

GBV Properties Ltd.

Land at Mardon Park, Baglan Energy Park

**Phase 2 Ecology Surveys,
(Ecosystem Resilience Assessment, Mitigation,
Compensation and Enhancement Measures).**

Report Ref: GBV020721

Date: 2nd July 2021

This report has been prepared on behalf of:

GBV Properties Ltd.

By:

Greg Jones & Barry Stewart

Greg Jones Ecologists Ltd

Bishopston

Swansea

SA3 3DX

Tel: 07771803629

e.mail: gregongower@yahoo.co.uk

Disclaimer

This report has been produced in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Report Writing 2017. This document has been prepared by Greg Jones and Barry Stewart for the client solely as a report detailing Ecological Survey data to inform re-development proposals. Data is considered to be correct and relevant only to the time of survey. The authors accept no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned.

Copyright

This report is the copyright of the authors, any unauthorised reproduction or use is prohibited.

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.

The site is of County importance for its plant assemblages and it anticipated the loss of habitats will be >50%, resulting in Major adverse impact at this level. Mitigation options to reduce and compensate the impact include the following:

- Creation of an appropriate mitigation area that will enable those rare and protected species listed to be safeguarded, 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 suitable receptor areas 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. **Note that a licence will be required to affect any works associated with the legally protected Deptford Pink.**
- Retention and management of bunds and creation of new low level, flat-top bunds (see figure 5 below), requiring an annual cut no earlier than 1st August, with the removal of all arisings
- 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.
- The presence of wall cotoneaster *Cotoneaster horizontalis* – an invasive non-native species is considered a threat to the biodiversity of the site which will require appropriate management during re-development of the site.

<u>Contents</u>	<u>Page</u>
SUMMARY	3
1.0 INTRODUCTION	6
2.0 REPTILE SURVEY	6
3.0 BAT SURVEY	6
4.0 BREEDING BIRD SURVEY	7
5.0 VEGETATION AND INVERTEBRATE SURVEY	8
6.0 CONCLUSIONS	18
7.0 COMPENSATION, MITIGATION AND BIODIVERSITY ENHANCEMENTS	20
References	22
Appendix 1: 2021 Species Data	23

1.0 INTRODUCTION

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

2.0 REPTILE SURVEY

2.1 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.

2.2 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

3.0 BAT SURVEY

3.1 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, an evening transect survey was undertaken 22nd April 2021. The survey was 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.

3.2 Results

Survey results are summarised in table 2 and illustrated in figure 1 below:

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.			

