

GBV Properties Ltd.

Land at Mardon Park, Baglan Energy Park

Preliminary Ecological Appraisal

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SUMMARY

This report refers to the land rear of the pumping station, Mardon Park, Baglan Energy Park SA12 7AX, NGR SS 73926 92651, to inform a current development proposal. The site has received considerable ecological survey effort in the recent past in relation to the proposed development of the wider site (Baglan Energy Park). This report aims to update that survey work with specific reference to the current condition of the site, plus inform ecological mitigation and compensation proposals for the current development proposal.

The site comprises former industrial land and formed part of the original BP Baglan site. The site was cleared and levelled some years ago to leave a flat open area with a thin industrial spoil covering. It is clear that over time the area became vegetated, however, it has more recently again been heavily disturbed through use of the site as a contractor's compound during the construction of the adjacent Baglan Link Bridge and Road. Whilst some of the wider area has become re-vegetated since this recent disturbance, the majority of this development site remains in a recently disturbed condition.

The site has been severely impacted and disturbed by previous levelling procedures recent multiple uses as a contractor's site compound for highway and infrastructure construction. Remaining habitat is largely ephemeral / short perennial vegetation with limited semi-improved neutral grassland and scattered scrub. A proportion of the site has been notified by NPTCBC as part of a wider Site of Interest for Natures Conservation (SINC) due to records for a number of qualifying plant species and lapwing. The extent of the SINC in relation to the site is shown in figure 2.

Largely as a result of the damage caused to the site it has a low potential to support reptiles, amphibians and ground nesting birds, and a negligible potential to support other protected species such as badger, dormouse and otter. Phase 2 surveys for reptiles, breeding birds and bats will confirm their use of the site and inform appropriate mitigation.

The development proposal is for a single light industrial unit with associated car park, services and access. In the absence of mitigation the proposal would result in the following impacts:

Loss of approximately 4983sqm of ephemeral / short perennial vegetation, neutral grassland and scattered scrub.

Loss of approximately 205sqm of Site of Importance for Nature Conservation as shown on figure 2. The area comprises neutral grassland with scattered scrub and patches of bare ground.

There are potentially the following impacts to species:

- Potential minor reduction in bat foraging habitat and minor disturbance through further introduction of artificial light sources associated with the development, to be confirmed following phase 2 surveys.
- Damage and loss of low potential bird nesting habitat to be confirmed following phase 2 surveys.
- Damage and loss of low potential reptile habitat and risk of harm or killing if reptiles are present to be confirmed following phase 2 surveys.

Phase 2 Ecological surveys will inform recommendations for the proposed development and will be included in final reporting. In addition the following broad recommendations can be made for the development:

- Ecological enhancement or mitigation measures such as bird and bat boxes can be installed on new build structures some of which can be self-contained units incorporated within the fabric of the building.
- Design of a sensitive lighting regime that minimises the use of artificial lighting to minimise impacts on local wildlife.
- Should a protected species be encountered during the construction phase, works in the area should cease and a suitably qualified ecologist should be contacted for advice.
- Any necessary vegetation clearance should be undertaken outside of the bird nesting season (March-August inclusive). Where this is not achievable working areas should be checked ahead of clearance by an ecologist, should a nest be present works must not commence until young have fledged.
- Landscaping and planting regimes for the site should utilise native local provenance species wherever possible to compensate for any losses as a result of the development.

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1.0 Introduction

This report refers to the land rear of the pumping station, Mardon Park, Baglan Energy Park SA12 7AX, NGR SS 73926 92651, to inform a current development proposal. The site has received considerable ecological survey effort in the recent past in relation to the proposed development of the wider site (Baglan Energy Park). This report aims to update that survey work with specific reference to the current condition of the site, plus inform ecological mitigation and compensation proposals for the current development proposal.

2.0 Site Description

The site comprises former industrial land and formed part of the original BP Baglan site. The site was cleared and levelled some years ago to leave a flat open area with a thin industrial spoil covering. It is clear that over time the area became vegetated, however, it has more recently again been heavily disturbed through use of the site as a contractor's compound during the construction of the adjacent Baglan Link Bridge and Road. Whilst some of the wider area has become re-vegetated since this recent disturbance, the majority of this development site remains in a recently disturbed condition.

