. Common lizards (*Zootoca vivipara*) and slow-worms (*Anguis fragilis*) favour rough grassland. Grass snakes (*Natrix helvetica*) have broadly similar requirements with a greater reliance on ponds and wetlands. Adders (*Vipera berus*) use a range of fairly open habitats with some cover but are most often found in dry heath (Beebee & Griffiths, 2000).

Birds

- 2.4.6 Birds nest and forage in a wide variety of habitats including scrub, woodland, hedges and trees, open ground and man-made structures. The site was assessed for its suitability to support nesting and foraging birds, with an emphasis on the Schedule 1 and notable

species recorded in the BDS. This included any nests or incidental signs of nesting such as feathers or pellets in locations suitable for nests.

Bats

- 2.4.7 Habitats were assessed in respect of their suitability for foraging and commuting bats according to Collins (2016). Areas of particular interest vary between species, but generally include sheltered areas and habitats with good numbers of insects, such as woodland, scrub, rivers and species-rich or rough grassland.
- 2.4.8 All buildings on the site and trees that may be affected by the works were assessed for their suitability for roosting bats and each building or tree was then given a grading based on the guidance as shown in *Table 1* Collins (2016). Any incidental signs of bats or other evidence found (such as droppings, urine stains, odour, grease stains or feeding remains), were also recorded.

Table 1: Classification criteria for ground level tree assessment and preliminary roost assessment

Category (Potential to support roosting bats)	Description
Negligible potential	Negligible habitat features on site likely to be used by roosting bats.
Low Potential	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate potential	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High Potential	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed roost	Bats or evidence of bats recorded within the building during the initial inspection surveys or during dusk/dawn surveys. A confirmed record (supplied by records centre/local bat group) would also apply.

Badgers

- 2.4.9 An initial assessment was carried out to identify areas that might be used by badgers (*Meles meles*) for commuting, foraging or setts within 30 m of all areas potentially affected by works (where access was possible). The area was systematically searched for signs of badgers including setts, foraging signs, paths (runs) and latrines where possible, and the category of sett and levels of recent activity visible at each sett recorded.

Hazel dormice

- 2.4.10 Habitats were assessed for their suitability for hazel dormice (*Muscardinus avellanarius*). This involved consideration of the habitat structure and the presence of plant species favoured by dormice such as Hazel (*Corylus avellana*) and Honeysuckle species (*Lonicera* sp.). Dormice generally use areas of dense woody vegetation and are more likely to be found where there is a wide diversity of woody species contributing to three-dimensional habitat complexity, a number of food sources, plants suitable for nest-building material, and good connectivity to other areas of suitable habitat.

Other species of principal importance

- 2.4.11 The UK countries of England, Wales, Scotland and Northern Ireland are obliged by their individual laws to maintain lists of species and habitats of principal importance for biodiversity conservation. In Wales, this obligation derives from the Environment (Wales) Act 2016. An assessment of the suitability and likelihood of the site supporting such species was made (for example, European hedgehog (*Erinaceus europaeus*)).

2.5 Constraints and limitations

- 2.5.1 All areas within the site boundary were accessible during the survey. However, some areas within the 30 m buffer of the site were not accessible, to the west, south and east of the site. These areas contain residential properties and associated gardens, which given the highly urbanised nature of the area are highly unlikely to contain badger setts or field signs. Therefore, lack of access is not considered a constraint to the conclusions of this report.
- 2.5.2 This preliminary appraisal as to whether protected species might occur on the site is based on the suitability of habitat, the known distribution of relevant species in the local area (from on-line sources and desk study), and any signs of the relevant species. It does not constitute a full and definitive survey of any protected species group.
- 2.5.3 Field signs for protected and valuable species are often difficult to find or absent from a site. The survey conducted was not intended to be a comprehensive presence/absence survey for all species, but rather to provide an indication of the likely presence of such species based on the field signs found, and the nature of the habitats present.
- 2.5.4 All recommendations made in this report are based on the red line boundary. If the red line boundary changes at a later date, further surveys may be required.

3.0 RESULTS

3.1 Background data search

Biodiversity action plans

- 3.1.1 Habitats on the site do not qualify as the priority habitat types 'Hedgerows and Ponds' under Section 7 of The Environment (Wales) Act 2016.
- 3.1.2 The latest Conwy local biodiversity action plan (LBAP) lists 4 habitat action plans (HAPs) and 15 species or species group action plans (SAPs). No local HAPs or SAPs are considered relevant to the proposed development.

Statutory sites

- 3.1.3 There are seven statutory designated sites within 2 km of the site boundary, comprising one special protection area (SPA), two special areas of conservation (SACs), two sites of special scientific interest (SSSIs), one national nature reserve (NNR) and one local nature reserve (LNR). These sites are listed in *Table 3* in order of proximity to the site; short descriptions are given for the sites.

Table 3: Statutory sites within 2 km of the site boundary

Site Name	Designation	Approximate Distance (m)
Pen Y Gogarth / Great Ormes Head	SSSI	285
Great Ormes Head SSSI is of special interest for its geological, botanical, entomological, ornithological and marine biological features. The SSSI includes limestone sea cliffs, boulder strewn shores, calcicolous grassland, limestone heath, acidic heath and maritime cliff vegetation. The heath vegetation is species rich and occurs in a mosaic with various grassland communities. Limestone pavements at the western end have grikes containing a rich scrub woodland flora. The site supports a diverse flora including the endemic goldilocks aster (<i>Aster linosyris</i>), spiked speedwell (<i>Veronica spicata</i> ssp. <i>hybrida</i>), spotted cat's-ear (<i>Hypochaeris maculate</i>) and wild cotoneaster (<i>Cotoneaster cambricus</i>). Other species of note include hoary rock-rose (<i>Helianthemum canum</i>), horseshoe vetch (<i>Hippocrepis comosa</i>), spring cinquefoil (<i>Potentilla neumanniana</i>) and Welsh hawkweed (<i>Hieracium cambricum</i>). An assemblage of bryophytes and lichens including the nationally vulnerable species <i>Collema fragile</i> and <i>Synalissa symphorea</i> are present. The marine biology of the site is of special interest because it has the largest extent of moderately exposed rock, supporting a complete zonation of marine biotopes as well as specialised and nationally scarce animals and algae most typically associated with rock pool, cave and limestone rock habitats. The limestone grasslands of the Great Orme support an outstanding assemblage of invertebrates. The site is especially noteworthy for two unique butterfly sub-species, the grayling (<i>Hipparchia semele thyone</i>) and the silver-studded blue (<i>Plebejus argus caernensis</i>), whilst the weevil <i>Helianthemapion aciculare</i> occurs here at its only British site. Other species of note include the horehound plume moth (<i>Wheeleria spilodactyla</i>), silky wave moth (<i>Idaea dilutaria</i>) and the pollen beetle <i>Meligethes brevis</i> . The SSSI is also important as it supports a large breeding colony of seabirds such as guillemot (<i>Uria aalge</i>), kittiwake (<i>Rissa tridactyla</i>) and razorbill (<i>Alca</i>		

Site Name	Designation	Approximate Distance (m)
<p><i>torda</i>). The headland caves support hibernating populations of lesser horseshoe bat (<i>Rhinolophus hipposideros</i>). The SSSI is to the north of the site boundary.</p>		
Great Orme's Head / Pen y Gogarth	SAC	285
<p>The Great Orme's Head SAC is designated for the Annex I habitats:</p> <ul style="list-style-type: none"> - European dry heaths - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) <p>These Annex I habitats are present as a qualifying feature, but are not a primary reason for selection of the site:</p> <ul style="list-style-type: none"> - Vegetated sea cliffs of the Atlantic and Baltic Coasts <p>The SAC covers predominately the same area as the Great Ormes Head SSSI as described above.</p>		
Great Orme's Head	LNR	285
<p>The Great Orme's Head LNR is within the Great Ormes Head SSSI as described above.</p>		
Aber Afon Conwy	SSSI	600
<p>Aber Afon Conwy SSSI is a coastal and marine site. The tidal reach of the site extends approximately 16 kilometres, the shoreline is backed by natural rock and boulder clay cliff, sand dune, salt marsh and woodland, with artificial substrate and sea defence walls. This coastal plain estuary has the largest extent, most complete zonation, richest variety and best examples of high quality intertidal estuarine communities, between Bardsey Island and Great Ormes Head. The SSSI is of special interest for its marine and terrestrial invertebrate biology and is of particular importance as it supports the nationally scarce belted beauty moth (<i>Lycia zonaria britannica</i>). The site supports high numbers of migratory salmon (<i>Salmo salar</i>) and waders such as curlew (<i>Numenius arquata</i>), oystercatcher (<i>Haematopus ostralegus</i>) and redshank (<i>Tringa tetanus</i>).</p>		
Maes-y-facrell, Pen Y Gogarth	NNR	660
<p>Maes-y-facrell, Pen Y Gogarth NNR comprises heathland and grassland within the Great Ormes Head SSSI. The NNR has large areas of exposed limestone pavement with a great diversity of plants and wildflowers that have capitalised on the thin layer of moist soil that lies within the grykes. Species of note include bloody cranesbill (<i>Geranium sanguineum</i>), dark red helleborine (<i>Epipactis atrorubens</i>), wild cotoneaster (<i>Cotoneaster cambricus</i>) and spiked speedwell (<i>Veronica spicata</i>). Insect life is also abundant, several endangered species of butterflies and moths occur including the silky wave moth (<i>Idaea dilutaria</i>) and silver-studded blue butterfly (<i>Plebejus argus</i>).</p>		
Liverpool Bay / Bae Lerpwl (Wales)	SPA	805
<p>Liverpool Bay SPA supports an internationally important assemblage of birds, over winter the area regularly supports: 69,687 water birds. Overwinter the site is particularly important for common scoter (<i>Melanitta nigra</i>), little gull (<i>Hydrocoloeus minutus</i>) and red-throated diver (<i>Gavia stellate</i>). In the breeding season the site is particularly important for common tern (<i>Sterna hirundo</i>) and little tern (<i>Sternula albifrons</i>).</p>		
Y Fenai a Bae Conwy / Menai Strait and Conwy Bay	SAC	805
<p>The Menai Strait and Conwy Bay SAC is designated for the Annex I habitats:</p> <ul style="list-style-type: none"> - Sandbanks which are slightly covered by sea water all the time - Mudflats and sandflats not covered by seawater at low tide - Reefs 		

Site Name	Designation	Approximate Distance (m)
These Annex I habitats are present as a qualifying feature, but not a primary reason for selection of the site: <ul style="list-style-type: none"> - Large shallow inlets and bays - Submerged or partially submerged sea caves 		

Internationally designated sites

- 3.1.4** There are four internationally designated sites within 10 km of the site boundary, comprising one special protection area (SPA) and three special areas of conservation (SACs). These sites are listed in Table 4, any sites within 2 km of the site boundary are described in Table 3.

Table 4: Internationally designated sites within 10 km of the site boundary

Site Name	Designation	Approximate Distance (m)
Great Orme's Head / Pen y Gogarth	SAC	285
Liverpool Bay / Bae Lerpwl (Wales)	SPA	805
Y Fenai a Bae Conwy / Menai Strait and Conwy Bay	SAC	805
Coedwigoedd Penrhyn Creuddyn / Creuddyn Peninsula Woods	SAC	2,365

Non-statutory sites

- 3.1.5** There are five non-statutory designated sites within 2 km of the site boundary, comprising four local wildlife sites (LWSs) and one regionally important geodiversity site (RIGS). These sites are listed in Table 5 in order of proximity to the site; short descriptions (when available) are given for the sites.

Table 5: Non-statutory sites within 2 km of the site boundary

Site Name	Designation	Approximate Distance (m)
West Shore, Llandudno	LWS	600
West Shore Llandudno LWS covers an area of vegetated shingle to the west of the site boundary.		
Deganwy Dunes	LWS	770
Deganwy Dunes LWS comprises dune grasslands that are in a golf course.		
Great Orme (Marcham)	RIGS	1,285
Bryniau	LWS	1,700
Bryniau LWS comprises acid grassland, calcareous grassland and scrub.		
Bryniau calcareous grassland and scrub	LWS	1,865
Bryniau calcareous grassland and scrub LWS comprises calcareous grassland and scrub.		