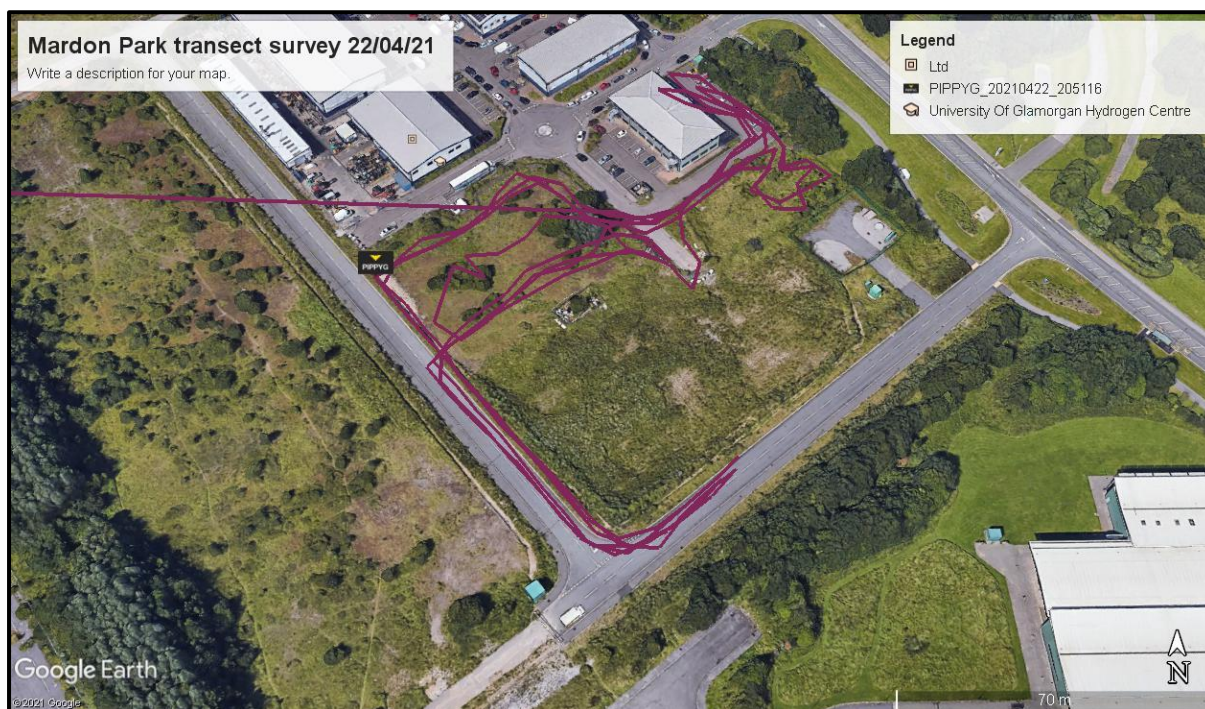


Figure 1. Mardon Park transect survey KLM derived session plot.

