

GBV Properties Ltd.

**Extension to rear of 21 Mardon Park, Baglan Energy
Park**

Ecological Appraisal

**(Ecosystem Resilience Assessment, Mitigation,
Compensation and Enhancement Measures).**

Report Ref: GBV151021

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Disclaimer

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SUMMARY

A preliminary ecological appraisal undertaken by Greg Jones Ecologists Ltd. In March 2021 (report ref. GBV020321) recommended phase 2 ecological surveys for reptiles, bats, breeding birds, vegetation (NVC) and invertebrates. This document reports the findings of those surveys and provides recommendations for mitigation, compensation and biodiversity enhancements for the proposed development.

The site reptile survey showed no presence of reptiles across the site. It is also understood that the site is subject to high water tables and flash flooding during heavy rain events, this is considered likely to severely restrict reptile use of the site.

The site was assessed as having poor habitat structural diversity. In addition, anthropogenic factors such as street lighting associated with adjacent roadways, and security lighting associated with existing industrial units were considered likely to produce significant levels of light spillage over the site. The site was therefore considered to have very low potential for roosting and foraging bats.

Birds were not recorded nesting on the site, with such activity recorded in retained woodland strips in proximity to the site.

Mitigation and compensatory options to reduce residual impacts include the following:

- Habitat enrichment for Section 7 bumblebee species and the Small Blue butterfly by planting up conservation areas with key forage species, e.g. Kidney Vetch, Narrow-leaved Everlasting-pea, Black Horehound, etc.
- Periodic scrub control and removal of arisings will be essential to maintain species-rich grassland habitats.
- A destructive search for amphibians and reptiles must be undertaken during topsoil stripping with any animals encountered removed safely to retained habitats under the same landownership.

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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 SS 73949 92594, 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. The site has become re-vegetated since this recent disturbance.

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 Phase 2 Ecological Surveys

The phase 1 walkover survey identified the requirement for detailed phase 2 Ecological surveys for the following:

- Reptiles
- Breeding Birds
- Bats
- Vegetation.

6.0 SURVEY RESULTS

6.1 Reptile Survey

6.1.1 Methodology

A reptile survey was undertaken April / May 2021, the survey was undertaken in accordance with guidance set out in the Herpetofauna Worker's Manual. Fifty reptile refugia comprising 40 bituminous felts and 10 onduline 'tins' were set out across the site 9th April 2021 and allowed to 'bed-in' for 14 days. Seven refugia survey visits were then undertaken from 21st April to 7th May, visits were undertaken under suitable weather conditions when reptiles can be expected to be active.

6.1.2 Results

The results of the reptile survey are shown in table 1 below:

Reptile Refugia Survey		Mardon Pk, Baglan EP.	
Date of visit	Time	Weather conditions/ Temp (oC)/% Cloud Cover	Species caught inc age and sex
21.04.21	9AM	Sunny 13Celsius, 10% cloud	None
23.04.21	8AM	Sunny 12C, 5% cloud	None
26.04.21	10;30AM	Sunny 15Celsius, No cloud	None
28.04.21	9AM	sunny spells 13Celsius, 70% cloud	None
30.04.21	10:30am	Overcast 80% Cloud 12Celsius	None
05.05.21	2pm	Sunny spells 16Celsius, 40% cloud	None
07.05.21	10am	Sunny 15Celsius, No cloud	None

6.2 Bat Survey

6.2.1 Methodology

The site was assessed as having poor habitat structural diversity. In addition, anthropogenic factors such as street lighting associated with adjacent roadways and security lighting associated with existing industrial units were considered likely to produce significant levels of light spillage over the site. These factors combine to give the site a low potential for roosting and foraging bats. Therefore, in accordance with Bat Conservation Trust Bat Survey Guidelines for Professional Ecologists, two evening transect survey were undertaken 22nd April and 8th July 2021. The surveys were undertaken by Greg Jones who holds a Natural Resources Wales licence to disturb and take bats for scientific or educational purposes and for the purpose of conserving wild animals.

6.2.2 Results

Survey results are summarised in table 2 and 3, illustrated in figures 1 and 2 and images of light spillage shown in plates 1 & 2 below:

Table 2. Bat Survey no.1 table

Site: Mardon Park, Baglan Energy Park		Survey: Evening Emergence Transect Survey for Bats.	
Date of Survey: 22/04/2021	Sunset: 20:24	Completed by Greg Jones 23/04/21.	
Surveyor			
Greg Jones NRW bat survey licence no. S088613/1			
Weather Conditions			
- Visibility – Excellent 10% cloud cover - No wind - Temperature at start 14⁰ Celsius - Temperature at finish 13⁰ Celsius			
Survey start / finish times			
Start: 20:22 Finish: 23:30			
Survey Equipment			
Wildlife Acoustics Echometer Touch 2 Pro Full Spectrum bat detector			
Survey Raw Data Summary			
20:51:16 Common pipistrelle pass north-west boundary of site.			
Conclusions			
- One common pipistrelle bat pass was recorded over the north-west boundary of the site. - No other bat activity recorded. - Very high level of light spillage over the site was noted.			

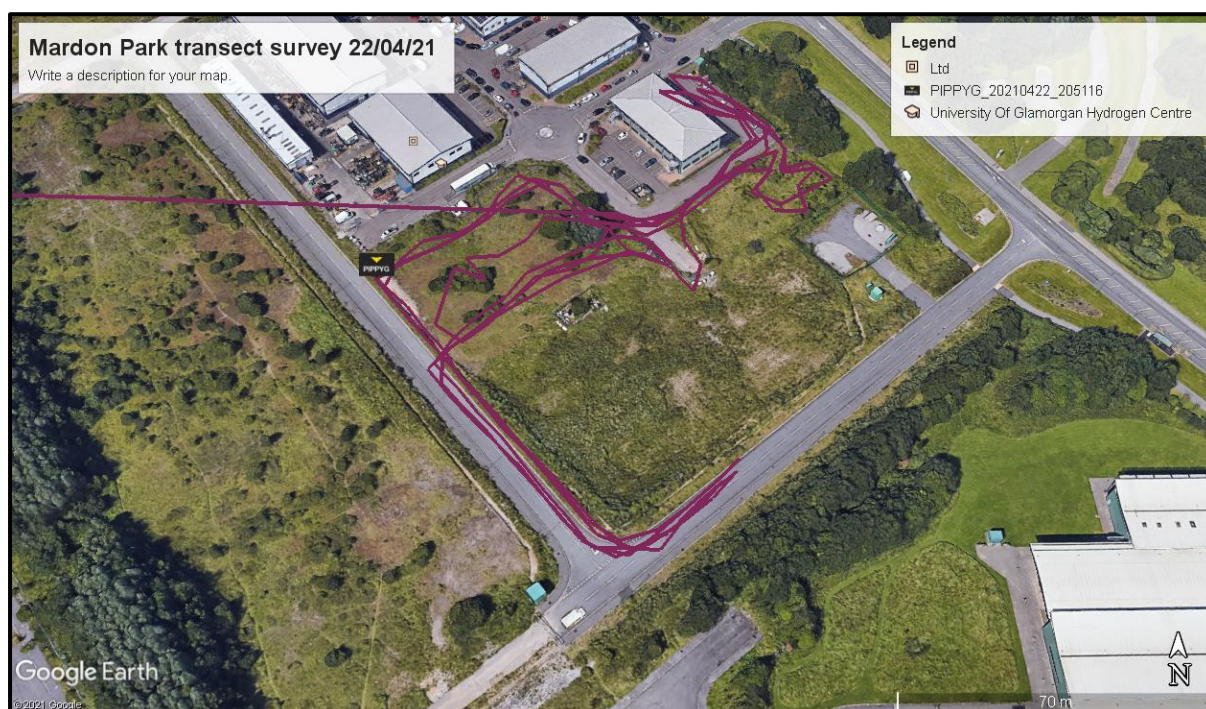


Figure 1. Mardon Park transect survey 1. KLM derived session plot.

