

Preliminary Ecological Appraisal

for

Blaendulais childcare unit



Project data

Client	Gareth Jones, TRJ
Project reference	207 Blaendulais childcare unit
Report title	Preliminary Ecological Appraisal
File reference	207 PEA report FINAL v2.docx
Team leader	Diana Clark MSc MCIEEM

Revision tracking

	Name	Version	Date
Author	Diana Clark	207 PEA report DRAFT 1.docx	07/07/2023
Reviewed	Siân Musgrave	207 PEA report DRAFT 1 SMQA.docx	07/07/2023
Revised	Diana Clark	207 PEA report DRAFT 2.docx	10/07/2023
Reviewed	Gareth Jones	Comments via email	11/07/2023
Revised	Diana Clark	207 PEA report FINAL.docx	11/07/2023
Revised	Diana Clark	207 PEA report FINAL v2.docx	20/07/2023



**Koru
Ecology
Associates**

Koru Ecology Associates
Killay, Swansea
07591 504840
koruecologyassociates@gmail.com

Contents

1	SUMMARY	1
1.1	SITE ASSESSMENT	1
1.2	RECOMMENDATIONS	1
2	INTRODUCTION	2
2.1	THE PROPOSED DEVELOPMENT	2
2.2	STUDY AIMS	3
3	METHODOLOGY	4
3.1	STUDY SCOPE	4
3.2	SURVEYOR QUALIFICATIONS AND EXPERIENCE	4
3.3	STUDY LIMITATIONS	5
3.4	DESK STUDY	5
3.5	PHASE 1 HABITAT SURVEY	5
3.6	ASSESSMENT OF PROTECTED/NOTABLE SPECIES POTENTIAL	6
4	RESULTS	7
4.1	SITE CONTEXT	7
4.2	DESIGNATED SITES	8
4.3	NOTABLE SPECIES RECORDS	8
4.4	HABITATS	9
4.5	PROTECTED/NOTABLE SPECIES	13
5	ASSESSMENT	15
5.1	PLANNING POLICY CONTEXT	15
5.2	IMPACTS ON DESIGNATED SITES	18
5.3	IMPACTS ON HABITATS	18
5.4	IMPACTS ON PROTECTED/NOTABLE SPECIES	19
5.5	ENHANCEMENTS	23
6	RECOMMENDATIONS	24
6.1	BIODIVERSITY ENHANCEMENTS	24
6.2	RECOMMENDATIONS DURING CONSTRUCTION	25
6.3	REPEAT SURVEYS	26
7	REFERENCES	27

1 Summary

1.1 Site Assessment

- 1.1.1 A Preliminary Ecological Appraisal (PEA) – including a Phase 1 Habitat survey and assessment for protected/notable species suitability – has been completed for an area of land in Blaendulais in relation to a proposed new childcare unit.
- 1.1.2 The Site comprises areas of semi-improved neutral grassland, semi-mature trees, scrub, tarmac and gravel.
- 1.1.3 A number of ecological features have been identified on or close to the proposed development site, including the following:
1. Five Sites of Importance for Nature Conservation (SINCs) within 1km of the Site.
 2. Several areas of ancient semi-natural woodland and plantation on ancient woodland within 1km of the Site.
 3. Areas of semi-improved neutral grassland, ephemeral/short perennial, scrub and semi-mature trees.
 4. Habitat with suitability for low numbers of reptiles and amphibians, together with small mammals including hedgehogs.
 5. Habitat with suitability for foraging/commuting bats and badgers.
 6. Habitat suitable for a range of invertebrate species.

1.2 Recommendations

- 1.2.1 A number of recommendations are given in the report in order to keep potential impacts on habitats and species to a minimum, as well as to provide net benefit for biodiversity. These are located within Section 6 of this report.
- 1.2.2 Repeat surveys are recommended if a period of more than two years elapses between the date of this survey and commencement of the works, even if planning consent has already been granted.