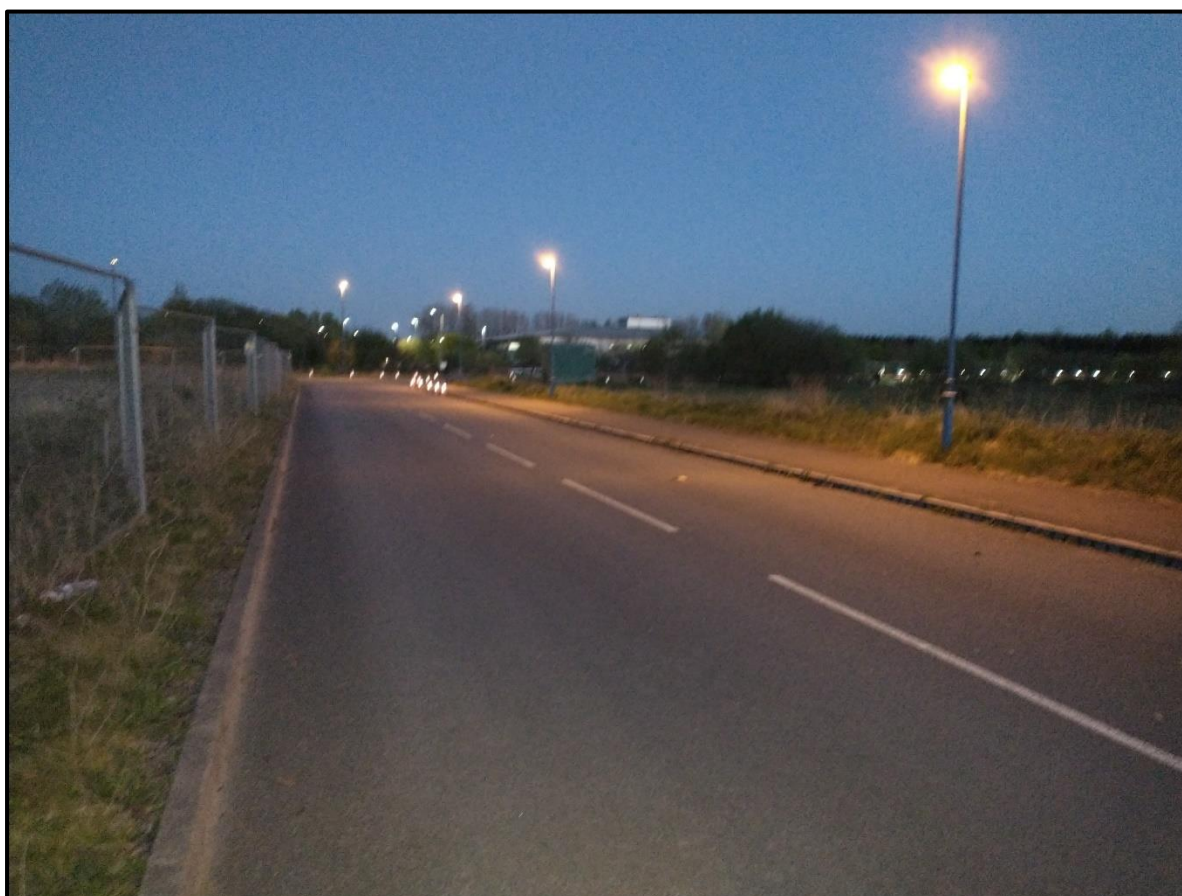


Plate 1. Light spillage from adjacent street lighting



Plate 2. Light spillage from existing business units.