Other Notable Sites

- 3.1.6 There are four areas of ancient woodland within 1 km of the site boundary, comprising three areas of ancient semi natural woodland and one area of restored ancient woodland. The closest area of ancient woodland to the site boundary is 240 m to the north-west.
- 3.1.7 The Great Orme is also defined as a heritage coast site and is 300 m to the north of the site boundary.

Protected and noteworthy species

- 3.1.8 At least 316 noteworthy species are recorded from places within 2 km of the site boundary. Of these, 5 are amphibians, 126 are birds, 2 are fungi, 99 are invertebrates, 15 are lichen, 52 are plants, at least 13 are mammals and 4 are reptiles. Species that are protected by law under Schedules 2 and 5 of The Conservation of Habitats and Species (Amendment) Regulations 2017, Schedules 2, 5 and 8 of The Wildlife and Countryside Act 1981 or The Protection of Badgers Act 1992 and have been recorded in the search area are listed in the table below (excluding species protected only against collection for sale); a full species list is given in Appendix C.

Table 6: Protected species records within 2 km of the site boundary

Latin Name	Common Name	Designation	Most Recent	No of Records	Within 100m	Within 1km	Within 2km
Amphibians							
<i>Epidalea calamita</i>	natterjack toad	EPS(Sch2), WCA5	1860	1	P	P	☒
Birds							
<i>Calcarius lapponicus</i>	Lapland bunting	WCA1.1	2015	132	P	P	☒
<i>Calidris maritima</i>	purple sandpiper	WCA1.1	1999	1			P
<i>Cettia cetti</i>	Cetti's warbler	WCA1.1	2015	1			P
<i>Charadrius dubius</i>	little ringed plover	WCA1.1	2010	1		P	☒
<i>Charadrius morinellus</i>	dotterel	WCA1.1	2019	68	P	P	☒
<i>Circus aeruginosus</i>	marsh harrier	WCA1.1	1999	1			P
<i>Circus cyaneus</i>	hen harrier	WCA1.1	2019	8	P	P	☒
<i>Clangula hyemalis</i>	long-tailed duck	WCA1.1	2013	1			P
<i>Coturnix coturnix</i>	quail	WCA1.1	2013	2		P	☒
<i>Crex crex</i>	corncrake	WCA1.1	2010	1			P
<i>Cygnus cygnus</i>	whooper swan	WCA1.1	2004	1			P
<i>Eremophila alpestris</i>	shore lark	WCA1.1	1999	1		P	☒
<i>Falco columbarius</i>	merlin	WCA1.1	2016	31	P	P	☒
<i>Falco peregrinus</i>	peregrine	WCA1.1	2020	86	P	☒	
<i>Falco subbuteo</i>	hobby	WCA1.1	2015	1			P

Latin Name	Common Name	Designation	Most Recent	No of Records	Within 100m	Within 1km	Within 2km
<i>Fringilla montifringilla</i>	brambling	WCA1.1	2019	27	P	P	☑
<i>Gavia</i> sp.	a diver	WCA1.1	2017	1		P	P
<i>Gavia arctica</i>	black-throated diver	WCA1.1	2006	2		P	☑
<i>Gavia immer</i>	great northern diver	WCA1.1	2017	11		P	☑
<i>Gavia stellata</i>	red-throated diver	WCA1.1	2017	16	P	P	☑
<i>Hydrocoloeus minutus</i>	little gull	WCA1.1	2015	11		P	☑
<i>Jynx torquilla</i>	wryneck	WCA1.1	2006	5		☑	
<i>Larus melanocephalus</i>	Mediterranean gull	WCA1.1	2016	2		P	☑
<i>Limosa limosa</i>	black-tailed godwit	WCA1.1	2013	1		P	☑
<i>Loxia curvirostra</i>	common crossbill	WCA1.1	2015	63			P
<i>Lullula arborea</i>	woodlark	WCA1.1	2015	10		P	☑
<i>Melanitta fusca</i>	velvet scoter	WCA1.1	2015	4		P	☑
<i>Melanitta nigra</i>	common scoter	WCA1.1	2016	16	P	P	☑
<i>Milvus milvus</i>	red kite	WCA1.1	2019	2			P
<i>Numenius phaeopus</i>	whimbrel	WCA1.1	2020	4		☑	
<i>Oceanodroma leucorhoa</i>	leach's petrel	WCA1.1	2014	9		P	☑
<i>Pandion haliaetus</i>	osprey	WCA1.1	2015	20		P	☑
<i>Pernis apivorus</i>	honey-buzzard	WCA1.1	1999	1			P
<i>Phoenicurus ochruros</i>	black redstart	WCA1.1	2017	94	P	☑	
<i>Platalea leucorodia</i>	spoonbill	WCA1.1	2015	2		P	☑
<i>Plectrophenax nivalis</i>	snow bunting	WCA1.1	2019	188	P	P	☑
<i>Pyrrhocorax pyrrhocorax</i>	chough	WCA1.1	2019	275	P	☑	
<i>Regulus ignicapilla</i>	firecrest	WCA1.1	2020	72	P	P	☑
<i>Sterna dougallii</i>	roseate tern	WCA1.1	2013	1		P	☑
<i>Turdus iliacus</i>	redwing	WCA1.1	2020	57	P	☑	
<i>Turdus pilaris</i>	fieldfare	WCA1.1	2019	17	P	☑	
<i>Tyto alba</i>	barn owl	WCA1.1	2004	2		P	☑
Mammals							
Chiroptera	unidentified bat	EPS(Sch2)	2003	2		☑	
<i>Delphinus delphis</i>	common dolphin	EPS(Sch2), WCA5	2009	1			☑
<i>Lutra lutra</i>	otter	EPS(Sch2), WCA5	2016	1			☑
<i>Meles meles</i>	badger	BA	2019	15		P	☑
<i>Nyctalus noctula</i>	noctule bat	EPS(Sch2), WCA5	2017	2	☑		
<i>Phocoena phocoena</i>	common porpoise	EPS(Sch2), WCA5	2019	8		P	☑

Latin Name	Common Name	Designation	Most Recent	No of Records	Within 100m	Within 1km	Within 2km
<i>Pipistrellus</i> sp.	a pipistrelle bat	EPS(Sch2), WCA5	1999	3		<input checked="" type="checkbox"/>	
<i>Pipistrellus nathusii</i>	Nathusius's pipistrelle	EPS(Sch2), WCA5	2017	1			<input checked="" type="checkbox"/>
<i>Pipistrellus pipistrellus</i>	common pipistrelle	EPS(Sch2), WCA5	2018	6	<input checked="" type="checkbox"/>		
<i>Pipistrellus pygmaeus</i>	soprano pipistrelle	EPS(Sch2), WCA5	2020	2		<input checked="" type="checkbox"/>	
<i>Rhinolophus hipposideros</i>	lesser horseshoe bat	EPS(Sch2), WCA5	2003	6		<input checked="" type="checkbox"/>	
<i>Tursiops truncatus</i>	bottle-nosed dolphin	EPS(Sch2), WCA5	2017	2			<input checked="" type="checkbox"/>
Plants							
<i>Cotoneaster cambricus</i>	wild cotoneaster	WCA8	2018	9		<input checked="" type="checkbox"/>	
<i>Lythrum hyssopifolia</i>	grass-poly	WCA8	2008	1			<input checked="" type="checkbox"/>
<i>Veronica spicata</i>	spiked speedwell	WCA8	2018	15		<input checked="" type="checkbox"/>	
Reptiles							
<i>Anguis fragilis</i>	slow-worm	WCA5	2019	29		<input checked="" type="checkbox"/>	
<i>Lacerta agilis</i>	sand lizard	EPS(Sch2), WCA5	1860	2	P	P	<input checked="" type="checkbox"/>
<i>Natrix helvetica</i>	grass snake	WCA5	1800	1	P	P	<input checked="" type="checkbox"/>
<i>Zootoca vivipara</i>	common lizard	WCA5	2021	89		<input checked="" type="checkbox"/>	

Note - **P** relates to records with 4 figure grid references that could potentially be anywhere within a 2 km square.

3.2 Plants and habitats

UKHab survey

- 3.2.1 The UKHab habitat map is provided as *Figure 2* and shows the location of the target notes referred to in the text below. A full description for each target note is given in *Appendix A*. The site is an active car park formed of hardstanding, with small patches of modified grassland, introduced mixed scrub and scattered trees, bounded on all aspects by either fencing or walls and a small substation building is also present on site.

g4 - Modified Grassland

- 3.2.2 There were three areas of modified grassland on site, two of which are regularly mown (*Target Note 1, 2; Plate 1*) to a height of c.3-10 cm. Grass species included Cock's-foot (*Dactylis glomerata*), Creeping Bent (*Agrostis stolonifera*), Wall Barley (*Hordeum murinum*) and Yorkshire-fog (*Holcus lanatus*), whilst forb species included Alexanders (*Smyrnium olusatrum*), Broad-leaved Dock (*Rumex obtusifolius*), Daisy (*Bellis perennis*), Creeping Buttercup (*Ranunculus repens*) Dandelion (*Taraxacum officinale* agg.), Dove's-foot Crane's-bill (*Geranium molle*), Hedge Mustard (*Sisymbrium officinale*), Herb-Robert (*Geranium robertianum*), Mind-your-own-business (*Soleirolia soleirolia*), Pellitory-of-the-

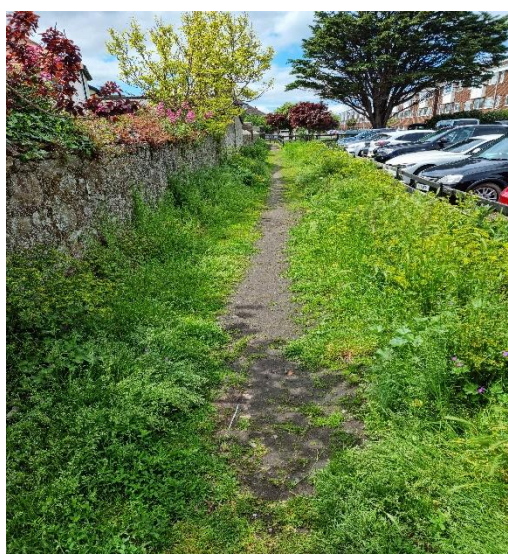
wall (*Parietaria judaica*), Pineappleweed (*Matricaria discoidea*), Ribwort Plantain (*Plantago lanceolata*) and White Clover (*Trifolium repens*).

- 3.2.3 An additional area of modified grassland (*Target Note 6; Plate 2*) surrounding a path (*Target Note 11*) was present in the south-west of site. This area appeared unmown with a sward height of ≤ 1 m. Grass species included large quantities of Creeping Bent and Wall Barley, with lesser quantities of Barren Brome (*Bromus sterilis*), Cock's-foot, Perennial Rye-grass (*Lolium perenne*) and Yorkshire-fog. Forbs included, Alexanders, Broad-leaved Dock, Cleavers (*Galium aparine*), Common Chickweed (*Stellaria media*), Daisy, Common Field-speedwell (*Veronica persica*), Common Mallow (*Malva sylvestris*), Common Nettle (*Urtica dioica*), Common Ragwort (*Jacobaea vulgaris*), Creeping Buttercup, Dove's-foot Crane's-bill, Field Horsetail (*Equisetum arvense*), Germander Speedwell (*Veronica chamaedrys*), Greater Plantain (*Plantago major*), Hedge Mustard, Herb-Robert, Ivy-leaved Speedwell (*Veronica hederifolia*), Pineappleweed, Red Dead-nettle (*Lamium purpureum*), Square-stalked Willowherb (*Epilobium tetragonum*), Welsh Poppy (*Papaver cambricum*) and White Clover.

Plate 1. Short mown modified grassland found in east of site.



Plate 2. Longer modified grassland found in south-west corner of site.



