PRELIMINARY ECOLOGICAL ASSESSMENT

for the

FORMER WHITLAND DAIRY

ST MARY'S STREET

WHITLAND

CARMS SA34 0BY

CLIENT: Obsidian Developments Ltd

Report prepared by:

Habitat Matters Ltd

Llyn-y-Gors

Tenby Rd

St Clears

Carms SA33 4JP

(T) 0779 169 7791

Habitat Matters Ltd

CONTENTS

This report was prepared for the specific purpose of carrying out a Preliminary Ecological Appraisal for a proposed development on land on the former Whitland Dairy and no liability will be accepted for use for other purposes or by third parties. Information supplied by the client and third parties has been taken as being correct and no liability can be accepted for errors and omissions. It has been assumed that the client has disclosed all relevant information whether asked for or not.

EXECUTIVE SUMMARY

Habitat Matters Ltd was instructed by Obsidian Developments Ltd, to provide a preliminary ecological assessment (PEA) in relation to a proposed residential development on land on part of the former Whitland Dairy site in St Mary's Street, Whitland.

The site is an area of concrete and footings for the original buildings which have been cleared since the factory ceased trading. It is bordered by the Afon Gronw on the eastern side, the mainline railway on the south and residential development to the north and west.

It is considered that overall there will be no negative impact on the local or regional ecology through the development of the site. Mitigation measures will be included to protect the dark river corridor from light spill.

Enhancement measures will be included that will have a positive impact on the biodiversity interest of the site and the local area. These include bird and bat boxes and bee bricks within the new houses, hedgehog gateways, use of pollinator seed mixes in the SUDS area and tree planting along the southern boundary of the site.

1.0 INTRODUCTION

Habitat Matters Ltd was instructed by the client, Obsidian Developments Ltd, to provide an ecological assessment for an area of land at the former Whitland Dairy in St Mary's Street, Whitland. The assessment will inform a planning submission for residential development on the site (as detailed in Site Layout Plan 2200 SP-01).

(*The location of the site is shown at Appendix 1).*

1.1 SITE DESCRIPTION & ECOLOGICAL CONTEXT

(*Photos of the site are included at Appendix 4*)

The survey site is located on the south-eastern side of the town at OS Grid Reference SN201165. The land is within the LDP settlement boundary.

Following previous demolition works on the site, the ground is fairly disturbed and comprises a level area of concrete hardstandings, extending to 1.5ha, on the western side of the former Whitland Dairy. It is bordered by the Afon Gronw to the east, the mainline railway to the south, houses to the north and St Mary's Street to the north-west. There is a small public car-park in the south-western corner.

2.0 METHODOLOGY

The survey, assessment and reporting was carried out in-line with the Preliminary Ecological Appraisal (2012) guidelines produced by the Chartered Institute of Ecology & Environmental Management (CIEEM), the Phase 1 Habitat Survey methodology (JNCC 2010), the British Standards for Biodiversity: Code of Practice for Planning and Development (BS42020:2013) and other relevant species best practice guidelines.

Following an initial desk study, a walk-over survey of the site was carried out to assess the habitat, the potential value for various species and any potential constraints for the development.

2.1. Desk Study

A desk-study was carried out prior to the field survey. This included reference to:

- OS Maps and Google Earth images in order to identify potential areas of habitat interest that may be impacted by the proposals or may support species that could be affected.
- BS:42020 and best practise guidelines
- Carmarthenshire Biodiversity Action Plan
- Biodiversity data, obtained from WWBIC/ Aderyn
- MAGIC map, Defra
- Relevant legislation, including Future Wales Policy 9, TAN5 and the Carmarthenshire County Council's Natural Environment & Biodiversity Draft SPG.

Landscape Context

The site and wider landscape was assessed using Google Earth aerial images and Ordnance Survey maps. This enabled an assessment to be made of off-site features and habitats, and therefore the potential impact of the development on the local biodiversity. The proximity of different habitats and the connectivity of linear features between areas of habitat outside the site boundary and the site itself were included within this assessment.

