

[REDACTED]

LAND AT FFORDD AMAZON

PRELIMINARY ECOLOGICAL APPRAISAL

January 2023



soltysbrewster
E C O L O G Y

4 Stangate House,
Stanwell Road
Penarth,
Vale of Glamorgan,
United Kingdom.
CF64 2AA

Telephone:- 029 2040 8476
e-mail:- enquiry@soltysbrewster.co.uk
Web Site:- www.soltysbrewster.co.uk



LAND AT FFORDD AMAZON

PRELIMINARY ECOLOGICAL APPRAISAL

Document Ref: E22112501/01. January 2023

Issue	Revision	Stage	Date	Prepared by:	Approved by	Signed
1		Draft for review	15/11/2022	Daria Cechowicz (Senior Ecologist)	Dr Matthew Watts (Director)	
2	Inclusion of 2018 survey results	Final	05/01/2023	Daria Cechowicz (Senior Ecologist)	Dr Matthew Watts (Director)	

CONTENTS

Summary

1.0 Introduction

2.0 Methodology

Desk study

Extended Phase 1 Habitat Survey

Constraints and Limitations

3.0 Results

Desk study

Extended Phase 1 Habitat Survey

Fauna

4.0 Policies and Plans

5.0 Conclusions and Recommendations

References

Appendices

Appendix I Site Location and Proposed Site Layout

Appendix II Desk Study Information Received from SEWBRcC

Appendix III Extended Phase 1 Survey Results and Target Notes

Appendix IV Bats and Artificial Lighting in the UK Guidance Note

SUMMARY

Soltys Brewster Ecology were commissioned by [REDACTED] to undertake a Preliminary Ecological Appraisal of two areas of land known as Land at Ffordd Amazon in Neath Port Talbot County. The first area is proposed as for an [REDACTED] which will include electrical charging points for vehicles and the second will be utilised to provide electrical connection into the National Grid – both areas are collectively referred to as ‘the site’. The ecological baseline conditions at the site were established in October 2022 through a combination of desk study and Extended Phase 1 Habitat Survey.

A total of six Statutory and 10 Non-Statutory Designated Sites are present within 1km, of which one non-statutory SINC known as ‘NTP watercourses’ was identified within the site boundary. Furthermore, five areas of ‘Ancient Semi-natural Woodland’ and one NRW priority Area Comprising Lowland Wetland were identified within 1km of the site, although the future development is unlikely to have an effect on statutory designated sites, Ancient woodland or the NRW Priority Area due to physical separation and the extent/type of the proposals.

The desk study returned several records for protected fauna and flora within 1km of the site (extended to 2km for bats). This included foraging/commuting records for at least four different bat species. Other mammals identified from the desk study included otter, polecat and European hedgehog. Herpetofauna (reptile and amphibian) records for the 1km search area include grass snake, lizard as well as common Frog and toad although no records were associated with the site. The desk study also returned an extensive list of priority and protected bird and invertebrate species found within 1km of the site although these were typically associated with the statutory designations to the south and north.

An Extended Phase 1 Habitat survey undertaken in October 2022 identified a limited range of habitats present within the survey area which consist of plantation woodland, dense scrub, poor semi-improved grassland, mosaic of habitats (scrub/grassland) and ditch. The plantation woodland was considered of the greatest ecological importance in the context of the site as it provides connectivity, shelter and nesting opportunities for a range of species.

The NPT watercourse SINC, which is a blanket designation for all watercourses within the authority boundary, incorporates the site and it is therefore recommended that the ditch is protected by an adequate protection buffer and that pollution prevention guidelines are followed to safeguard the watercourse. The proposed layout indicates that retention and enhancement of the ditch (e.g. rubbish and debris removed) would be achievable.

Survey work in 2018 identified a small colony of Southern Marsh Orchid *Dactylorhiza praetermissa* along the eastern boundary of the site, although this area would not be affected by the proposed development footprint. To inform any subsequent development in this part of the site ('Area for Alternative Fuel Research'), a walk over survey between May-July would be recommended to inform avoidance or mitigation measures that may be required.

Development at the site presents opportunities for both strategic & local biodiversity enhancement. Enhancement measures could include the inclusion of bird boxes onto retained trees along with management of retained habitats, new planting regime to benefit wildlife, creation of log piles and design of the attenuation pond in a way that would hold water for parts of the year.

1.0 INTRODUCTION

- 1.1 Soltys Brewster Ecology were commissioned by [REDACTED] to undertake a Preliminary Ecological Appraisal (PEA) of two areas of land known as Land at Ffordd Amazon at the most eastern part of Neath Port Talbot County. The first area of proposed development is for an [REDACTED] where the site has been identified as an excellent opportunity for electric vehicle charging points and would be the first of several locations in Wales to offer a unique opportunity for [REDACTED] to enter into collaborative research with Swansea University to study six themes. These include; Embodied Carbon, Energy Data Collection and Visualisation, Building Design, New Product Integration, Engagement Activities, and Alternative Fuels & Wider Research. The [REDACTED] will help to meet the Welsh Government's vision in its Electric Charging Strategy for Wales that: *"By 2025, all users of electric cars and vans in Wales are confident that they can access electric vehicle charging infrastructure when and where they need it."* The site is owned by Swansea University, who are also developing an Area for Alternative Fuel Research immediately adjacent to this location. The [REDACTED] will be a key part of the University's Gateway to Zero (G20). The site survey would also include the proposed connection point to the 33KV line west of the site along Ffordd Amazon Road. An ecological survey of the two areas to establish the baseline conditions and identify any ecological constraints or opportunities to inform an application is required.
- 1.2 The 'main development area' is located directly between two major roads comprising Fford Amazon and B4290 (central grid reference SS 71528 93514) and is situated south of Jersey Marine and east of Amazon UK in the county of Neath and Port Talbot and west of Swansea Bay Golf Club. The second area known as 'the connection point area' where the electrical connection will be installed can be located along the northern part of Ffordd Amazon road, directly opposite Bay Field Hospital (central grid reference SS 70341 93494). The two areas will collectively be referred to as 'the site' – site location plans/proposed layout are included in Appendix I.
- 1.3 The current report presents the findings of an ecological desk study and Extended Phase 1 Habitat survey undertaken at the site in October 2022. The current report describes the existing ecological conditions as well as identifying any potential ecological constraints/opportunities associated with proposed development at the site.

2.0 METHODOLOGY

- 2.1 To establish the baseline ecological conditions at the site and adjacent habitats, a combination of desk-based consultation and Extended Phase 1 Habitat survey were undertaken in October 2022.

Desk study

- 2.2 The desk study involved consultation with the South East Wales Biodiversity Records Centre (SEWBRc) to identify any records of rare, protected or notable flora and fauna at the site and within a radius of 1km (extended to 2km for bats as per the Bat Conservation Trust's good practice guidelines) extending from the central point of the site (Appendix II). The search criteria also included information relating to the location and citation details (where available) for any sites designated for their nature conservation interest such as Sites of Special Scientific Interest (SSSIs) or Sites of Importance for Nature Conservation (SINCs).

Extended Phase 1 Habitat Survey

- 2.3 The PEA survey was undertaken on 18th October 2022 by a suitably experienced ecologist¹ and followed standard Phase 1 Habitat Survey protocol (JNCC, 2010) as amended by the Institute of Environmental Assessment (1995). All habitats within the site boundary, were classified and mapped as accurately as possible. Habitats considered to have potential to support rare, protected or otherwise notable species of flora and fauna were noted, as were any direct signs of these species (e.g. Eurasian badger *Meles meles* setts and dung-pits). Incidental observations of birds on or flying over the site were also recorded and any incidence of invasive weed species (e.g. Himalayan Balsam *Impatiens glandulifera*) noted.
- 2.4 A map of habitats was drawn up and target notes were used to identify features of ecological interest. Where possible, habitats were cross-referenced to any relevant important UK or Wales priority habitats as identified under Section 7 of the Environment Act (Wales) 2016.
- 2.5 During the field survey any trees at the site were assessed for their potential to support roosting bats and were categorised in relation to the bat roosting features (BCT, 2016). The categories are as follows:
- **Known or confirmed roost.**
 - **High** - A 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.

¹ Associate Member of the Chartered Institute of Ecology & Environmental Management (CIEEM), with experience of habitat and protected species surveys

- **Moderate** – A 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.
- **Low** – A tree of sufficient size & age to contain PRFs (Potential Roost Features) but with none seen from the ground or features seen with only very limited roosting potential.
- **Negligible** – Negligible habitat features on site likely to be used by roosting bat.

Constraints and Limitations

- 2.6 The species data collected during the desk study is mainly derived from records submitted by members of the public and ad hoc surveys undertaken by volunteers and other environmental professionals. However, it should not be taken as a definitive list as a lack of data does not prove absence of protected and priority species within the local area and therefore potential further surveys may be required to address this limitation within suitable habitats.