H2b – Other hedgerows

- 3.2.4 There was a hedgerow c.2 m tall, 1.5 m wide that encroached onto site, with plants rooted immediately adjacent to western boundary fence (*Target Note 8; Plate 3*). The hedge was comprised of Holly (*Ilex aquifolium*), Red Claws (*Escallonia rubra*) and, Spindle (*Euonymus europaeus*). Ground flora was lacking, with the base of the hedgerow featuring either bare earth, leaf litter and a single stand of Butterfly-bush (*Buddleja davidii*) also present.

Plate 3. Hedgerow recorded to the west of site.



H3h (48) – Mixed scrub, introduced

- 3.2.5 There were four small areas of mixed, introduced scrub present on site (*Target Note 3, 5, 7, 9; Plates 4, 5*). These areas were comprised of woody species such as Butterfly-bush, Common Box (*Buxus sempervirens*), Daisy Bush (*Brachyglottis greyi*), Hebe (*Hebe* sp.) and Rosemary (*Rosmarinus officinalis*), with encroaching herb species such as Common Mallow, Creeping Bent, Dandelion, Field Forget-me-not (*Myosotis arvensis*), Pellitory-of-the-wall, Ivy-leaved Speedwell and Wall Barley. A significant stand of Himalayan Balsam was recorded at *Target Note 9* and this is addressed in the 'Invasive plant species' section below.

Plate 4. Introduced scrub forming ornamental area near car park entrance.



Plate 5. More sparsely vegetated introduced scrub in south-west corner of site.



u1b – Developed land. Sealed surface

- 3.2.6 The majority of the site was comprised of hardstanding (*Target Note 4; Plate 6*), currently in use as an active car park. This gave rise to several ephemeral species such as Biting Stonecrop (*Sedum acre*), Common Cornsalad (*Valerianella locusta*), Common Groundsel (*Senecio vulgaris*), Pellitory-of-the-wall, Pineappleweed, Scarlet Pimpernel (*Anagallis arvensis ssp. arvensis*), Square-stalked Willowherb, Wall Barley and White Clover. However, these species did not form continuous habitat that could be mapped.

Plate 6. Car park formed of hardstanding.



u1b5 – Buildings

- 3.2.7 There was a small, brick-built substation building with pitched tile roof located in the south east area of the site (*Target Note 12; Plate 7*). This building was assessed for roosting bats (see *Section 3.3 – bats*).

Plate 7. Small substation building on site.



u1c – Artificial unvegetated, unsealed surface

- 3.2.8 There was an unsealed footpath (*Target Note 11; Plate 2*) in the south-west corner of the site, surrounded by modified grassland (*Target Note 6*).

u1e – Built linear features

- 3.2.9 The site was bounded by either brick walls, with fences atop, or wood picket fencing (*Target Note 10; Plate 8*).

Plate 8. Example of wall and fencing used to bound site.



Scattered Trees

- 3.2.10 Although not recorded as part of UKHab surveys, there were several scattered trees on or immediately adjacent to site. These included Ash (*Fraxinus excelsior*), Elm (*Ulmus minor*), Norway Maple (*Acer platanoides*) and Western Red Cedar (*Thuja plicata*). These were assessed for roosting bats (see *Section 3.3 – bats*).

Invasive plant species

- 3.2.11 Himalayan Balsam was recorded at *Target Note 9*, forming a dense swathe (*Plate 9*). This species is listed under the Invasive Alien Species (Enforcement and Permitting) Order 2019. No other invasive species were recorded on site.

Plate 9. Dense stand of Himalayan Balsam on site.



3.3 Protected and notable animals

- 3.3.1 *Figure 2* shows the location of the target notes referred to in the text below, which show the location of particular features with suitability for protected and notable animals. A full description for each target note is given in *Appendix A*.

Invertebrates

- 3.3.2 The desk study did not return any records of protected invertebrates within 2 km but did return records of 99 notable species. The site is likely to contain suitable food plants and habitats for a number of these species including Garden Tiger Moth (*Arctia caja*) which feeds on a variety of species including Common Nettle and Broad-leaved Dock. However, the habitats on the site are all common and relatively species-poor and are therefore unlikely to support important invertebrate assemblages.

Great crested newts (and other amphibians)

- 3.3.3 The BDS returned no records of great crested newts (GCN) but did return records of common toad (*Bufo bufo*) and a singular historic record (1860) of natterjack toads (*Epidalea calamita*) within 2 km of the site. There are no waterbodies on, or within 500m of the site.
- 3.3.4 Terrestrial habitats on site that are suitable for GCN and common toad were limited to the longer modified grassland (*Target Note 6*) and within areas of introduced scrub (*Target Note 3, 5, 7, 9*). There was no suitable habitat for natterjack toads. The site is isolated from water bodies and surrounding habitats comprise predominantly sealed surfaced, urban development. Therefore, it is considered highly unlikely that the amphibian species are present on site, and therefore they are not discussed further within this report.

Reptiles

- 3.3.5 The data search returned recent records of common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) and common lizard within 2 km of the site, most recently in 2019 and 2021 respectively. Suitable habitat for reptiles is limited to the same areas as GCN above and for similar reasons as GCN, it is highly unlikely that reptiles are present on site, and therefore they are not discussed further within this report.

Birds

- 3.3.6 The BDS returned records of 42 protected bird species within 2 km of the site, however, the site does not provide suitable nesting habitat for any of these species, the majority of which are wetland, farmland or wintering species.
- 3.3.7 The hedgerow (*Target Note 8*), introduced scrub (*Target Note 3, 5, 7, 9*), building (*Target Note 12*) and scattered trees provide suitable habitat for common bird species such as song thrush (*Turdus philomelos*), robin (*Erithacus rubecula*) and wood pigeon (*Columba palumbus*).
- 3.3.8 The longer modified grassland (*Target Note 6*) offers limited suitability for ground nesting species as this area is regularly disturbed by walkers, both with dogs and without.

Bats

- 3.3.9 The desk study returned records of at least five species of bat within 2 km of the site, including common pipistrelle (*Pipistrellus pipistrellus*), lesser horseshoe bat (*Rhinolophus hipposideros*), Nathusius's pipistrelle (*Pipistrellus nathusii*), noctule (*Nyctalus noctule*) and soprano pipistrelle (*Pipistrellus pygmaeus*), with an unidentified species also recorded.
- 3.3.10 The building on site (*Target Note 12*) offers suitable features for roosting bats including, missing mortar and tile gaps, ridge tile gaps, soffit box access and, vent panels and bricks (*Plates 10-12*). Given the suitability of the building for crevice dwelling species, the number of features that could be used, and the availability of suitable foraging habitat within a typical core sustenance zone (CSZ) for these species this building is considered to be of moderate potential for roosting bats.

Plate 10. Mortar and roof tile gap.



Plate 11. Ridge tile and roof tile gaps.



Plate 12. Soffit box with open access.



- 3.3.11 The trees on and immediately adjacent to site did not possess any suitable features for roosting bats.
- 3.3.12 The perimeters of site offer low suitability for foraging and commuting bats, with patches of modified grassland and small quantities of ephemeral herbs in the boundaries. The site is also connected to suitable habitat in the wider landscape, largely via residential gardens. However, the majority centre of site is unsuitable for commuting and foraging bats, being dominated by hardstanding.

Badgers

- 3.3.13 The desk study returned 15 records within the wider landscape, the most recent of which was recorded in 2019.
- 3.3.14 No evidence of badgers was recorded at the site or within 30 m of it (where access allowed). The site is unsuitable for sett building and offers limited foraging opportunities within vegetated areas. Within 30m of site the greenspace is comprised of amenity grassland patches or small residential gardens. It is unlikely that badger setts exist or could be established within 30 m of site and therefore badgers are not discussed further within this report.

Hazel Dormouse

- 3.3.15 The desk study returned no records of hazel dormice within 2 km of the site boundary.
- 3.3.16 There was a small section of hedgerow on site (*Target Note 8*), however this was isolated from the wider landscape, small in size and did not contain vegetation favoured by hazel dormice. Therefore, it is considered highly unlikely that hazel dormice are present on site and they are not discussed further within this report.

Other species of principal importance

Hedgehog

- 3.3.17 Hedgehogs occupy a range of lowland habitats with enough cover to allow nesting. They are common in parks in urban and suburban environments, farmland and gardens. Modified grassland introduced mixed scrub and hedgerow on site provide suitable foraging opportunities for hedgehog. There may be opportunities for hedgehogs to hibernate in the introduced mixed scrub and hedgerow present on and adjacent to the site. The site is however, relatively isolated from other areas of suitable habitat in the surrounding environment, with solid walls and fences blocking access to residential gardens.

Brown Hare

- 3.3.18 Brown hares (*Lepus europaeus*) favour a mosaic of arable fields, grassland and woodland edges. Records of brown hares were returned within 2km of the site boundary, however the site itself provides no suitable habitat. In addition, the urban nature of the

surrounding area means that it is highly unlikely brown hare will be impacted by the proposed development

Polecat

- 3.3.19 Polecat (*Mustela putorius*) are found in a range of habitats, including deciduous woodland, grassland, mixed woodland, arable land and in urban gardens. Records of polecat were returned by the desk study and whilst the site itself does not provide suitable habitat for polecat, land immediately adjacent, i.e. residential gardens offers some suitability for the species.

4.0 EVALUATION

Statutory designated sites

- 4.1.1 There are four international statutory designated sites within 10 km of the site, including Great Orme's Head / Pen y Gogarth SAC, Liverpool Bay / Bae Lerpwl SPA, Y Fenai a Bae Conwy / Menai Strait and Conwy Bay SAC and Coedwigoedd Penrhyn Creuddyn / Creuddyn Peninsula Woods SAC. Due to the close nature of the sites, there may be significant effects on the integrity of the sites through several indirect pathways. Based on the proposed development, this may include increased recreational pressures, for example.
- 4.1.2 There are four national statutory designated sites within 1 km of the site. Similarly, to above, the proximity of these sites means there may be significant effects on the integrity of the sites through several indirect pathways.

Non-statutory designated sites

- 4.1.3 There are five non-statutory designated sites within 2 km of the site boundary, comprising four LWSs and a RIGS site, the latter of which is not relevant to this assessment. Similarly, to the above the proximity of these sites means there may be significant effects on the integrity of the sites through several indirect pathways.

Habitats and plants

- 4.1.4 The habitats at the site are not species-rich, have little botanical value and are ubiquitous in the wider area. None of the habitats qualify as priority or local BAP habitats, although the scattered trees on and adjacent to site do have some value. These and vegetation on site should be retained as far as practicable to minimise the ecological impacts of the works.
- 4.1.5 Himalayan Balsam, an invasive species listed under the Invasive Alien Species (Enforcement and Permitting) Order 2019, was recorded on site. Although not a legal requirement, it is recommended that this invasive species is treated and/or removed by a specialist contractor to eradicate it from site and prevent its spread.

Protected and other notable species

- 4.1.6 The hedgerow, introduced mixed scrub and building on site provide suitable nesting habitat. Precautionary measures are required to prevent destruction or disturbance of any bird nests during the works.
- 4.1.7 The building has been assessed to offer moderate potential for roosting bats and is to be demolished. Further surveys will be required to ascertain the presence or likely absence of a roost.
- 4.1.8 Habitats around the perimeter of site provide low suitability for foraging and commuting bats. Precautionary measures are required during the works to prevent disturbance to bats.

- 4.1.9 The site provides suitable habitat for hedgehogs and polecats, therefore precautionary measures are required during the works to prevent any negative impacts on hedgehogs.
- 4.1.10 Enhancement measures for invertebrates, birds, bats and hedgehogs are recommended.

5.0 RECOMMENDATIONS

5.1 Key constraints to design and construction

Designated Sites

- 5.1.1 As there are four internationally designated sites within 10km of, in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) a habitats regulations assessment (HRA) stage 1 screening assessment will be required to determine if the above proposals may affect the protected features of the given sites.