The main residential area of the town lies to the north and west of the site. The nearby houses are predominantly terraced properties, fronting the street but with small rear gardens. There is a large area of previously developed land on the eastern side of the Afon Gronw, also part of the former creamery site. A small wooded area has established on the eastern bank of the river, close to the bridge over the B4238 main road through Whitland. The wooded area extends along the river to the north of the bridge to areas of woodland and mature hedgelines around semi-improved grassland fields on the northern side of the town. The eastern bank of the river is vegetated with scrub, bramble and semi-mature trees running downstream to the mainline railway and the Afon Taf, approximately 300m to the south. There is no vegetation on the western bank of the river where it flows past the survey site.

The landscape surrounding Whitland is predominantly agricultural, with medium to large fields divided by a network of hedgerows and some tree lines. The A40 trunk road by-passes the town, approximately 1km north of the site.

2.2 Phase 1 Habitat Survey

A walk-over field survey of the proposed site and the immediate area, where accessible, was carried out by Fiona Lanc of Habitat Matters Ltd, on the 20th October 2022. Conditions were dry and bright during the survey and allowed an assessment to be made of the habitats. The

suitability of the recorded habitats for supporting different animal species, including signs and incidental sightings, was also considered during the survey.

The survey provided an assessment of the habitat types and the likelihood of the development having an impact on protected fauna. It included:

- A survey for non-native invasive species, including Japanese Knotweed.
- A search for signs of badger activity on the site
- An assessment of the potential for impact on birds, including suitable nest sites within the area.
- An assessment of the potential impact of the development on bats
- An assessment of the potential impact on reptiles
- An assessment of the potential impact on otters & water voles

3.0 EVALUATION OF ECOLOGICAL FEATURES & IDENTIFICATION OF POTENTIAL IMPACTS

3.1 HABITATS

3.1.1 Protected Sites

There are no protected sites with a statutory designation close to the site. The Afon Gronw, a tributary of the Afon Taf flows along the eastern boundary; the Taf is designated as the Taf Estuary SSSI approximately 6km downstream (as the crow flies), at the upper tidal limit.

The site lies within a B-Lines designated area. This is a voluntary UK-wide initiative to create "insect pathways" through the landscape by creating or restoring pollinator habitats to link existing wildlife areas, thereby making a major contribution towards the National Pollinator Strategy.

3.1.2 Habitat Survey

The survey identified three habitat types on the site, described as follows:

<u>Brownfield</u>

The former dairy is a brownfield site, defined as land previously occupied by industrial or other human uses but which has now become disused, derelict or is currently unoccupied.

The proposed development site comprises wide level areas of open concrete and footings of the original buildings on the site, these remaining after demolition of the former creamery. As a result, it has been disturbed over the last few years and there are several piles of earth,

rubble and cut vegetation; some areas appeared to have been levelled recently. It is considered that the large extent of concrete hard-standings makes the site unsuitable for open mosaic habitat to develop.

Ruderal vegetation has established across the site, exploiting gaps and cracks between concrete slabs; species noted during the survey include bramble (*Rubus fruticosus*), rosebay willowherb (*Chamaenerion angustifolium*), Himalayan honeysuckle (*Leycesteria Formosa*), stonecrop, teasel (*Dipsacus*), ragwort (*Senecio jacobaea*), *Buddleia*, hemp agrimony (*Eupatorium cannabinum*), great mullein (*Verbascum thapsus*) and immature willow (*Salix*).

The southern part of the site is more vegetated (possibly a covering of soil was spread here during initial clearance works) and includes bramble, rosebay willowherb, coltsfoot (*Tussilago farfara*), horsetail (*Equisetum arvense*), creeping thistle (*Cirsium arvense*), dandelion (*Taraxecum* sp) and wild mustard (*Sinapis arvensis*).

It is considered that there will be no detrimental impact on the ecology of the site as a result of the development.

Boundaries

The site boundaries are described as follows:

The **western boundary** is a vertical, shuttered concrete wall, approximately 1m high on the site side but dropping steeply down on the Afon Gronw side. This effectively provides a barrier between the channel and the site and prevents good ecological connectivity; as such, it is of no ecological interest.