2 Introduction

2.1 The Proposed Development

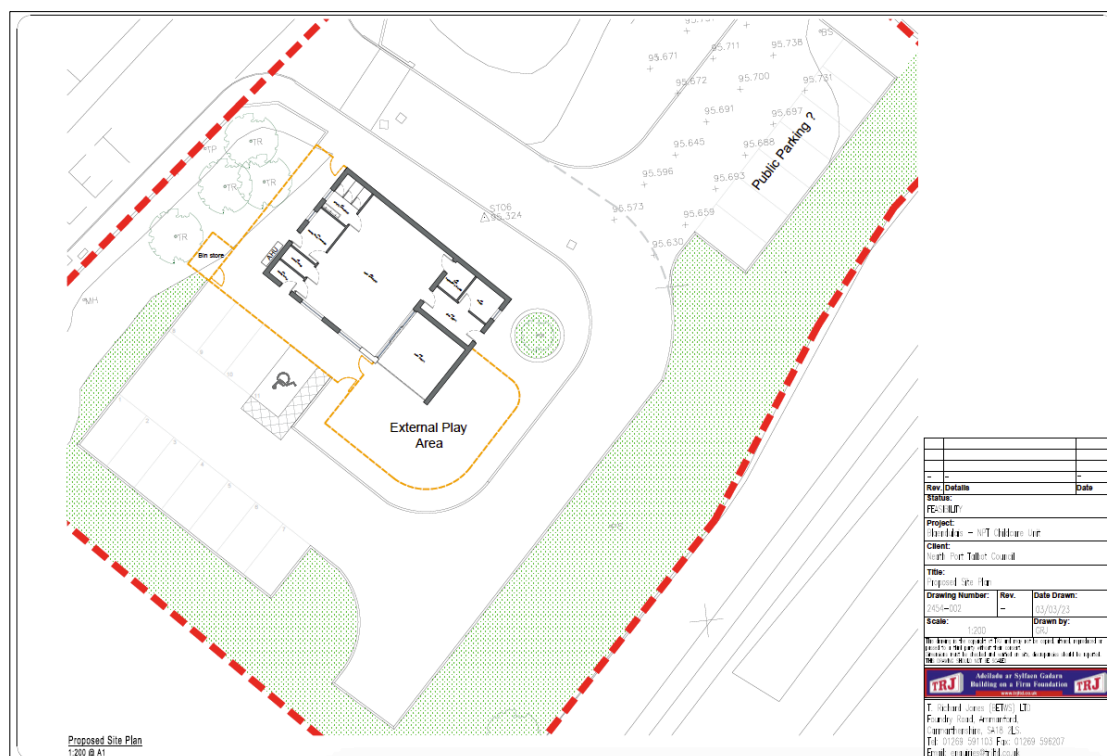
2.1.1 Koru Ecology Associates was commissioned in March 2023 by Nicholas Richards at Neath Port Talbot Council (“the Applicant”) via Gareth Jones of TRJ (“the Agent”) to complete a Preliminary Ecological Appraisal (PEA) of an area of land in Blaendulais (“the Site”).

2.1.2 The Site is centred on approximate National Grid Reference SN8196408947, and its location is shown in Figure 1 below. A copy of the proposals is shown in Figure 2 below.

Figure 1. Site location (red dotted line).



Figure 2. Site proposals.



2.1.3 This report has been prepared as part of a planning application to Neath Port Talbot Council for the development of a new childcare facility, including all access and associated infrastructure.

2.2 Study Aims

2.2.1 This report considers the potential impacts of the proposed development on ecological features identified within the Site, and/or its surroundings. The report details the methodology (Section 3) and results (Section 4) of the survey, describing features of ecological value found to be present, and impacts that may occur (Section 5). The report also gives recommendations for actions that should be undertaken by the Applicant to help minimise development impacts, as well as result in net benefit to biodiversity (Section 6).

3 Methodology

3.1 Study Scope

3.1.1 Koru Ecology Associates was commissioned by the Applicant in March 2023 to complete a PEA of the Site, based on standard methods set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017). This included the following:

1. **Desk-based study.** Written consultation with consultees, together with interrogation of online databases, to identify statutory and non-statutory designated sites of nature conservation importance, as well as records of protected and/or notable species.
2. **Phase 1 Habitat Survey.** To record the nature and extent of vegetation and habitats within and immediately adjacent to the Site.
3. Identification and/or assessment of potential for protected/otherwise notable flora and fauna that may require **further species-specific surveys**, together with any requirements for mitigation or potential mitigation.
4. Identification of **opportunities for net benefit for biodiversity**.

3.1.2 A more detailed description of tasks 1 – 3 is provided in Sections 3.4 – 3.6 below.

3.2 Surveyor Qualifications and Experience

3.2.1 Diana Clark MSc MCIEEM led all survey work and wrote this report. Diana has worked as a consultant ecologist since 2003 and holds two degrees in related disciplines. She is also a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), and Koru Ecology Associates is a CIEEM Registered Practice.

3.2.2 This report has been subject to technical review by Siân Musgrave BSc MCIEEM. Siân has worked as a consultant ecologist since 2008 and is a full member of CIEEM.

3.3 Study Limitations

- 3.3.1 Every effort was made during the field visit to complete a comprehensive survey and produce a detailed description of the Site. However, no investigation can ensure the complete characterisation and prediction of the environment 100% of the time. Natural and semi-natural habitats change over time, and thus results given in this report may become less reliable in the future. Repeat surveys are usually recommended if a significant period of time elapses between when surveys were completed and when works commence. Further details are given in Section 6 of this report.
- 3.3.2 No significant constraints were noted in relation to this project.

3.4 Desk Study

- 3.4.1 Due to the nature of the development proposals, (single low impact building on a small site), impacts on ecology and biodiversity are likely to be very localised, i.e. largely affecting the Site itself rather than have a much wider zone of influence. Records of protected/otherwise notable species within 1km of the Site were therefore requested from the South East Wales Biodiversity Records Centre (SEWBReC) in 2023. Records of designated sites within the same search area were also requested.
- 3.4.2 Further details in relation to any designated sites identified were then sought via the Joint Nature Conservancy Council (JNCC) website (www.jncc.defra.gov.uk) and the Natural Resources Wales (NRW) website (www.naturalresourceswales.gov.uk) where necessary.

3.5 Phase 1 Habitat Survey

- 3.5.1 Diana Clark MSc MCIEEM conducted a Phase 1 Habitat Survey of the Site on the 2nd May 2023. Vegetation types and habitats present were described and mapped during a walkover of the Site, based on standard published guidelines for Phase 1 Habitat Survey (JNCC, 2010). Features of particular interest were recorded as Target Notes (TNs).