Invasive plant species

- 5.1.2 Himalayan Balsam, an invasive species listed under the Invasive Alien Species (Enforcement and Permitting) Order 2019, was recorded on site. Although not a legal requirement, it is recommended that this invasive species is treated and/or removed by a specialist contractor to eradicate it from site and prevent its spread.

Bats

- 5.1.3 The building has been assessed to offer moderate potential for roosting bats and is to be demolished. Further surveys will be required to ascertain the presence or likely absence of a roost. Should a roost be discovered, then a mitigation licence from Natural Resources Wales (NRW) will be required, which may place restrictions on working methods and timings.
- 5.1.4 Habitats adjacent to site boundaries have been identified as offering low suitability for foraging and commuting bats. Where possible, night working should be avoided to prevent light disturbance on these areas. If this is not possible, lighting should be designed in line with the Institute of Lighting Professionals (ILP, 2018) Guidance Note 08/18 'Bats and Artificial Lighting in the UK' and aim to keep a <1 lux increase in light levels in these areas.

5.2 Further Assessments

Designated Sites

- 5.2.1 A habitats regulations assessment (HRA) stage 1 screening assessment should be undertaken to fully assess the likely significant effects (LSE) on the qualifying features of the designated sites as a result of the proposed development.
- 5.2.2 The CJEU published Case C323/19 (People Over Wind case) with regards to the Habitats Directive which determined that mitigation when cannot be taken into account when considering the screening test for LSE (i.e. Stage 1 HRA).
- 5.2.3 Should, in the absence of mitigation, the Stage 1 HRA conclude there is likely significant effect to the designated sites an HRA Stage 2: appropriate assessment (AA) should be undertaken, which would take into account mitigation and in-combination effects.

Bats

- 5.2.4 As the building was identified as moderate potential for roosting bats, the following recommendations are made regarding further survey, which should be carried out before demolition takes place (Collins 2016):
- A minimum of one dusk emergence and one dawn re-entry surveys should be carried out.
 - These surveys should be carried out during the active season for bats (May – September, inclusive).
 - At least one of the surveys should be carried out between May and August.
 - Survey visits should be spaced by a minimum of two weeks, preferably more.
- 5.2.5 If a roost is discovered during these surveys, an additional third visit would be required to inform an NRW licence application.

5.1 Mitigation requirements

Ecological clerk of works

- 5.1.1 If suitable bird nesting habitat is to be cleared this should be carried out outside of the bird breeding season (March to August inclusive). If it must be removed during the breeding season, an ECoW will be required to perform a nesting bird check before any removal of suitable nesting habitat. This would involve watching the vegetation for at least 30 minutes to watch for nesting behaviours before performing a hand search for nests. If nesting birds are found, then the ecologist will outline how to proceed; this may include creating a buffer around the nest or possible delays to the works until the chicks have fledged.
- 5.1.2 Scrub clearance, if required, should only occur between March and October to avoid harming hibernating hedgehogs. If any hedgehogs are found during the works, they should be left to disperse of their accord before works continue.

Invasive plant species

- 5.1.3 It is an offence under Part 2 of the Invasive Alien Species (Enforcement and Permitting) Order 2019 to 'plant or otherwise causes to grow in the wild any specimen which is of a species of plant which is included in Part 2 of Schedule'. Himalayan Balsam is included on this list and has been identified on site. To avoid contamination of additional areas beyond the site boundary, it is recommended that this invasive species should be treated and/or removed by a specialist contractor to eradicate it from site and prevent its spread.

Precautionary working measures

- 5.1.4 In order to safeguard any hedgehogs, polecats and nocturnal animals that may be present, excavations should be covered overnight to prevent them from becoming trapped. If it is not possible to cover excavations, an access route should be provided to allow animals to climb out.
- 5.1.5 Night working should be avoided to prevent any unnecessary disturbance on nocturnal species including bats and hedgehogs. If night working is required, artificial lighting

should be hooded to reduce spill and should be directed away from any linear features that could be used for foraging and commuting, and away from any buildings or trees which may be suitable for roosting bats.

- 5.1.6 If any protected species are encountered during the works, works must stop, and an ecologist be contacted about how to proceed.

Sensitive lighting strategy

- 5.1.7 External lighting as part of proposals should be designed in line with the Institute of Lighting Professionals (ILP, 2018) *Guidance Note 08/18 'Bats and Artificial Lighting in the UK'* and aim to keep a <1 lux increase in light levels of current and any newly established potential foraging and commuting resources both during the construction and operational phases.

5.2 Opportunities for enhancement

- 5.2.1 The below enhancement measures are recommended in line with the conservation objectives of relevant local SAPs, the Environment (Wales) Act 2016 and the National Planning Policy Framework 2018.
- 5.2.2 The final development plan (AD102) is assessed with regard to providing a biodiversity net gain (BNG), which is presented within a separate report (RSK Biocensus, 2021).

Landscaping

- 5.2.3 The planting of native species including flower-, berry- and fruit-bearing species would benefit badgers, birds and other protected species. Furthermore, planting trees and hedgerows on site would create commuting corridors for many species including bats and hedgehogs. These features should be kept as dark corridors and should have strips of rough native grassland planted adjacent to them to attract invertebrates.
- 5.2.4 Amenity grassland on site should be managed using an annual summer cut to encourage the growth of a more diverse species range and improve the suitability of the habitat for protected species.

Removal of invasive plant species

- 5.2.5 Invasive plant species on the site should be treated and removed by a specialist contractor. This would prevent any future spread of the species and improve the condition of the habitat in which it is located.

Bird and bat boxes

- 5.2.6 Bird boxes should be incorporated into the development design, including those suitable for sparrow species, dunnoek (*Prunella modularis*) and/or starling (*Sturnus vulgaris*) which are all species of conservation concern and have been recorded within 2 km of the site. Additionally, integrated bat boxes e.g. Schwegler 1FR should be incorporated within new buildings fabric, orientated south, south east, or south west to provide additional roosting opportunities for the local bat population.

Log piles and 'hedgehog highways'

- 5.2.7 Log piles should be incorporated into quiet and varied habitats in the development to offer refuge for hedgehogs and other species e.g. reptiles. Ideally, they should be created using any logs generated from vegetation clearance, or from native and local wood. Furthermore, gaps (c.13 x 13 cm) should be maintained in any perimeter fencing to prevent disrupting hedgehog movement.

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FIGURES

Figure 1 - Site Location Plan

Figure 2 - UKHab Habitat Map



Legend:

- Site Boundary
- Study Area (30m)

00	09/06/2021	2482014	GO	RG	TW
Rev	Date	Description	Drn	Chk	App

Maelgwyn Road

RSK
biocensus
EXPERTS IN ECOLOGY

TITLE: Figure 1:
Site Location Plan

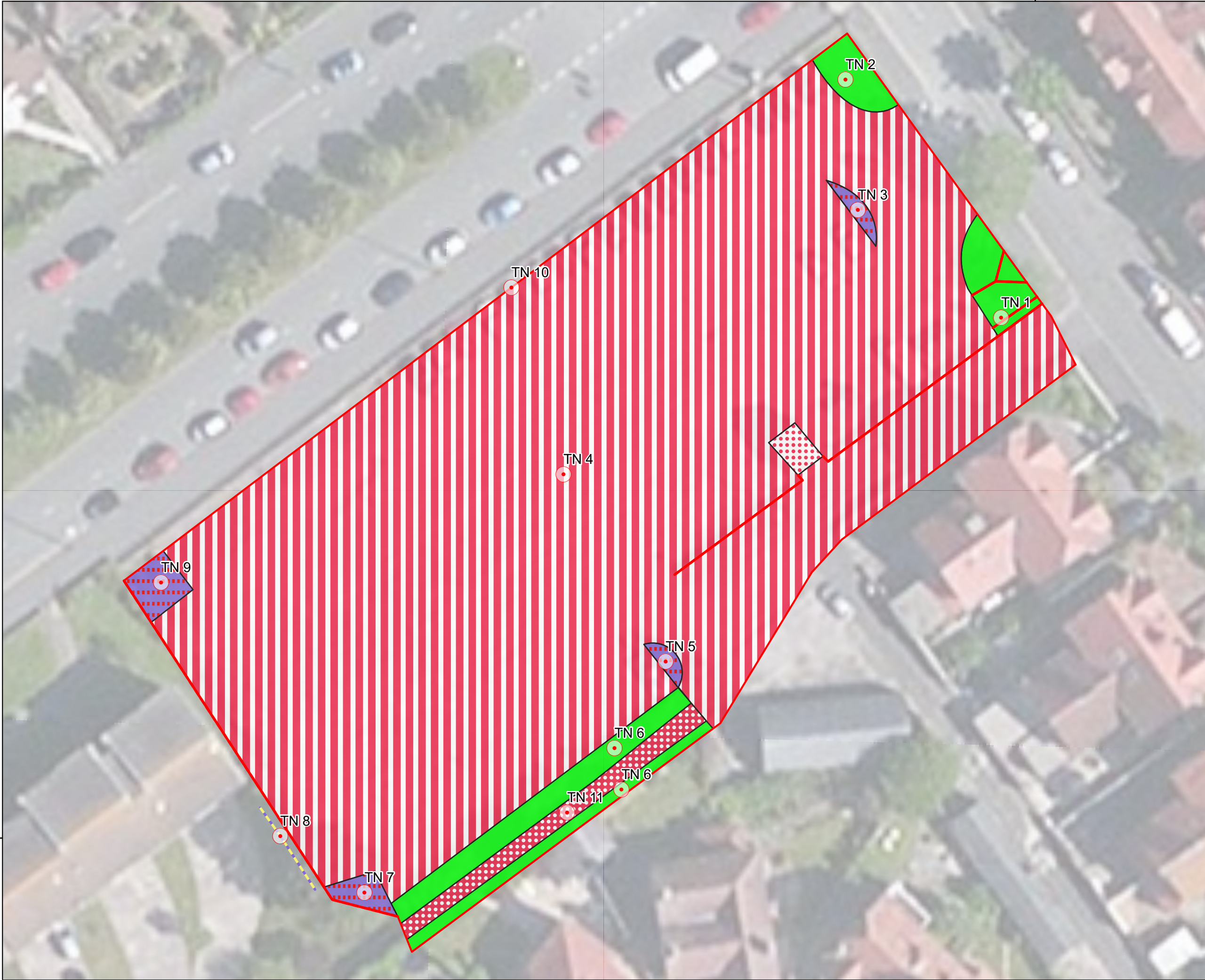
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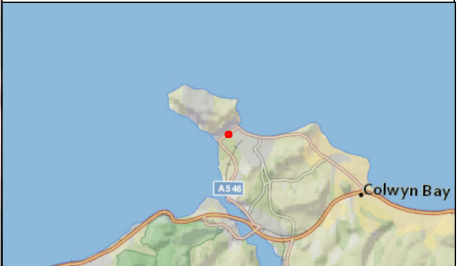
SCALE: 1:5,000 @ A3

NWSE

REV 00



- Legend:
- Site Boundary
 - g4 - Modified Grassland
 - h3h - Mixed Scrub - Introduced
 - u1b5 - Building
 - u1b - Developed Land - Sealed Surface
 - u1c - Artificial Unvegetated Surface
 - h2 - Hedgerow
 - u1e - Built Linear Feature
 - Target Note

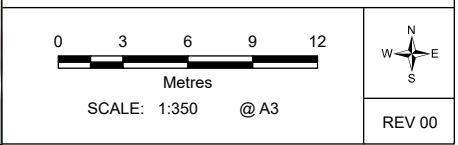


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Rev	Date	Description	Drn	Chk	App

Maelgwyn Road



TITLE: Figure 2:
UK Habitat Survey



APPENDIX A – TARGET NOTES

The locations of the following target notes are shown in *Figure 2* and referred to in the report above.