Table 3. Bat Survey no.2 table

Site: Mardon Park, Baglan Energy Park		Survey: Evening Emergence Transect Survey for Bats.	
Date of Survey: 08/07/2021	Sunset: 21:34	Completed by	Greg Jones 08/07/21.
Surveyor			
Greg Jones NRW bat survey licence no. S0850284-1			
Weather Conditions			
- Visibility – Excellent 60% cloud cover - No wind - Temperature at start 16⁰ Celsius - Temperature at finish 16⁰ Celsius			
Survey start / finish times			
Start: 21:22 Finish: 00:43			
Survey Equipment			

Wildlife Acoustics Echometer Touch 2 Pro Full Spectrum bat detector
Survey Raw Data Summary
22:07:14 – 22:07:37 Soprano pipistrelle recorded foraging over adjacent land (opposite side of roadway) beyond west boundary of site. 22:12:59 Soprano pipistrelle pass recorded beyond south boundary of the site. 22:19:59 Soprano pipistrelle bat commuting E-W over eastern boundary of site.
Conclusions
- Foraging and commuting activity of soprano pipistrelle bat was recorded at low levels. - Very high level of light spillage over the site was noted.

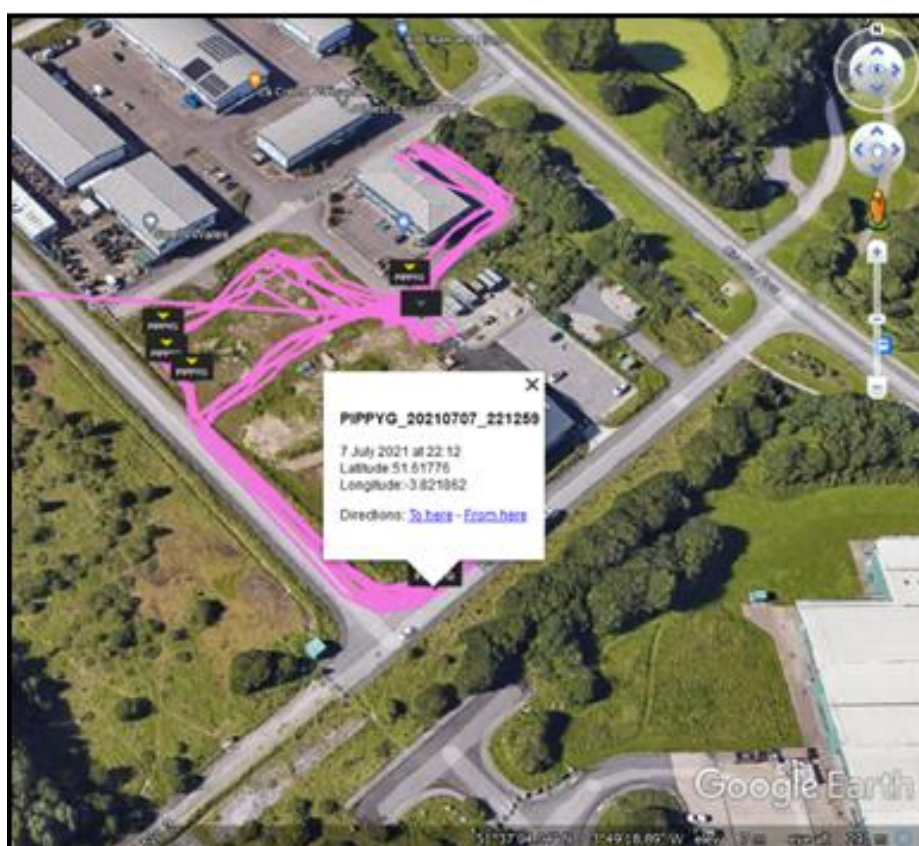


Figure 2. Mardon Park transect survey 2. KLM derived session plot.

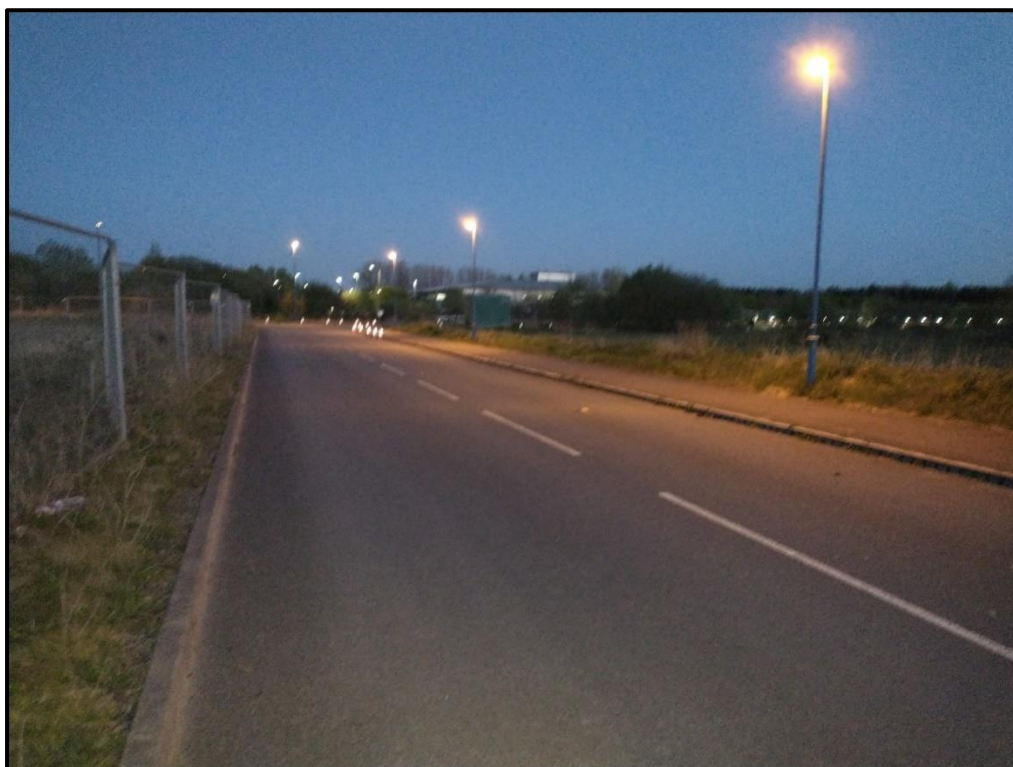


Plate 1. Light spillage from adjacent street lighting



Plate 2. Light spillage from existing business units.

6.2 Breeding Bird Survey

6.2.1 Methodology

Breeding bird surveys were undertaken on site in April and May 2021, by Greg Jones and followed British Ornithological Society Breeding Bird Survey protocol.

6.2.2 Results

Breeding bird surveys were undertaken 21st April and 7th May respectively. No birds were recorded nesting on the proposed development site. Nesting was apparent in woodland strips to the east and south. Results of the surveys are illustrated in figures 2 & 3 below.