3.0 Planning Policy

Relevant Planning History

- P2006/0375 18 Number B1, B2 and B8 Business units, 5 number 2 storey offices and 2 number B2/B8 Industrial units: Approved 22nd June 2007.
- P2018/0151: Light Industrial Unit (Use Class B1. Decision: Approved 24-JUL-18.

Planning policy

In addition to national guidance contained within Planning Policy Wales, the application has referred to the Policies within the Adopted Neath Port Talbot Local Development Plan. The relevant policies include:

Strategic Policies

- Policy SP3 - Sustainable communities
- Policy SP10 - Open Space
- Policy SP1 - Climate Change
- Policy SP4 – Infrastructure
- Policy SP5 - Development in the Coastal Corridor Strategy Area
- Policy SP11 - Employment Growth
- Policy SP15 - Biodiversity and Geodiversity
- Policy SP16 - Environmental Protection
- Policy SP19 - Waste Management
- Policy SP20 - Transport Network
- Topic based Policies
- Policy I1 - Infrastructure Requirements

- Policy OS1 - Open Space Requirements
- Policy EC2 - Existing Employment Areas
- Policy EC3 - Employment Area Uses
- Policy EN7 - Important Natural Features
- Policy EN8 - Pollution and land stability
- Policy RE2 - Renewable and Low Carbon Energy In New Developments
- Policy W3 - Waste Management in New Development
- Policy BE1 – Design

The following SPG is of relevance to this application:

- Planning Obligations (October 2016)
- Parking Standards (October 2016)
- Baglan Energy Park Development Framework (October 2016)
- Pollution (October 2016)
- Open Space & Greenspace (July 2017)
- Renewable and Low Carbon Energy (July 2017)
- Design (July 2017)
- Development and the Welsh Language (July 2017)

Consultation

- Pre-application advise was requested in November 2020
- Written pre-application advise was provided by Neath Port Talbot County Borough Council Planning Department on the 30th of January 2018 (ref: Q2018/0007)
- The applicant is owner of the closest unit to the site (19/20 Mardon Park)

4.0 Legislation

The following pieces of legislation have been considered in relation to this assessment:

- Environment (Wales) Act 2016. In particular this Act introduced an enhanced biodiversity and ecosystem resilience duty (Section 6 duty). The duty to public authorities in the exercise of their functions in relation to Wales and, will help maximise contributions to achieving the well-being goals. The Nature Recovery Action Plan supports this legislative requirement to reverse the decline in biodiversity, address the underlying causes of biodiversity loss by putting nature at the heart of decision-making and increasing the resilience of ecosystems by taking specific action focused around the 6 objectives for habitats and species. Specific attention has been given to fully consider all habitats and species listed under Section 7 of this Act ie. the list of habitats and species of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.
- Conservation of Habitats and Species Regulations 2017. The Regulations provide legislative protection for certain species and certain designated sites; including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs).
- Wildlife and Countryside Act 1981 (as amended) which provides legislative protection for certain species (including nesting birds), prohibits the spread of invasive species and

provides the mechanisms for the designation and protection of Sites of Special Scientific Interest (SSSI).

- Protection of Badgers Act 1992 which consolidates legislation specific to badgers (*Meles meles*).
- Hedgerow Regulations 1997 which provides means of protecting hedgerows of value in relation to various criteria including a 'Wildlife and Landscape' criteria relating specifically to ecological features.

5.0 Methodology

This section outlines the methods used to undertake the ecological appraisal for the site.

5.1 Desk top study

The following sources of information were accessed to undertake the desk study for the site:

- A 2km biological record centre search was commissioned from South East Wales Biodiversity Information Centre search reference: 0201-714.
- Natural Resources Wales interactive map Viewer was accessed on 9th February 2021. This was used to search for statutory sites located within the site's locality and to assess the potential for any in-direct impacts that the proposed development might have on such designations and any protected species.
- Neath Port Talbot County Borough Council website was accessed to assess the site in terms of the Local Development Plan and Local Biodiversity Action Plan.

5.2 Extended Phase 1 Habitat Survey

The extended Phase 1 habitat survey was undertaken on 22nd January 2021 under dry, clear conditions at 4°C. Binoculars, Clulite 1 million candle power torch and an endoscope were carried on site to aid assessment.