Target Note 1. An area of modified grassland with a single Ash (*Fraxinus excelsior*) tree in the south east corner. The grassland had a sward height of 3–10 cm and contained grass species including Cock's-foot (*Dactylis glomerata*), Creeping Bent (*Agrostis stolonifera*), Wall Barley (*Hordeum murinum*) and Yorkshire-fog (*Holcus lanatus*). Forb species included Broad-leaved Dock (*Rumex obtusifolius*), Common Chickweed (*Stellaria media*), Cleavers (*Galium aparine*), Daisy (*Bellis perennis*), Common Mallow (*Malva sylvestris*), Common Sorrel (*Rumex acetosa*), Creeping Buttercup (*Ranunculus repens*), Dandelion (*Taraxacum officinale* agg.), Dove's-foot Crane's-bill (*Geranium molle*), Greater Plantain (*Plantago major*), Hedge Mustard (*Sisymbrium officinale*), Herb-Robert (*Geranium robertianum*), Mind-your-own-business (*Soleirolia soleirolia*), Pellitory-of-the-wall (*Parietaria judaica*), Pineappleweed (*Matricaria discoidea*), Ribwort Plantain (*Plantago lanceolata*) and White Clover (*Trifolium repens*).

Target Note 2. A second area of modified grassland, with a sward height of 3-10 cm and localised swathes of forbs. Grass species including Cock's-foot (*Dactylis glomerata*), Creeping Bent (*Agrostis stolonifera*), Wall Barley (*Hordeum murinum*) and Yorkshire-fog (*Holcus lanatus*). Forbs species included Alexanders (*Smyrniolus olusatrum*), Broad-leaved Dock (*Rumex obtusifolius*), Daisy (*Bellis perennis*), Common Groundsel (*Senecio vulgaris*), Common Mallow (*Malva sylvestris*), Creeping Buttercup (*Ranunculus repens*), Curled Dock (*Rumex crispus*), Dandelion (*Taraxacum officinale* agg.), Dove's-foot Crane's-bill (*Geranium molle*), Germander Speedwell (*Veronica chamaedrys*), Ivy-leaved Speedwell (*Veronica hederifolia*), Pellitory-of-the-wall (*Parietaria judaica*), Pineappleweed (*Matricaria discoidea*), Common Ragwort (*Jacobaea vulgaris*), Shepherd's-purse (*Capsella bursa-pastoris*) and White Clover (*Trifolium repens*).

Target Note 3. Small area of mixed, introduced scrub that forms an ornamental stand in car park. Area is planted with Common Box (*Buxus sempervirens*), Daisy Bush (*Brachyglottis greyi*) and Rosemary (*Rosmarinus officinalis*). The ground flora consisted of self-seeded species such as Common Mallow (*Malva sylvestris*), Dandelion (*Taraxacum officinale* agg.), Field Forget-me-not (*Myosotis arvensis*), Ivy (*Hedera helix*), Pellitory-of-the-wall (*Parietaria judaica*), Pineappleweed (*Matricaria discoidea*), Scarlet Pimpernel (*Anagallis arvensis*), Wall Barley (*Hordeum murinum*), Wall Rocket (*Diplotaxis tenuifolia*) and an Elm (*Ulmus minor*) sapling.

Target Note 4. Large area of hardstanding forming the majority site, in use as an active car park. Largely devoid of vegetation, except for scattered ephemeral species around its margins including Biting Stonecrop (*Sedum acre*), Broad-leaved Dock (*Rumex obtusifolius*), Common Cornsalad (*Valerianella locusta*), Common Groundsel (*Senecio vulgaris*). Creeping Bent (*Agrostis stolonifera*), Dandelion (*Taraxacum officinale* agg.), Field Forget-me-not (*Myosotis arvensis*), Herb-Robert (*Geranium robertianum*), Pellitory-of-the-wall (*Parietaria judaica*), Pineappleweed (*Matricaria discoidea*), Scarlet Pimpernel (*Anagallis arvensis* ssp. *arvensis*), Square-stalked Willowherb (*Epilobium tetragonum*), Wall Barley (*Hordeum murinum*) and White Clover (*Trifolium repens*). These species did not provide a continuous area of habitat on site.

Target Note 5. A small area of mixed, introduced scrub, akin to *Target Note 3*, with a singular immature Norway Maple (*Acer platanoides*). This area was dominated by Daisy Bush

(*Brachyglottis greyi*) with encroaching Alexanders (*Smyrnium olusatrum*), Common Mallow (*Malva sylvestris*), Creeping Bent (*Agrostis stolonifera*), Ivy-leaved Speedwell (*Veronica hederifolia*) and Wall Barley (*Hordeum murinum*) from adjacent modified grassland (Target Note 6).

Target Note 6. An area of unmown modified grassland either side of a bare ground path with a sward height of $\leq 1\text{m}$. Grass species included large quantities of Creeping Bent (*Agrostis stolonifera*) and Wall Barley (*Hordeum murinum*), with lesser quantities of Barren Brome (*Bromus sterilis*), Cock's-foot (*Dactylis glomerata*), Perennial Rye-grass (*Lolium perenne*) and Yorkshire-fog (*Holcus lanatus*). Forbs included Alexanders (*Smyrnium olusatrum*), Bramble (*Rubus fruticosus* agg.), Broad-leaved Dock (*Rumex obtusifolius*), Cleavers (*Galium aparine*), Common Chickweed (*Stellaria media*), Daisy (*Bellis perennis*), Common Field-speedwell (*Veronica persica*), Common Mallow (*Malva sylvestris*), Common Nettle (*Urtica dioica*), Common Ragwort (*Jacobaea vulgaris*), Creeping Buttercup (*Ranunculus repens*), Dove's-foot Crane's-bill (*Geranium molle*), Field Horsetail (*Equisetum arvense*), Germander Speedwell (*Veronica chamaedrys*), Greater Plantain (*Plantago major*), Hedge Mustard (*Sisymbrium officinale*), Herb-Robert (*Geranium robertianum*), Ivy-leaved Speedwell (*Veronica hederifolia*), Pineappleweed (*Matricaria discoidea*), Red Dead-nettle (*Lamium purpureum*), Square-stalked Willowherb (*Epilobium tetragonum*), Welsh Poppy (*Papaver cambricum*) and White Clover (*Trifolium repens*).

Target Note 7. A small area of mixed, introduced scrub, likely recently planted and featuring frequent bare earth patches. Species recorded include Common Box (*Buxus sempervirens*), Common Mallow (*Malva sylvestris*), Hebe (*Hebe* sp.), Hedge Mustard (*Sisymbrium officinale*), Stinking Iris (*Iris foetidissima*), Wall Barley (*Hordeum murinum*) and White Goosefoot (*Chenopodium album*).

Target Note 8. A hedgerow c.2 m tall, 1.5 m wide that encroaches onto site, with plants rooted immediately adjacent to western boundary fence. The hedge was comprised of Holly (*Ilex aquifolium*), Red Claws (*Escallonia rubra*) and Spindle (*Euonymus europaeus*). Ground flora was lacking, with the base of the hedgerow featuring either bare earth, leaf litter and a single stand of Butterfly-bush (*Buddleja davidii*) also present.

Target Note 9. A small area of mixed, introduced scrub, dominated by Himalayan Balsam (*Impatiens glandulifera*), which is an invasive plant species listed under the Invasive Alien Species (Enforcement and Permitting) Order 2019. Additional species included Barren Brome (*Bromus sterilis*), Black Medick (*Medicago lupulina*), Butterfly-bush (*Buddleja davidii*) Cleavers (*Galium aparine*), Hedge Bindweed (*Calystegia sepium*) and Common Ragwort (*Jacobaea vulgaris*).

Target Note 10. A brick wall, with wooden fencing atop forming boundaries around the site.

Target Note 11 An unvegetated footpath in the south-west corner of the site, surrounded by modified grassland (Target Note 6).

Target Note 12. A small, brick-built substation building with pitched tile roof, located within the south-east area of the site.

APPENDIX B – PLANT SPECIES LIST

Table 2: Vascular plant species recorded from the Maelgwyn Road site on 3rd June 2021

Plant Species
Woody species
<i>Acer platanoides</i> (Norway Maple)
<i>Brachyglottis greyi</i> (Daisy Bush)
<i>Buddleja davidii</i> (Butterfly-bush)
<i>Buxus sempervirens</i> (Common Box)
<i>Escallonia rubra</i> (Red Claws)
<i>Euonymus europaeus</i> (Spindle)
<i>Fraxinus excelsior</i> (Ash)
<i>Hedera helix</i> (Ivy)
<i>Ilex aquifolium</i> (Holly)
<i>Rosmarinus officinalis</i> (Rosemary)
<i>Rubus fruticosus</i> agg. (Bramble)
<i>Thuja plicata</i> (Western Red Cedar)
<i>Ulmus minor</i> (Elm)
Herbaceous species
<i>Agrostis stolonifera</i> (Creeping Bent)
<i>Anagallis arvensis</i> (Scarlet Pimpernel)
<i>Bellis perennis</i> (Daisy)
<i>Bromus sterilis</i> (Barren Brome)
<i>Calystegia sepium</i> (Hedge Bindweed)
<i>Capsella bursa-pastoris</i> (Shepherd's-purse)
<i>Chenopodium album</i> (White Goosefoot)
<i>Dactylis glomerata</i> (Cock's-foot)
<i>Diploxys tenuifolia</i> (Wall Rocket)
<i>Epilobium tetragonum</i> (Square-stalked Willowherb)
<i>Equisetum arvense</i> (Field Horsetail)
<i>Galium aparine</i> (Cleavers)
<i>Geranium molle</i> (Doves-foot Crane's-bill)
<i>Geranium robertianum</i> (Herb-Robert)
<i>Hebe</i> sp. (Hebe)
<i>Holcus lanatus</i> (Yorkshire-fog)
<i>Hordeum murinum</i> (Wall Barley)
<i>Impatiens glandulifera</i> (Himalayan Balsam)
<i>Iris foetidissima</i> (Stinking Iris)
<i>Jacobaea vulgaris</i> (Common Ragwort)
<i>Lamium purpureum</i> (Red Dead-nettle)
<i>Lolium perenne</i> (Perennial Rye-grass)

Plant Species
<i>Malva sylvestris</i> (Common Mallow)
<i>Matricaria discoidea</i> (Pineappleweed)
<i>Medicago lupulina</i> (Black Medick)
<i>Myosotis arvensis</i> (Field Forget-me-not)
<i>Papaver cambricum</i> (Welsh Poppy)
<i>Parietaria judaica</i> (Pellitory-of-the-wall)
<i>Plantago lanceolata</i> (Ribwort Plantain)
<i>Plantago major</i> (Greater Plantain)
<i>Ranunculus repens</i> (Creeping Buttercup)
<i>Rumex acetosa</i> (Common Sorrel)
<i>Rumex crispus</i> (Curled Dock)
<i>Rumex obtusifolius</i> (Broad-leaved Dock)
<i>Sedum acre</i> (Biting Stonecrop)
<i>Senecio vulgaris</i> (Common Groundsel)
<i>Sisymbrium officinale</i> (Hedge Mustard)
<i>Smyrniolum olusatrum</i> (Alexanders)
<i>Soleirolia soleirolia</i> (Mind-your-own-business)
<i>Stellaria media</i> (Common Chickweed)
<i>Taraxacum officinale</i> agg. (Dandelion)
<i>Trifolium repens</i> (White Clover)
<i>Urtica dioica</i> (Common Nettle)
<i>Valerianella locusta</i> (Common Cornsalad)
<i>Veronica chamaedrys</i> (Germander Speedwell)
<i>Veronica hederifolia</i> (Ivy-leaved speedwell)
<i>Veronica persica</i> (Common Field-speedwell)

APPENDIX C – NOTEWORTHY SPECIES RECORDS

Table 7 displays noteworthy species records that are located within 2 km of the site boundary. These species records were obtained from Cofnod – North Wales Environmental Information Service. The Latin and common names for species are given as well as their level of designation. A glossary defining abbreviations used in the table is given in Table X, Appendix 4. If a species is not included in the table below it does not necessarily mean the species is absent from the search area, but rather that data-holding organizations do not have records of it in these locations.