Figure 2. Breeding bird survey 21.04.2021

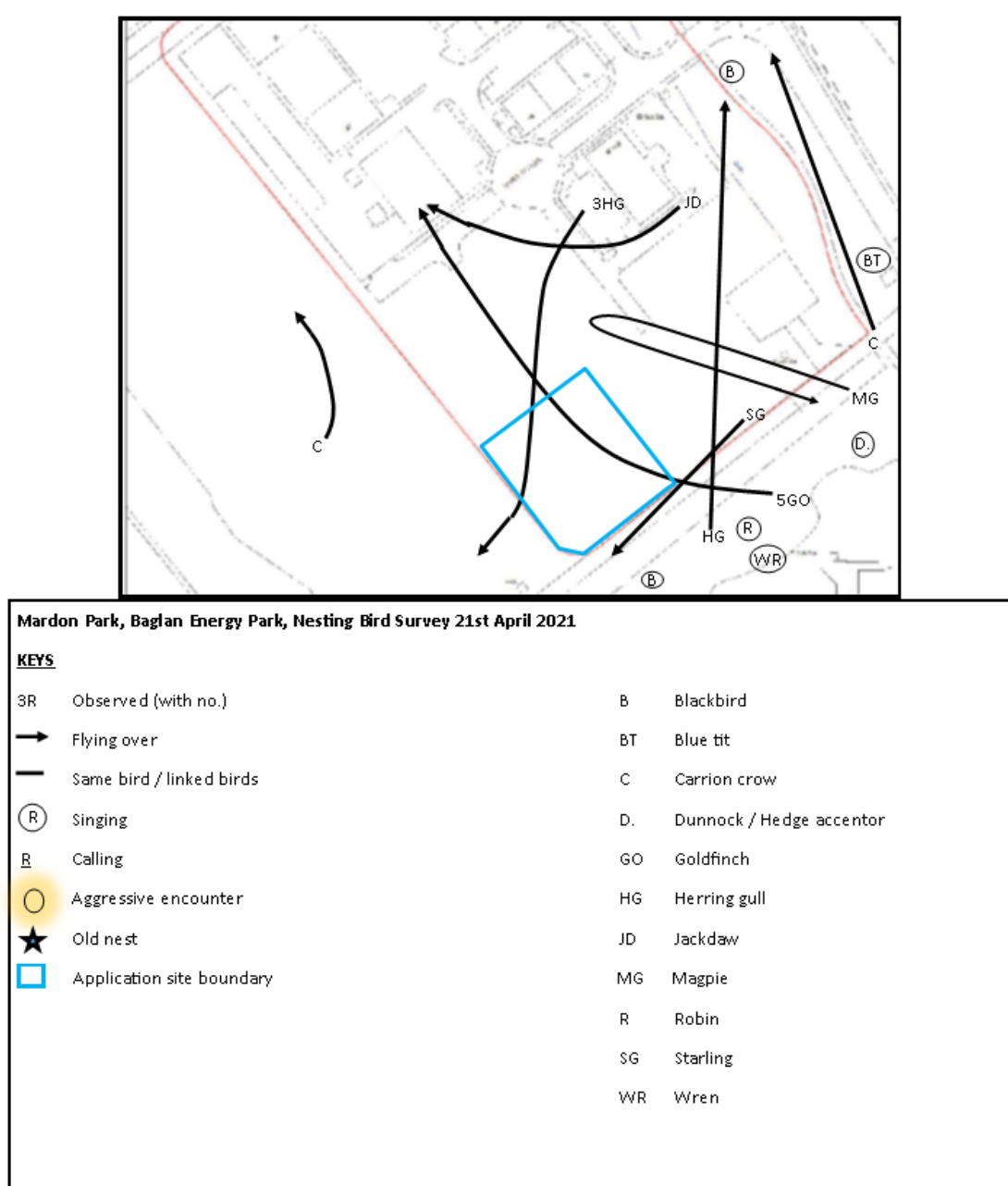
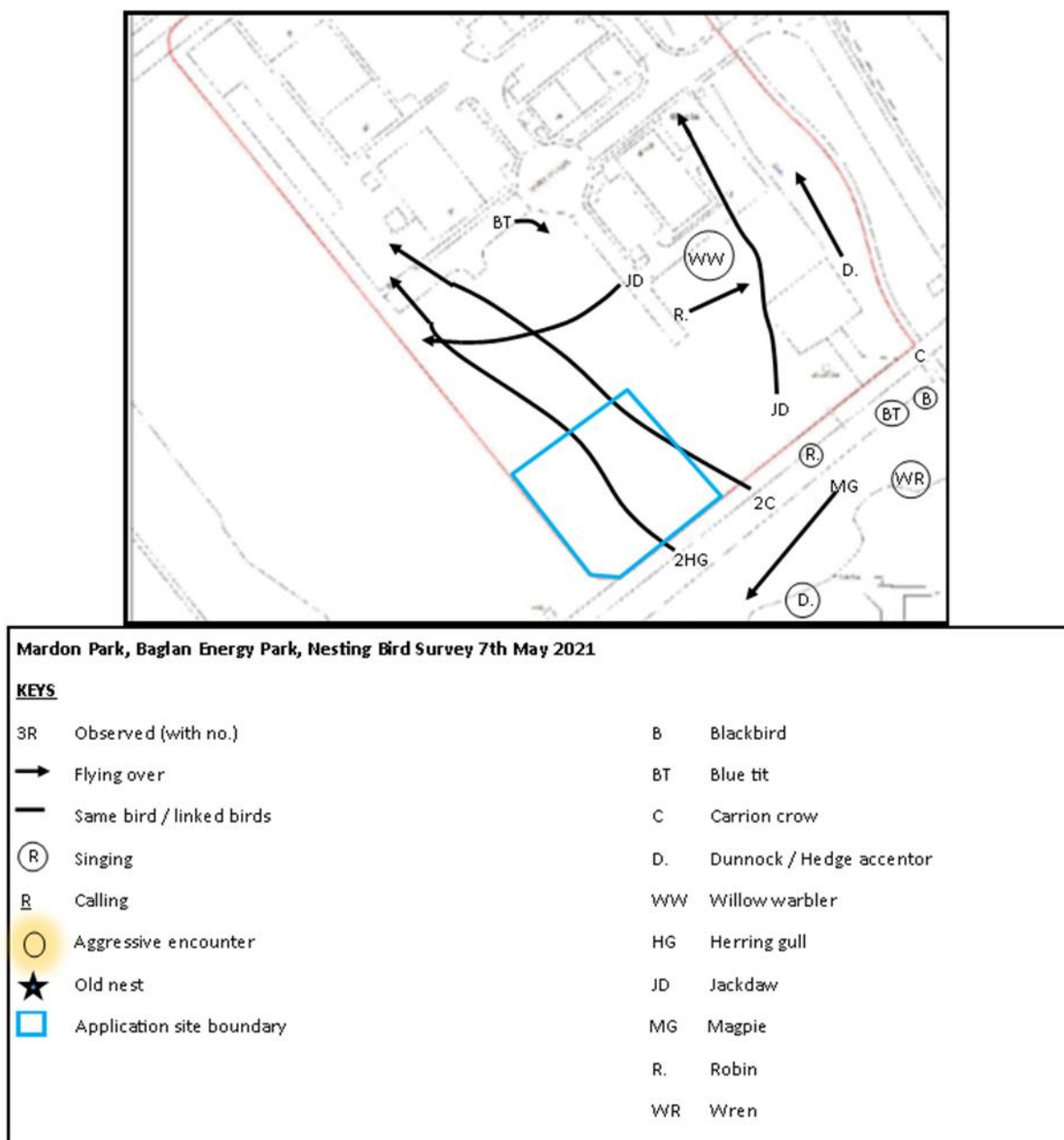


Figure 3. Breeding bird survey 07.05.2021



6.3 VEGETATION AND INVERTEBRATE SURVEY (Barry Stewart & Greg Jones)

6.3.1 Introduction

A full vegetation and invertebrate survey was undertaken by Barry Stewart and Greg Jones and is reported separately in report referenced "VEGETATION SURVEY (Barry Stewart & Greg Jones) REVISED 20th October 2021".