An extended phase 1 Ecological survey comprises a walkover survey detailing dominant vegetation plus:

- Species protected through UK and EU law.
- Species and habitats appearing on the Environment (Wales) Act 2016 Section 7 lists of species and habitats of principal importance for the conservation of biological diversity.

- Species and habitats listed by the biodiversity action plan as locally important.
- Potential additional phase 2 survey requirements.

5.2.1 Plants

The standardised phase 1 survey methodology was used to categorise the site's vegetation types and to record dominant vegetation species within them. Presence of any invasive plant species is also recorded.

5.2.2 Invertebrates

The site was assessed for its potential to support diverse invertebrate communities based primarily on the presence of habitats known to support such invertebrate communities. Local surveyor knowledge and reference to previous detailed ecological survey work.

5.2.3 Amphibians

The potential for the site to host amphibians was assessed based on the presence or proximity of suitable amphibian habitat such as watercourses and open water.

5.2.4 Reptiles

The potential for the site to host reptiles was assessed based on the presence or proximity of suitable habitat. Reptiles can occur on a number of different habitat types, but are particularly associated with scrub and grassland interfaces, they also require areas of open ground for basking. Rubble piles, dense tussocky grassland and compost heaps are frequently used for breeding and or hibernation.

5.2.5 Birds

The survey was undertaken early in the bird nesting season. An assessment was made of the suitability of the habitat to support breeding or wintering birds.

5.2.6 Bats

An assessment was made of all habitats and features of the site and therefore it's potential to support roosting bats, and also to support foraging or commuting bats. The assessment was undertaken in accordance with the Bat Conservation Trust Survey Guidelines 2016.

5.2.7 Badgers

The site was investigated for field signs indicative of badger use or presence. These include badger setts, pathways, latrines, and hairs. Potential access from and use of surrounding areas were also assessed.

5.2.8 Dormouse *Muscardinus avellanarius*

The county has records for Dormouse *Muscardinus avellanarius* and attention was given to field signs, such as dormouse breeding nests, and the presence of preferred food sources like hazel *Corylus avellana* and honeysuckle *Lornica periclymeneum*. Connectivity with suitable woodland, scrub and hedgerow habitat is considered crucial for dormouse to accommodate dispersal and foraging, and this was considered in the context of the site and its locality.

5.2.9 Additional Habitat and Species

An assessment was made of the site's potential to host other notable habitat or species in particular those listed as locally important within the county's Local Biodiversity Action Plan. Such habitat and species are crucial to the maintenance of the county's biodiversity.

5.2.10 Constraints

Extended phase 1 habitat surveys are often affected by seasonality constraints which will affect presence of certain plants or animals. The absence of any particular species from the survey should not therefore be considered as absolute proof of absence or that that the species will not be present in the future. This is particularly relevant to very mobile species such as some mammals and birds. In addition the survey was undertaken at a sub-optimal time of year for botanical identification.

6.0 Survey Results

6.1 Desk top study

Further to the searches outlined in 4.1, table 1 lists the designated sites in the locality:

Name	Designation	Proximity to site	Designation detail / qualifying features
Earlswood Road Cutting And Ferryboat Inn Quarries SSSI	Site of Special Scientific Interest	1.5Km north west.	This site is of special scientific interest for its exposures of late Carboniferous rocks which afford the best available sections through the Carboniferous Rhondda Beds, in a deltaic facies.
Crymlyn Burrows SSSI	Site of Special Scientific Interest	1.45Km west	One of the last remaining sections of the Swansea Bay Coastline which has remained substantially unmodified by industrial development. Over the past one hundred and fifty years, parallel sand dune ridges have developed at right angles to the River Neath and these are continuing to accumulate at the present time. Salt water is able to gain access to the system at high tide via the river channel, with the result that the dunes are interspersed by tongues of saltmarsh. These grade westwards into wet dune slacks and carr woodland.
Pant y Sais SSSI	Site of Special Scientific Interest	2.7km north-west	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 with abundant Typha latifolia and Typha angustifolia, and developing fen carr. Formerly part of the same hydrological system as Crymlyn Bog.