Table 3: Noteworthy species records within 2 km of the site boundary

Latin Name	Common Name	Designation
Amphibians		
<i>Bufo bufo</i>	common toad	WCA5, S7
<i>Epidalea calamita</i>	natterjack toad	EPS(Sch2), WCA5, S7
<i>Lissotriton helveticus</i>	palmate newt	WCA5
<i>Lissotriton vulgaris</i>	smooth newt	WCA5
<i>Rana temporaria</i>	common frog	WCA5
Birds		
<i>Acanthis cabaret</i>	lesser redpoll	S7, Amber
<i>Actitis hypoleucos</i>	common sandpiper	Red, GB RDB(VU)
<i>Aegithalos caudatus</i>	long-tailed tit	Amber
<i>Alauda arvensis</i>	skylark	S7, Amber
<i>Alca torda</i>	razorbill	Amber
<i>Anas crecca</i>	teal	Amber
<i>Anas penelope</i>	wigeon	Amber
<i>Anas platyrhynchos</i>	mallard	Amber
<i>Anas strepera</i>	gadwall	Amber
<i>Anser albifrons</i> subsp. <i>flavirostris</i>	Greenland greater white-fronted goose	S7, Red, GB RDB(CR)
<i>Anthus pratensis</i>	meadow pipit	Amber
<i>Anthus trivialis</i>	tree pipit	S7, Amber
<i>Apus apus</i>	swift	Amber, GB RDB(EN)
<i>Arenaria interpres</i>	turnstone	Amber, GB RDB(VU)
<i>Asio flammeus</i>	short-eared owl	Red, GB RDB(EN)
<i>Aythya ferina</i>	pochard	Red, GB RDB(EN)

Latin Name	Common Name	Designation
<i>Calcarius lapponicus</i>	Lapland bunting	WCA1.1, Amber, GB RDB(VU)
<i>Calidris alba</i>	sanderling	Amber
<i>Calidris alpina</i>	dunlin	Red, GB RDB(EN)
<i>Calidris canutus</i>	knot	Red
<i>Calidris maritima</i>	purple sandpiper	WCA1.1, Amber, GB RDB(CR)
<i>Cephus grylle</i>	black guillemot	Amber
<i>Cettia cetti</i>	Cetti's warbler	WCA1.1
<i>Charadrius dubius</i>	little ringed plover	WCA1.1
<i>Charadrius hiaticula</i>	ringed plover	S7, Red, GB RDB(VU)
<i>Charadrius morinellus</i>	dotterel	WCA1.1, Amber, GB RDB(EN)
<i>Chloris chloris</i>	greenfinch	Amber, GB RDB(EN)
<i>Chroicocephalus ridibundus</i>	black-headed gull	S7, Red, GB RDB(VU)
<i>Circus aeruginosus</i>	marsh harrier	WCA1.1, Amber
<i>Circus cyaneus</i>	hen harrier	WCA1.1, S7, Red, GB RDB(VU), LBAP
<i>Clangula hyemalis</i>	long-tailed duck	WCA1.1, Red
<i>Coccothraustes coccothraustes</i>	hawfinch	S7, Amber, GB RDB(EN)
<i>Corvus cornix</i>	hooded crow	Amber
<i>Coturnix coturnix</i>	quail	WCA1.1, Amber
<i>Crex crex</i>	corncrake	WCA1.1, S7, Red
<i>Cuculus canorus</i>	cuckoo	S7, Red, GB RDB(VU)
<i>Cygnus cygnus</i>	whooper swan	WCA1.1, GB RDB(EN)
<i>Delichon urbicum</i>	house martin	GB RDB(VU)
<i>Emberiza calandra</i>	corn bunting	S7, Red
<i>Emberiza citrinella</i>	yellowhammer	S7, Red
<i>Emberiza schoeniclus</i>	reed bunting	S7, Amber
<i>Eremophila alpestris</i>	shore lark	WCA1.1, GB RDB(EN)
<i>Falco columbarius</i>	merlin	WCA1.1, Red, GB RDB(EN)
<i>Falco peregrinus</i>	peregrine	WCA1.1
<i>Falco subbuteo</i>	hobby	WCA1.1
<i>Falco tinnunculus</i>	kestrel	S7, Red, GB RDB(VU)
<i>Ficedula hypoleuca</i>	pied flycatcher	S7, Red, GB RDB(VU)
<i>Fratercula arctica</i>	puffin	Red
<i>Fringilla montifringilla</i>	brambling	WCA1.1, Amber

Latin Name	Common Name	Designation
<i>Gallinago gallinago</i>	snipe	Amber
<i>Gavia</i> sp.	a diver	WCA1.1
<i>Gavia arctica</i>	black-throated diver	WCA1.1, Amber, GB RDB(VU)
<i>Gavia immer</i>	great northern diver	WCA1.1, Amber
<i>Gavia stellata</i>	red-throated diver	WCA1.1, Amber
<i>Haematopus ostralegus</i>	oystercatcher	Amber
<i>Hydrobates pelagicus</i>	storm petrel	Amber
<i>Hydrocoloeus minutus</i>	little gull	WCA1.1, Amber
<i>Jynx torquilla</i>	wryneck	WCA1.1
<i>Larus argentatus</i>	herring gull	S7, Red, GB RDB(EN)
<i>Larus canus</i>	common gull	Red
<i>Larus fuscus</i>	lesser black-backed gull	Amber
<i>Larus marinus</i>	great black-backed gull	Red, GB RDB(EN)
<i>Larus melanocephalus</i>	Mediterranean gull	WCA1.1
<i>Limosa lapponica</i>	bar-tailed godwit	S7, Red
<i>Limosa limosa</i>	black-tailed godwit	WCA1.1, Amber, GB RDB(EN)
<i>Linaria cannabina</i>	linnet	S7, Red
<i>Linaria flavirostris</i>	twite	S7, Amber
<i>Locustella naevia</i>	grasshopper warbler	S7, Red
<i>Loxia curvirostra</i>	common crossbill	WCA1.1
<i>Lullula arborea</i>	woodlark	WCA1.1, S7, GB RDB(VU)
<i>Lymnocyptes minimus</i>	jack snipe	Amber
<i>Melanitta fusca</i>	velvet scoter	WCA1.1, Red, GB RDB(VU)
<i>Melanitta nigra</i>	common scoter	WCA1.1, S7, Amber, GB RDB(CR)
<i>Mergus serrator</i>	red-breasted merganser	Amber, GB RDB(VU)
<i>Milvus milvus</i>	red kite	WCA1.1, Amber
<i>Morus bassanus</i>	gannet	Amber
<i>Motacilla cinerea</i>	grey wagtail	Amber
<i>Motacilla flava</i>	yellow wagtail	S7, Red
<i>Muscicapa striata</i>	spotted flycatcher	S7, Red
<i>Numenius arquata</i>	curlew	S7, Red, GB RDB(EN)
<i>Numenius phaeopus</i>	whimbrel	WCA1.1, Amber, GB RDB(CR)
<i>Oceanodroma leucorhoa</i>	leach's petrel	WCA1.1, Amber

Latin Name	Common Name	Designation
<i>Pandion haliaetus</i>	osprey	WCA1.1, Amber
<i>Passer domesticus</i>	house sparrow	S7, Amber
<i>Passer montanus</i>	tree sparrow	S7, Red, GB RDB(VU)
<i>Pernis apivorus</i>	honey-buzzard	WCA1.1, Amber, GB RDB(EN)
<i>Phalacrocorax aristotelis</i>	shag	Amber, GB RDB(EN)
<i>Phalacrocorax carbo</i>	cormorant	Amber
<i>Phoenicurus ochrurus</i>	black redstart	WCA1.1, Amber, GB RDB(EN)
<i>Phylloscopus sibilatrix</i>	wood warbler	S7, Red, GB RDB(VU)
<i>Phylloscopus trochilus</i>	willow warbler	Red
<i>Picus viridis</i>	green woodpecker	Amber
<i>Platalea leucorodia</i>	spoonbill	WCA1.1, Amber, GB RDB(EN)
<i>Plectrophenax nivalis</i>	snow bunting	WCA1.1, Amber, GB RDB(EN)
<i>Pluvialis apricaria</i>	golden plover	S7, Red
<i>Pluvialis squatarola</i>	grey plover	Red, GB RDB(VU)
<i>Podiceps cristatus</i>	great crested grebe	GB RDB(VU)
<i>Prunella modularis</i>	dunnock	S7
<i>Puffinus griseus</i>	sooty shearwater	Amber
<i>Puffinus mauretanicus</i>	Balearic shearwater	S7, Red, GB RDB(VU), OSPAR
<i>Puffinus puffinus</i>	Manx shearwater	Amber
<i>Pyrrhocorax pyrrhocorax</i>	chough	WCA1.1, S7, Amber, GB RDB(VU)
<i>Pyrrhula pyrrhula</i>	bullfinch	Red
<i>Regulus ignicapilla</i>	firecrest	WCA1.1, Amber
<i>Regulus regulus</i>	goldcrest	Amber
<i>Saxicola rubetra</i>	whinchat	Red
<i>Scolopax rusticola</i>	woodcock	Red, GB RDB(VU)
<i>Somateria mollissima</i>	eider	Amber, GB RDB(VU)
<i>Stercorarius longicaudus</i>	long-tailed skua	Amber
<i>Stercorarius parasiticus</i>	arctic skua	Amber, GB RDB(CR)
<i>Sterna dougallii</i>	roseate tern	WCA1.1, S7, Red, GB RDB(EN), OSPAR
<i>Sterna hirundo</i>	common tern	Amber
<i>Sterna paradisaea</i>	Arctic tern	Red, GB RDB(VU)
<i>Sterna sandvicensis</i>	sandwich tern	Amber

Latin Name	Common Name	Designation
<i>Streptopelia turtur</i>	turtle dove	S7, Red, GB RDB(CR)
<i>Sturnus vulgaris</i>	starling	Red, GB RDB(VU)
<i>Sylvia communis</i>	whitethroat	Red
<i>Tadorna tadorna</i>	shelduck	Amber, GB RDB(EN)
<i>Tringa erythropus</i>	spotted redshank	Amber, GB RDB(EN)
<i>Tringa totanus</i>	redshank	Red, GB RDB(VU)
<i>Turdus iliacus</i>	redwing	WCA1.1, Amber, GB RDB(CR)
<i>Turdus philomelos</i>	song thrush	S7, Amber
<i>Turdus pilaris</i>	fieldfare	WCA1.1, Amber, GB RDB(CR)
<i>Turdus torquatus</i>	ring ouzel	S7, Red, GB RDB(VU)
<i>Tyto alba</i>	barn owl	WCA1.1, LBAP
<i>Uria aalge</i>	guillemot	Amber
<i>Vanellus vanellus</i>	lapwing	S7, Red, GB RDB(EN)
Fungus		
<i>Entoloma bloxamii</i>	big blue pinkgill	S7
<i>Hygrocybe spadicea</i>	date waxcap	S7
Invertebrates		
<i>Acronicta psi</i>	grey dagger	S7
<i>Acronicta rumicis</i>	knot grass	S7
<i>Aepus robinii</i>	n/a	NS, Notable:B
<i>Agrochola helvola</i>	flounced chestnut	S7
<i>Agrochola lychnidis</i>	beaded chestnut	S7
<i>Allophyes oxyacanthae</i>	green-brindled crescent	S7
<i>Amphimallon ochraceum</i>	n/a	NR, Notable:A
<i>Amphipyra tragopoginis</i>	mouse moth	S7
<i>Anania terrealis</i>	golden-rod pearl	Notable:B
<i>Andrena (Poecilandrena) labiata</i>	red-girdled mining bee	Notable:A
<i>Anobium inexpectatum</i>	n/a	Notable:B
<i>Apamea remissa</i>	dusky brocade	S7
<i>Arctia caja</i>	garden tiger	S7
<i>Argynnis adippe</i>	high brown fritillary	WCA5, S7, GB RDB(CR)
<i>Atethmia centrargo</i>	centre-barred swallow	S7
<i>Azana anomala</i>	n/a	NS
<i>Boloria euphrosyne</i>	pearl-bordered fritillary	WCA5, S7, GB RDB(EN)
<i>Boloria selene</i>	small pearl-bordered fritillary	S7
<i>Bombus (Psithyrus) rupestris</i>	red-tailed (hill) cuckoo bee	Notable:B