3.0 RESULTS

Desk Study

Previous Ecology Surveys

- 3.1 Previous ecology surveys comprising a PEA and Reptile survey undertaken in 2018 by 'Just Mammals Consultancy' at the site confirmed a presence of southern marsh orchid *Dactylorhiza praetermissa* in the northern part of the parcel and further surveys established likely absence of common reptiles from the site boundary. The survey work undertaken in 2018 included two separate land parcels, of which the current development site forms the north eastern parcel. Surveys undertaken in 2018 for the south western parcel of land are not of ecological relevance to the current development.

SEWBreC Records

Designated Sites

- 3.2 There are a number of statutory designated sites within the search area, although none are directly adjacent to the proposed development boundary. Consultation with SEWBreC also confirmed the presence of locally designated SINC's comprising of discrete areas and the blanket 'NTP Watercourses' SINC which is an authority wide designation applied to all existing watercourses (see Appendix II). Further details for the non-statutory and statutory designated sites within 1km desk study search can be located in Table 1 below and are illustrated on the plans in Appendix II. Several of the sites are covered by multiple designations, although with the exception of the existing ditch at the site – which would fall under the NPT Watercourses SINC, none would be subject to direct or indirect impacts as a result of the proposed development – this is based on consideration for the physical separation, intended use and scale of the proposed works (see plan in Appendix I).

Table 1: Statutory and Non-Statutory (locally) Designated Sites within 1km of the Site Boundary

Name	Designation Type	Description of location in relation to the site and likely effect	Designation Description	Distance from Site (m)
Statutory Designated Sites				
CRYMLYN BOG AND PANT Y SAIS	National Nature Reserves (NNR)	Crymlyn Bog and Pant y Sais lies within a south Wales industrial and urban landscape between Swansea and Neath, 1 km inland of the coast. It is located north and north west from the site boundary. Due to scale of the proposed development, it is unlikely that the NNR site is going to be affected by construction and post developmental pressured as a result. Furthermore, the NNR site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings.	Crymlyn Bog comprises a floodplain-valley mire located within a lowland coastal context and is the most extensive wetland of its type in Wales. The mire features a complex mosaic of vegetation types, supporting examples of swamp, tall herb fen, fen meadow and carr communities. The site supports an exceptionally wide range of rich and poor fen communities, some of which bear a close floristic affinity to certain floodplain mires in East Anglia. The presence of significant areas of saw sedge <i>Cladium mariscus</i> swamp is notable in extensive stands of this uncommon vegetation type, occurring at only three other sites in Wales. Crymlyn Bog is part of a larger inter-estuarine complex which includes the adjacent Pant y Sais fen.	448
Crymlyn Bog	Ramsar Site	Crymlyn Bog lies within a south Wales industrial and urban landscape between Swansea and Neath, 1 km	Crymlyn Bog comprises a floodplain-valley mire located within a lowland coastal context and is the most	440

		inland of the coast. It is located north and north west from the site boundary. Due to scale of the proposed development, it is unlikely that the Ramsar site is going to be affected by construction and post developmental pressured as a result. Furthermore, the Ramsar site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	extensive wetland of its type in Wales. The mire features a complex mosaic of vegetation types, supporting examples of swamp, tall herb fen, fen meadow and carr communities. The site supports an exceptionally wide range of rich and poor fen communities, some of which bear a close floristic affinity to certain floodplain mires in East Anglia. The presence of significant areas of sedge <i>Cladium mariscus</i> swamp is notable in extensive stands of this uncommon vegetation type, occurring at only three other sites in Wales. Crymlyn Bog is part of a larger inter-estuarine complex which includes the adjacent Pant y Sais fen.	
Crymlyn Bog / Cors Crymlyn	Special Areas of Conservation (SAC)	It is located north and north west from the site boundary. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SAC site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	Transition mires and quaking bogs for which this is considered to be one of the best areas in the United Kingdom. Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> for which this is considered to be one of the best areas in the United Kingdom. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) for which the area is considered to support a	440

			significant presence.	
Cors Crymlyn / Crymlyn Bog	Sites of Special Scientific Interest (SSSI)	The SSSI is located north west from the site boundary. Due to scale of the proposed development, it is unlikely that the SSSI site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SSSI site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	Crymlyn Bog is of special interest for its fen (topogenous mire) communities, wet woodland, associated invertebrate assemblages, a substantial population of the nationally rare slender cotton grass <i>Eriophorum gracile</i> and a population of the nationally scarce hornet robberfly <i>Asilus crabroniformis</i> . It is the most extensive area of lowland fen in South Wales and is situated 3.5 km east of central Swansea within a landscape heavily influenced by past and present industrial activities. The site is part of a larger inter-estuarine complex including Pant-y-Sais SSSI and the Neath flood plain. Crymlyn Bog owes its form to glacial erosion, followed by a series of Boreal marine incursions, giving rise to sequences of clay and peat. The main fen area which developed on these deposits lies between 5 - 7 m above sea level.	450
Pant-y-Sais	SSSI	The SSSI is located north from the site boundary. Due to scale of the proposed development, it is unlikely that the SSSI site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SSSI site is separated by	Predominantly an area of lowland fen located in a narrow valley which was a former course of the River Neath. The site supports a range of fenland communities including Sphagnum and bryophyte dominated areas of poorer fen vegetation, Molinia caerulea communities, swamp areas	450

		physical barriers comprising railway, other woodland habitats, residential and business dwellings	with abundant Typha latifolia and Typha angustifolia, and developing fen carr. Formerly part of the same hydrological system as Crymlyn Bog. The Tennant Canal section acts as a refuge for aquatic plants, including Butomus umbellatus which is rare in the county	
Crymlyn Burrows	SSSI	The SSSI is located to the south of the site. Due to scale of the proposed development, it is unlikely that the SSSI site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SSSI site is separated by physical barriers a complex network of roads.	This area is one of the last remaining sections of the Swansea Bay Coastline which has remained substantially unmodified by industrial development. Its dunes and saltmarshes are home to several notable plant species and supports a number of small wading bird species that overwinter in Swansea Bay.	227
Non-Statutory Designated Sites				
Pant-y-Sais	Local Nature Reserves (LNR)	The LNR is likely a part of Pant-y-Sais SSSI which is located north from the site boundary. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SAC site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	See Pant-y-Sais description above	450
Red Jacket	Wildlife	The Wildlife Trust is located north-east from the	This is a lowland fen situated in a narrow valley between	859

Fen	Trust Reserve	site. Due to scale of the proposed development, it is unlikely that the Reserve site is going to be affected by construction and post developmental pressured as a result. Furthermore, the Wildlife Trust Reserve is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	Pant y Sais fen and the Neath Estuary. The wetland vegetation is dominated by Bulrush and provides a nesting habitat for Cetti's Warbler, Reed Bunting, Reed Warbler, and Sedge Warbler in spring and summer. Water Vole benefit from the open water and dense Bulrush to breed, and Fen Raft Spider stand and wait for prey along the waterside. There is an abundant population of dragonflies, including Common Blue Damselfly Large Red Damselfly and Common Darter.	
NPT Watercourses	Adopted SINC	Located within the site boundary as information received from the records centre.	All waterbodies within Neath Port Talbot are designated as a SINC.	0
FABIAN WAY WILDFLOWER VERGE	Adopted SINC	The SINC is located to the south of the site. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SINC site is separated by physical barriers a complex network of roads.	Fabian way is the main dual carriage way between junction 42 and Swansea city (A483). When the new road way was built, the existing grassland was destroyed but as part of the scheme, flower rich grassland was planted, and over a number of years has become established as a meadow type grassland verge which runs along the central reservation and, in some parts, along the sides adjacent to pedestrian walkways. The resulting habitat now supports a diverse mix of flora and likely associated invertebrates and small mammals. The verge is adjacent	63

			to Crymlyn Burrows SSSI and several SINCS. The verge is currently managed as an NPT Nature Conservation Site where it is cut annually between end August and end of March. Qualifying features include Species-rich neutral grasslands (which could include MG1, MG6 & MG10).	
EARLSWOOD AREA	Adopted SINC	The SINC is located to the east of the site. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SINC site is separated by physical barrier including B4290 road.	A complex of habitats associated with the Earlswood Golf Course, bound by the Tennant Canal in the west and the A484 to the south and east. The site ranges in elevation between 10m and 86m asl, with the underlying geology being that of the South Wales Upper Coal Measures Formation, overlain by a patchwork of glacial till and aeolian sand. The principal habitats are deciduous woodland, Bracken slopes, lowland meadows and heath with a few parcels of dune vegetation, rock outcrops and ponds. The in private ownership and is primarily used for golf, though some woodland areas are unmanaged. Recorded taxa include 323 vascular plants, 60 bryophytes, 31 invertebrates, 31 birds, 1 lichen, 4 fungi.	79
AMAZON WOODLANDS	Adopted SINC	The SINC is located to the west of the site. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by	Lying approximately 1km to the south of Jersey Marine, this is 2.24ha remnant of what was formerly a much more extensive area of wet woodland established on the	602