Crymlyn Bog SAC, SSSI, Ramsar, NNR	Special Area of Conservation, Site of Special Scientific Interest, Ramsar site, National Nature Reserve.	4.1Km north- west	Alder woodlands on floodplains Calcium-rich fen dominated by great fen sedge (saw sedge) Very wet mires often identified by an unstable 'quaking' surface. 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 3.5km east of central Swansea within a landscape heavily influenced by past and present industrial activities. Crymlyn Bog SSSI, South Wales qualifies under criterion 1 as the largest example of valley-flood plain mire in Wales. There is no other known example of this type with a comparable complexity and diversity of vegetation in Britain. The site occupies a total area of 243.9 ha of which 60 ha. are managed as National Nature Reserve..
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The site is proposed for development of light industrial units. All excavations, and potentially contaminated materials will be managed on site, and no materials will be exported. No impact is therefore anticipated to the above statutory designations.

It is understood that a proportion of the boundary of the site has recently been confirmed as part of a Site of Interest for Nature Conservation with Neath Port Talbot County Borough. Development of the site must therefore take account of the features of the site and provide mitigation and compensation for any impacts. Figure 2 shows the approximate SIN boundary in relation to the development site.

6.2 Vegetation

The walkover survey detailed dominant habitat types and recorded individual species. The survey was undertaken at a sub-optimal time of year for botanical survey. Figure 1 below details the phase 1 habitat survey.

The site has a low habitat diversity being dominated by short ephemeral vegetation over industrial spoil and neutral grassland. Previous site assessment (David Clements Ecology 2013) located areas of ruderal vegetation, Phragmites stands and scattered scrub, these were not conspicuous, appearing to have been lost to, or severely damaged by the recent multiple use of the site as a contractor's compounds.

Species which were conspicuous are shown in appendix 1, however due to the time of year, comprehensive vegetation identification was not possible.

A small number of individual stands of sharp rush (*Juncus acutus*) were recorded.

A number of previous surveys were undertaken by Dr Charles Hipkin and David Clements Ecology in 2012 and 2013 respectively which covered the larger SINC area, further botanical records from Rebecca Sharp also exist. A number of rare and uncommon plant species were recorded from these surveys including sharp rush (*Juncus acutus*), basil-thyme (*Clinopodium acinos*), distant sedge (*Carex distans*), round-leaved crane's-bill (*Geranium rotundifolium*), hawkweed oxtongue (*Picris hieracioides*), vervain (*Verbena officinalis*), spotted-orchids (*Dactylorhiza spp*) and knotted pearlwort (*Sagina nodosa*) all of which were recorded in 2012-2013 (DCE 2012).

6.2.1 Neutral grassland

Bunded areas associated with the peripheries of the site and a central bund contained neutral grassland severely disturbed in places due to past uses as a contractor's compound, highway and services works.



Plate 1 Neutral grassland.

6.2.2 Scattered scrub

Scattered scrub was also associated with the peripheral bunded parts of the site. Species present were gorse *Ulex europaeus* and butterfly bush *Buddleia davidii*.



Plate 2. Scrub species on peripheral bunds.

6.2.3 Ephemeral / short perennial

The majority of the site has a patchy ground covering of ephemeral and short perennial vegetation over industrial spoil.



Plate 3. Ephemeral / short perennial vegetation

6.2.4 Invasive Species

No species listed under Schedule 9 part II of the Wildlife and Countryside Act 1981 (as amended) were recorded on site.

6.3 Invertebrates

There are currently no invertebrate records for the site and the present survey was undertaken at a sub-optimal time of year for invertebrate surveying. A number of local species have however been recorded in similar habitat within the wider Energy Park site such as small blue (*Cupido minimus*), mother shipton (*Callistege mi*) and burnet companion moths (*Euclidia glyphica*) in addition more common species listed in the NPT LBAP such as bumblebees (*Bombus* spp.) It is considered that habitats present on site are capable of having invertebrate interest which must be accommodated within mitigation proposals.

6.4 Amphibians

No suitable amphibian breeding habitat such as watercourses and open water were recorded on the site. There are records for common frog, common toad and palmate newt within the wider Energy Park. The protected great crested newt (gcn) has not been recorded in the locality. The triangular lake and balancing pond due east of the site are considered unlikely to be used by gcn, particularly the latter which is of recent construction and subject to heavy disturbance through a pumped drainage management regime. There is also poor habitat connectivity between these waterbodies and the site interrupted by the main Central Avenue highway and cycle tracks. It is therefore considered unlikely that gcn occur on the site, however a non-licence method statement can be employed during the construction phase that will prevent any harm to the species in the unlikely event of it's occurrence. The potential presence of all amphibians will need to be accommodated within mitigation proposals.