3.6 Assessment of Protected/Notable Species Potential

- 3.6.1 In addition, the habitats within the Site were appraised for their suitability to support protected or notable species, or assemblages that could be sensitive to the proposed development, in accordance with 'Guidelines for Baseline Ecological Assessment' (IEA, 1995).
- 3.6.2 The protected and notable habitats and species referred to above include those listed under the Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019); and Species and Habitats of Principal Importance in England/Wales – currently listed under the Natural Environment and Rural Communities (NERC) Act 2006 but also endorsed by the Environment (Wales) Act 2016 (see Section 5 for more information).
- 3.6.3 During the survey, consideration was given to features such as potential breeding bird habitat, bat roosting locations, reptile habitat and the suitability of other features for protected/otherwise notable species. Exotic and invasive species (e.g. Japanese knotweed (*Reynoutria japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*)) were noted by the surveyor, if present.
- 3.6.4 The survey approach taken is designed to identify broad habitat types and the potential of these habitats to support notable/protected species, thereby providing an overview of the ecological interest at a site. It is the most widely used and professionally recognised method for initial ecological site appraisal.

4 Results

4.1 Site Context

4.1.1 The Site is located close to the centre of the settlement of Blaendulais, between the High Street and adjacent to a railway line on the south-eastern boundary, which runs in a roughly north-east to south-west orientation. On the far side of the High Street and the railway line, there are residential properties and associated access roads that make up Blaendulais. Immediately to the north-east of the Site is the Seven Sisters Colliery Memorial Park, comprising regularly mown amenity grassland, beyond which is a small area of woodland and further public open space managed as playing fields. The south-east boundary of the Site is immediately adjacent to Commercial Street, beyond which are further residential houses and a continuation of the railway line.

4.1.2 The site context is shown in Figure 3 below.

Figure 3. Site context.



4.2 Designated Sites

- 4.2.1 A number of designated sites were identified within 1km of the proposed development site. These are summarised in Table 1 below.

Table 1. Summary of designated sites.

Designation	SINC name	Distance	Habitats present / reasons for designation
SINC	NPT watercourses	Covers the Site	All watercourses within NPT including buffer area.
SINC	NPT ancient semi-natural woodland	206m	Ancient semi-natural woodland.
SINC	Land behind Marigold Place	324m	An area of marshy grassland that is dominated by purple moor grass with mosaics of wet heath and acid grassland
SINC	Heol Heddwch	416m	Mixed site of purple moor-grass and rush pasture with species-rich semi improved grassland, marsh fritillary also recorded here.
SINC	Blaendulais marshy grassland	602m	Species rich area of purple moor-grass and rush pasture, only NPT site for fen bedstraw, marsh fritillary also recorded here.

Key:
SINC = Site of Importance for Nature Conservation.

- 4.2.2 In addition, five areas of ancient semi-natural woodland (nearest to the site approximately 200m away) and two areas of plantation on ancient woodland site (approximately 800m away) were identified within the search area.
- 4.2.3 The Site is also close to two Natural Resources Wales (NRW) Priority Areas (heathland and grassland, and Plantation Ancient Woodland), which are located approximately 350m and 800m away respectively, as well as being within a Buglife 'B-line' area (designated by the Buglife B-line project).

4.3 Notable Species Records

- 4.3.1 Due to confidentiality requirements of the biological records centre, a copy of the full desk study report is not included here. However, a summary of the most relevant records is given in Table 2 below and within the following paragraphs.
- 4.3.2 In addition to those species recorded in Table 2, records of 35 notable bird species (including 15 Section 7 species and 5 protected under Section 1 of the Wildlife and Countryside Act) and 16 notable invertebrate species (including 1 beetle species, 3

butterfly species and 11 moth species) were noted. A further 42 notable higher and lower plant species were highlighted, including 22 flowering plant species, 1 fern species, 3 lichen species, 2 liverwort species and 14 moss species.

Table 2. Summary of Notable Species Records.

Common name	Scientific name	Conservation status*
Bat	Chiroptera	EPS
Pipistrelle bat	<i>Pipistrellus sp.</i>	EPS
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	EPS
Otter	<i>Lutra lutra</i>	EPS
Badger	<i>Meles meles</i>	PBA
Hedgehog	<i>Erinaceus europaeus</i>	S7
Hare	<i>Lepus europaeus</i>	S7
Common toad	<i>Bufo bufo</i>	WCA5
Common frog	<i>Rana temporaria</i>	WCA5
Grass snake	<i>Natrix helvetica</i>	WCA5
Common lizard	<i>Zootoca vivipara</i>	WCA5

Key:

EPS = European Protected Species (listed in Annex 4 of the EC Habitats Regulations and Schedule 2 of the Habitats Regulations).

WCA5 = Animals listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

S7 = Priority Species listed under Section 7 of the Environment (Wales) Act 2016.

PBA = Protected under the Protection of Badgers Act 1992.