TENNANT CANAL	Adopted SINC	construction and post developmental pressured as a result. Furthermore, the SINC network of roads and dwellings associated with Amazon UK. The canal is located north-east from the site. Due to scale of the proposed development, it is unlikely that the SAC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SINC site is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	blown sands of the coastal plain. The uncommon woodland type is isolated by industrial developments to the east and west but functions as an important stepping stone between similar habitats at Crymlyn Burrows and the boggy woodland communities at Crymlyn Bog. The site readily floods and is unmanaged.	682
		The Tennant canal supports exceptional aquatic and emergent flora along much of its length. It lies, in part, adjacent to Pant y Sais Fen and links to Crymlyn Bog. Areas of wet grassland and Carr woodland form adjacent habitat, together with brownfield and industrial sites. Bankside vegetation includes numerous Orchid species, as well as typical emergent plants such as Yellow Flag Iris and Greater Spearwort. The Fen Raft Spider is found along the canal tow path and in Pant y Sais Fen. Otters are also regularly seen on the canal's riparian zone. The SINC runs from Pant-y-Sais Fen in Jersey Marine, in the south west of the county over to Tonna, to the east of Neath. Part of the canal runs alongside Pant-y-Sais Fen SSSI and NNR, the Wildlife Trust's Red Jacket Fen (NPTSINC083) and links to Crymlyn Bog SAC and Ramsar. Part of the Canal itself is included within the Crymlyn Bog		

CRYMLYN BURROWS	Adopted SINC	The SINC is likely associated with the SSSI, which is located to the south of the site. Due to scale of the proposed development, it is unlikely that the SINC/SSSI site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SSSI site is separated by physical barriers a complex network of roads.	SAC. The Tennant Canal Society undertake much of the vegetation management along the canal. This site is located north of the River Neath and is a continuation of the habitats at Crymlyn Burrows SSSI. Predominantly sand dune it is fronted by saltmarsh and mudflats with an area of scrub at the north-eastern end. As mentioned above, the site is adjacent to Crymlyn Burrows SSSI which is also designated for its dune and saltmarsh habitats. The highly designated wetland sites of Pant-y-Sais fen and Crymlyn Bog are around 1.5km North West of this SINC (SSSI, SAC, Ramsar). Several other SINCS are in the vicinity, the most relevant are Earlswood (NPTSINC020) and Earlswood Grasslands (NPTSINC038) which both support elements of dune habitat. Earlswood Golf course occupies land within and adjacent to the site. This intensively managed area occupies what would naturally be part of the dune system. Some dune species persist in the golf course vegetation and small areas of scrub are likely to be of value to birds such as Stonechat and Linnet.	760
RED JACKET FEN	Adopted SINC	The SINC is likely associated with Wildlife Trust, the	A rich fen site at 6m is sandwiched between the Tennant	806

		area is located north-east from the site. Due to scale of the proposed development, it is unlikely that the SINC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SINC is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	Canal and the railway line embankment immediately east of Pant-ysais Fen. The underlying geology is that of the South Wales Upper Coal Measures Formation, the basin substrate comprising raised storm beach deposits of sand and gravel. Fen, reed-swamp and wet woodland are the primary habitats, with canal banks adding to the richness of habitats present. The site is a WTSWW reserve and has public access. Management has been undertaken to control the level of scrub on site. Other records are likely to be stored by the WTSWW, but records available show the site supports in excess of 192 vascular plants, 49 bryophytes, 39 invertebrates, 46 birds, 6 lichens, 21 fungi, 3 fish, 2 mammals, plus 1 each of amphibian and reptile.	
JERSEY MARINE WOODS	Adopted SINC	The SINC is located north from the site. Due to scale of the proposed development, it is unlikely that the SINC site is going to be affected by construction and post developmental pressured as a result. Furthermore, the SINC is separated by physical barriers comprising railway, other woodland habitats, residential and business dwellings	A mosaic of habitats are established on the small hill sandwiched between the redevelopment footprint of the former Llandarcy oil refinery and low-lying fen complex of Red Jacket Pil and Pant-y-sais. The site ranges in elevation between 10m and 107m asl, with the underlying geology being that of the South Wales Upper Coal Measures Formation, overlain by a patchwork of glacial till. The principal habitats are deciduous woodland (including a	944

			small parcel of ancient woodland), Bracken slopes with a few parcels of less improved pasture. The site would appear to be mostly in private ownership and is primarily used for grazing, though some woodland areas are unmanaged. Species data are required as the original data set appears to have been lost from the system.	
--	--	--	---	--

Ancient Woodland and Natural Resources Wales (NRW) Priority Area

- 3.3 There are five parcels of 'Ancient Semi-natural Woodland' located within 1km from the site, with the closest situated 650m north from the site. Furthermore, there is an area of NRW priority Area comprising Lowland Wetland 144m from the site boundary and this area includes the Pant y Sais SSSI & Crymlyn Bog SAC. The proposed development is unlikely to have any effect on any of the ancient woodlands, statutory designated sites or NRW priority areas due to its scale/nature and physical separation comprising railway, other woodland habitats, residential and business dwellings.

Protected and Priority Species

- 3.4 The data search returned several protected species records including records of foraging and commuting common & soprano pipistrelle *Pistrellus pipistrellus/P.pygmaeus*, *Myotis* bat, common noctule *Nyctalus noctula*, records of bats within 2km of. Furthermore, a small common pipistrelle roost was also identified approximately 1200m north-west from the site boundary. Most of the records were associated with the statutory designations to the north and south of the site and were considered of limited ecological relevance.
- 3.5 Other terrestrial records of mammals including several field signs belonging to otter *Lutra lutra* with the closest recorded over 450m north from the site boundary. A single record of polecat *Mustela putorius* and European hedgehog *Erinaceus europaeus* was also returned within 1km search area. No recent, nor historic records of hazel dormouse *Muscardinus avellanarius* were returned from within 1km search.
- 3.6 Several records of grass snake *Natrix helvetica* as well as common lizard *Zootoca vivipara* were returned from the desk study with the closest one over 450m from the site boundary. Other herpetofauna (reptiles and amphibians) include several records of record of Common Frog *Rana temporaria* as well as common toad. No recent nor historic records of Great Crested Newt *Triturus cristatus* were returned from within 1km search.
- 3.7 A number of bird species listed under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended) have been recorded within 1km of the site including, Cetti's warbler *Cettia cetti*, velvet scoter *Melanitta fusca*, long-tailed duck *Clangula hyemalis*, Mediterranean gull *Ichthyaetus melanocephalus* (records associated with Crymlyn Burrows), pintail *Anas acuta*, whimbrel *Numenius phaeopus*, peregrine *Falco peregrinus*, common scoter *Melanitta nigra*, red kite *Milvus milvus*, kingfisher *Alcedo atthis*, greenshank *Tringa nebularia* and barn owl *Tyto alba*. The data search also included a number of Priority bird species under Section 7 of the Environmental Act (Wales) 2016 within 1km including song thrush *Turdus*

philomelos, lesser redpoll *Acanthis cabaret*, reed bunting *Emberiza schoeniclus*, starling *Sturnus vulgaris* and yellow wagtail *Motacilla flava*. Many of the aforementioned species will unlikely use the site as they are associated with wetland habitat, which was absent from the site boundary, furthermore some predators e.g. red kite and barn owl may choose to forage in areas north from the site due to more suitable habitat comprising fields and grasslands (as determined by the satellite imagery). The site however, does offer nesting opportunities for scrub nesting species.

- 3.8 Several priority invertebrate species listed under Section 7 of the Environment (Wales) Act 2016 were recorded within 1km, these included brown-banded carder bee *Bombus humilis*, multiple species of moth including cinnabar moth *Tyria jacobaeae*, rosy rustic moth *Hydraecia micacea* and two species of butterfly consisting of small heath butterfly *Coenonympha pamphilus* and small blue butterfly *Cupido minimus*.

Extended Phase 1 Habitat Survey

- 3.9 The distribution and extent of habitats recorded in October 2022 at the site are illustrated on the Extended Phase 1 Habitat Plan with accompanying target notes in Appendix III. The Extended Phase 1 Habitat Survey revealed a limited range of habitat types at the site, with the majority of the development site comprising poor semi-improved grassland, mosaic of habitats (scrub/grassland) and plantation broadleaved woodland.

