



**Preliminary Ecological Assessment  
for a proposed development  
on land adjacent to  
Llest y Bryn  
Carmarthen  
Carmarthenshire  
SA31 1ED**

\*\*\*\*\*DRAFT REPORT, NOT FOR SUBMISSION\*\*\*\*\*

**Client: Obsidian Developments**

**Survey Date: 17<sup>th</sup> November 2023**

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## 1. Introduction

Wyndrush Wild was contracted to carry out an updated preliminary ecological appraisal in support of an application to Carmarthenshire County Council for a housing development dwelling on land in Carmarthen. The grid reference is SN415210 (see Figure 1 below).

The aim of the survey is to provide baseline data on habitat and species, both on and adjacent to the site, and to investigate potential impacts that may occur during construction and post-construction stages. An assessment is made of any potential impact on protected species in the area.



Figure 1. Surveyed Site



## Site Description

The proposed site comprises two fields on the north-eastern side of Carmarthen, sloping gently with a south-west to northerly aspect. They are surrounded by existing housing on all sides. Both fields had been left unmanaged for seven years until recent mowing / clearance of scrub.



*Figure 2. Proposed Development Site – western field*

## 2. Methodology

### 2.1 Desk Exercise

A limited desk exercise was carried out. The site had been surveyed by Richard Gould in 2016, and a full desk exercise including a search of the West Wales Biodiversity Information Centre database had been completed as part of that work. No records had been returned for the site itself; roosts of unidentified bat species had been recorded within 500m, and common lizard and slow worm had been recorded from the Carmarthen area. The site was considered unlikely to support hazel dormouse as there were no records from the surrounding area.

Gould Ecology subsequently carried out reptile survey which identified a good population of slow worm and common lizard together with a low number of grass snakes. Both fields were used, with particular concentrations in the western part of the site.

The nearest protected site is the Afon Tywi SSSI / SAC which lies approximately 770m away to the south-east at its nearest point. There is no direct hydrological continuity with this site.

## **2.2 Extended Phase I Survey**

A thorough site inspection was made on 17<sup>th</sup> November 2023. The survey followed the methodology set out by the Handbook for Phase 1 Habitat Survey (JNCC, 1993) and then subsequently by the Institute of Environmental Assessment (1995). The methods provide quick and accurate classification of habitats.

In addition, the survey looked for field signs of protected species and assessed the habitat for their potential presence. Measures taken included:-

- A search for signs of badgers on the site.
- Consideration of the potential impact of the development on bats, reptiles and other protected species.
- Recording birds and identifying the suitability of the habitat for nesting birds especially those listed as species of conservation concern.
- Recording a list of plants found on the site, shown in Appendix 1.

## **2.3 Constraints**

There were no significant constraints to the survey. Breeding birds could not be recorded due to the time of year, but an assessment could be made of their likely presence. Identification of grassland plants could be made on vegetative characters.



### 3. Results

#### 3.1 Vegetation and habitat survey

The habitats at and adjoining the site location were recorded in detail. The application area comprises one main habitat type: poor semi-improved grassland (B4) with extensive areas of recently cleared bracken and bramble scrub. There is a small area of dense scrub (A2.1) remaining in one corner. The site is bounded by hedgerows: intact species-poor (J2.1.2) and hedge with trees (J2.3.2). There are no watercourses on or adjoining the site.