The Study Area at Mardon Park, Baglan is shown on Figures 1. The study site incorporated all the proposed development site areas within Mardon Park. Additional areas beyond the boundaries of the proposed development site yet within the same ownership were also studied to provide context. The text below uses vernacular names for the vascular plants recorded during the surveys, the scientific names of which are given at appendix 1. It is more conventional to use italicised scientific names of lower plants, including bryophytes (mosses and liverworts) and lichens, which are used preferentially in the main text, although vernacular names are also provided at appendix 1, where these exist:

6.3.2 Methods

A Phase II survey was undertaken at the study site on the 8th June (BS & GJ) and on 11th June (BS). All areas within the survey area that are shown on figure 4 were covered and all species recorded with abundances estimated using the dafor scale. As brownfield site are generally heterogeneous and were largely unsampled for the NVC, it was anticipated that the communities represented at the site would be unlikely not be covered by the National Vegetation Classification (NVC).

6.3.3 Results

The site contains the coarse grassland and herb-rich grassland habitats shown as area 2a and area 2b on figure 4 below.

Herb-rich coarse grassland (Area 2b):

The bunds around the verge boundaries of the site and the area shown on figure 4 all were found to support a good diversity grasses and herbs with occasional scrub elements. This vegetation was much more rank than that recorded within the Area 1a, the result of soil movement and a greater organic content in the substrate. Bryophytes and lichens were generally at low abundance, the most frequent components including robust species such as Creeping Bent, False Oat-grass, Hedgerow Crane's-bill, Hoary Mustard, Oxeye Daisy, Red Fescue, Ribwort Plantain, Spear Thistle and Wild Carrot. Kidney Vetch, the larval foodplant of the Small Blue butterfly, and Common Bird's-foot Trefoil were both locally abundant in Areas 1e and 3d, the only other notable species recorded being Common Broomrape, Hawkweed Oxtongue, Round-leaved Crane's-bill and Viper's-bugloss. This heterogeneous vegetation does not fit any described communities within the NVC, but shows weak affinity to **MG1d** *Arrhenatherum elatius* grassland, *Pastinaca sativa* sub-community.

Coarse grassland (Areas 2a):

Somewhat rank grassland extended across much of Area 2 and into the eastern fringe of Area 1 and a small part of Area 3. Here the most prominent species were Cock's-foot, False Oat-grass, Ribwort Plantain and Yorkshire-fog, with *Calliergonella cuspidata* frequent in the ground layer. Hawkweed Oxtongue and Viper's-bugloss were the only two notable species of interest, with other locally frequent species helping characterise the vegetation including Hoary Mustard, Oxeye Daisy, Common Bird's-foot Trefoil and Wild Parsnip. In terms of the NVC this vegetation approximates to **MG1d** *Arrhenatherum elatius* grassland, *Pastinaca sativa* sub-community.

6.3.4 Significant Species

Vascular Plants:

None of the significant vascular plant species recorded in Area 1. Were recorded in Area 2- the subject of this report.

Invertebrates:

None of the invertebrates recorded in areas 1 & 3 were recorded in area 2 – the subject of this report, however their presence could be expected.

Figure 4
Vegetation Survey Plan
June 2021

Legend

-  Development Area
-  Mardon Park Study Area
-  Mitigation Areas
-  Quadrats
-  A2.1 Dense scrub
-  A2.2 Scattered scrub
-  I2.2 Spoil bund
-  J5.1 Herb-rich coarse grassland
-  J5.2 Coarse grassland
-  B3.3 Calcareous grassland on slag
-  J5.3 Lichen-bryophyte vegetation on slag
-  J5.4 Cleared scrub



7.0 CONCLUSIONS

7.1 Reptiles

The site reptile survey showed no presence of reptiles across the site. It is also understood that the site is subject to high water tables and flash flooding during heavy rain events, this is considered likely to severely restrict reptile use of the site. Notwithstanding the above it will be necessary to consider potential reptile presence during site clearance and it is considered appropriate that a destructive search will be undertaken under the supervision of an ecologist. It is also anticipated that any reptiles encountered during a destructive search can be translocated to retained habitats within the larger site.

7.2 Bats

The site was assessed as having poor habitat structural diversity. In addition, anthropogenic factors such as street lighting associated with adjacent roadways, and security lighting associated with existing industrial units were considered likely to produce significant levels of light spillage over the site. The site was considered to have very low potential for roosting and foraging bats. The transect survey confirmed this low potential with only a small number of bat passes recorded over two 3 hour transect sessions, further survey work was therefore deemed inappropriate in this instance. It is considered that existing light spillage from street and security lighting, plus poor habitat structural diversity renders the site unattractive to bats for both foraging and roosting, furthermore mitigation or compensatory procedures for bats would have no bearing on the existing anthropogenic factors and are therefore not deemed appropriate in relation to the proposed development.

7.3 Birds

Birds were not recorded nesting on the site, with such activity recorded in retained woodland strips in proximity to the site. There are historical records for lapwing *Vanellus vanellus*, whilst not confirmed breeding at the site mitigation for this species has been undertaken for the whole Baglan Energy Park site. Aside from protecting existing woodland strips adjacent the site during the construction phase, further mitigation for birds is not considered appropriate.

7.4 Vegetation and Invertebrates.

The site comprises coarse grassland and herb-rich coarse grassland (habitats 2a&2b in figure 4). These habitats are not included on the Section 7 list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales (Environment (Wales) Act, 2016) and are of local interest for conservation. The site will in turn provide interest for local invertebrate populations.

7.5 Ecosystem resilience

7.5.1. Diversity between and within ecosystems

The site does not have habitat included on the Section 7 list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales (Environment (Wales) Act, 2016). Two grassland habitats are present. The lichen-bryophyte habitats of particular interest on the wider Mardon Park site are absent from this part of the site.

7.5.2 Extent, scale and condition of ecosystems

The site has limited interest when considered in isolation. The habitats present have wider representation in the locality and significant amounts of similar habitat has been given over as mitigation for the Baglan Energy Park re-development. The habitat has been cleared and levelled several times for recent use by the Local Authority as a contractor's site compound.

7.5.3 Connectivity between and within ecosystems

The site is surrounded by access roads and existing developments, as such the site is considered significantly isolated from surrounding semi-natural habitats. Habitat connectivity between and within ecosystems is therefore considered poor and limited to habitats within the site itself. Notwithstanding this, the site may provide a 'stepping-stone' function for invertebrates and other faunal groups when considered in relation to the adjacent SINC site and the Energy Park as a whole.

7.5.4 Adaptability of ecosystems

The site has undergone significant change and disturbance since its previous industrial uses. The site has since been levelled and twice suffered significant disturbance through use as a construction site compound by the Local Authority whilst constructing the Baglan Energy Park link Road and associated infrastructure works. The current diversity of vegetative species therefore is testament to the site's resilience and adaptability. It is considered therefore that well managed mitigation procedures undertaken on the site could provide positive regenerative results, although more positive results could be gained by informed management of other parts of the Mardon Park site, particularly those holding lichen-bryophyte habitat.

8.0 COMPENSATION, MITIGATION AND BIODIVERSITY ENHANCEMENTS

The following sections sets out potential mitigation and compensation options for the whole of the original study areas – areas 1,-3 and should be considered in that context.

Assessment

As shown in table 1, a total of 2,824 m² of habitats of high ecological value will be lost to the development, plus 968 m² of moderate ecological value and 3,068 m² of low value. The full survey site is of County importance and the loss of habitats detailed at Table 1 predict losses >50%, resulting in Major adverse impact at this level.

Potential Mitigation

There is potential to mitigate the above losses either by bringing other areas in Mardon Park into positive ecological management or potentially off-site mitigation or a combination of those two options.