4.0 BREEDING BIRD SURVEY

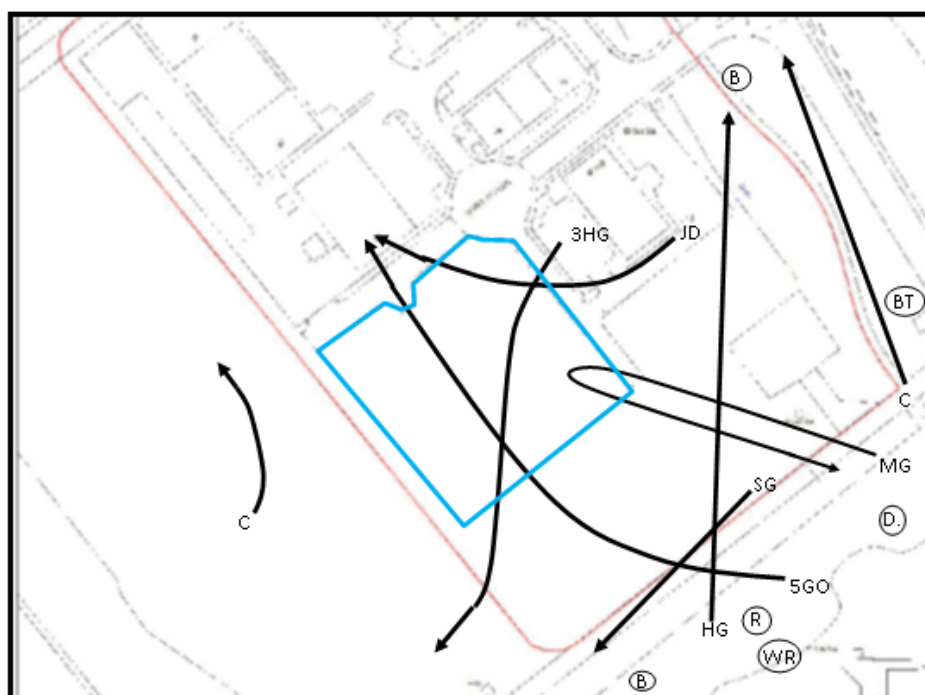
4.1 Methodolgy

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

4.1 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



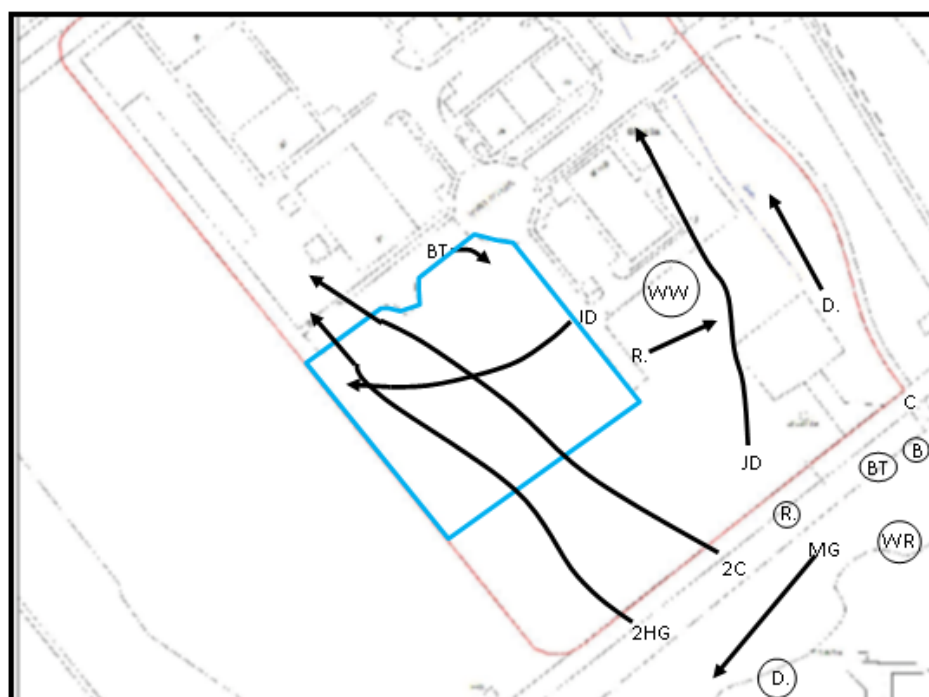
Mardon Park, Baglan Energy Park, Nesting Bird Survey 21st April 2021

KEYS

- 3R Observed (with no.)
- Flying over
- Same bird / linked birds
- (R) Singing
- R Calling
- Aggressive encounter
- ★ Old nest
- Application site boundary

- B Blackbird
- BT Blue tit
- C Carrion crow
- D. Dunnock / Hedge accentor
- GO Goldfinch
- HG Herring gull
- JD Jackdaw
- MG Magpie
- R Robin
- SG Starling
- WR Wren

Figure 3. Breeding bird survey 07.05.2021



Mardon Park, Baglan Energy Park, Nesting Bird Survey 7th May 2021

KEYS

- 3R Observed (with no.)
- Flying over
- Same bird / linked birds
- (R) Singing
- B Calling
- Aggressive encounter
- ★ Old nest
- Application site boundary

- B Blackbird
- BT Blue tit
- C Carrion crow
- D. Dunnock / Hedge accentor
- WW Willow warbler
- HG Herring gull
- JD Jackdaw
- MG Magpie
- R. Robin
- WR Wren

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

5.1 Introduction

The purpose of this section is to provide a record of vegetation survey work undertaken during 2021. The likely impacts from the proposed works on the botanical interest of the Site are described together with mitigation options and opportunities to contribute to the sustainable management of natural resources in Wales as detailed in the Environment (Wales) Act 2016 and the Well-being of Future Generations (Wales) Act 2015.

The Study Area at Mardon Park, Baglan is shown on Figures 1. 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:

5.2 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). Nevertheless, a sample of five 2m x 2m quadrats at the locations shown on figure 1 were taken to provide a more quantitative record of the vegetation present in the most interesting unit of the site, i.e., Area 1a, which was found to support a suite of notable species. The programme MAVIS¹ was used to analyse the resulting quadrat data to identify affinities to communities described by Rodwell.

5.3 Results

A total of 144 vegetative species was recorded within the survey area, 119 being vascular plants, 20 bryophytes (mosses and liverworts) and 5 lichens. Quadrat samples are reproduced at Appendix 1 along with full species lists from all habitat polygons shown on figure 4, which were sampled. Part of the area is designated as a SINC, qualifying because of the high level of biodiversity it supports, exceeding the threshold for *Open Mosaic Habitats on Previously Developed Land* (OMHoPDL), plus species 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, 2016²).