Latin Name	Common Name	Designation
<i>Brachysomus echinatus</i>	n/a	Notable:B
<i>Caradrina morpheus</i>	mottled rustic	S7
<i>Caryocolum vicinella</i>	coast groundling	Notable:B
<i>Cathormiocerus spinosus</i>	n/a	Notable:A
<i>Ceramica pisi</i>	broom moth	S7
<i>Ceutorhynchus resedae</i>	n/a	Notable:B
<i>Choragus sheppardi</i>	n/a	Notable:A
<i>Chrysis schencki</i>	n/a	Notable:A
<i>Cirrhia icteritia</i>	sallow	S7
<i>Cleonis pigra</i>	large thistle weevil	Notable:B
<i>Coenonympha pamphilus</i>	small heath	S7
<i>Cossus Cossus</i>	goat moth	S7
<i>Crambus pratella</i>	scarce grass-veneer	Notable:B
<i>Cryptocephalus aureolus</i>	n/a	Notable:B
<i>Cryptocephalus bipunctatus</i>	n/a	NS, Notable:B
<i>Cryptocephalus hypochaeridis</i>	n/a	NS
<i>Cupido minimus</i>	small blue	WCA5, S7
<i>Dasypolia temple</i>	brindled ochre	S7
<i>Diarsia rubi</i>	small square-spot	S7
<i>Dicranomyia aquosa</i>	n/a	Notable
<i>Diloba caeruleocephala</i>	figure of eight	S7
<i>Ecliptopera silaceata</i>	small phoenix	S7
<i>Ennomos fuscantaria</i>	dusky thorn	S7
<i>Ennomos quercinaria</i>	august thorn	S7
<i>Epirrhoe galiata</i>	galium carpet	S7
<i>Erynnis tages</i>	dingy skipper	S7, GB RDB(VU)
<i>Eugnorisma glareosa</i>	autumnal rustic	S7
<i>Euheptaulacus villosus</i>	n/a	NS, Notable:A
<i>Eulamprotes wilkella</i>	painted neb	Notable:B
<i>Euxoa nigricans</i>	garden dart	S7
<i>Euxoa tritici</i>	white-line dart	S7
<i>Geophilus gracilis</i>	n/a	NS
<i>Hemistola chrysoprasaria</i>	small emerald	S7
<i>Hepialus humuli</i>	ghost moth	S7
<i>Hipparchia semele</i>	grayling	S7, GB RDB(VU)
<i>Homoeosoma nebulella</i>	large clouded knot-horn	Notable:B
<i>Hoplodrina blanda</i>	rustic	S7

Latin Name	Common Name	Designation
<i>Idaea dilutaria</i>	silky wave	S7
<i>Ischnomera sanguinicollis</i>	n/a	NS, Notable:B
<i>Lasiommata megera</i>	wall	S7
<i>Leucania comma</i>	shoulder-striped wainscot	S7
<i>Limobius borealis</i>	n/a	Notable:A
<i>Litologia literosa</i>	rosy minor	S7
<i>Longitarsus ballotae</i>	n/a	NS, Notable:B
<i>Longitarsus obliteratus</i>	n/a	NS
<i>Malacosoma neustria</i>	lackey	S7
<i>Mallota cimbiciformis</i>	n/a	NS, Notable
<i>Malthodes pumilus</i>	n/a	NS
<i>Mecinus circulator</i>	n/a	Notable:B
<i>Mecyna asinalis</i>	coastal pearl	Notable:B
<i>Melanchra persicariae</i>	dot moth	S7
<i>Meligethes solidus</i>	n/a	Notable
<i>Mniotype adusta</i>	dark brocade	S7
<i>Nymphalis polychloros</i>	large tortoiseshell	WCA5
<i>Orthochaetes setiger</i>	n/a	Notable:B
<i>Orthosia gracilis</i>	powdered quaker	S7
<i>Oxycera morrisii</i>	white-barred soldier	NS, Notable
<i>Oxycera pardalina</i>	hill soldier	NS, Notable
<i>Oxycera pygmaea</i>	pygmy soldier	NS, Notable
<i>Paradelphomyia fuscula</i>	n/a	Notable
<i>Phycosoma inornatum</i>	silky gallows-spider	S7, NS
<i>Plebejus argus</i>	silver-studded blue	WCA5, S7, GB RDB(VU), LBAP
<i>Satyrrium w-album</i>	white-letter hairstreak	WCA5, S7, GB RDB(EN)
<i>Scopula marginepunctata</i>	mullein wave	S7
<i>Scotopteryx bipunctaria</i>	chalk carpet	S7
<i>Scotopteryx chenopodiata</i>	shaded broad-bar	S7
<i>Segestria bavarica</i>	n/a	NR
<i>Sphecodes crassus</i>	swollen-thighed blood bee	Notable:B
<i>Sphecodes ferruginatus</i>	dull-headed blood bee	Notable:B
<i>Spilosoma lubricipeda</i>	white ermine	S7
<i>Spilosoma lutea</i>	buff ermine	S7
<i>Stilbia anomala</i>	anomalous	S7
<i>Temnothorax albipennis</i>	n/a	Notable:A

Latin Name	Common Name	Designation
<i>Tholera cespitis</i>	hedge rustic	S7
<i>Tholera decimalis</i>	feathered gothic	S7
<i>Trachyploeus alternans</i>	n/a	Notable:B
<i>Tyria jacobaeae</i>	cinnabar	S7
<i>Xanthorhoe ferrugata</i>	dark-barred twin-spot carpet	S7
<i>Xestia ashworthii</i>	Ashworth's rustic	S7
<i>Xylota xanthocnema</i>	n/a	NS, Notable
Lichen		
<i>Arthonia apotheciorum</i>	n/a	NS
<i>Biatorrella fossarum</i>	n/a	GB RDB(EN), NR
<i>Caloplaca chalybaea</i>	n/a	NS
<i>Collema fragile</i>	n/a	S7, GB RDB(VU), NS
<i>Collema multipartitum</i>	n/a	NS
<i>Collema polycarpon</i>	n/a	NS
<i>Collemopsidium sublitorale</i>	n/a	NS
<i>Fuscopannaria praetermissa</i>	n/a	NR
<i>Lempholemma botryosum</i>	n/a	NS
<i>Lichenocodium lecanorae</i>	n/a	NS
<i>Merismatium deminutum</i>	n/a	NS
<i>Opegrapha parasitica</i>	n/a	NR
<i>Opegrapha rupestris</i>	n/a	NS
<i>Synalissa ramulosa</i>	n/a	S7, GB RDB(VU), NR
<i>Toninia sedifolia</i>	n/a	S7
Mammals		
Chiroptera	unidentified bat	EPS(Sch2)
<i>Delphinus delphis</i>	common dolphin	EPS(Sch2), WCA5, S7
<i>Erinaceus europaeus</i>	hedgehog	S7, GB RDB(VU)
<i>Lepus europaeus</i>	hare	S7
<i>Lutra lutra</i>	otter	EPS(Sch2), WCA5, S7, LBAP
<i>Meles meles</i>	badger	BA
<i>Mustela putorius</i>	polecat	S7
<i>Nyctalus noctula</i>	noctule bat	EPS(Sch2), WCA5, S7
<i>Phocoena phocoena</i>	common porpoise	EPS(Sch2), WCA5, S7, OSPAR
<i>Pipistrellus</i> sp.	a pipistrelle bat	EPS(Sch2), WCA5, S7
<i>Pipistrellus nathusii</i>	Nathusius's pipistrelle	EPS(Sch2), WCA5
<i>Pipistrellus pipistrellus</i>	common pipistrelle	EPS(Sch2), WCA5, S7

Latin Name	Common Name	Designation
<i>Pipistrellus pygmaeus</i>	soprano pipistrelle	EPS(Sch2), WCA5, S7
<i>Rhinolophus hipposideros</i>	lesser horseshoe bat	EPS(Sch2), WCA5, S7
<i>Tursiops truncatus</i>	bottle-nosed dolphin	EPS(Sch2), WCA5, S7
Plants		
<i>Anacamptis morio</i>	green-winged orchid	GB RDB(VU)
<i>Antennaria dioica</i>	mountain everlasting	GB RDB(VU)
<i>Anthemis cotula</i>	stinking chamomile	GB RDB(VU)
<i>Aster linosyris</i>	goldilocks aster	GB RDB(EN), NR
<i>Botrychium lunaria</i>	moonwort	GB RDB(VU)
<i>Brassica oleracea</i>	wild cabbage	NS
<i>Calystegia soldanella</i>	sea bindweed	GB RDB(VU)
<i>Centaurea cyanus</i>	cornflower	S7
<i>Centaurium littorale</i>	seaside centaury	NS
<i>Cerastium pumilum</i>	dwarf mouse-ear	NS
<i>Chenopodium murale</i>	nettle-leaved goosefoot	GB RDB(EN)
<i>Cichorium intybus</i>	chicory	GB RDB(VU)
<i>Clinopodium acinos</i>	basil thyme	S7, GB RDB(VU)
<i>Cotoneaster cambricus</i>	wild cotoneaster	WCA8, S7, GB RDB(CR), NR, LBAP
<i>Cyperus longus</i>	galingale	NS
<i>Didymodon icmadophilus</i>	slender beard-moss	NR
<i>Epipactis atrorubens</i>	dark-red helleborine	NS
<i>Erica vagans</i>	Cornish heath	NR
<i>Euphorbia exigua</i>	dwarf spurge	GB RDB(VU)
<i>Euphrasia confusa</i>	eyebright	GB RDB(VU)
<i>Fumaria purpurea</i>	purple ramping-fumitory	S7, GB RDB(VU), NS
<i>Galeopsis speciosa</i>	large-flowered hemp-nettle	S7, GB RDB(VU)
<i>Genista tinctoria</i>	Dyer's greenweed	GB RDB(VU)
<i>Gentianella campestris</i>	field gentian	S7, GB RDB(EN)
<i>Grimmia tergestina</i>	dapple-mouthed grimmia	NR
<i>Gymnadenia conopsea</i>	fragrant orchid	S7
<i>Helianthemum oelandicum</i> subsp. <i>incanum</i>	rock-rose	NS
<i>Helleborus foetidus</i>	stinking hellebore	NS
<i>Hieracium britannicoides</i>	confused hawkweed	NR
<i>Hieracium pseudoleyi</i>	hawkweed	NR
<i>Hippophae rhamnoides</i>	sea-buckthorn	NS
<i>Hornungia petraea</i>	hutchinsia	NS

Latin Name	Common Name	Designation
<i>Hyacinthoides non-scripta</i>	bluebell	WCA8
<i>Hyoscyamus niger</i>	henbane	GB RDB(VU)
<i>Hypochaeris maculata</i>	spotted cat's-ear	GB RDB(VU), NR
<i>Juniperus communis</i>	juniper	S7
<i>Lythrum hyssopifolia</i>	grass-poly	WCA8, GB RDB(EN), NR
<i>Marrubium vulgare</i>	white horehound	NS
<i>Meconopsis cambrica</i>	welsh poppy	NS
<i>Medicago sativa</i> subsp. <i>falcata</i>	sickle medick	NS
<i>Minuartia verna</i>	spring sandwort	NS
<i>Neottia nidus-avis</i>	bird's-nest orchid	GB RDB(VU)
<i>Polypogon monspeliensis</i>	annual beard-grass	NS
<i>Potamogeton coloratus</i>	fen pondweed	NS
<i>Potentilla tabernaemontani</i>	spring cinquefoil	NS
<i>Rosa agrestis</i>	small-leaved sweet-briar	NS
<i>Salsola kali</i> subsp. <i>kali</i>	prickly saltwort	S7, GB RDB(VU)
<i>Silene gallica</i>	small-flowered catchfly	S7, GB RDB(EN), NS
<i>Silene nutans</i>	Nottingham catchfly	NS
<i>Sorbus rupicola</i>	rock whitebeam	NS
<i>Valerianella eriocarpa</i>	hairy-fruited cornsalad	NR
<i>Veronica spicata</i>	spiked speedwell	WCA8, NS
Reptiles		
<i>Anguis fragilis</i>	slow-worm	WCA5, S7, LBAP
<i>Lacerta agilis</i>	sand lizard	EPS(Sch2), WCA5, S7, LBAP
<i>Natrix helvetica</i>	grass snake	WCA5, S7, LBAP
<i>Zootoca vivipara</i>	common lizard	WCA5, S7, LBAP

APPENDIX D – ABBREVIATIONS

Table 4 displays abbreviations of protected species legislation.