6.5 Reptiles

Habitats present on neighbouring areas to the site or within the wider SINC area are considered suitable to host reptile species. Damage and levelling to the habitats present on the proposed development site is likely to have had a considerable impact on any reptile population that may have been present, particularly if no mitigation procedures were undertaken. Common lizard and slow-worm have been recorded in the locality and it is considered that they could still occur on the site albeit at low population densities. A reptile survey undertaken at the appropriate time of year would give a better understanding of reptile population levels and therefore inform mitigation proposals.

6.6 Birds

A breeding bird survey was undertaken across the wider SINC site by David Clements Ecology in 2013 and a small number of 'potentially nesting birds was recorded'. During this survey the presence of northern lapwing (*Vanellus vanellus*) was recorded. Lapwing is listed as a species of principal importance under Section 7 of the Environment (Wales) Act 2016 and is a key species of the Baglan Energy Park for which extensive mitigation works have been undertaken, these mitigation works are also likely to benefit other declining ground nesting species such as ringed plover and little ringed-plover.

Magpie *Pica pica*, common kestrel *Falco tinnunculus*, carrion crow *Corvus corone corone*, Green woodpecker *Picus viridis* and blue tit *Parus major* were recorded on site during the walkover survey. The low occurrence of scrub and absence of woodland habitat on the proposed development is considered likely to severely restrict breeding opportunity for such species on the site itself.

Of the other species that have been recorded across the wider Energy Park, skylark (*Alauda arvensis*) is considered the most likely to use the site for ground nesting, however the increasingly built-up and disturbed nature of the site locality is likely to be a severely limiting factor to such use.

Due to the increasingly built-up nature of the locality with associated increasing human disturbance, on-site compensatory works for lapwing are considered inappropriate, particularly as extensive, more appropriate mitigation works have been provided elsewhere on the Energy Park.

The site is not considered to be of importance for wintering birds, however a breeding bird survey undertaken at the appropriate time of year would give a better understanding of its use by breeding birds and therefore inform mitigation proposals.

6.7 Bats

No suitable bat roosting features or evidence of bat use were recorded across the site. Highways and associated street lighting surround the site and are likely to severely limit its use by certain species, there may however be limited foraging potential for widespread species such as common and soprano pipistrelles. Transect surveys during the appropriate time of year would give a better understanding of its use by bats and therefore inform mitigation proposals.

6.8 Brown hare

Brown hare (*Lepus europeaus*) has been recorded within the Energy Park, it is conceivable that the species may occur at the site but the current condition of habitats, street lighting and human disturbance are factors considered likely to deter the species from significant use of the site. Brown hare is listed as a species of principal importance under Section 7 of the Environment (Wales) Act 2016.

6.9 Dormice

Records for dormouse do exist within the county, however, habitat connectivity between the records and the site is not available to the species. Habitats present on site were deemed unsuitable to support dormouse.

6.10 Badger

No field signs for badger were recorded on or adjacent the site.

6.11 Other mammals

Field signs for rabbit including a warren, droppings and hairs were recorded in neighbouring habitats. One bank / field vole was recorded during the walkover survey.

7.0 Conclusions and Recommendations

7.1 Introduction

This section presents the conclusions of the ecological appraisal. It sets out recommendations for further works and provides an assessment of the likely ecological impacts of the proposed development.

7.2 Site Evaluation

The site has been severely impacted and disturbed by previous levelling procedures recent multiple uses as a contractor's site compound for highway and infrastructure construction. Remaining habitat is largely ephemeral / short perennial vegetation with limited semi-improved neutral grassland and scattered scrub. A proportion of the boundary of the site has been notified by NPTCBC as part of a wider Site of Interest for Nature Conservation (SINC) due to records for a number of qualifying plant species and lapwing. The extent of the SINC in relation to the site is shown in figure 2.

Largely as a result of the damage caused to the site it has a low potential to support reptiles, amphibians and ground nesting birds, and a negligible potential to support other protected species such as badger, dormouse and otter. Phase 2 surveys for reptiles, breeding birds and bats will confirm their use of the site and inform appropriate mitigation.