Potential on-site mitigation

High value habitats will be mitigated by the implementation of a management regime to maintain and enrich herb-rich grassland on free-draining slag-based substrate in Mitigation Areas A & D (totalling 3,313 m²), these being broad verges of suitable substrate, parts of which have started to scrub-over. The creation of an appropriate habitat within the mitigation area can be provided to ensure those rare and protected species listed will be safeguarded and their populations expanded, notably Deptford Pink and Basil Thyme. It is essential that a suitable substrate is created in order to provide favourable conditions for these and associated species. It is recommended that translocation of the existing surface substrate from within Area 1a (along with its established vegetation) is translocated to the identified receptor sites with a similar base substrate (i.e. very low nutrient status slag with minimal organic matter). Seed of key species should be sown onto the area in the appropriate season. To implement this, an application for a licence to effect any works associated with the legally protected Deptford Pink will be required.

Additional mitigation will be provided within the 1,433 m² of managed lawn in Mitigation Area B, by way of relaxing the mowing regime to a single late summer cut-and-collect. Monitoring should be carried in the first two years to determine if an additional early Spring cut-and-collect is also required

Management of mitigation verges and internal bunds shown on figure 1, will require an annual cut no earlier than 1st August, with the removal of all arisings.

Additional habitat enrichment will be provided for Section 7 bumblebee species and the Small Blue butterfly by planting up conservation areas with key forage species, e.g. Kidney Vetch, Narrow-leaved Everlasting-pea, Back Horehound, etc.

Periodic scrub control will be undertaken to maintain species-rich grassland habitats.

Table 1. Balance sheet of habitats lost and mitigation gains

Habitats that will be lost	Ecological Value of Habitat	Area 1 (m ²)	Area 2 (m ²)	Area 3 (m ²)
Lichen-bryophyte vegetation	High	2508 m ²		
Calcareous grassland	High			316 m ²
Species-poor coarse grassland	Low	1381 m ²	1687 m ²	
Herb-rich coarse grassland	Moderate			857 m ²
Spoil	Moderate			111 m ²

Mitigation	Area A (1684 m ²)	Area B (3026 m ²)	Area C (2199 m ²)	Area D (1629 m ²)
Herb-rich grassland on free-draining slag-based substrate: <i>Scrub clearance and long-term management (i.e. autumn cut and collect) proposed to provide suitable habitat for Deptford Pink, Basil Thyme, Twigg Mullein, Kidney Vetch etc.</i>	1684 m ²			1629 m ²
Species-rich grassland on established lawn area: <i>Mowing regime to be reduced to a single late summer cut-and-collect, with plug planting a range of key beneficial grassland species.</i>		1433 m ²		

Mitigation and compensatory options to reduce residual impacts include the following:

- Habitat enrichment for Section 7 bumblebee species and the Small Blue butterfly by planting up conservation areas with key forage species, e.g. Kidney Vetch, Narrow-leaved Everlasting-pea, Black Horehound, etc.
- Periodic scrub control and removal of arisings will be essential to maintain species-rich grassland habitats.
- A destructive search for amphibians and reptiles must be undertaken during topsoil stripping with any animals encountered removed safely to retained habitats under the same landownership.

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Appendix 1: 2021 Species Data

Dafor codes:

d = dominant

a = abundant

f = frequent

o = occasional

r = rare

l = locally (used as prefix to d, a & f)

p = present

<u>Taxon</u>	<u>Vernacular</u>	<u>Dafor</u>	<u>Comment</u>
VASCULAR PLANTS			
<i>Acer pseudoplatanus</i>	Sycamore	r	[Area 3b] spoil bund
<i>Agrostis stolonifera</i>	Creeping Bent	o	[Area 1a] quadrat spp
<i>Agrostis stolonifera</i>	Creeping Bent	f	[Area 1b] bund
<i>Alchemilla mollis</i>	Garden Lady's-mantle	r	[Area 3d] established grassland with scrub
<i>Alnus cordata</i>	Italian Alder	r	[Area 3b] spoil bund
<i>Anagallis arvensis</i>	Scarlet Pimpernel	r	[Area 1b] bund
<i>Anthyllis vulneraria</i>	Kidney Vetch	f	[Area 1a]
<i>Anthyllis vulneraria</i>	Kidney Vetch	lf	[Area 1a] adj spp
<i>Anthyllis vulneraria</i>	Kidney Vetch	o	[Area 1b] bund
<i>Anthyllis vulneraria</i>	Kidney Vetch	o	[Area 1d] verge bund
<i>Anthyllis vulneraria</i>	Kidney Vetch	o	[Area 2a] ruderal grassland
<i>Anthyllis vulneraria</i>	Kidney Vetch	f	[Area 3a] short spp-rich sward by verge
<i>Anthyllis vulneraria</i>	Kidney Vetch	f	[Area 3d] established grassland with scrub
<i>Aphanes arvensis</i>	Parsley-piert	o	[Area 1a] quadrat spp
<i>Arctium minus</i>	Lesser Burdock	r	[Area 1b] bund
<i>Arctium minus</i>	Lesser Burdock	r	[Area 2a] ruderal grassland
<i>Arenaria serpyllifolia</i>	Thyme-leaved Sandwort	p	[Area 1a] quadrat spp
<i>Arenaria serpyllifolia</i>	Thyme-leaved Sandwort	o	[Area 3a] short spp-rich sward by verge
<i>Arrhenatherum elatius</i>	False Oat-Grass	f	[Area 1b] bund
<i>Arrhenatherum elatius</i>	False Oat-Grass	a	[Area 2a] ruderal grassland
<i>Bellis perennis</i>	Daisy	o	[Area 3a] short spp-rich sward by verge
<i>Bromus hordeaceus</i>	Soft-brome	p	[Area 1a] quadrat spp
<i>Bromus hordeaceus</i>	Soft-brome	o	[Area 3a] short spp-rich sward by verge
<i>Buddleja davidii</i>	Butterfly-bush	o	[Area 1b] bund
<i>Buddleja davidii</i>	Butterfly-bush	o	[Area 2a] ruderal grassland
<i>Buddleja davidii</i>	Butterfly-bush	la	[Area 3b] spoil bund
<i>Buddleja davidii</i>	Butterfly-bush	lf	[Area 3c] scrub
<i>Calystegia sepium</i>	Hedge Bindweed	r	[Area 1d] verge bund
<i>Cardamine hirsuta</i>	Hairy Bitter-cress	r	[Area 1a] adj spp
<i>Carex arenaria</i>	Sand Sedge	p	[Area 1a] quadrat spp
<i>Carex arenaria</i>	Sand Sedge	r	[Area 1d] verge bund
<i>Catapodium maritimum</i>	Sea Fern-grass	p	[Area 1a] quadrat spp
<i>Catapodium maritimum</i>	Sea Fern-grass	o	[Area 3a] short spp-rich sward by verge
<i>Catapodium rigidum</i>	Fern-grass	r	[Area 1a] adj spp
<i>Catapodium rigidum</i>	Fern-grass	r	[Area 1a] quadrat spp
<i>Catapodium rigidum</i>	Fern-grass	o	[Area 1d] verge bund
<i>Centaurea nigra</i>	Common Knapweed	o	[Area 1b] bund
<i>Centranthus ruber</i>	Red Valerian	r	[Area 3d] established grassland with scrub
<i>Cerastium diffusum</i>	Sea Mouse-ear	r	[Area 1a] quadrat spp
<i>Cerastium fontanum</i>	Common Mouse-ear	r	[Area 1b] bund