¹ <https://www.ceh.ac.uk/services/modular-analysis-vegetation-information-system-mavis>

² <https://gov.wales/environment-wales-act-2016-factsheets>

Lichen Bryophyte Community (Area 1a):

This was perhaps the most interesting area of vegetation due to the co-dominance of lower plants growing on basic slag, namely the lichen *Cladonia rangiformis* and the mosses *Homalothecium lutescens* and *Hypnum cupressiforme* var. *lacunosum*. Vascular plants were more evident among the list of less abundant constants recorded and included Biting Stonecrop, Common Stork's-bill, Hoary Mustard and Ribwort Plantain along with the dog lichen *Peltigera canina*. This area was found to support several notable species including Basil Thyme, Bearded Fescue, Deptford Pink, Hawkweed Oxtongue, Rough Clover, Round-leaved Crane's-bill, Sharp Rush, Twiggy Mullein and Viper's-bugloss.

The NVC does not cover the vegetation found on steel slag or other industrial waste substrates, and unsurprisingly the analysis using MAVIS revealed no close fit to any community described by the NVC (Rodwell, 2000). The best fit provided, returned a very weak coefficient value of 20.89, suggesting a loose association with maritime cliff vegetation, namely MC5d *Armeria maritima*-*Cerastium diffusum* ssp. *diffusum* maritime therophyte community, *Arenaria serpyllifolia* sub-community. A more appropriate community name using the three co-dominant species (all lower plants) would be '**OV+** *Hypnum cupressiforme* var. *lacunosum* - *Cladonia rangiformis* - *Homalothecium lutescens* lichen-bryophyte community'.

Herb-rich coarse grassland (Areas 1b, 1d, 1e, 2b & 3d):

The bunds around the verge boundaries of the site and the area shown on figure 1 by 3d, 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.

Cleared Scrub (Area 1c):

Two areas of cleared scrub supported a limited suite of ruderal pioneer species, loosely similar in composition to that described in the previous paragraph. No fit for any described NVC community.

Coarse grassland (Areas 2a, 1f and 3b):

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.

Calcareous grassland on spoil (Area 3a):

A small area with a short, herb-rich sward. The most frequent calcicoles included Bearded Fescue, *Hypnum cupressiforme* var. *lacunosum* and Kidney Vetch, with lesser quantities of *Drepanocladus aduncus*, Hare's-foot Clover, Hop Trefoil, Rough Clover, Sea Fern-grass and Thyme-leaved Sandwort. Again, there was no good NVC fit, but the vegetation showed some affinity to **SD8** *Festuca rubra*-*Galium verum* fixed dune grassland.

Mixed Scrub (Area 3c):

Patches of dense scrub and scattered scrub are shown in the north-eastern part of Area 3 on figure 1. Butterfly-bush and Rusty Willow were two most abundant species noted, with occasional examples of Goat Willow, Gorse, Himalayan Cotoneaster, hybrid willows, Italian Alder and Sycamore. Bramble was a frequent associate. This community is not described by the NVC.

Shaley spoil bund (Area 3e):

The ridge of spoil adjacent to the car park supported scrub, mostly Butterfly-bush, and a suite of ruderals such as Biting Stonecrop, Musk Mallow, Field Madder, Wild Parsnip and Wood Sage. This community is not described by the NVC.

5.4 Significant Species

Vascular Plants:

Deptford Pink is listed on Schedule 8 of the Wildlife and Countryside Act, 1981, which affords protection from intentional picking, uprooting or destruction. It is a Welsh Government Section 7 Priority Species and also listed as Endangered on the National Red List (Dines, 2008). Within the study area the species was found to be highly localised, with 8+ plants found within a 2m² area located at the transition between Areas 1a and 1c (SS7393392663).

Basil Thyme is a Welsh Government Section 7 Priority Species, also listed Vulnerable on the National Red List (Dines, 2008). The species was found to be scattered across Area 1a, with approximately 100 plants noted.

Bearded Fescue is listed as Nationally Scarce and was recorded during the survey as a new species for NPT, though has subsequently been found to be widespread in the Baglan area. The species was found to be scattered across Area 1a.

Sharp Rush is listed as Nationally Scarce and a single plant was recorded in Area 1a.