7.3 Potential Impacts

The development proposal is for a single light industrial unit with associated car park, services and access. In the absence of mitigation, the proposal would result in the following impacts:

7.3.1 Habitat Loss

Loss of approximately 4983sqm of ephemeral / short perennial vegetation, neutral grassland and scattered scrub.

Impact to SINC designation

Loss of approximately 205sqm of Site of Importance for Nature Conservation as shown on figure 2. The area comprises neutral grassland with scattered scrub and patches of bare ground.

7.3.2 Impacts to species

There are potentially the following impacts to species:

- Potential minor reduction in bat foraging habitat and minor disturbance through further introduction of artificial light sources associated with the development, to be confirmed following phase 2 surveys.
- Damage and loss of low potential bird nesting habitat to be confirmed following phase 2 surveys.
- Damage and loss of low potential reptile habitat, and risk of harm or killing if reptiles are present to be confirmed following phase 2 surveys.

7.4 Assessment of ecosystem resilience

Phase 2 ecological surveys are required to inform an assessment of ecosystem resilience in relation to the proposed development.

7.5 Recommendations

Phase 2 Ecological surveys will inform recommendations for the proposed development and will be included in final reporting. In addition the following broad recommendations can be made for the development:

- Ecological enhancement or mitigation measures such as bird and bat boxes can be installed on new build structures some of which can be self-contained units incorporated within the fabric of the building.
- Design of a sensitive lighting regime that minimises the use of artificial lighting to minimise impacts on local wildlife.
- Should a protected species be encountered during the construction phase, works in the area should cease and a suitably qualified ecologist should be contacted for advice.
- Any necessary vegetation clearance should be undertaken outside of the bird nesting season (March-August inclusive). Where this is not achievable working areas should be checked ahead of clearance by an ecologist, should a nest be present works must not commence until young have fledged.
- Landscaping and planting regimes for the site should utilise native local provenance species wherever possible to compensate for any losses as a result of the development.

8.0 Proposed mitigation, compensation and ecological enhancement

Results and findings of the phase 2 surveys outlined above will be utilised along with current industry best practice to inform mitigation, compensation and ecological enhancement for the proposed development.

Bibliography

- Anon. (2000). The Countryside and Rights of Way Act (2000). HMSO, London.
- Anon (2006) The Natural Environment and Rural Communities Act 2006. HMSO, London
- Anon (2016) Environment (Wales) Act 2016
- Anon (2010). The Conservation of Habitats and Species Regulations 2017 HMSO, London.
- Anon (1981). The Wildlife and Countryside Act 1981 HMSO, London
- Department of the Environment (DoE 1994) Biodiversity: the UK Action Plan. Cmmd 2428. DoE, London.
- Rose F. (2006) The Wildflower Key (2nd ed.). Warne
- Royal Town Planning Institute (RTPI 1999) Good Practice Guide: Planning for Biodiversity. RTPI, London.
- Stace, C. (1996). The New Flora of the British Isles. (2nd ed.). Cambridge.
- Oxford, M 2000. Developing Naturally. A Handbook for incorporating the natural environment into planning and environment. Association of Local Government Ecologists.
- Nature Conservancy Council 1990. Handbook for Phase 1 habitat survey. A technique for environmental audit.
- David Clements Ecology Ltd 2013. Baglan Energy Park: Bridged Link-Road, Neath Port Talbot, Glamorgan. Ecological Assessment. Appendix: Additional Survey Area to the West at Mardon Park.
- David Clements Ecology Ltd 2012. Baglan Energy Park: Bridged Link-Road, Neath Port Talbot, Glamorgan. Ecological Assessment.
- Greg Jones Consultant Ecologist 2018. Land to the rear of Pumping Station, Mardon Park, Ecological Appraisal.

Figure 1.