4.4 Habitats

- 4.4.1 The habitat types recorded during the Phase 1 Habitat Survey of the Site itself are described within the following paragraphs and shown in Figure 4 below. Scientific names are given after the first mention of a species; thereafter, common names are used. Nomenclature follows Stace (2019) for vascular plant species.
- 4.4.2 The habitats present on the Site can roughly be divided into fifths, with two fifths comprising a mix of short ephemeral/perennial, semi-improved grassland and young scattered scrub (Target Note 1, Figures 5 and 6 below), one fifth comprising a grassy bank with a narrow band of trees (Target note 2, Figure 7 below), one fifth comprising semi-improved grassland (Figure 8 below) and one fifth comprising tarmac hard standing (Figure 9 below). In addition, there is a short flight of concrete steps leading onto the Site in the western corner, and a bus stop shelter just to the north of this (Figure 10 below). Several individual semi-mature trees are also present (see Figures 11 and 12 below) and, and a short low brick wall is present close to the south-western boundary.

- 4.4.3 The areas of semi-improved grassland have clearly been left unmanaged for a number of years, and contain a mix of species including the grasses Yorkshire-fog *Holcus lanatus*, cock's-foot *Dactylis glomerata*, fescue *Festuca* sp. and sweet vernal grass *Anthoxanthum odoratum*, together with forbs such as creeping buttercup *Ranunculus repens*, cuckooflower *Cardamine pratensis*, dandelion *Taraxacum officinale* agg., yarrow *Achillea millifolium*, common knapweed *Centaurea nigra*, ribwort plantain *Plantago lanceolata*, common bird's-foot-trefoil *Lotus corniculatus*, broad-leaved dock *Rumex obtusifolius*, curled dock *R. crispus*, common sorrel *R. acetosa*, white clover *Trifolium repens*, silverweed *Potentilla anserina*, creeping cinquefoil *P. repens*, daisy *Bellis perennis*, ragwort *Jacobaea vulgaris* and creeping thistle *Cirsium arvense*. Bramble *Rubus fruticosus* agg. is starting to colonise, and a small denser patch of this is present towards the north-western corner of the Site.

Figure 4. Phase 1 Habitat sketch.



- 4.4.4 Many of these species are also present within the area of vegetation noted at Target Note 2, alongside additional species such as colt's-foot *Tussilago farfara* and annual meadow grass *Poa annua*, and the general character of this habitat is shorter and more open. The scattered scrub in this area largely comprises young, regenerating goat willow *Salix caprea*, alongside occasional butterfly-bush *Buddleja davidii*, Norway Maple *Acer platanoides* seedlings, hornbeam *Carpinus betulus* and broom *Cytisus scoparius*.
- 4.4.5 The trees and scrub on the south-eastern edge of the Site are located along the railway embankment, with most mature /semi-mature specimens planted at the top of the bank. Tree species include hornbeam, willow *Salix* sp., Scot's-pine *Pinus sylvestris* and wild cherry *Prunus avium*.
- 4.4.6 The semi-mature trees close to the north-western boundary (T1 – T4 and G1 within the arboricultural report (S. Lucocq, 2023)) include Norway maple and wild cherry.

Figure 5. Short perennial vegetation, looking south.	Figure 6. Short perennial vegetation with scattered regenerating willow throughout.
	

Figure 7. Band of trees on embankment, south-eastern boundary.



Figure 8. Example of semi-improved grassland on the north-western edge of site.

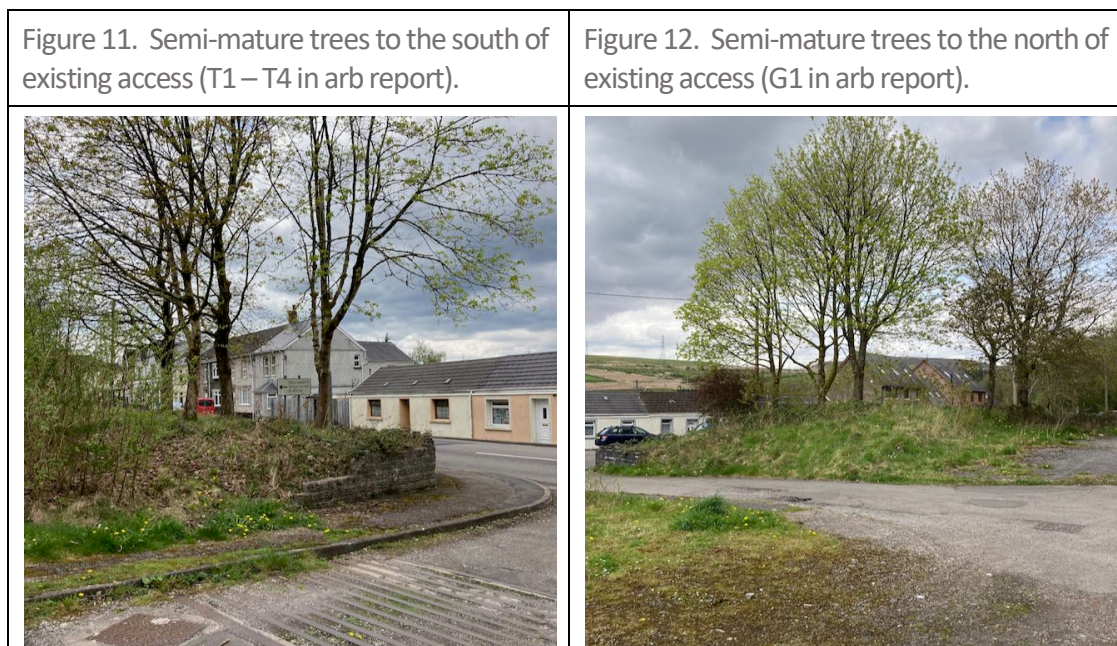


Figure 9. Tarmac area at the northern end of the Site.