The following species are all listed as Contributory Species for SINC selection within NPT and were recorded during the survey:

Hawkweed Oxtongue (Areas 1a, 1b, 1d, 2a, 2b & 3d)

Rough Clover (Areas 1a & 3a)

Round-leaved Crane's-bill (Areas 1a & 2b)

Twiggy Mullein (Area 1a)

Viper's-bugloss (Areas 1a, 1b, 1d, 2a & 2b)

Invertebrates:

Incidental observations included:

Lepidoptera (moths and butterflies) Small Blue was recorded in good quantity in Areas 1a and 3a, but can be expected wherever Kidney Vetch occurs, this being the larval host plant.

Hymenoptera (ants bees and wasps) The Brown-banded Carder Bee was recorded in Area 1a on Kidney Vetch, though is known to forage on a number of other species recorded at the site.



Photo 1. Deptford Pink at transition of Area 1a and 1c (SS7393392663)



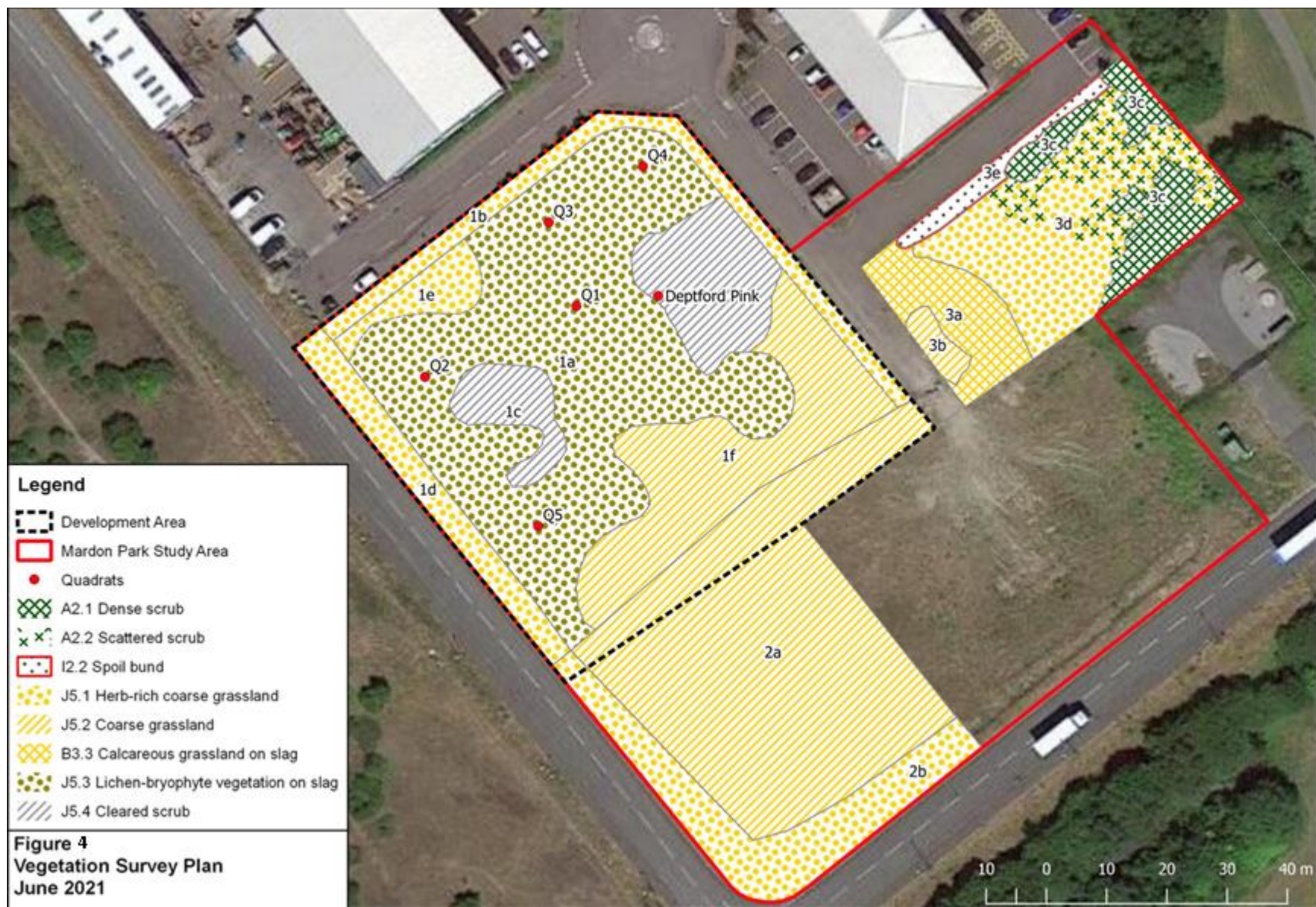
Photo 2. Deptford Pink



Photo 3. Basil Thyme is locally frequent within Area 1a



Photo 4. Twiggie Mullein is locally frequent within Area 1a



6.0 CONCLUSIONS

6.1 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.

6.2 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 one bat pass recorded over a 3 hour transect session, 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.

6.3 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.

6.4 Vegetation and Invertebrates

The site is of County importance and it anticipated the loss of habitats will be >50%, resulting in major adverse impact at this level.

6.5 Ecosystem resilience

6.5.1. Diversity between and within ecosystems

The site has a significant diversity and part of the site has SINC status exceeding the threshold for *Open Mosaic Habitats on Previously Developed Land* (OMHoPDL), 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, 2016³).

6.5.2 Extent, scale and condition of ecosystems