Table 4: Glossary of abbreviations used in this report

Code	Full Title	Explanation
Amber	Amber list	Amber listed species have a population status in the UK of medium conservation concern.
BA	The Protection of Badgers Act 1992	Legislation making it an offence to kill, injure or take a badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.
BAP	Biodiversity Action Plan	A plan that identifies threats to significantly important species and habitats, and sets out targets and actions to enhance or maintain biodiversity.
DA	The Deer Act 1991	All wild deer with the exception of muntjac (<i>Muntiacus reevesi</i>) and Chinese water deer (<i>Hydropotes inermis</i>) are protected by a closed season.
ENG BSBI RDB	A Vascular Plant Red List for England	A list published in 2014 by the Botanical Society of Britain and Ireland of the red list status of plants in England. Measured against standardised IUCN criteria.
ENG BSBI RDB(CR)	Critically Endangered	A BSBI Red List designation for species at an extremely high risk of extinction.
ENG BSBI RDB(EN)	Endangered	A BSBI Red List designation for species at a very high risk of extinction.
ENG BSBI RDB(VU)	Vulnerable	A BSBI Red List designation for species at high risk of extinction.
EPS (Sch 2)	European Protected Species (Schedule 2)	European protected species (listed on Schedules 2 of The Conservation of Habitats and Species Regulations 2017)
EPS (Sch 5)	European Protected Species (Schedule 5)	European protected species (listed on Schedules 5 of The Conservation of Habitats and Species Regulations 2017)
GB RDB	Red Data Book Species	Species identified in one of the UK Red Data 2001.
GB RDB(CR)	Critically Endangered	An IUCN Red List designation for species at an extremely high risk of extinction.
GB RDB(EN)	Endangered	An IUCN Red List designation for species at a very high risk of extinction.
GB RDB(VU)	Vulnerable	An IUCN Red List designation for species at high risk of extinction.
HAP	Habitat Action Plan	A plan that identifies threats to a priority habitat and sets out targets and actions to enhance or maintain that habitat.

Code	Full Title	Explanation
IUCN	International Union for Conservation of Nature and Natural Resources (also known as The World Conservation Union)	A worldwide partnership and conservation network to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.
LBAP	Local Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in species action plans and habitat action plans to enhance or maintain biodiversity at the county or regional level.
LHAP	Local Habitat Action Plan	A plan that identifies threats to a locally important priority habitat and sets out targets and actions to enhance or maintain that habitat.
LSAP	Local Species Action Plan	A plan that identifies threats to locally important species, and sets out targets and actions to prevent losing that species from the local area.
Notable	Scarce and threatened invertebrates	Invertebrate species which are estimated to occur within the range of 16 to 100 10km squares but subdivision into Notable A and Notable B categories is not possible as there is insufficient information available).
Notable:A	Scarce and threatened invertebrates	Taxa which do not fall within Red Data Book categories but which are none-the-less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid or, for less well-recorded groups, within seven or fewer vice-counties.
Notable: B	Scarce and threatened invertebrates	Taxa which do not fall within Red Data Book categories but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10km squares of the National Grid or, for less-well recorded groups between eight and twenty vice-counties.
NN	Nationally Notable	Designation for invertebrate taxa that are thought to be notably important in the UK.
NR	Nationally Rare	Species in 15 or fewer hectads in Great Britain.
NS	National Scarce	Species in 16-100 hectads in Great Britain.
OSPAR	OSPAR	Species listed on The Convention for the Protection of the Marine Environment of the North-East Atlantic
Red	Red List	Red listed species have a population status in the UK with high conservation concern.
SAP	Species Action Plan	A plan that identifies threats to significantly important species, and sets out targets and actions to prevent losing that species to extinction.
S41	Species of Principal Importance	Species of principal importance in England under The Natural Environment and Rural Communities (NERC) Act (2006)

Code	Full Title	Explanation
UKBAP	UK Biodiversity Action Plan	A plan that identifies threats to locally important species and habitats, and sets out targets and actions in Species Action Plans and Habitat Action Plans to enhance or maintain biodiversity in the UK.
WCA	The Wildlife and Countryside Act 1981 (as amended)	Containing 4 Parts and 17 Schedules, the Act covers protection of wildlife (birds, and some animals and plants), the countryside, National Parks, and the designation of protected areas, and public rights of way. All wild plants in Britain are protected from intentional uprooting by an unauthorized person, but land owners, land occupiers, persons authorized by either of these or persons authorized in writing by the Local Authority for the area are exempt. Protection for some species may be limited to certain Sections of the Act (<i>e.g.</i> S13(2)).
WCA1	Schedule 1 of The Wildlife and Countryside Act 1981 (as amended)	<p>This Schedule lists birds protected by special penalties at all times, but virtually all wild birds have some protection in law.</p> <p>Acts which are prohibited for all wild birds (except derogated 'pest' species) include intentional killing, injuring or taking; taking, damaging or destroying nests in use or being built; taking or destroying eggs; possessing or having control of (with certain exceptions but including live for dead birds, parts or derivative); setting or permitting certain traps, weapons, decoys or poisons. Selling, offering or exposing for sale, possessing or transporting for sale any live wild bird, egg or part of an egg or advertising any of these for sale, or dead wild bird including parts or derivatives are also prohibited. Many birds must be formally registered and ringed if kept in captivity.</p> <p>Schedule I WCA birds are additionally protected from intentional or reckless disturbance while building a nest, or when such a bird is in, on or near a nest containing eggs or young, or intentional or reckless disturbance of dependent young.</p>
WCA5	Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)	Schedule 5 animals are protected from intentional killing, injuring or taking; possessing (including parts or derivatives); intentional or reckless damage, destruction or obstruction of any structure or place used for shelter or protection; selling, offering or exposing for sale, possessing or transporting for the purpose of sale (alive or dead, including parts or derivatives). Protection of some species is limited to certain Sections of the Act (<i>e.g.</i> S9(1), S9(4a), S9(4b), S9(5)).
WCA8	Schedule 8 of The Wildlife and Countryside Act 1981 (as amended)	Plants and fungi protected from intentional picking, uprooting, destroying, trading (including parts or derivatives), <i>etc.</i>

APPENDIX E – PROTECTED SPECIES LEGISLATION

This section provides an overview of relevant specific legislation and policy.

Legislation

International and national legislation relating to this assessment include:

- Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (Ramsar Convention);
- Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds 2009 (Birds Directive);
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora 1992 (Habitats Directive);
- Convention on the Conservation of European Wildlife and Natural Habitats 1979 (Bern Convention);
- Convention on the Conservation of Migratory Species of Wild Animals 1979 (Bonn Convention).
- Wildlife and Countryside Act 1981 as amended (WCA);
- Conservation of Habitats and Species Regulations 2017 (Habitat Regulations);
- Countryside and Rights of Way (CROW) Act 2000;
- Environment (Wales) Act 2016;
- Protection of Badgers Act 1992;
- UK Biodiversity Action Plan BAP (now superseded by the UK Post-2010 Biodiversity Framework)

The Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 provide comprehensive protection to a range of animals and plants listed in Schedules 2 and 5 of the Regulations, respectively (known as 'European protected species' (EPS)). The key part of this legislation in relation to the proposed works is Regulation 43, copied below:

“43. (1) A person who—
(a) deliberately captures, injures or kills any wild animal of a European protected species,
(b) deliberately disturbs wild animals of any such species,
(c) deliberately takes or destroys the eggs of such an animal, or
(d) damages or destroys a breeding site or resting place of such an animal,
is guilty of an offence.
(2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—
 (i) to survive, to breed or reproduce, or to rear or nurture their young, or
 (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate;
 or
 (b) to affect significantly the local distribution or abundance of the species to which they belong.”

Wildlife and Countryside Act 1981

An addition to the Regulations, above, the Act provides additional protection for EPS, and protection of a range of other animals and plants listed in Schedules 5 and 8 of the Act, respectively. The key part of this legislation in relation to the proposed works are in Section 9, copied below:

“9 Protection of certain wild animals

- ...
 (4) Subject to the provisions of this Part, a person is guilty of an offence if intentionally or recklessly—
 ...
 (b) he disturbs any such animal while it is occupying a structure or place which it uses for shelter or protection; or
 (c) he obstructs access to any structure or place which any such animal uses for shelter or protection.”

There is no provision within the Act for a derogation licences to be issued for the purposes of development, although Section 10 Part (3)(c) provides a defence in cases that may be considered to be: “the incidental result of a lawful operation and could not reasonably have been avoided.”

(Note: Section 16 of the Act does make provision for derogation licences to be issued “for the purposes of preserving public health or public ... safety”, which might be applicable to the proposed works. For confirmation of this, it would be appropriate to consult Natural Resources Wales.)

General

This section briefly describes the legal protection afforded to the protected species referred to in this report. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

Great crested newt

Great crested newts are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and receives full protection under Section 9. Great crested newts are also European Protected Species listed on The Conservation of Habitats and Species Regulations 2017 (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a great crested newt;
- deliberately disturb a great crested newt (in such a way as to be likely to significantly affect, (i) the ability of a significant group of great crested newt to survive, breed or

rear/nurture their young; and (ii) the local distribution or abundance of the species concerned);

- deliberately take or destroys the eggs of such an animal;
- damage or destroy a breeding site or resting place of a great crested newt; and
- possess, control, transport, sell, exchange a great crested newt, or offer a great crested newt for sale or exchange.

All resting and breeding places of great crested newts receive legal protection even when great crested newts are not present.

Reptiles

Common lizard, grass snake, slow-worm and adder are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), in respect of Section 9(5) and part of Section 9(1).

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

Birds

Birds - general protection

All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). The protection was extended by the CRow Act. The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Birds (specially protected species)

Certain species of bird are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5) of the Act. The protection was extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

Bats

All species of British bat are protected by The Wildlife and Countryside Act 1981 (as amended), extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- intentionally kill, injure or take;
- possess or control;
- intentionally or recklessly damage, destroy or obstruct access to a breeding site or resting place; and
- intentionally or recklessly disturb whilst the animal occupies a breeding site or resting place.

Bats are also European protected species listed on The Conservation of Habitats and Species Regulations 2017. This legislation makes it an offence to:

- deliberately capture, injure or kill;
- deliberately disturb, including in particular any disturbance which is likely (a) to impair their ability - (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) hibernate or migrate, where relevant; or (b) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place; and
- possess, control, transport, sell, exchange, or offer for sale or exchange.

Badger

Badgers (*Meles meles*) are protected in Britain under the Protection of Badgers Act 1992 and Schedule 6 of The Wildlife and Countryside Act 1981 (as amended). The legislation affords protection to badgers and badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a badger sett; or
- to disturb a badger when it is occupying a sett.

Hazel dormouse

The hazel dormouse is protected by The Wildlife and Countryside Act 1981 (as amended), extended by the Countryside and Rights of Way Act 2000. This legislation makes it an offence to:

- Intentionally kill, injure or take a dormouse;
- Possess or control any live or dead specimen or anything derived from a dormouse (unless it can be shown to have been legally acquired);
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse; or
- Intentionally or recklessly disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

The dormouse is also European Protected Species listed on The Conservation of Habitats and Species Regulations 2017. This legislation makes it an offence to:

- Deliberately capture or kill a dormouse;
- Deliberately disturb a dormouse;
- Damage or destroy a breeding site or resting place of a dormouse;
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead dormouse or any part of a dormouse.

Other Mammals

All wild mammals are protected by The Wild Mammals (Protection) Act 1996 (as amended). This legislation makes it an offence to mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal.



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