<i>Cerastium fontanum</i>	Common Mouse-ear	o	[Area 3a] short spp-rich sward by verge
<i>Cerastium glomeratum</i>	Sticky Mouse-ear	o	[Area 1b] bund
<i>Cirsium arvense</i>	Creeping Thistle	lf	[Area 1b] bund
<i>Cirsium arvense</i>	Creeping Thistle	o	[Area 2a] ruderal grassland
<i>Cirsium vulgare</i>	Spear Thistle	f	[Area 1b] bund
<i>Cirsium vulgare</i>	Spear Thistle	o	[Area 3d] established grassland with scrub
<i>Clinopodium acinos</i>	Basil Thyme	p	[Area 1a] quadrat spp
<i>Conyza floribunda</i>	Bilbao's Fleabane	lf	[Area 1b] bund
<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	r	[Area 1a] adj spp
<i>Cotoneaster simonsii</i>	Himalayan Cotoneaster	r	[Area 3b] spoil bund
<i>Crepis capillaris</i>	Smooth Hawk's-beard	o	[Area 1a] quadrat spp
<i>Crepis vesicaria</i>	Beaked Hawk's-beard	o	[Area 1b] bund
<i>Dactylis glomerata</i>	Cock's-foot	r	[Area 1a] quadrat spp
<i>Dactylis glomerata</i>	Cock's-foot	lf	[Area 1b] bund
<i>Dactylis glomerata</i>	Cock's-foot	f	[Area 2a] ruderal grassland
<i>Daucus carota subsp. carota</i>	Wild Carrot	o	[Area 1a] quadrat spp
<i>Daucus carota subsp. carota</i>	Wild Carrot	o	[Area 1b] bund
<i>Daucus carota subsp. carota</i>	Wild Carrot	f	[Area 1d] verge bund
<i>Daucus carota subsp. carota</i>	Wild Carrot	o	[Area 2a] ruderal grassland
<i>Daucus carota subsp. carota</i>	Wild Carrot	lf	[Area 2b] verge bund
<i>Daucus carota subsp. carota</i>	Wild Carrot	lf	[Area 3d] established grassland with scrub
<i>Dipsacus fullonum</i>	Wild Teasel	r	[Area 1b] bund
<i>Dianthus armeria</i>	Deptford Pnk	r	[Area 1a] adj spp
<i>Echium vulgare</i>	Viper's-bugloss	o	[Area 1a] quadrat spp
<i>Echium vulgare</i>	Viper's-bugloss	o	[Area 1b] bund
<i>Echium vulgare</i>	Viper's-bugloss	o	[Area 1d] verge bund
<i>Echium vulgare</i>	Viper's-bugloss	r	[Area 2a] ruderal grassland
<i>Echium vulgare</i>	Viper's-bugloss	r	[Area 2b] verge bund
<i>Epilobium tetragonum</i>	Square-stalked Willowherb	o	[Area 3b] spoil bund
<i>Erodium cicutarium</i>	Common Stork's-bill	p	[Area 1a] quadrat spp
<i>Erodium cicutarium</i>	Common Stork's-bill	r	[Area 1b] bund
<i>Erophila verna</i>	Common Whitlowgrass	p	[Area 1a] quadrat spp
<i>Eupatorium cannabinum</i>	Hemp-agrimony	r	[Area 1b] bund
<i>Festuca rubra</i>	Red Fescue	a	[Area 1d] verge bund
<i>Festuca rubra</i>	Red Fescue	lf	[Area 2a] ruderal grassland
<i>Festuca rubra</i>	Red Fescue	f	[Area 3d] established grassland with scrub
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill	o	[Area 1b] bund
<i>Geranium molle</i>	Dove's-foot Crane's-bill	o	[Area 1a] adj spp
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill	p	[Area 1a] quadrat spp
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill	o	[Area 1b] bund
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill	lf	[Area 1d] verge bund
<i>Geranium pyrenaicum</i>	Hedgerow Crane's-bill	lf	[Area 3d] established grassland with scrub
<i>Geranium robertianum</i>	Herb-Robert	o	[Area 1b] bund
<i>Geranium rotundifolium</i>	Round-leaved Crane's-bill	o	[Area 1a] adj spp
<i>Geranium rotundifolium</i>	Round-leaved Crane's-bill	o	[Area 1a] quadrat spp
<i>Geranium rotundifolium</i>	Round-leaved Crane's-bill	o	[Area 2b] verge bund
<i>Heracleum sphondylium</i>	Hogweed	r	[Area 1a] quadrat spp
<i>Hippophae rhamnoides</i>	Sea-buckthorn	r	[Area 1b] bund
<i>Hirschfeldia incana</i>	Hoary Mustard	p	[Area 1a] quadrat spp
<i>Hirschfeldia incana</i>	Hoary Mustard	la	[Area 1b] bund
<i>Hirschfeldia incana</i>	Hoary Mustard	lf	[Area 2a] ruderal grassland
<i>Hirschfeldia incana</i>	Hoary Mustard	f	[Area 2b] verge bund
<i>Hirschfeldia incana</i>	Hoary Mustard	o	[Area 3d] established grassland with scrub

<i>Holcus lanatus</i>	Yorkshire-fog	p	[Area 1a] quadrat spp
<i>Holcus lanatus</i>	Yorkshire-fog	f	[Area 1b] bund
<i>Holcus lanatus</i>	Yorkshire-fog	o	[Area 1d] verge bund
<i>Holcus lanatus</i>	Yorkshire-fog	la	[Area 2a] ruderal grassland
<i>Holcus lanatus</i>	Yorkshire-fog	f	[Area 3d] established grassland with scrub
<i>Hypochaeris radicata</i>	Cat's-ear	p	[Area 1a] quadrat spp
<i>Hypochaeris radicata</i>	Cat's-ear	o	[Area 1b] bund
<i>Hypochaeris radicata</i>	Cat's-ear	o	[Area 2a] ruderal grassland
<i>Hypochaeris radicata</i>	Cat's-ear	o	[Area 3d] established grassland with scrub
<i>Juncus acutus</i>	Sharp Rush	r	[Area 1a] adj spp
<i>Juncus inflexus</i>	Hard Rush	o	[Area 2a] ruderal grassland
<i>Juncus ranarius</i>	Frog Rush	r	[Area 1a] quadrat spp
<i>Lathyrus pratensis</i>	Meadow Vetchling	o	[Area 1b] bund
<i>Lathyrus pratensis</i>	Meadow Vetchling	lf	[Area 1d] verge bund
<i>Leucanthemum vulgare</i>	Oxeye Daisy	f	[Area 1b] bund
<i>Leucanthemum vulgare</i>	Oxeye Daisy	lf	[Area 1d] verge bund
<i>Leucanthemum vulgare</i>	Oxeye Daisy	lf	[Area 2a] ruderal grassland
<i>Leucanthemum vulgare</i>	Oxeye Daisy	f	[Area 2b] verge bund
<i>Leucanthemum vulgare</i>	Oxeye Daisy	la	[Area 3d] established grassland with scrub
<i>Lolium perenne</i>	Perennial Rye-grass	o	[Area 1b] bund
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	lf	[Area 1d] verge bund
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	lf	[Area 2a] ruderal grassland
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	o	[Area 2b] verge bund
<i>Lotus corniculatus</i>	Common Bird's-foot-trefoil	la	[Area 3d] established grassland with scrub
<i>Malva moschata</i>	Musk-mallow	r	[Area 3b] spoil bund
<i>Medicago lupulina</i>	Black Medick	lf	[Area 3a] short spp-rich sward by verge
<i>Melilotus sp.</i>	melilot	o	[Area 1b] bund
<i>Myosotis arvensis</i>	Field Forget-me-not	o	[Area 1a] adj spp
<i>Myosotis arvensis</i>	Field Forget-me-not	o	[Area 1b] bund
<i>Myosotis arvensis</i>	Field Forget-me-not	f	[Area 2a] ruderal grassland
<i>Myosotis arvensis</i>	Field Forget-me-not	o	[Area 2a] ruderal grassland
<i>Myosotis arvensis</i>	Field Forget-me-not	f	[Area 3d] established grassland with scrub
<i>Oenothera agg.</i>	Evening Primrose	o	[Area 1a] quadrat spp
<i>Oenothera agg.</i>	Evening Primrose	o	[Area 3a] short spp-rich sward by verge
<i>Oenothera x fallax</i>	O. glazioviana x biennis	o	[Area 1d] verge bund
<i>Oenothera x fallax</i>	O. glazioviana x biennis	o	[Area 2a] ruderal grassland
<i>Oenothera x fallax</i>	O. glazioviana x biennis	o	[Area 2b] verge bund
<i>Oenothera x fallax</i>	O. glazioviana x biennis	o	[Area 3d] established grassland with scrub
<i>Orobancha minor</i>	Common Broomrape	r	[Area 2b] verge bund
<i>Pastinaca sativa subsp. sylvestris</i>	Wild Parsnip	o	[Area 1a] quadrat spp
<i>Pastinaca sativa subsp. sylvestris</i>	Wild Parsnip	lf	[Area 1b] bund
<i>Pastinaca sativa subsp. sylvestris</i>	Wild Parsnip	la	[Area 2a] ruderal grassland
<i>Pastinaca sativa subsp. sylvestris</i>	Wild Parsnip	la	[Area 3b] spoil bund
<i>Pastinaca sativa subsp. sylvestris</i>	Wild Parsnip	o	[Area 3d] established grassland with scrub
<i>Picris hieracioides</i>	Hawkweed Oxtongue	lf	[Area 1a] quadrat spp
<i>Picris hieracioides</i>	Hawkweed Oxtongue	o	[Area 1b] bund
<i>Picris hieracioides</i>	Hawkweed Oxtongue	f	[Area 1d] verge bund
<i>Picris hieracioides</i>	Hawkweed Oxtongue	o	[Area 2a] ruderal grassland
<i>Picris hieracioides</i>	Hawkweed Oxtongue	f	[Area 2b] verge bund
<i>Picris hieracioides</i>	Hawkweed Oxtongue	o	[Area 3d] established grassland with scrub
<i>Pilosella officinarum</i>	Mouse-ear-hawkweed	o	[Area 2b] verge bund
<i>Pilosella officinarum</i>	Mouse-ear-hawkweed	o	[Area 3a] short spp-rich sward by verge
<i>Plantago coronopus</i>	Buck's-horn Plantain	o	[Area 1a] quadrat spp