The **southern boundary** is a 1.8m high wire mesh fence, separating the site from the mainline railway. There is a 1m wide concrete pathway on the site side, running parallel with the fence and, on the railway side of the fence, a number of semi-mature sycamore (*Acer pseudoplatanus*) and willow (*Salix*) trees have established; these are within a vegetated strip along the railway embankment which includes bramble, buddleia and rosebay willowherb.

The **north-western** boundary is open to St Mary's Street but currently fenced with temporary fencing. The **western corner**, around the car-park, is fenced off with a low post and rail fence. There is a high brick wall (part of a former building) between the carpark and the railway fence. The **northern** edge of the site is the rendered gable wall of the adjacent house with a high stone boundary wall (pointing in good condition) alongside the garden.

There will be no detrimental impact on the boundaries from the development.

Watercourse

The Afon Gronw, a tributary of the Afon Taf, flows in a deep concrete-sided channel on the eastern boundary. There is no fence or other boundary feature between the site and the river, other than a 1m high concrete wall which extends to below water level on the riverside. The land adjacent to the river is predominantly concrete hardstanding although more vegetated on top of hard surfacing toward the southern end of the site. Occasional surface water drains from the site outfall into the river. Due to the concrete boundary wall, the ecological value of the river bank on the western side is considered to be low.

The watercourse and associated banks are likely to be a wildlife corridor and may be used by commuting or foraging bats and otters moving through their territory; as such, the riparian corridor is considered to be of medium to high habitat value although it has been modified in the past by various engineering works.

Policy EP1: Water and Environment Capacity sets out the requirement to safeguard watercourses through biodiversity/ecological buffer zones and corridors to protect riparian habitats and species, water quality and floodplain capacity. Although there are no proposals to realign or otherwise adjust the watercourse, mitigation measures will be required to protect the watercourse as a dark corridor.

3.1.3 Invasive Non-Native Species

There was no evidence of invasive species such as Japanese Knotweed (*Fallopia japonica*) or Himalayan balsam (*Impatiens glandulifera*), on the site. However, given that some areas of the site have been disturbed recently, it is recommended that a walkover survey is carried out in the growing season before development commences and, if either of these species are found to be present, appropriate action is taken to control them; this should be agreed with Carmarthenshire County Council and Natural Resources Wales including, if necessary, a suitable herbicide treatment for use near watercourses.

A small number (2-3) of Wall Cotoneaster (*C. horizontalis*) plants have established along the adjoining property wall on the northern boundary. This species is a non-native invasive and is listed in Section 9 of the Wildlife & Countryside Act, making it an offence to plant or otherwise cause it to grow in the wild. It does not appear to have spread elsewhere on the site but will need to be controlled, ideally through cutting and stump treatment with herbicide to avoid wider establishment.

While there is no statutory requirement to control or eradicate these invasive weeds, it is the responsibility of the landowner to prevent any spread to adjoining land.

3.2 SPECIES

An assessment was carried out into the suitability of the site and adjacent areas for a number of animal species including those listed under the Conservation of Habitats and Species Regulations 2010 (as amended); the Wildlife and Countryside Act 1981 (as amended); the Natural Environment and Rural Communities (NERC) Act 2006 Section 42 Habitats or Species of Principle Importance for Conservation of Biological Diversity in Wales; UK Biodiversity Action Plan (UK BAP) priority species or Local BAP (LBAP) priority species; Nationally rare or nationally scarce species; and, Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists).

The Aderyn data search showed no records of priority species or species of conservation concern within the immediate area.

Bats

There are no trees or buildings within the site that might provide a suitable bat roost. There are the remains of an old brick wall in the western corner of the site with a vertical gap (shallow depth and open at the top) between two brick sections on a piece of wall jutting into the site. This was assessed for potential as a bat roost and was considered to be too open to the elements and to predators to be suitable. This wall is to be retained.

The river is a dark corridor and likely to be used by commuting and foraging bats, particularly species such as Daubenton.

Overall, it is considered that there will be no negative impact on the local bat population as a result of the proposed development but mitigation measures will be required to maintain the dark corridor. Enhancement measures included within the proposals will provide roost opportunities.