Figure 10. Bus stop on the north-western boundary of the Site.





4.5 Protected/Notable Species

- 4.5.1 There is some potential for protected/notable species/species groups to be present on the Site or close by, these are summarised in Table 1 below.
- 4.5.2 A more detailed assessment of the potential for each species and/or species group to be present is given in Section 5 of this report, together with an assessment of likely impacts of the development proposals.

Table 1. Protected/Notable Species Summary.

Species	Notes
Bats	The desk study highlighted low numbers of bat records within the vicinity of the Site, all of which were either unidentified bats or pipistrelles. All recorded roosts are at least 300m from the Site. The Site is isolated from good quality habitat to the south-east and north-west, however its close association with the railway line and the presence of woodland and public open space to the north means that it is likely bats use the Site for foraging and commuting. These are likely to be limited to low numbers of the more common and light-tolerant bat species such as pipistrelles. The bus shelter is unsuitable for roosting bats and no other structures with suitability are present on the Site. None of the scattered trees on the Site are suitable for roosting bats, however it is possible that some of the trees adjacent to the railway line have potential roost features.
Otter	The desk study highlighted the presence of a single historical otter record over 1km from the Site. There is no suitable habitat for otters present on the Site and the likelihood of otters crossing the Site is very low. This species is therefore not considered further here.

Amphibians	Records of common frog and common toad were highlighted by the desk study. No known standing water bodies are present on the Site or within 500m of the Site. Some suitable terrestrial habitat for toads is present and it is possible that low numbers of this species may be present.
Reptiles	Records of grass snake and common lizard were highlighted by the desk study. Some suitable habitat for reptiles is present on the Site, however it should be noted that for this species group the site is fairly isolated, being entirely surrounded by busy roads to the west and south, a wooded railway line to the east and an area of regularly mown amenity grassland to the north. A significant population of reptile species is considered unlikely, however it is possible that low numbers of common lizard and/or slow worm may be present.
Breeding birds	A number of bird records were highlighted by the desk study, including some species that use habitat types present on the Site. There is suitable habitat for breeding birds on the Site, largely confined to the narrow band of trees and scrub on the railway embankment, as well as within some of the denser areas of scattered scrub and within the semi-mature scattered trees. Foraging birds may also use the Site.
Badger	A single record of badger was highlighted by the desk study. No evidence of badgers was noted on the Site, though it is possible that badgers use the Site for commuting or foraging purposes on occasion.
Hedgehog	Several records of hedgehogs were highlighted by the desk study, including one very close by and within the last few years. Some suitable habitat for nesting or hibernating hedgehogs is present on the Site, largely associated with the band of trees and scrub next to the railway line. It is also possible that this species may cross the Site and forage within it.
Invertebrates	The Site is likely to support a reasonable range of invertebrate species.
Plants	No invasive species or other notable plants were recorded on the Site during the survey.

5 Assessment

5.1 Planning Policy Context

5.1.1 Planning Policy Wales (PPW) (11th Edition, February 2021) is the national planning document setting out the devolved planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs) and Circulars. Of particular importance is TAN 5 (Welsh Assembly Government 2009), which provides national policy guidance in respect of nature conservation and planning.

5.1.2 PPW, the TANs and Circulars should all be taken into account by local planning authorities in Wales when preparing development plans and assessing planning applications. Those of most relevance are discussed further below.

TAN5: Nature Conservation and Planning

5.1.3 TAN 5 Nature Conservation and Planning sets out the manner in which planning authorities should comply with their duty to “...have a regard, so far as is consistent with the proper exercise of [their] functions, to the purpose of conserving biodiversity”, as required by the NERC Act.

5.1.4 The key principles of positive planning for nature conservation in TAN 5 are:

1. Work to achieve nature conservation objectives through a partnership between local planning authorities, Countryside Council for Wales (CCW), the Environment Agency (EA) Wales (CCW and EA Wales are now collectively Natural Resources Wales (NRW)), voluntary organisations, developers, landowners and other key stakeholders;
2. Integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time.
3. Ensure that the United Kingdom's (UK) international and national obligations for site, species and habitat protection are fully met in all planning decisions;
4. Look for development to provide net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;

5. Help to ensure that development does not damage, or restrict access to, or the study of, geological sites and features or impede the evolution of natural processes and systems especially on rivers and the coast;
6. Forge and strengthen links between the town and country planning system and biodiversity action planning particularly through policies in local development plans and the preparation of supplementary planning guidance that adds value to Local Biodiversity Action Plans (LBAP) by highlighting the ways in which the planning system can help to deliver the objectives of LBAPs in practical ways;
7. Plan to accommodate and reduce the effects of climate change by encouraging development that will reduce damaging emissions and energy consumption and that helps habitats and species to adapt to climate change.