<i>Plantago lanceolata</i>	Ribwort Plantain	o	[Area 1a] quadrat spp
<i>Plantago lanceolata</i>	Ribwort Plantain	f	[Area 1b] bund
<i>Plantago lanceolata</i>	Ribwort Plantain	lf	[Area 1b] bund
<i>Plantago lanceolata</i>	Ribwort Plantain	a	[Area 2a] ruderal grassland
<i>Plantago lanceolata</i>	Ribwort Plantain	la	[Area 3d] established grassland with scrub
<i>Poa annua</i>	Annual Meadow-grass	r	[Area 1b] bund
<i>Poa pratensis</i>	Smooth Meadow-grass	lf	[Area 1b] bund
<i>Poa trivialis</i>	Rough Meadow-grass	o	[Area 3d] established grassland with scrub
<i>Potentilla anserina</i>	Silverweed	o	[Area 1b] bund
<i>Potentilla anserina</i>	Silverweed	o	[Area 2a] ruderal grassland
<i>Potentilla reptans</i>	Creeping Cinquefoil	lf	[Area 1b] bund
<i>Potentilla reptans</i>	Creeping Cinquefoil	lf	[Area 1d] verge bund
<i>Potentilla reptans</i>	Creeping Cinquefoil	lf	[Area 2b] verge bund
<i>Prunella vulgaris</i>	Selfheal	o	[Area 3b] spoil bund
<i>Prunella vulgaris</i>	Selfheal	lf	[Area 3d] established grassland with scrub
<i>Pulicaria dysenterica</i>	Common Fleabane	r	[Area 1b] bund
<i>Pulicaria dysenterica</i>	Common Fleabane	o	[Area 2a] ruderal grassland
<i>Ranunculus repens</i>	Creeping Buttercup	o	[Area 1b] bund
<i>Rubus caesius</i>	Dewberry	o	[Area 1b] bund
<i>Rubus caesius</i>	Dewberry	o	[Area 2b] verge bund
<i>Rubus fruticosus</i> agg.	Bramble	o	[Area 2a] ruderal grassland
<i>Rubus fruticosus</i> agg.	Bramble	r	[Area 3b] spoil bund
<i>Rumex crispus</i>	Curled Dock	r	[Area 1b] bund
<i>Rumex crispus</i>	Curled Dock	o	[Area 2a] ruderal grassland
<i>Sagina apetala</i>	Upright Pearlwort	o	[Area 1a] quadrat spp
<i>Salix caprea</i>	Goat Willow	r	[Area 1b] bund
<i>Salix cinerea</i> subsp. <i>oleifolia</i>	Rusty Willow	o	[Area 1b] bund
<i>Salix cinerea</i> subsp. <i>oleifolia</i>	Rusty Willow	lf	[Area 3c] scrub
<i>Salix repens</i>	Creeping Willow	o	[Area 1a] adj spp
<i>Salix x fragilis</i>	Hybrid Crack-willow	r	[Area 1b] bund
<i>Salix x reichardtii</i>	Hybrid Willow	r	[Area 3b] spoil bund
<i>Saxifraga tridactylites</i>	Rue-leaved Saxifrage	lf	[Area 1a] quadrat spp
<i>Sedum acre</i>	Biting Stonecrop	lf	[Area 1a] quadrat spp
<i>Sedum acre</i>	Biting Stonecrop	o	[Area 3b] spoil bund
<i>Sedum album</i>	White Stonecrop	o	[Area 1a] adj spp
<i>Sedum album</i>	White Stonecrop	lf	[Area 1a] quadrat spp
<i>Sedum rupestre</i>	Reflexed Stonecrop	o	[Area 1a] adj spp
<i>Senecio jacobaea</i>	Common Ragwort	r	[Area 1a] quadrat spp
<i>Senecio jacobaea</i>	Common Ragwort	o	[Area 1d] verge bund
<i>Senecio jacobaea</i>	Common Ragwort	o	[Area 2a] ruderal grassland
<i>Senecio jacobaea</i>	Common Ragwort	o	[Area 3a] short spp-rich sward by verge
<i>Senecio vulgaris</i>	Groundsel	r	[Area 1b] bund
<i>Sherardia arvensis</i>	Field Madder	r	[Area 1a] quadrat spp
<i>Sherardia arvensis</i>	Field Madder	lf	[Area 3b] spoil bund
<i>Silene coronaria</i>	Rose Campion	r	[Area 2b] verge bund
<i>Sonchus asper</i>	Prickly Sow-thistle	r	[Area 1a] quadrat spp
<i>Sonchus asper</i>	Prickly Sow-thistle	o	[Area 1b] bund
<i>Sonchus oleraceus</i>	Smooth Sow-thistle	o	[Area 1b] bund
<i>Syntrichia ruralis</i> var. <i>ruraliformis</i>	Sand-hill Screw-moss	r	[Area 1a] quadrat spp
<i>Syntrichia ruralis</i> var. <i>ruralis</i>	Great Hairy Screw-moss	r	[Area 1a] quadrat spp
<i>Taraxacum</i> agg.	Dandelion	o	[Area 1a] quadrat spp
<i>Taraxacum</i> agg.	Dandelion	r	[Area 3b] spoil bund
<i>Teucrium scorodonia</i>	Wood Sage	r	[Area 3b] spoil bund