Plantation Woodland

- 3.10 The western, southern and north-eastern boundary of the site is encompassed by a line of semi-mature planted trees that are all of a similar height/age. The southern tip of the habitat is approximately 25m at the widest point, with areas to the north east of the site comprising of more dense scrub communities and younger tree saplings. The western line comprises of continuous, unmanaged, dense semi mature broadleaved trees. The species abundance and frequency does not vary between the sections. Species recorded within this habitat include: gorse *Ulex europaeus*, bramble *Rubus fruticosus agg.*, silver birch *Betula pendula*, grey willow *Salix cinerea subsp. Cinerea*, crack-willow *Salix fragilis*, alder *Alnus glutinosa*, butterfly-bush *Buddleja davidii*, dogwood *Cornus sanguinea*, bracken *Pteridium aquilinum* and pedunculate oak *Quercus robur*.

Plate 1 - Plantation woodland with an area of bracken among dense and semi-mature trees.



Dense scrub

- 3.11 There are two areas of dense scrub recorded within the site (see Appendix III). The first is a wide strip which extends west from the main development area. The habitat is densely overgrown by bramble and common reed *Phragmites australis*. Other frequent species comprise of gorse, broom *Cytisus scoparius*, cock's-foot *Dactylis glomerata*, common vetch *Vicia sativa subsp. Segetalis*, ribwort plantain *Plantago lanceolata*, dogwood, creeping thistle *Cirsium arvense*, common fleabane *Pulicaria dysenterica*. Scattered trees including saplings and established willows, silver birch and Italian elder *Alnus cordata*.
- 3.12 The second area of dense scrub lines the southern boundary of 'the connection point area' to the north of Ffordd Amazon - it was thick with mature dense scrub vegetation which included broom, gorse, silver birch, bramble, willows, and butterfly-bush *Buddleja davidii*.

Plate 2 – Area of Dense Scrub (near main development area) along the western part.



Poor Semi-improved Neutral Grassland

- 3.13 The most dominant habitat within the site comprises poor semi-improved neutral grassland. The grassland appears to be in frequent use by the public and dog walkers due to presence of multiple pathways. The grassland did not show any signs of recent management, however the sward heights vary across the habitat. Although most species recorded within this habitat followed the poor neutral grassland classification, there were some marshy species recorded within the habitat. One of the features of the grassland also included a wide strip of common reed (see Target Note 1) which lined the north-western edge of the site boundary. Saplings of willow were also recorded to the north-west where they slowly started to colonise that area. The remaining species recorded included: cock's-foot, yorkshire-fog *Holcus lanatus*, red fescue *Festuca rubra*, soft-rush *Juncus effusus*, Common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera*, red clover *Trifolium pratense*, Common fleabane *Pulicaria dysenterica*, Ribwort Plantain *Plantago lanceolata*, Creeping Buttercup *Ranunculus repens*, Goat Willow *Salix caprea*, Mare's-tail *Hippuris vulgaris*, Perforate St John's-wort *Hypericum perforatum*, common vetch, broom, hard rush *Juncus inflexus*, cow parsley *Anthriscus sylvestris*, tufted hair-grass *Deschampsia cespitosa* subsp. *Cespitosa* and false oat-grass *Arrhenatherum elatius*.
- 3.14 No spikes of Southern Marsh Orchid were identified along the north eastern boundary of the grassland (where they had been recorded in 2018) or elsewhere within the grassland. This may be attributable to the timing of the 2022 survey (October) when flower spikes would not have been visible and the height of

the surrounding grassland vegetation (in the absence of any management/cutting) which is likely to have obscured any remaining plant stems or basal leaves.

Plate 3 – Area of poor semi-improved neutral grassland surrounded by the line of planted trees.



Mosaic of habitats

- 3.15 The most dominant habitat within ‘the connection point area’ comprises of mosaic of habitats which includes plants communities derived from several habitat types including poor-semi-improved grassland, ephemeral short perennial mosaic as well scattered scrub. The habitat was surrounded by semi-mature woodland to the east and west with the railway line to the north. The area shows previous signs of management, where wheels of heavy machinery were identified and the substrate comprises of gravel and uneven ground possibly associated with previous infra-structure works. The grassland component included species comprising Yorkshire-fog, red fescue *Festuca rubra* and annual meadow grass *Poa annua*, scattered scrub included saplings of bramble, willows and silver birch saplings and gorse. The ephemeral/short perennial component included species such as common nettle *Urtica dioica*, hairy bitter-cress *Cardamine hirsute*, thistle, perforate St John's-wort *Hypericum perforatum*, common chickweed *Stellaria media*, groundsel *Senecio vulgaris*, wild strawberry *Fragaria vesca*, hoary willowherb *Epilobium parviflorum*, Viper's-bugloss *Echium vulgare*, ribwort plantain and stonecrop species *Sedum sp.*

Plate 4 – Area of mosaic of habitats in the ‘connection point area’.



Dry Ditch

- 3.16 The ditch was located within the plantation woodland habitat and dense scrub in both areas of the site. Both ditches were dry at the time of the survey. The ditch along the ‘main development area’ measured approximately 1m in width and 1.5m in depth. It surrounded the site boundary from the south west around to the north east. The second ditch within ‘the connection point area’ was much deeper approximately 2m and was approximately 1m wide.

Fauna

- 3.17 During the survey, a search of field signs for protected or notable species was undertaken and the potential of the habitats to support these species considered. In the context of this report, these species meet any of the following criteria:
- Species protected by British or international law;
 - Priority species included on Section 7 (Environment Act, Wales);
 - Nationally rare or nationally scarce species;
 - Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber Lists).

Bats

- 3.18 The plantation woodland within site was considered suitable to support a range of foraging and commuting bat species and it is likely to act as important habitat corridor for bats in the wider landscape. All trees within the site were semi-mature and unlikely to support bat roosts and were considered of Negligible potential.

Badger

- 3.19 No badger setts or signs of badger activity were identified at the site or within the immediately surrounding habitats, furthermore no records of badger were returned from the desk study. Despite the lack of evidence, the presence of individual animals on an occasional or irregular basis could not be ruled out due to suitable foraging and commuting habitat across the site, therefore badger should be considered as part of good site practice during any enabling or construction work.

Hazel Dormouse

- 3.20 No records of hazel dormouse were returned from the desk study search and although there is a good connectivity to the wider area (particularly north) through the plantation, the on-site habitat was of limited diversity in terms of foraging habitat and in the absence of a known source population, is unlikely to support Dormice.

Otter

- 3.21 Although records for otter were returned from the desk study, it is unlikely that otter will utilise the site due to multiple physical barriers that separate the site from where the field sign was identified. Furthermore, there are no suitable habitats to support otter within the site boundary and frequent disturbance from dog walkers and nearby traffic would make it even less appealing for the species. For those reasons otter will no longer be discussed in this report.

Reptiles

- 3.22 Record of grass snake and common lizard were returned from the desk study less than 1km away. The habitats recorded within survey area provide some potential for foraging and basking opportunities, particularly within the edges of woodlands, dense scrub, mosaic of habitats and grassland. As described in Section 3.1, surveys in 2018 established likely absence of reptiles from the development site although given the time elapsed and the structural suitability of the habitats within and immediately adjacent to the application site, the presence of a small population or individual animals on an occasional basis

cannot be excluded within the site boundary and therefore precautionary methods of working are provided in Section 5.

Amphibians

- 3.23 No records of Great Crested Newts (GCN) were identified within 1km of the site and no permanent waterbodies or suitable breeding habitat can be found within the site boundaries – the seasonal ditches within the site is unlikely to be wet year-round and currently support dense vegetation with no open water making it unsuitable for breeding GCN. A review of satellite imagery mapping revealed that the next nearest pond was located approximately 125m north-east of the site, however this was separated from the site by several considerable physical barriers that would likely restrict GCN movement such as series of roads. Records returned presence of common toad and common frog therefore further consideration of these species (e.g. sensitive clearance method within suitable habitats) may be required.

Birds

- 3.24 Three common bird species were recorded during the site visit and included wren *Troglodytes troglodytes*, robin *Erithacus rubecula* and blue tit *Cyanistes caeruleus*. These species, have the potential to breed and forage within the site due to presence of suitable habitat comprising plantation woodland. As part of the survey work in 2018 (Just Mammals, 2018), a parcel of land south west of the current application site identified the presence of ground nesting birds (Ringed Plover *Charadrius hiaticula*). The current application site was considered unsuitable for use by this species (and other ground nesting birds) based on a combination of disturbance caused by dog walkers and pedestrians, with the adjacent trees/scrub providing perching posts for predators.