Birds

Overall, the on-site vegetation provides little opportunity for nesting songbirds. However, the brambles or debris piles, although fairly low and prone to predation from cats, may be used by small birds such as robins or wrens.

There are several records of Dipper (*Cinclus cinclus*) on the Gronw, a bird associated with fast flowing rivers. Kingfishers (*Althedo asshis*) have also been recorded, particularly on the nearby Taf. Other species of bird are likely to use the river for feeding and as a habitat corridor to other areas nearby; the vegetation on the opposite bank is valuable nesting cover.

It is considered that there will be no negative impact on the local bird population as a result of the proposed development; there will be no disturbance to the river and this will be retained as a dark corridor. New nesting opportunities will be provided within the development.

Badgers

The site was assessed for badger activity (including tracks, latrines, snuffle holes and more extensive digging). There was no sign of badgers within the survey area or the adjacent land.

Otters

Although the Aderyn data provides only a single record of an otter (*Lutra lutra*) sighting on the Afon Taf, 300m downstream of the site, the Taf and it's tributaries are known to be good otter habitat and it is likely that the Gronw will be used by this species when moving through the territory. There are no suitable sites for a breeding or resting holt on the concrete sided river channel alongside the site.

The river is too fast flowing and the channel sides provide inhospitable conditions for water vole.

It is considered that there will be no negative impact on these species as a result of the proposed development; there will be no disturbance to the river and this will be retained as a dark corridor.

Reptiles

Brownfield sites are often good reptile habitat. While the former creamery site has several heaps of earth and rubble which could provide suitable reptile refuge, overall, the site is considered to be sub-optimal for these species due to being isolated from good habitat and having poor connectivity.

Other Notable Species

Hedgehogs have been recorded at several locations within the town, the closest being approximately 150m from the site. The site itself is not currently considered to be good hedgehog habitat but as it develops to provide areas of new habitat, including gardens, it may become more attractive.

4.0 RECOMMENDATIONS FOR FURTHER SURVEY WORK

4.1 There are no recommendations for further survey work under the current proposals.

5.0 MITIGATION AND ENHANCEMENT

5.1 MITIGATION

The Mitigation Hierarchy has been considered as part of the site development, as follows:

1. **Avoid** – the site is included within the LDP and the development has been designed specifically for this location. The land has low ecological value and development will enable a number of biodiversity enhancements to be included.
2. **Minimise** – the development has been designed to utilise the area but to avoid an impact on ecological features, such as the river.
3. **Rehabilitate / restore** – ecological enhancements will be included that will restore areas of open concrete on the site to provide biodiversity value.
4. **Offset** – unnecessary.

Mitigation measures are included, as follows:

<u>Lighting</u>

Light pollution due to increased nocturnal light levels, could potentially have a detrimental impact on wildlife, particularly otters and foraging bats, using the dark river corridor and deter these species from using the river. Birds nesting in the vegetation on the eastern river bank may also be affected and may be encouraged to start an earlier dawn chorus or the extra light may even trigger some species, such as robins, to sing during the night. These changes in natural behaviour can impact on bird reproduction. In addition, increased nocturnal light levels can make roosting birds more visible to predators. Unmitigated development could potentially have a detrimental impact on the local songbird population.

A dark corridor will be maintained along the Afon Gronw by controlling any necessary outdoor lighting on the nearest properties with a time / motion sensor to avoid overnight lighting. Lighting along the access road next to the river will also be controlled with a time sensor, directed into the site and will not remain on overnight.

Reptiles

As the site is sub-optimal for these species, a reptile survey is likely to be inconclusive and provide little evidence of their presence. Nevertheless, to follow good practise, the vegetation on the southern part of the site will be kept mown short prior to and during construction. The debris heaps will be dismantled carefully over the winter (outside the bird nesting season) under ecological supervision and, if a reptile is found, it will be transferred carefully away from the construction area.