<i>Trifolium arvense</i>	Hare's-foot Clover	o	[Area 1a] quadrat spp
<i>Trifolium arvense</i>	Hare's-foot Clover	f	[Area 1d] verge bund
<i>Trifolium arvense</i>	Hare's-foot Clover	o	[Area 2a] ruderal grassland
<i>Trifolium arvense</i>	Hare's-foot Clover	o	[Area 3a] short spp-rich sward by verge
<i>Trifolium campestre</i>	Hop Trefoil	o	[Area 1d] verge bund
<i>Trifolium campestre</i>	Hop Trefoil	r	[Area 3a] short spp-rich sward by verge
<i>Trifolium dubium</i>	Lesser Trefoil	o	[Area 1a] quadrat spp
<i>Trifolium dubium</i>	Lesser Trefoil	o	[Area 1d] verge bund
<i>Trifolium pratense</i>	Red Clover	o	[Area 1b] bund
<i>Trifolium repens</i>	White Clover	o	[Area 1b] bund
<i>Trifolium repens</i>	White Clover	lf	[Area 2a] ruderal grassland
<i>Trifolium scabrum</i>	Rough Clover	lf	[Area 1a] quadrat spp
<i>Trifolium scabrum</i>	Rough Clover	o	[Area 3a] short spp-rich sward by verge
<i>Trifolium striatum</i>	Knotted Clover	o	[Area 1a] quadrat spp
<i>Ulex europaeus</i>	Gorse	r	[Area 1d] verge bund
<i>Ulex europaeus</i>	Gorse	o	[Area 3b] spoil bund
<i>Urtica dioica</i>	Common Nettle	lf	[Area 2a] ruderal grassland
<i>Verbascum thapsus</i>	Great Mullein	r	[Area 2b] verge bund
<i>Verbascum virgatum</i>	Twiggy Mullein	o	[Area 1a] quadrat spp
<i>Veronica arvensis</i>	Wall Speedwell	o	[Area 1a] quadrat spp
<i>Veronica arvensis</i>	Wall Speedwell	o	[Area 2b] verge bund
<i>Veronica persicaria</i>	Common Field-speedwell	r	[Area 1b] bund
<i>Vicia cracca</i>	Tufted Vetch	o	[Area 1d] verge bund
<i>Vicia sativa subsp. segetalis</i>	Common Vetch	lf	[Area 1b] bund
<i>Vicia sativa subsp. segetalis</i>	Common Vetch	o	[Area 2a] ruderal grassland
<i>Vicia sativa subsp. segetalis</i>	Common Vetch	o	[Area 2b] verge bund
<i>Vicia tetrasperma</i>	Smooth Tare	r	[Area 1d] verge bund
<i>Vicia villosa</i>	Fodder Vetch	r	[Area 1b] verge bund
<i>Vulpia bromoides</i>	Squirreltail Fescue	o	[Area 1a] quadrat spp
<i>Vulpia ciliata</i>	Bearded Fescue	o	[Area 1a] quadrat spp
<i>Vulpia ciliata</i>	Bearded Fescue	f	[Area 3a] short spp-rich sward by verge
<i>Vulpia myuros</i>	Rat's-tail Fescue	o	[Area 1a] quadrat spp
<i>Vulpia myuros</i>	Rat's-tail Fescue	o	[Area 3b] spoil bund
BRYOPHYTES			
<i>Amblystegium serpens</i>	Creeping Feather-moss	p	[Area 1a] quadrat spp
<i>Barbula convoluta var. convoluta</i>	Lesser Bird's-claw Beard-moss	p	[Area 1a] quadrat spp
<i>Barbula convoluta var. convoluta</i>	Lesser Bird's-claw Beard-moss	lf	[Area 3b] spoil bund
<i>Barbula convoluta var. sardoa</i>	Wavy Bird's-claw Beard-moss	o	[Area 3b] spoil bund
<i>Brachythecium albicans</i>	Whitish Feather-moss	o	[Area 1b] bund
<i>Brachythecium rutabulum</i>	Rough-stalked Feather-moss	o	[Area 1b] bund
<i>Bryum algovicum</i>	Drooping Thread-moss	o	[Area 1a] quadrat spp
<i>Bryum argenteum</i>	Silver-moss	r	[Area 1a] quadrat spp
<i>Bryum argenteum</i>	Silver-moss	r	[Area 1b] verge bund
<i>Bryum dichotomum</i>	Bicoloured Bryum	lf	[Area 1a] quadrat spp
<i>Bryum dichotomum</i>	Bicoloured Bryum	o	[Area 1b] bund
<i>Calliergonella cuspidata</i>	Pointed Spear-moss	lf	[Area 1b] bund
<i>Calliergonella cuspidata</i>	Pointed Spear-moss	f	[Area 2a] ruderal grassland
<i>Calliergonella cuspidata</i>	Pointed Spear-moss	lf	[Area 3d] established grassland with scrub
<i>Dicranella varia</i>	Variable Forklet-moss	p	[Area 1a] quadrat spp
<i>Didymodon fallax</i>	Fallacious Beard-moss	o	[Area 1a] quadrat spp
<i>Didymodon insulanus</i>	Cylindric Beard-moss	o	[Area 1a] quadrat spp
<i>Drepanocladus aduncus</i>	Kneiff's Hook-moss	o	[Area 3a] short spp-rich sward by verge

<i>Homalothecium lutescens</i>	Yellow Feather-moss	p	[Area 1a] quadrat spp
<i>Homalothecium lutescens</i>	Yellow Feather-moss	o	[Area 2b] verge bund
<i>Homalothecium lutescens</i>	Yellow Feather-moss	o	[Area 3d] established grassland with scrub
<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	p	[Area 1a] quadrat spp
<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	lf	[Area 1d] verge bund
<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	f	[Area 3a] short spp-rich sward by verge
<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	lf	[Area 3b] spoil bund
<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	lf	[Area 3d] established grassland with scrub
<i>Pseudocrossidium hornschurchianum</i>	Hornschurch's Beard-moss	o	[Area 1a] quadrat spp
<i>Pseudocrossidium hornschurchianum</i>	Hornschurch's Beard-moss	o	[Area 3b] spoil bund
<i>Pseudoscleropodium purum</i>	Neat Feather-moss	o	[Area 1a] quadrat spp
<i>Pseudoscleropodium purum</i>	Neat Feather-moss	f	[Area 3d] established grassland with scrub
<i>Thuidium tamariscinum</i>	Common Tamarisk-moss	r	[Area 1d] verge bund
<i>Trichostomum crispulum</i>	Curly Crisp-moss	o	[Area 1d] verge bund
LICHENS			
<i>Cladonia rangiformis</i>	a lichen	p	[Area 1a] quadrat spp
<i>Cladonia squamosa</i> var. <i>squamosa</i>	a lichen	p	[Area 1a] quadrat spp
<i>Collema auriforme</i>	a lichen	p	[Area 1a] quadrat spp
<i>Leptogium gelatinosum</i>	a lichen	p	[Area 1a] quadrat spp
<i>Peltigera canina</i>	a lichen	lf	[Area 1a] quadrat spp
INVERTEBRATES			
<i>Apis mellifera</i>	Western Honey Bee	p	[Area 1b] bund
<i>Bombus humilis</i>	Brown-banded Carder Bee	1	[Area 3a] short spp-rich sward by verge
<i>Bombus lapidarius</i>	Red-tailed Bumblebee	3	[Area 1a]
<i>Bombus lapidarius</i>	Red-tailed Bumblebee	2	[Area 1b] bund
<i>Bombus pratorum</i>	Early Bumblebee	1	[Area 1b] bund
<i>Bombus terrestris</i>	Buff-tailed Bumblebee	10	[Area 1a]
<i>Bombus terrestris</i>	Buff-tailed Bumblebee	5	[Area 1b] bund
<i>Cupido minimus</i>	Small Blue	40	[Area 1a]
<i>Cupido minimus</i>	Small Blue	1	[Area 3a] short spp-rich sward by verge
<i>Polyommatus icarus</i>	Common Blue	2	[Area 3a] short spp-rich sward by verge