Invertebrates

- 3.25 The site is likely to support a number of common invertebrate species with the scrub, grassland and plantation habitats. However, the presence of rarer species or those of conservation concern was considered unlikely given the limited diversity/extent of the habitat features recorded.

Other mammals

- 3.26 The site offers suitable foraging and commuting opportunities for European hedgehog and polecat at least on an occasional basis. A mammal path was recorded within the site boundary (see Target Note 2) where it was positioned and disappeared underneath the base of the plantation trees. Furthermore, signs of rabbit in form of droppings and evidence of digging within 'the connection point area' was recorded see Target Note 3.

4.0 POLICIES AND PLANS

- 4.1 The following local and national planning policy relating to nature conservation and biodiversity are considered of relevance to the site.

Planning Policy Wales (2021)

- 4.2 This document set out the land use planning policies of the Welsh Government with Chapter 6 dealing with Distinctive and Natural Places which covers Biodiversity and Ecological Networks. The advice contained within PPW is supplemented for some subjects by Technical Advice Notes (TAN's), with TAN 5 addressing Nature Conservation & Planning.
- 4.3 TAN 5 identifies a number of key principles, which the town and country planning system in Wales should consider. Those relevant are detailed below:
- *Work to achieve nature conservation objectives through a partnership between local planning authorities, Natural Resources Wales (NRW), voluntary organisations, developers, landowners and other key stakeholders;*
 - *Integrate nature conservation into all planning decisions looking for development to deliver social, economic and environmental objectives together over time;*
 - *Ensure that the UK's international obligations for site, species and habitat protection are fully met in all planning decisions;*
 - *Look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally;*
 - *Promoting approaches to development which create new opportunities to enhance biodiversity, prevent biodiversity losses, or compensate for losses where damage is unavoidable. Minimising or reversing the fragmentation of habitats and improving habitat connectivity through the promotion of wildlife corridors;*
 - *Local planning authorities should seek to protect trees, groups of trees and areas of woodland where they have natural heritage value or contribute to the character or amenity of a particular locality;*
 - *The presence of a species protected under European or UK legislation is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat.*

Environment (Wales) Act, 2016

- 4.4 Part 1 of the Environment Act Wales came into force in May 2016 and sets out the approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory 'principles of sustainable management of natural resources' defined within the Act.

Section 6 - Biodiversity and resilience of ecosystems duty

- 4.5 *Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'.*

Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity

- 4.6 *This section lists living organisms and types of habitat in Wales which are considered of key significance to maintaining and enhancing biodiversity in relation to Wales. The Welsh Ministers are required to take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.*

Local Planning Policy

Neath Port Talbot CBC Local Development Plan 2011 - 2026 (Adopted January 2016)

- 4.7 The Neath Port Talbot Local Development Plan (LDP) 2011 – 2026 was adopted on the 27th January 2016. It is now the most up to date Development Plan for Neath Port Talbot, superseding the Unitary Development Plan, and is used in the determination of planning applications. The LDP sets out a range of policies and proposals relating to future development and deals with the use and conservation of land and buildings within Neath Port Talbot up to 2026. A number of policies within the LDP are considered of relevance to the site and these are detailed below.

Section 5 – Topic Based Policies

Policy SP 15: Biodiversity and Geodiversity

Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:

- 1. The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection:*

(a) Special Areas of Conservation (SACs) and Ramsar Sites;

(b) Sites of Special Scientific Interest (SSSIs);

(c) National Nature Reserves (NNRs).

- 2. The identification and protection of sites of regional and local importance;*
- 3. The protection of important natural heritage features.*

Policy EN 6: Important Biodiversity and Geodiversity Sites

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:

- 1. They conserve and where possible enhance the natural heritage importance of the site; or*
- 2. 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.

Policy EN 7: Important Natural Features

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:

- 1. 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*
- 2. The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.*

5.0 CONCLUSIONS AND RECOMMENDATIONS

- 5.1 The combination of desk study and Extended Phase 1 Habitat survey identified a limited range of habitats within the site, with majority of land covered by grassland and lines of plantation trees. The development will retain the plantation to the site boundaries although this will be cut back as required and some loss will be required in the wider southern area to accommodate the attenuation pond (see plan in Appendix I). The majority of the development will take place within the grassland part of the 'main development area' which was considered of limited ecological interest. The mosaic of habitats at the connection point is also likely to be affected by any excavation for connection of electrical cables, although it is likely that similar infra-structure works have previously been undertaken in this corridor.

Designated Sites

- 5.2 The dry ditches at the site would fall under the blanket NPT Watercourse SINC. All watercourses in the county of Neath and Port Talbot are classed as SINCS, therefore it is advised that an adequate protection buffer is implemented around the ditches. The boundary ditch at the main development parcel will be retained and pollution prevention measures are also recommended to avoid any construction contamination entering the watercourse. The ditches are located within the line of broadleaved plantation trees and dense scrub, where in some areas the vegetation will be required to be trimmed or cut back. It is therefore recommended that any arisings from the vegetation are cleared from the ditches. If ditches will require any type of alteration, it is recommended that local authority is contacted for further advise.

Bats

- 5.3 Bats and their habitats are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and afforded further protection under the Wildlife and Countryside Act 1981 (as amended). Several bat species are also listed as priority species under The Environmental (Wales) Act 2016. The site offers suitable foraging and commuting habitat for bats along the plantation woodland. The current design will need to accommodate attenuation pond and 'trim existing bushes and trees'. Retention of the remainder of the existing boundary vegetation will maintain habitat connectivity for bats (and other species) in the immediate local area.
- 5.4 The design of any site lighting should also seek to reduce artificial light spill onto retained boundary habitats and linear features and limit any increase over and above the existing levels. The site is located

in an existing business park area with street lighting and buildings to the east, west and north which is likely to limit the number and type of bat species currently present – i.e. species such as Pipistrelle and Noctule which are relatively tolerant of artificial lighting. See lighting guidance note produced by BCT & ILP (2018) for advice on how to mitigate for impacts of artificial lighting on bats (Appendix IV).

Badger

- 5.5 Although no badger signs or sett were recorded during the survey, the habitats within the site have the potential to support foraging and commuting badger at least on an occasional or irregular basis. Good site practice measures such as covering open excavations at night or providing a means of escape for Badgers and other small; mammals (e.g. hedgehog, polecat) would be recommended.

Herpetofauna

- 5.6 Suitable habitats for common reptile species have been identified within the site as well as the survey area and wider habitat. Common species of reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill or injure these species. Common reptiles are also priority species under The Environment (Wales) Act 2016. Any development works including requirement for clearance of line of broadleaved trees, poor semi-improved grassland and mosaic of habitats have the potential to kill or injure any common reptiles. No reptiles were identified during the reptile surveys undertaken by 'Just Mammals Consultancy' therefore the presence of anything other than small numbers of reptiles at the site was considered unlikely and a precautionary method for site clearance would be recommended to minimise the risk to this group (including common amphibians). This could comprise phased, directional clearance of grassland towards retained boundary habitats to allow any animals present to disperse – this type of clearance should be undertaken during the active part of the year for reptiles and amphibians (typically March – September). If a reptile is found during the construction phase of the development, an ecologist will need to be contacted for further advise.

Birds

- 5.7 The site has the potential to support breeding birds due to suitable habitats comprising plantation woodland as well as the reed strip within the poor semi-improved grassland. All birds, their nests and young are protected from damage and destruction under the Wildlife and Countryside Act 1981 (as amended). The desk study returned multiple records of birds within 1km from the site, including species listed under Schedule 1 of Wildlife and Countryside Act 1981 (as amended). Due to likelihood of nesting birds being present within the suitable habitats, any vegetation works (removal of trees and reed grass

within grassland) that would affect the aforementioned habitats, would be subject to seasonal constraints and should be undertaken outside of the nesting bird season (undertaken between September – February). Mitigation/enhancements for tree and scrub nesting species could be provided via next boxes on new buildings or retained trees.

Other mammals

- 5.8 The site contains suitable habitats for European hedgehog and rabbit. Rabbits receive some protection under the Wild Mammals (Protection) Act 1996. Should burrows be identified in the future and any excavations or tree felling are required or large machinery are present on site this could result in the collapse of rabbit burrows and death of this species by crushing and/or asphyxiation. It is advised that if any burrows are identified that require excavation, or heavy machinery needs tracking over them, they should first be soft-stopped to determine if they are in use. If they are in use, they should be dugout using hand tools. European hedgehog is a species of principal importance for the conservation of biodiversity under Section 7 of the Environment (Wales) Act 2016 and therefore a priority species in Wales. This species is a priority species and should be safeguarded during future development works, where e.g., a 2m exclusion zone should be implemented around potential European hedgehog hibernation features during the hibernation season (October to March inclusive) which includes log, brash and rubble piles.