The site has considerable interest when considered in isolation. The site is diverse in terms of its lichen bryophyte community and coarse grassland habitats, which are considered to provide ecological function in local terms. 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 presence of wall cotoneaster *Cotoneaster horizontalis* – an invasive non-native species is considered a threat to the biodiversity of the site which will require appropriate management.

6.5.3 Connectivity between and within ecosystems

The site is surrounded on all four sides by highways and access roads, 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 wider SINC site and the Energy Park as a whole.

6.5.4 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.

7.0 COMPENSATION, MITIGATION AND BIODIVERSITY ENHANCEMENTS

The site is of County importance and it anticipated the loss of habitats will be >50%, resulting in Major adverse impact at this level. Mitigation and compensatory options to reduce the impact include the following:

- Creation of an appropriate mitigation area that will enable those rare and protected species listed to be safeguarded, 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 suitable receptor areas 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. **Note that a licence will be required to affect any works associated with the legally protected Deptford Pink.**
- Retention and management of bunds and creation of new low level, flat-top bunds (see figure 5 below), requiring an annual cut no earlier than 1st August, with the removal of all arisings.
- 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.
- The presence of wall cotoneaster *Cotoneaster horizontalis* – an invasive non-native species is considered a threat to the biodiversity of the site which will require appropriate management during re-development of the site.