5.2 ENHANCEMENT MEASURES

The development will include a number of measures to improve wildlife interest and enhance the local biodiversity and green network infrastructure. This will be achieved as follows:

i. Landscape planting will provide an overall positive impact on the biodiversity value of a site and the local area. New habitats will be created through planting small areas of native tree and shrub species within the site and, over time, gardens will develop.
ii. Approximately 130m x 3m of mixed, native tree and shrub planting will be carried out along the southern boundary of the site to provide new woodland habitat against the railway, improved wildlife linkages, feeding and nesting sites for birds and small mammals and enhance the existing boundary. Species will include rowan (*Sorbus aucuparia*), wild cherry/gean (*Prunus avium*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*.
iii. Pollinator-friendly plants will be included in the landscape planting for insects and bee bricks will be included on each property, built into a sheltered south or west facing wall
iv. Hedgehog gateways will be included in all fences between gardens
v. Integrated bat boxes will be included on 50% of houses with 1 on each of the houses on the eastern boundary.
vi. A bird nesting feature will be provided on each property – all roofs will overhang and be suitable for eg: house martins. Bird nesting blocks will be incorporated in eaves / verge and nesting facility within N or E facing walls for eg: house sparrows.
vii. The SUDS ponds will hold a given amount of water at all times and will provide natural water body / wetland habitat with appropriate planting
viii. Pollinator planting – pollinator friendly, local provenance seed mix will be used within SUDS areas.

ix. Reduced mowing frequency of grassland will be carried out around SUDS ponds to encourage native wildflowers to seed, improved vegetation structure and habitat for insects and small mammals.

x. Light management will ensure that no lights are directed onto the river corridor.

The ecological enhancements are summarised at Appendix 3.

6.0 REFERENCES

BS 42020: Biodiversity – Code of Practice for Planning & Development

List of Species & Habitats of Principle Importance for Conservation of Biological Diversity in Wales. Wales Biodiversity Partnership/Welsh Assembly Government.