Local Policy Context

5.1.5 A number of local planning policies within the Neath Port Talbot Local Development Plan (NPTCBC, 2016) are relevant to biodiversity and nature conservation, these include the following:

1. **Strategic Policy 15 (Biodiversity and Geodiversity).** This relates to the protection, conservation, enhancement and management of important habitats, species and sites of geological interest through recognition of SACs, Ramsar sites, SSSIs and NNRs, as well as via identification and protection of sites of regional and local importance. Important natural heritage features will also be protected.
2. **Policy EN6 (Important Biodiversity and Geodiversity Sites).** The policy states “Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where a) they conserve and where possible enhance the natural heritage importance of the site; or b) the development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site. Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable”.

3. Policy EN7 (Important Natural Features): The policy states “Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where a) full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or b) the biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed”.

5.1.6 Consideration should also be given to Neath Port Talbot’s Biodiversity and Geodiversity Supplementary Planning Guidance (NPTCBC, 2018).

The Environment (Wales) Act 2016

5.1.7 Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions (Biodiversity and Resilience of Ecosystems Duty, or Section 6 Duty). This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity. In doing so planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

1. Diversity between and within ecosystems
2. The connections between and within ecosystems;
3. the scale of ecosystems;
4. the condition of ecosystems including their structure and functioning; and
5. the adaptability of ecosystems.

5.1.8 In fulfilling this duty, the Environment Act (Wales) 2016 requires public authorities to seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales. Public authorities must have regard to a list of living organisms and types of habitat which in their opinion are of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. This list must be prepared and published by the Welsh Ministers under Section 7 (1) of the same Act. Until this list has been published, the list of Habitats and Species of Principal Importance previously published under Section 42 of the Natural Environment and Rural Communities (NERC) Act 2006, should be used.

5.2 Impacts on designated sites

- 5.2.1 The Site is located within the settlement of Blaendulais and is surrounded by roads, a railway line and areas of regularly managed amenity grassland. All of the SINC highlighted by the desk study are at least 200m from the Site, on the far side of roads and housing etc, and all other areas of interest highlighted by the desk study are also a significant distance from the Site. Given that the project is small-scale and contained entirely within the Site, impacts on SINC as a result of the development proposals are considered unlikely.
- 5.2.2 The Site falls within the Buglife B-Lines project area. There is an opportunity for the development proposals to provide habitat improvements of benefit to pollinators and other invertebrate species. This is discussed further in Section 6 of this report.

5.3 Impacts on Habitats

- 5.3.1 The PEA survey visit identified the presence of tarmac hard standing, semi-improved grassland, ephemeral/short perennial vegetation, scrub and trees on the Site.
- 5.3.2 The semi-improved grassland is unremarkable and will largely be retained within the scheme, as will nearly all the scattered trees and the trees/scrub line on the south-eastern boundary. Habitat loss will be limited to the removal of the existing mix of ephemeral/short perennial, semi-improved grassland and scattered scrub. The loss of this habitat is not considered significant and there is an opportunity to improve the retained habitats by way of appropriate longer-term grassland management.
- 5.3.3 A single tree will be removed as part of the proposals (Tree 2 within the arboricultural report (Lucocq, 2023)), however there is an opportunity to increase tree cover by way of new planting, where this doesn't compromise retained grassland areas.
- 5.3.4 Appropriate grassland management and tree planting is discussed further in Section 6 of this report.

5.4 Impacts on Protected/Notable Species

Bats

- 5.4.1 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended), and by the Conservation of Habitats and Species Regulations 2017 (as amended). Taken together, these make it an offence to:
- a) Deliberately capture, injure or kill a bat;
 - b) Deliberately disturb any bat, in particular any disturbance which is likely to (i) impair their ability to survive, breed, reproduce or to rear or nurture their young; or in the case of hibernating or migratory species, to hibernate or migrate; or (ii) to affect significantly the local distribution or abundance of the species to which they belong.
 - c) To be in possession or control of any live or dead bat or any part of, or anything derived from a bat.
 - d) Damage or destroy a breeding site or resting place of a bat;
 - e) Intentionally or recklessly obstruct access to any place that bat uses for shelter or protection;
 - f) Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- 5.4.2 A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.
- 5.4.3 Eight species of bat are listed as Species of Principal Importance under NERC Act 2006/The Environment (Wales) Act 2016, including barbastelle *Barbastella barbastellus*, Bechstein's *Myotis bechsteinii*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *P. pygmaeus*, brown long-eared *Plecotus auritus*, greater horseshoe *Rhinolophus ferrumequinum* and lesser horseshoe *R. hipposideros*.
- 5.4.4 No buildings or other structures suitable for roosting bats are present on the Site and none of the scattered trees have features suitable for roosting bats. It is possible that some trees on the boundary with the railway line may have some suitability for roosting bats, however it should be noted that these will be entirely retained within the scheme design.