Orchids

- 5.9 No Orchids were noted during October 2022 survey (due to seasonal constraints). The footprint of the proposed development (see Appendix I) would not affect the area where Orchids were identified by 'Just Mammals Consultancy', and this area would be retained as part of the habitat corridor referred to in 5.1. Prior to any subsequent future development ('Area for Alternative Fuel Research', Appendix I) an updated walkover would be recommended in the summer months (May-July) to establish if orchids are still present and to inform any associated avoidance (retention) or mitigation measures.

Avoidance, Mitigation and Enhancements

5.10 The avoidance, mitigation and enhancements described in the sections above are summarised below:

Avoidance

- Vegetation clearance (trees and reed grass within the grassland habitat to the north of the site) to avoid nesting bird season and to be undertaken over the winter period (between September – February).
- Retention of the remaining trees after minimal trimming has been undertaken within line of broadleaved trees habitat that should not be affected by the development.

Retention of existing ditches.

Mitigation

- Design of site lighting to minimise artificial light spill onto plantation woodland and associated line of trees to limit impacts to foraging/commuting bats and other nocturnal wildlife..
- Covering of any excavations overnight or means of escape provided during construction phase to minimise risks to Badger and any other small mammals that may become trapped.
- Sensitive approach to clearance of grassland and line of broadleaved trees vegetation so as to minimise any risks to any common reptiles and amphibians that may be present.

Enhancement

- Installation of bird boxes onto existing trees.
- Management of retained plantation woodland and scrub and ditch network.
- Any new planting to include native species or those with a known wildlife benefit
- Inclusion of log pile hibernacula within retained tree/scrub corridor.
- Design of the attenuation pond to hold water for parts of the year (i.e. into late spring/early summer).

REFERENCES

Bat Conservation Trust (2016) *Bat Surveys – Good Practice Guidelines*. Bat Conservation Trust, London.

Bat Conservation Trust & Institution of Lighting Professionals (2018) *Bats and artificial lighting in the UK. Guidance Note 08/18*. Bat Conservation Trust, London.

Froglife (1999) *Reptile Survey: An introduction to planning, conducting and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Froglife, Halesworth.

Natural Resources Wales (2017) *A guide to your rights and responsibilities of riverside ownership in Wales*. NRW, Cardiff

Institute for Environmental Assessment (1995) *Guidelines for Baseline Ecological Assessment*. E & FN Spon, Hong Kong.

Institute for Environmental Assessment (1995) *Guidelines for Baseline Ecological Assessment*. E & FN Spon, Hong Kong.

Jackson, D. (2015) *Bats & Trees – Information Leaflet*. Bat Conservation Trust, London.

Joint Nature Conservation Committee (JNCC) (2010) *Handbook for Phase I Habitat Survey. A technique for environmental audit*. JNCC, Peterborough.

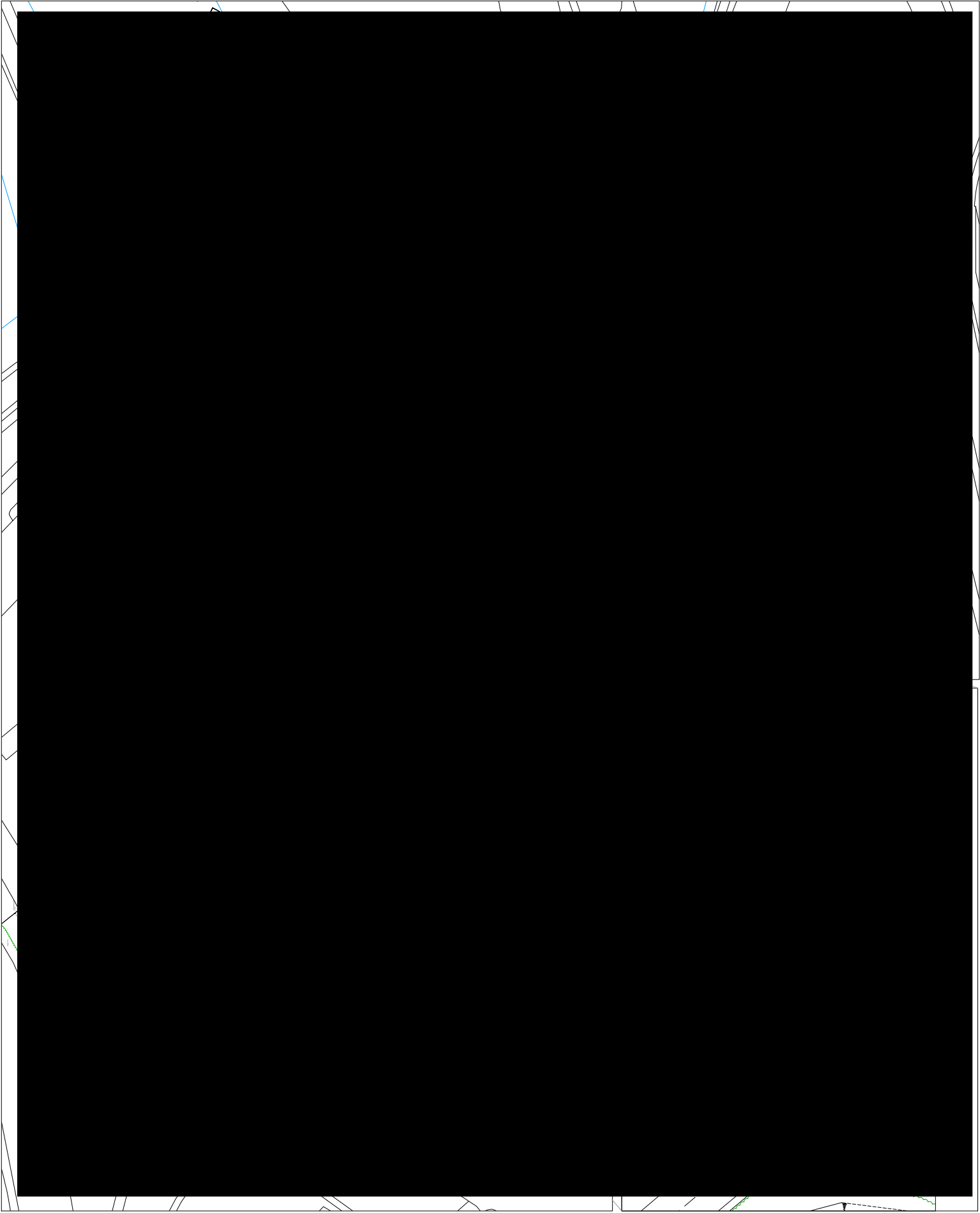
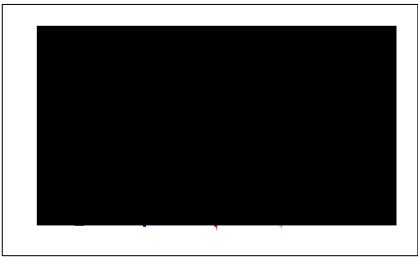
Just Mammals Consultancy (2018) *Gateway Project, Fabian Way, Neath Port Talbot. A Preliminary Ecological Appraisal* (File Reference: GEN0918)

Just Mammals Consultancy (2018) *Gateway Project, Fabian Way, Neath Port Talbot. An Ecological Survey Report* (File Reference: REP0918)

Welsh Assembly Government (2021) *Planning Policy Wales Edition 11*. February 2021.