Carmarthen LBAP

WWBIC/ Aderyn biodiversity data

Defra – MAGIC

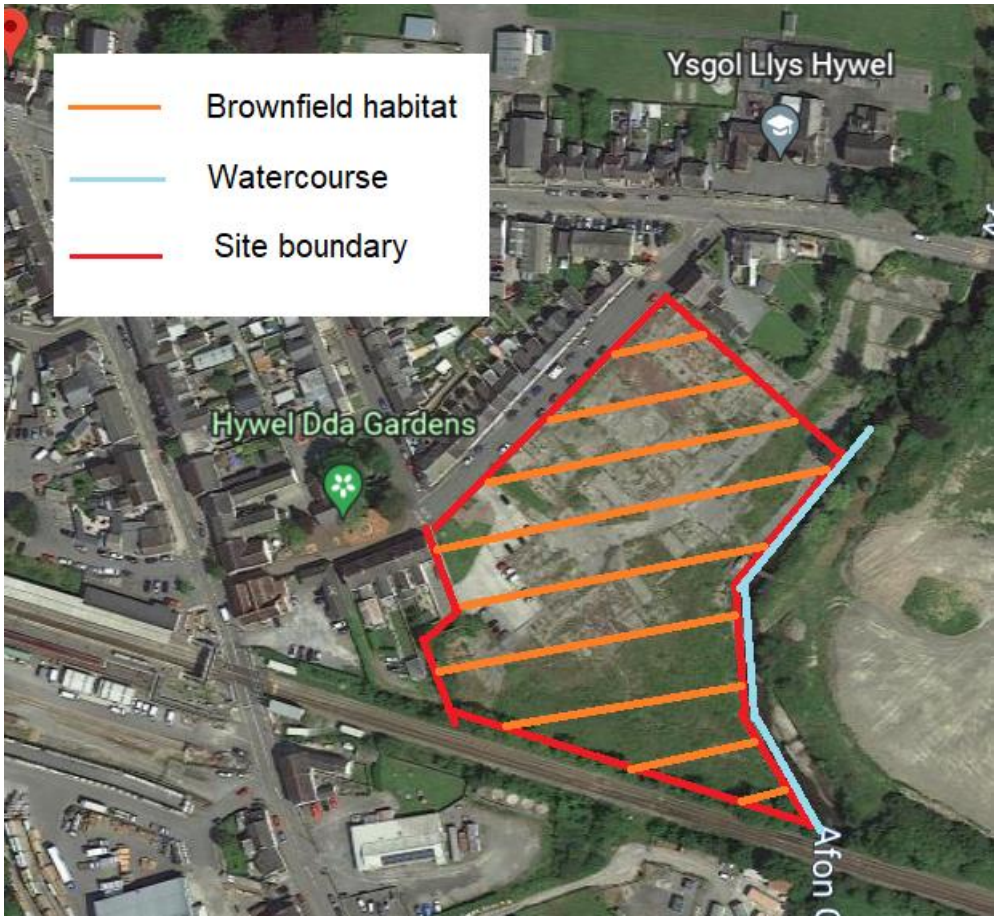
Future Wales, Policy 9

Natural Environment and Biodiversity Draft SPG, Carmarthenshire County Council

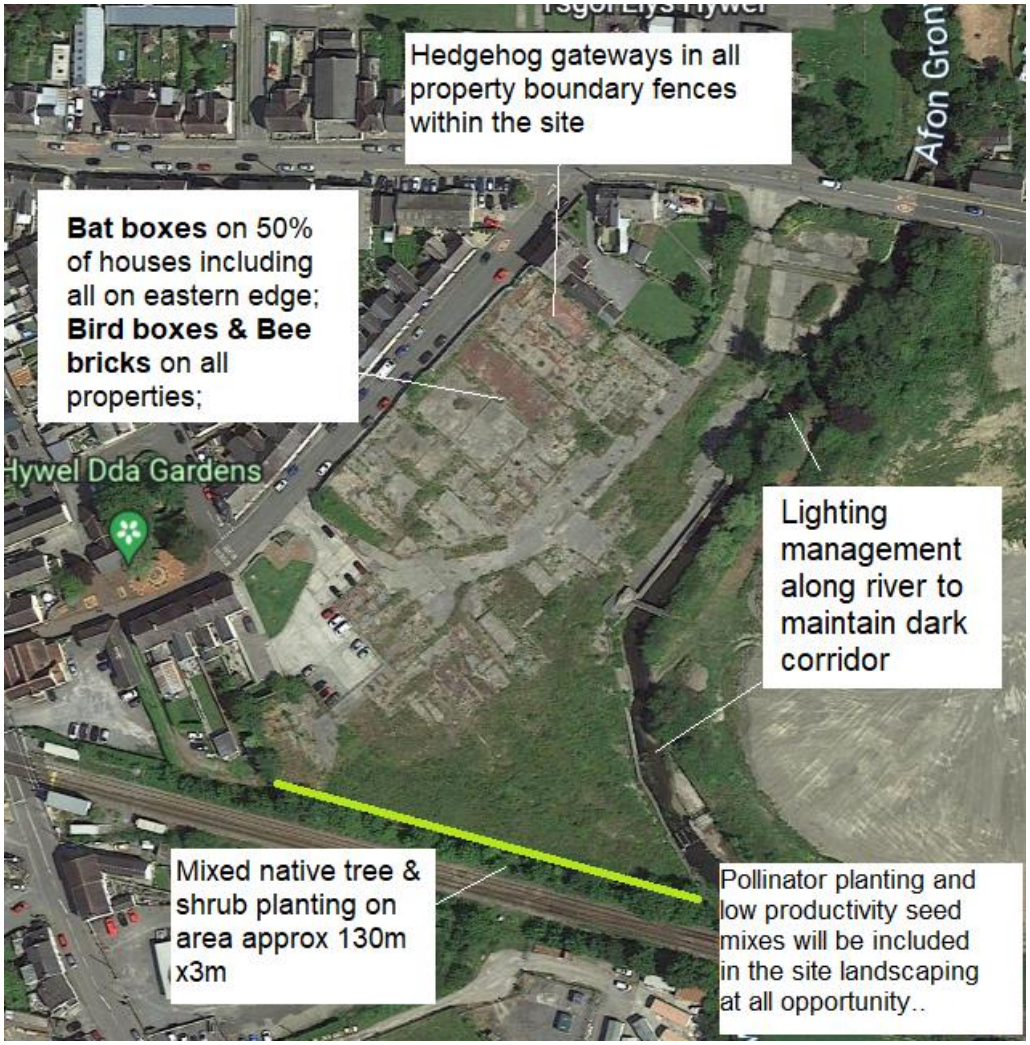
TAN 5 – Nature Conservation & Planning

APPENDIX 1 - SITE LOCATION

© Google Earth



© Google Earth



© Google Earth

APPENDIX 4 – SITE PHOTOGRAPHS

1. Northern-western boundary

2. Northern boundary

3. Eastern boundary

4. Afon Gronw

5. Car park in SW corner

6. Southern boundary

7. View N across site

8 View E across site

9. Debris piles in NW corner

10. Concrete hard-standings

11. View SE

12. View north from car-park

13. Vegetation on southern area.

Future Wales, Policy 9, Welsh Government - Resilient Ecological Networks and Green Infrastructure

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

• identify areas which should be safeguarded and created as ecological networks for their importance for adaptation to climate change, for habitat protection, restoration or creation, to protect species, or which provide key ecosystems services, to ensure they are not unduly compromised by future development; and

• identify opportunities where existing and potential green infrastructure could be maximised as part of place-making, requiring the use of nature-based solutions as a key mechanism for securing sustainable growth, ecological connectivity, social equality and well-being. Planning authorities should include these areas and/or opportunities in their development plan strategies and policies in order to promote and safeguard the functions and opportunities they provide. In all cases, action towards securing the maintenance and enhancement of biodiversity (to provide a net benefit) the resilience of ecosystems and green infrastructure assets must be demonstrated as part of development proposals through innovative, nature-based approaches to site planning and the design of the built environment.

Environment (Wales) Act 2016

The Environment (Wales) Act 2016 replaced the NERC (2006) Act in 2016. This now imposes a stronger duty for Local Authorities to maintain and enhance biodiversity. Planning Policy Wales (PPW) 11 sets out that "*planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*". This policy and subsequent policies in Chapter 6 of PPW 11 respond to the Section 6 Duty of the Environment (Wales) Act 2016.

Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence (with certain limited exceptions) to intentionally kill, injure or take any wild bird, or to damage, take or destroy the nest of any wild bird whilst that nest is being built or in use, or to take or destroy its eggs. Furthermore, the Act affords additional protection to specific species of birds listed in Schedule 1 of the Act. In respect of these species it is unlawful intentionally or recklessly to disturb such a bird whilst it is nest-building or is in, on or near a nest containing eggs or young; or to disturb their dependent young. Following recent revisions, fifty-nine species are listed on the UKBAP.

Bats

All species of bats and their roosting sites are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats etc.) Regulations 1994, updated and consolidated by the Conservation of Habitats and Species Regulations 2012. All species of UK bats are designated as 'European Protected Species' and are covered by a Species Action Plan within Carmarthenshire LBAP.

Reptiles

There are four widespread species of British reptile, comprising grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and common lizard (*Zootoca vivipara*). These animals are protected under the Wildlife and Countryside Act 1981 (as amended). They are given so called 'partial protection', which prohibits the deliberate killing or injury of individuals. The habitats of common reptiles are not specifically protected.

Otters

The otter is a European protected species and afforded protection under Schedule 5 of the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regualtions 2010. It is an offence to kill, injure or handle and otter and to disturb or damage a holt or other shelter.

Badgers

Badgers and badger setts are protected under The Protection of Badgers Act 1992, which makes it illegal to kill, injure or take a badger, or to interfere with a sett. A sett is defined as "any structure or place which displays signs indicating current use by a badger".

Invasive Species

Japanese Knotweed and Himalayan Balsam are listed under Schedule 9, Part 11 of the Wildlife and Countryside Act 1981, making it an offence to plant or otherwise cause them to grow in the wild. Care should be taken to avoid bringing in or removing material contaminated with these species during the site development.

Hedgerows Regulations 1997

These regulations came into force to protect important hedgerows in the countryside, in particular hedgerows which are more than 20 metres long or those which meet another hedgerow at either end.