- 5.4.5 It is likely that the more common species of bats (such as pipistrelles) will use the band of trees along the edge of the Site by the railway line for commuting and foraging purposes, and there may be some limited foraging on the rest of the Site. However, the wider area on either side of the Site is well-lit and therefore species that prefer darker conditions (for example horseshoe bats) are unlikely to be present.
- 5.4.6 An appropriate approach to lighting – both during construction and the operational stages of the project – is required in order to ensure minimal impacts on bats that may use the Site. There is an opportunity to improve the Site for bats by way of appropriate planting and management of retained grassland, and by provision of new roosting opportunities. These requirements are discussed further in Section 6 of this report, and assuming these are followed, some positive impacts for bats are predicted.
- 5.4.7 **Amphibians**
- 5.4.8 Amphibians, including newts, frogs and toads are protected by various legislation, including the Wildlife and Countryside Act, and for great crested newt *Triturus cristatus*, the Habitats Regulations.
- 5.4.9 In addition, great crested newt and common toad are both UK Biodiversity Action Plan species and are listed as a Species of Principal Importance under the provisions of the NERC Act 2006/Environment (Wales) Act.
- 5.4.10 No records of great crested newts were highlighted by the desk study, and no suitable breeding ponds or other waterbodies were noted on standard OS 1:25,000 mapping within 500m of the Site. There are also no waterbodies present on the Site itself. In addition, the Site is located in an area of the country where great crested newts considered to be of patchy distribution and therefore there is a low probability of occurrence (Oldham *et al*, 2000). Taken all the above together, it is considered unlikely that great crested newts are present on the Site, and this species is not considered further here.
- 5.4.11 Records of common frog and common toad were highlighted by the desk study and some suitable terrestrial habitat for these species is present on the Site.
- 5.4.12 Appropriate precautions in relation to these more common species of amphibians should be taken when preparing the Site for development, these are discussed further in Section 6 of this report. Assuming these precautions are followed, impacts on amphibians are considered likely to be negligible.

Breeding Birds

- 5.4.13 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to intentionally or recklessly disturb them while they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.
- 5.4.14 Records of a reasonable range of bird species were highlighted by the desk study.
- 5.4.15 There is suitable habitat for nesting birds on the Site, in particular within the band of trees and scrub along the boundary next to the railway line. The site is also suitable for foraging.
- 5.4.16 There is an opportunity to maintain and enhance habitats for nesting and foraging birds through habitat management and planting, and by providing new opportunities for nesting birds. These measures are on discussed further in Section 6 of this report, and – if followed appropriately – some positive impacts for birds are predicted.

Reptiles

- 5.4.17 All native British reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Grass snake, slow worm, common lizard and adder are protected against intentional killing or injury and against sale. In addition, all British reptiles are UK Biodiversity Action Plan species and are listed as Species of Principal Importance under the provisions of the NERC Act 2006 (and therefore the Environment (Wales) Act).
- 5.4.18 Records of grass snake and common lizard were highlighted by the desk study.
- 5.4.19 The presence of grass snake on the Site is considered to be unlikely, largely due to the absence of standing water and poor connectivity with suitable habitat, however there is some limited potential for low numbers of common lizard and slow worm to be present on the Site. Appropriate measures should be put into place when the Site is prepared for development, these are discussed in Section 6 of his report.

Badgers

- 5.4.20 Badgers are protected under the Badgers Act 1992. This makes it an offence to willfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to

intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. Removal of significant areas of badger foraging habitat may also contravene the Act, as it could be regarded as cruelty.

- 5.4.21 A single record of badger was highlighted by the desk study.
- 5.4.22 No evidence of badgers on the Site was noted during the survey, however the Site contains suitable foraging habitat for this species. Appropriate precautions should be put into place during the construction phase of the project, which are discussed further in Section 6 of this report. If followed correctly these will ensure impacts on badgers are negligible.

Hedgehogs

- 5.4.23 Hedgehogs are listed as a Species of Principal Importance under the NERC Act 2006/Environment (Wales) Act 2016.
- 5.4.24 The habitat present on the Site may be used by hedgehogs on occasion, for commuting and/or foraging of invertebrates. Appropriate precautions should be taken during construction in order to avoid harm to this species. There is an opportunity to improve the Site for hedgehogs by appropriate habitat management practices and by the installation of hedgehog boxes in secluded areas of the Site. Assuming these requirements are followed, impacts on this species are considered likely to be negligible and may result in some positive impacts.

Invertebrates

- 5.4.25 A number of invertebrate species records were highlighted by the desk study, and a reasonable range of invertebrates is likely to be present on the Site.
- 5.4.26 Appropriate recommendations in relation to potential enhancements/future habitat management are therefore given in Section 6 of this report, and if followed correctly are likely to result in an improvement for invertebrates.

Plants

- 5.4.27 The development proposals will result in the loss of an area of mixed ephemeral/short perennial, semi-improved grassland and scrub. None of the plants noted during the

survey were considered notable and the assemblage is considered to be unremarkable and typical of early colonisation of previously developed land.

- 5.4.28 Appropriate long-term management of all retained areas and any newly seeded areas of grassland is required in order to address the loss of this habitat. Appropriate grassland management will result in the retention of many of the species recorded during the survey, and will allow additional plant species to colonise in the future, thus leading to a more diverse habitat being in place. Appropriate management measures are discussed further in Section 6 of this report and – if followed correctly – should result in net benefit for grassland habitat.

5.5 Enhancements

- 5.5.1 Planning Policy Wales 11 states *'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'*.
- 5.5.2 A number of opportunities for enhancement have already been suggested in the paragraphs above and are detailed more fully in Section 6 of this report.