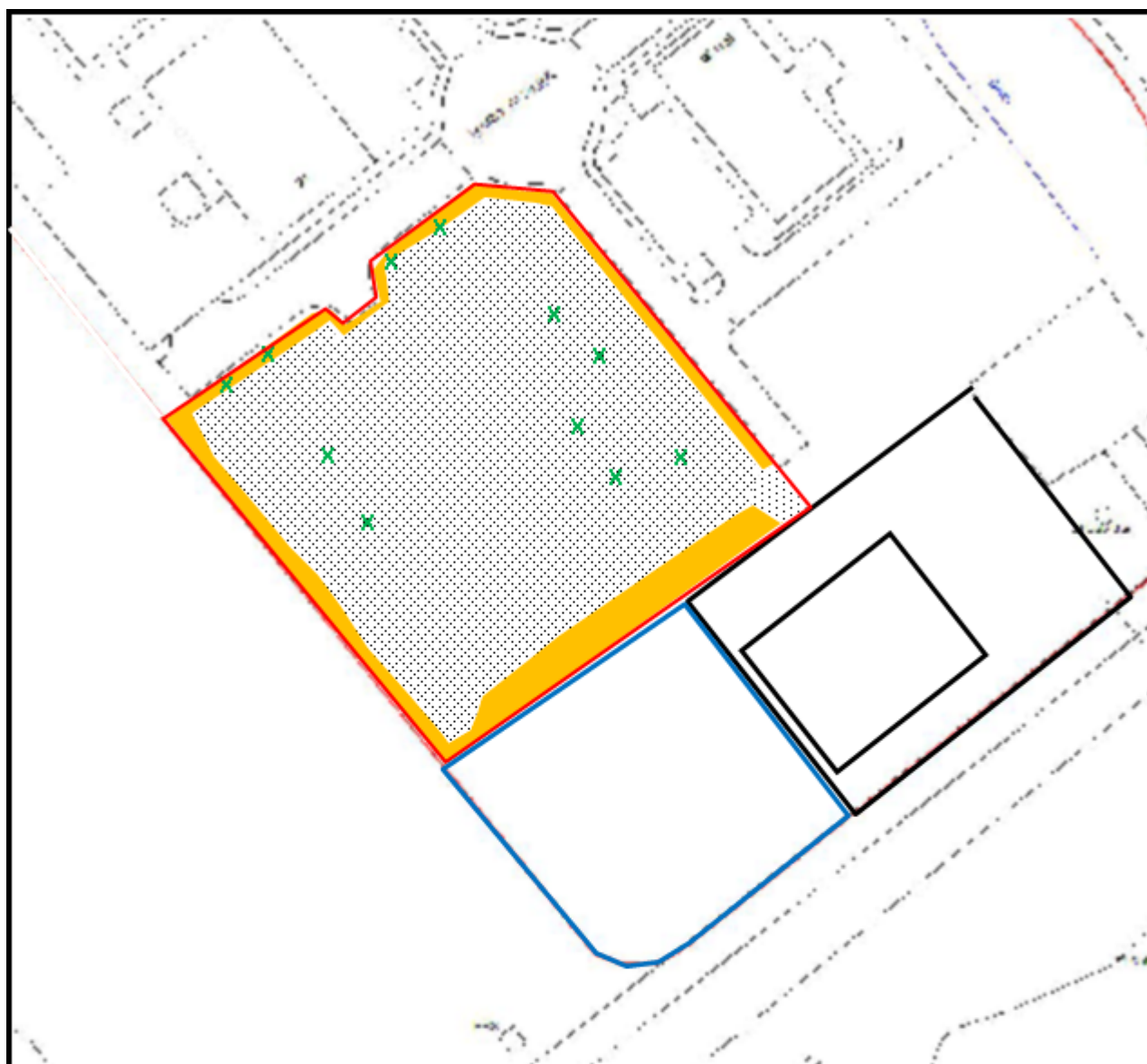
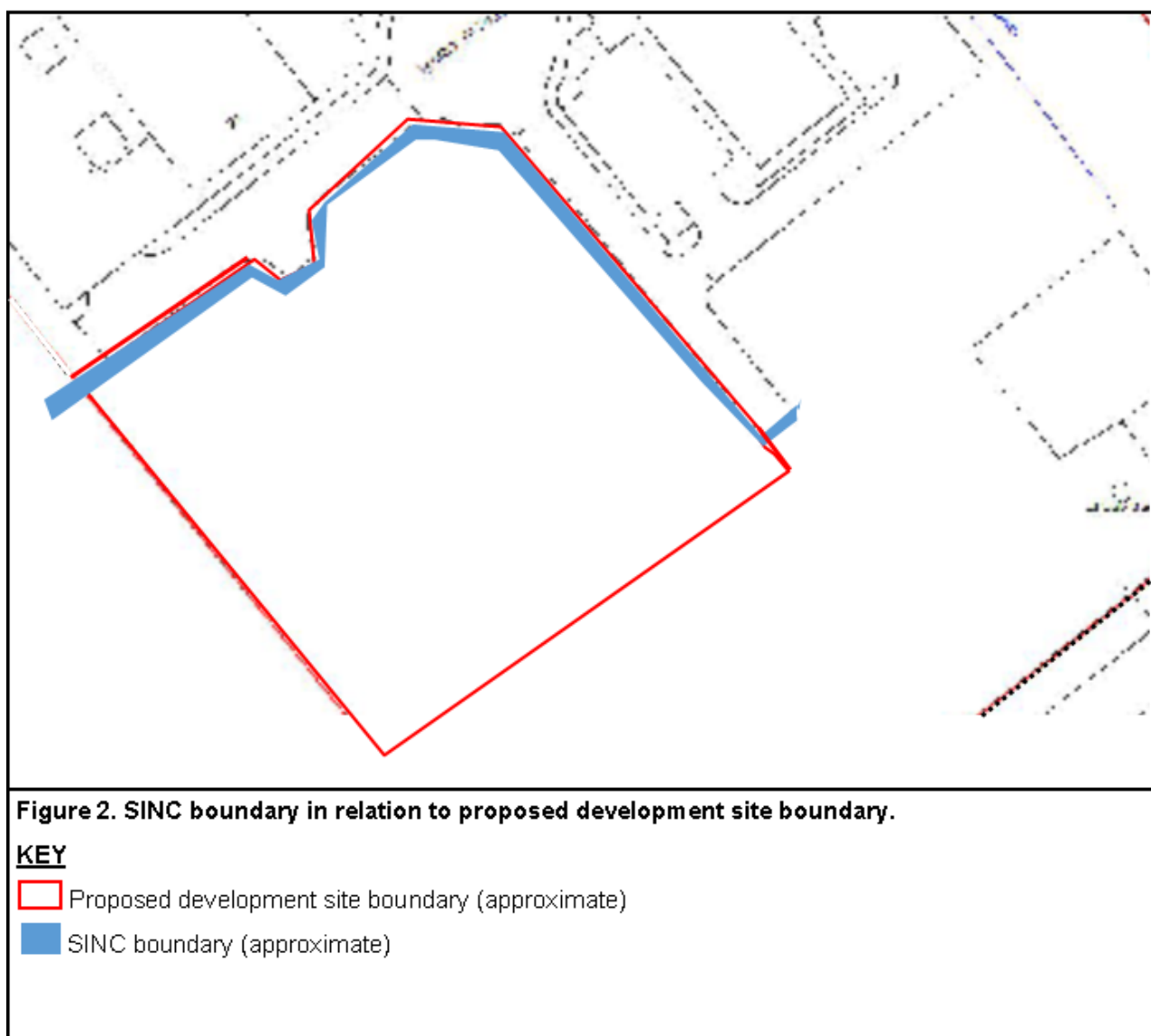