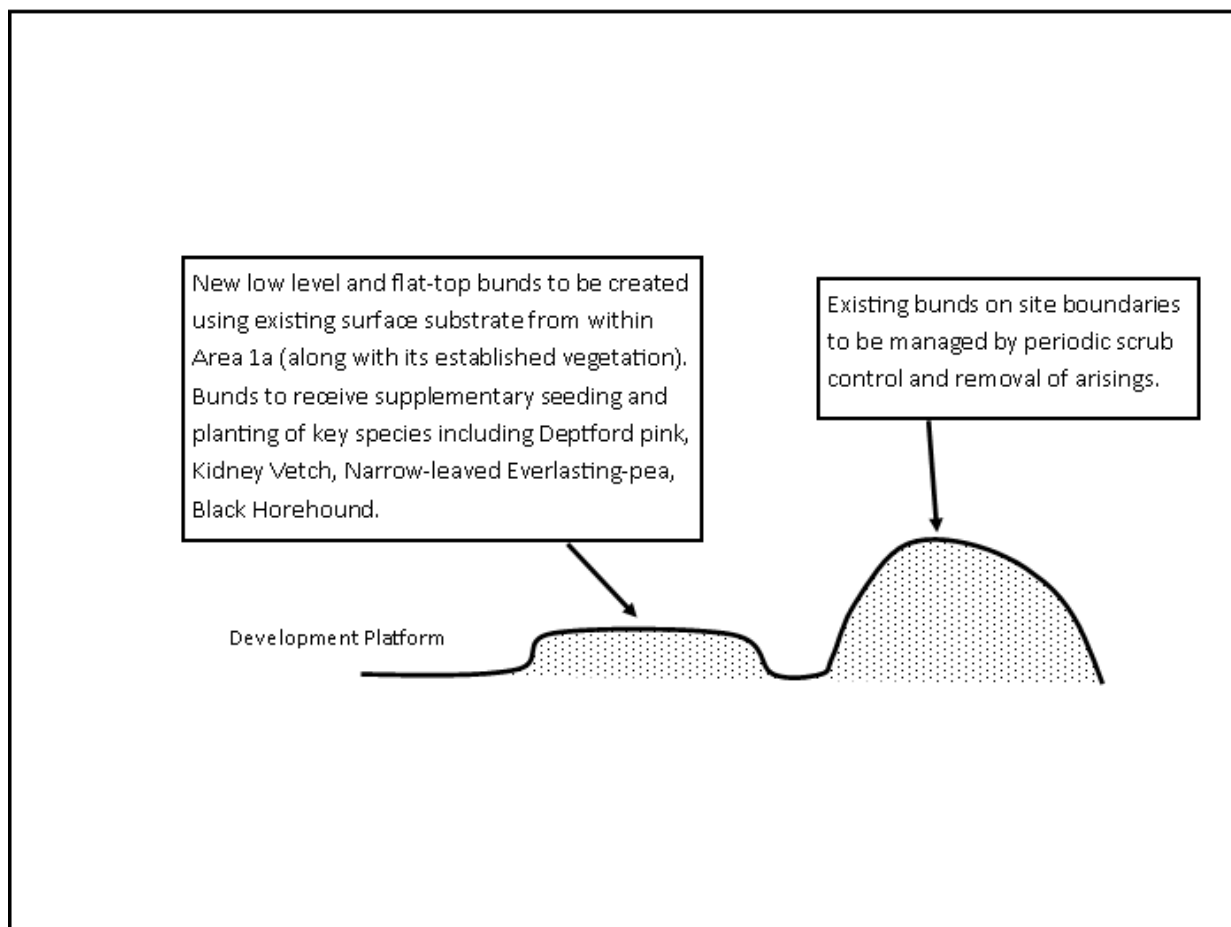


Figure 5. Indicative cross-section drawing of existing and proposed conservation bunds on peripheries of the site.

References

- Dines, T. (2008) *A Vascular Plant Red Data List for Wales*. Plantlife International (Plantlife Wales), Salisbury.
- Hipkin, C.R. (2010) *Species Used for Local SINC Site Selection in Neath Port Talbot: Vascular Plants*, Unpublished Report to the Neath Port Talbot Biodiversity Forum.
- Rodwell, J.S. (2000) *British Plant Communities. Volume 5: Maritime and Open Vegetation*, Cambridge University Press, Cambridge.
- David Clements Ecology Ltd.(2013) *Baglan Energy Park; Bridged Link-Road, Neath Port Talbot. Ecological Assessment. Appendix: Additional Survey Area to the west at Mardon Park*.
- Gent, T. and Gibson, S. (2012) *Herpetofauna Worker's Manual*. JNCC publication.
- Anon (2017). *The Conservation of Habitats and Species Regulations 2017* HMSO, London.
- Anon (1981). *The Wildlife and Countryside Act 1981 (as amended)* HMSO, London
- Bat Conservation Trust (2016) *Bat Surveys for Professional Ecologists – Good Practice Guidelines* 3rd Edition.
- Joint Nature Conservation Committee (2004). *Bat Workers Manual* 3rd Edition.
- British Trust for Ornithology. *Breeding Bird Codes*.

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 hornschuchianum</i>	Hornschuch's Beard-moss	o	[Area 1a] quadrat spp
<i>Pseudocrossidium hornschuchianum</i>	Hornschuch'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