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

APPENDIX I SITE LOCATION PLAN & PROPOSED SITE LAYOUT



APPENDIX II DESK STUDY INFORMATION RECEIVED FROM SEWBRcC

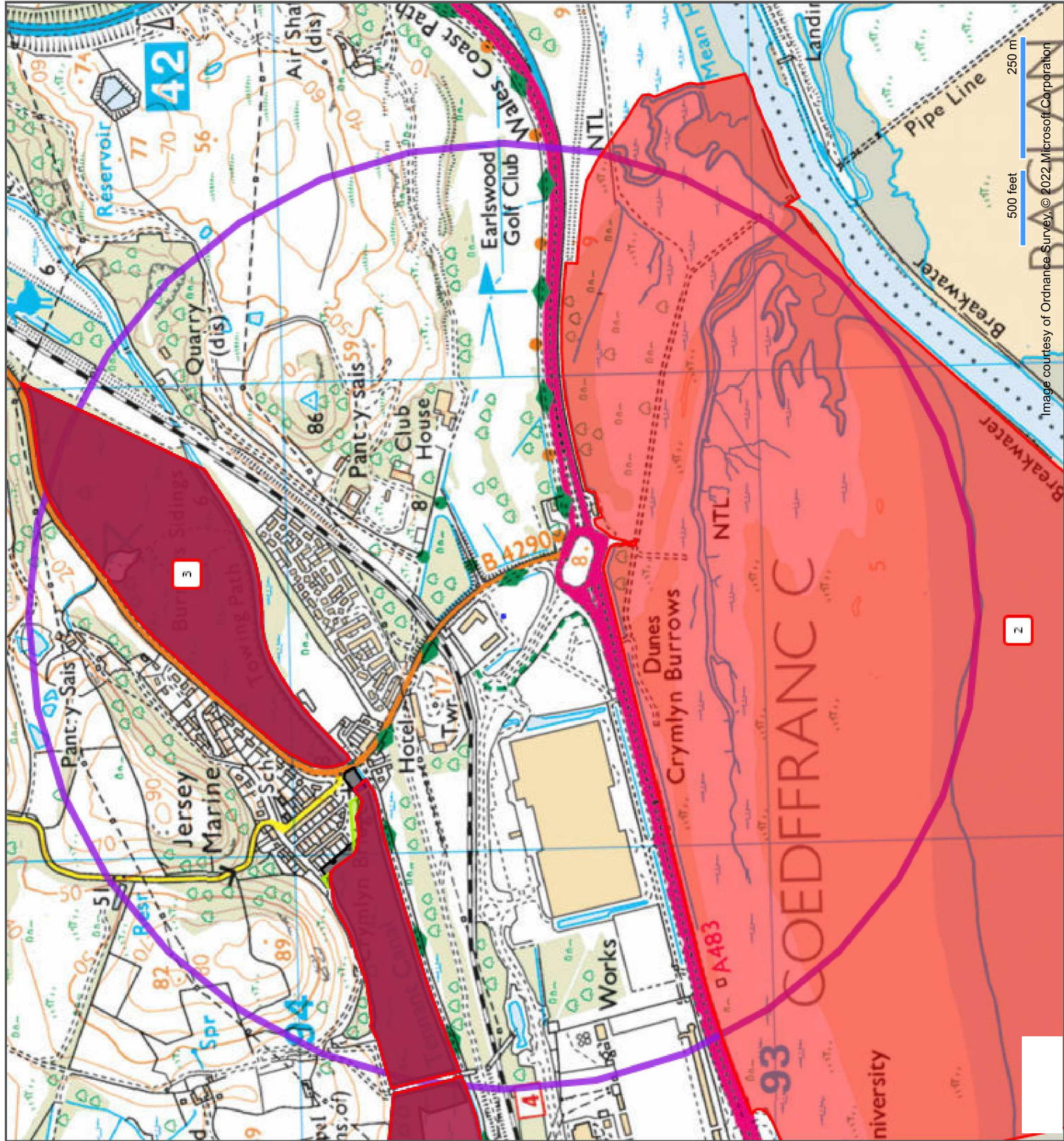
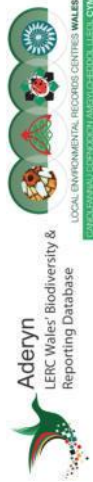


Image courtesy of Ordnance Survey, © 2022 Microsoft Corporation



eMapper for LERC Wales Aderyn Commercial
daria-cechowicz_13/10/2022_fford-amazon-swansea /
54556/0223-565

Key



Search Location



Search Buffer (1000m)