Figure 1. Mardon Park, Baglan EP, Phase 1 Habitat Drawing

KEY

-  Neutral grassland
-  Ephemeral / short perennial vegetation
-  Scattered scrub
-  Hardstanding
-  Proposed development site boundary.
-  Future development site boundary
-  Existing development boundary.

Figure 2.



Appendix 1. Plant species list recorded 22.01.21

Vernacular	Taxon
Annual meadow grass	<i>Poa annua</i>
Sweet vernal grass	<i>Anthoxanthum odoratum</i>
Cock's-foot	<i>Dactylis glomerata</i>
Sheep's fescue	<i>Festuca ovina</i>
Yarrow	<i>Achillea millefolium</i>
Willowherb	<i>Epilobium sp.</i>
Creeping buttercup	<i>Ranunculus repens</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Bramble	<i>Rubus fruticosus</i>
Butterfly bush	<i>Buddleia davidii</i>
Common gorse	<i>Ulex europeaus</i>
Yellow bartsia	<i>Parentucellia viscosa</i>
Hoary plantain	<i>Plantago media</i>
Creeping thistle	<i>Cirsium arvensis</i>
Wild carrot	<i>Daucus carota</i>
Biting stonecrop	<i>Sedum acre</i>
Lichen	<i>Cladonia sp.</i>