6 Recommendations

6.1 Biodiversity enhancements

6.1.1 A number of opportunities for net benefit for biodiversity in relation to this project have already been mentioned and are set out in the bullet points below. These measures collectively will help improve habitat diversity on the Site, and in turn support a greater range of invertebrates and the animals that feed on them – as well as provision of new opportunities for roosting bats, nesting/foraging birds and hedgehogs.

1. **Appropriate landscaping and planting scheme.** Appropriate planting should be designed into the scheme, including a number of new trees (including at least two to compensate for the loss of Tree 2) and appropriate seeding of newly landscaped grassland areas. Any tree planting should ideally be of native species and specimens of local provenance. However, if this is not possible, they should be of species known to provide a diverse range of food (such as nuts and berries) for birds and invertebrates. Any newly landscaped areas suitable for grassland should be seeded with a diverse mix that is appropriate to well-drained neutral soil.
2. **Appropriate habitat management plan.** An appropriate management plan for the habitats retained/improved/created on the Site should be drawn up and carried out as stated for the lifetime of the development. The management plan should include replacement of any newly planted trees if they fail within the first five years, as well as an appropriate minimal mowing regime for the grassland, with a late summer cut post-seeding to form part of this.
3. **Bat and bird box installation.** In order to provide new opportunities for nesting birds and roosting bats, bird and bat boxes should be installed on the new building, ideally built into the fabric of the walls. If that is not possible, then externally attached bat and bird boxes can be used. In addition, further boxes should be installed within the band of trees on the boundary with the railway line under the supervision of a suitably competent ecologist, in order to ensure maximum chance of take-up. Boxes should be of types that are suitable for species known to be in the area, or likely to colonise, and be installed at appropriate densities and in appropriate locations. They should also be made of long-lasting material, ideally woodcrete or similar.

4. **Hedgehog nest boxes.** Several hedgehog nesting boxes should be installed on the Site within the band of trees on the boundary with the railway line, in order to provide additional nesting opportunities for this species. Nest boxes should be of a robust and proven design, and placed by an appropriately competent ecologist.

6.2 Recommendations during construction

6.2.1 A number of recommendations during the works are made within the following paragraphs, in relation to the conduction phase of the project.

1. **Protection of retained habitats.** Heras fencing (or similar) should be used to protect retained areas of habitat, including retained scattered trees, the band of trees on the boundary with the railway line, and the area of habitat to the south which is outside the planning application boundary but within the landownership boundary (blue line). A suitable plan should be submitted as part of the planning application to show the location of this, and no vehicle/materials storage/movement should take place within areas that have been protected.
2. **Initial site clearance under supervision.** The initial site strip should be completed under the supervision of an appropriately competent ecologist (Ecological Clerk of Works (ECoW)), who will provide a tool box talk on the potential for finding notable species (most likely common reptile and amphibian species) prior to commencing. Should any such species be found, the ecologist will carefully transfer these to areas of retained habitat on the far side of the protective fencing.
3. **Avoidance of night working.** As far as possible, construction works should not take place during the hours of darkness, due to the requirement for keeping impacts on foraging/commuting bats, badgers and hedgehogs to a minimum.
4. **Appropriate precautions in relation to small mammals such as hedgehogs.** Any trenches/excavations created during the works, for example for service connections or foundations, should be covered over at night to prevent animals such as hedgehogs and other species from falling in and becoming trapped. If that is not possible, an adequate means of escape must be provided, for example, a gently graded side wall or provision of gently sloped wooden plank or equivalent. All excavations should be checked for trapped wildlife each morning prior to commencing activities.

6.3 Repeat Surveys

- 6.3.1 If the Site remains undeveloped for more than two years from the date of this survey, repeat survey work may be necessary, even if planning permission has already been granted. This is to ensure that no significant changes have taken place to the Site in the meantime, that impacts on protected species/habitats have remained the same, and that mitigation measures are still appropriate for the scheme. Any significant changes that may occur should be addressed appropriately if this happens.

7 References

Joint Nature Conservation Committee (2010) Handbook for Phase I Habitat Survey: A Technique for Environmental Audit. JNCC, Peterborough.

HMSO (1981) Wildlife and Countryside Act 1981 (as amended). London: HMSO.

HMSO (2017) The Conservation of Habitats and Species Regulations 2017. London: HMSO.

HMSO (2006) Natural Environment and Rural Communities Act 2006 (as amended). London: HMSO.

HMSO (2016) Environment (Wales) Act 2016. London: HMSO.

IEA (ed.) (1995) Guidelines for Baseline Ecological Assessment' (IEA, 1995). Institute of Environmental Assessment, UK.

Lucocq, S (2023) Arboricultural Report. ArbTS, Ystradgynlais.

Neath Port Talbot County Borough Council (2016) Local Development Plan (2011-2026). Neath Port Talbot Council, Neath.

Neath Port Talbot County Borough Council (2018) Biodiversity and Geodiversity Supplementary Planning Guidance. Neath Port Talbot Council, Neath.

Oldham R. S., Keeble J., Swan M.J.S. and Jeffcote M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal, Volume 10, pp 143 – 155.

Stace, C. (2019) New Flora of the British Isles (4th edition). Cambridge University Press, Cambridge.

Welsh Government (2021) Planning Policy Wales. Welsh Government, Cardiff.

Welsh Assembly Government (2009) Technical Advice Note 5: Nature Conservation and Planning. WAG, Cardiff.