National Nature Reserves

1: CRYMLYN BOG AND PANT Y SAIS



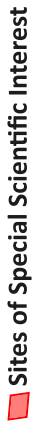
Ramsar Sites

1: Crymlyn Bog



Special Areas of Conservation

1: Crymlyn Bog / Cors Crymlyn



Sites of Special Scientific Interest

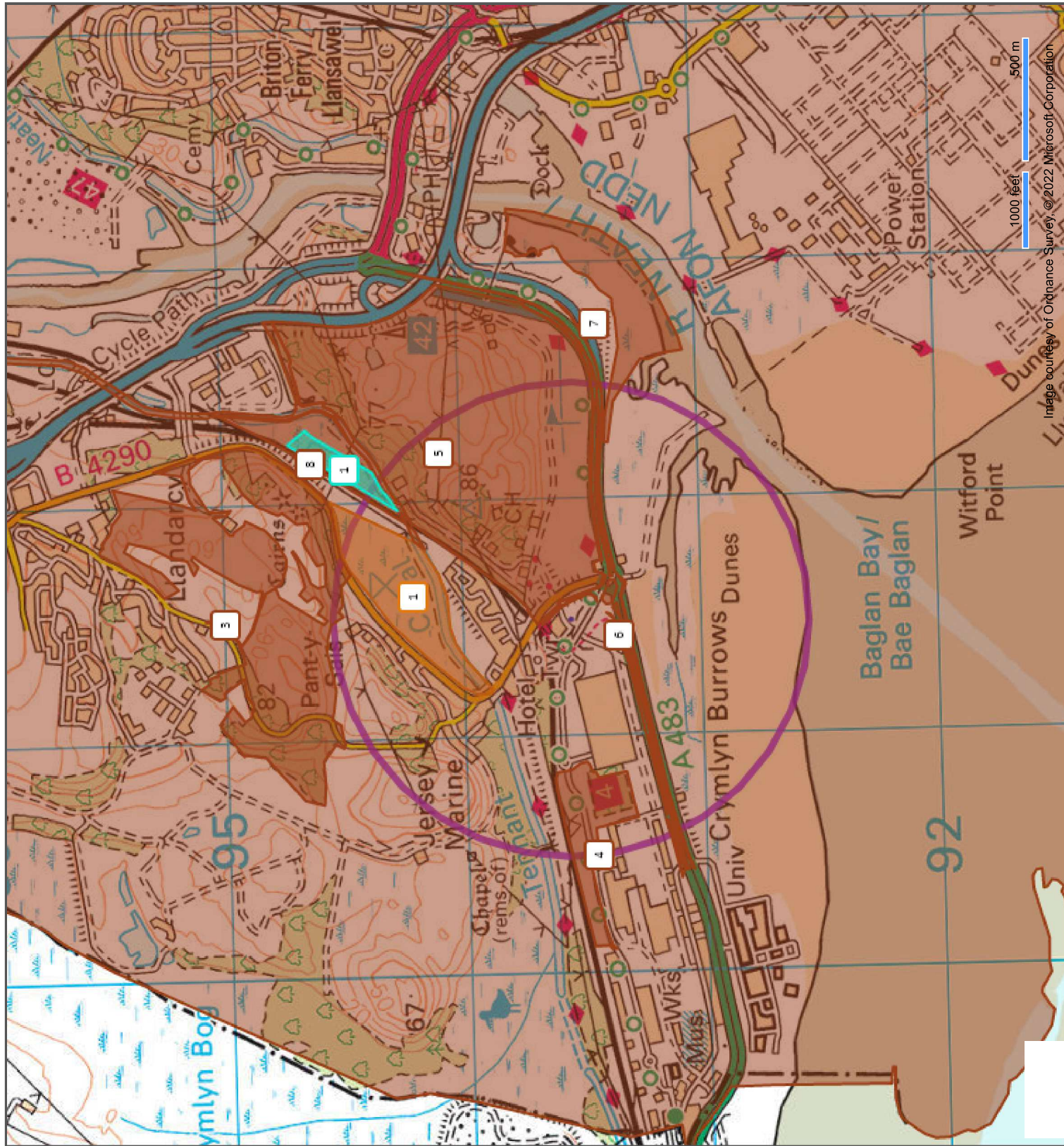
1: Cors Crymlyn / Crymlyn Bog

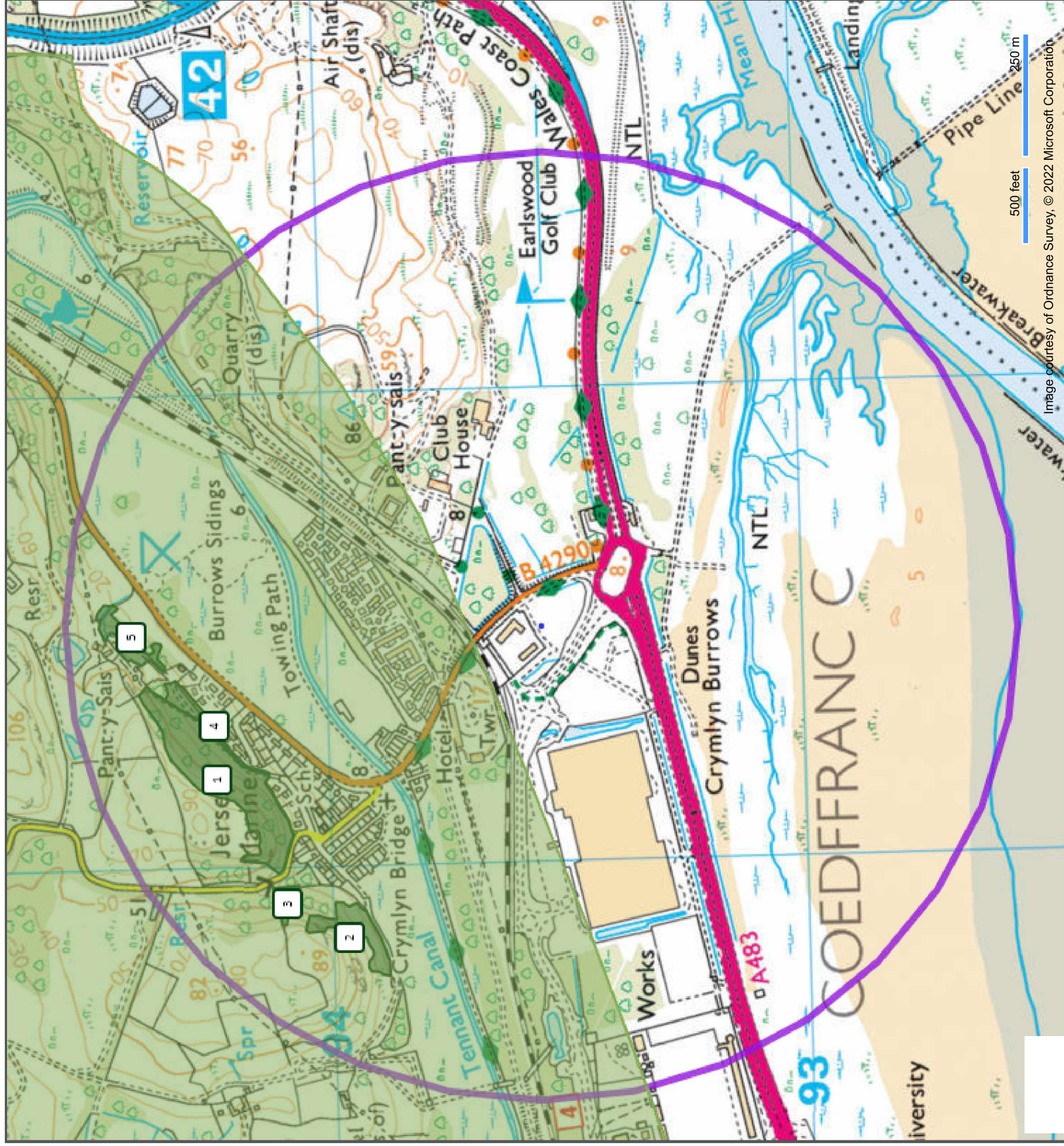
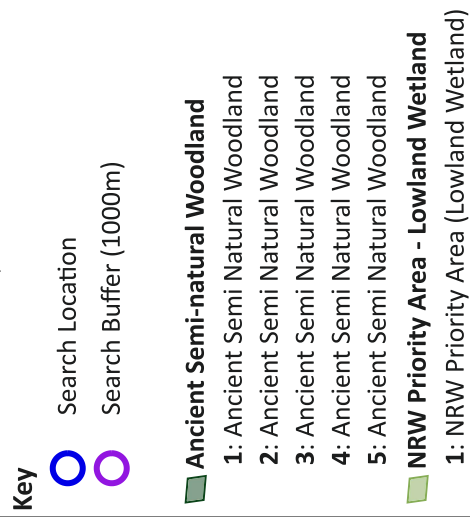
2: Crymlyn Burrows

3: Pant-y-Sais

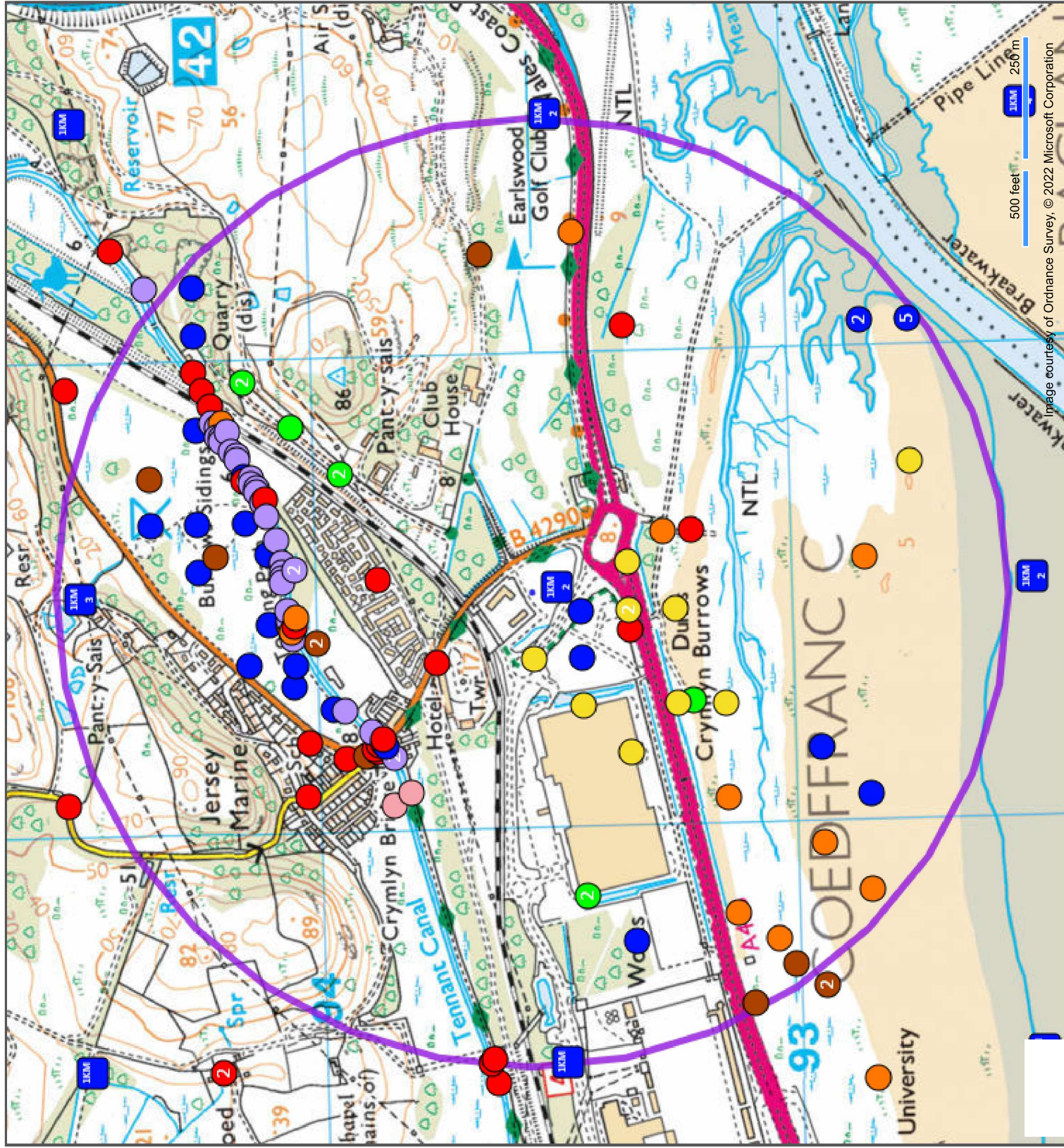
Key

-  Search Location
-  Search Buffer (1000m)
-  **Local Nature Reserves**
 - 1: PANT-Y-SAIS
-  **Adopted SINC**
 - 1: NPT Watercourses
 - 2: TENNANT CANAL
 - 3: JERSEY MARINE WOODS
 - 4: AMAZON WOODLANDS
 - 5: EARLSWOOD AREA
 - 6: FABIAN WAY WILDFLOWER VERGE
 - 7: CRYMLYN BURROWS
 - 8: RED JACKET FEN
-  **Wildlife Trust Reserve**
 - 1: Red Jacket Fen





- Key**
- Search Location
 - Search Buffer (1000m)
 - Bees, Wasps, Ants and Sawflies
 - Birds
 - Butterflies and Moths
 - Fungi, Lichen and Slime Moulds
 - Mammals
 - Other Invertebrates
 - Plants
 - Reptiles and Amphibians



500 feet 250m

Image courtesy of Ordnance Survey, © 2022 Microsoft Corporation

APPENDIX III EXTENDED PHASE 1 HABITAT SURVEY PLAN & TARGET NOTES

Target Note	Description/Comment
Birds seen/ heard: wren <i>Troglodytes troglodytes</i> , robin <i>Erithacus rubecula</i> and blue tit <i>Cyanistes caeruleus</i> .	
1	A mammal path 
2	A strip of tall reed within the poor semi-improved grassland