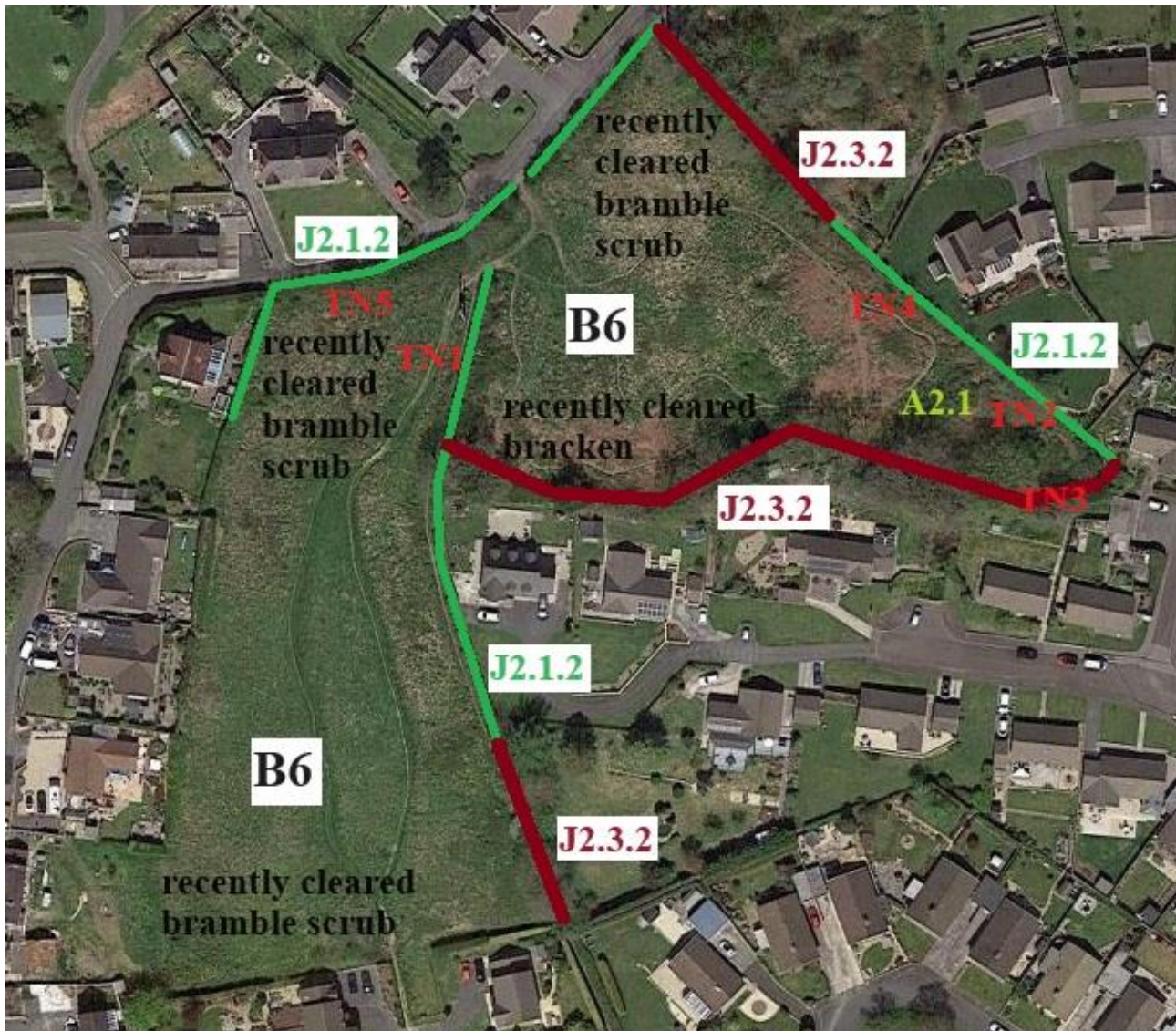


Figure 3. Phase I habitat map

TN1: Himalayan Cotoneaster

TN2: Giant Montbretia

TN3: Ash tree with moderate potential for roosting bats

TN4: Variegated Yellow Archangel

TN5: Billard's Bridewort



## Poor Semi-Improved Grassland (B6) / Recently Cleared Scrub



*The application area has areas of species-poor coarse grassland.*

Both fields have areas of coarse grassland dominated by Yorkshire fog, false oat-grass and cock's-foot. Accompanying species include ribwort plantain, ragwort, hogweed, common sorrel and lesser knapweed. In the National Vegetation Classification, this corresponds to a species-poor form of *Arrhenatherum elatius* grassland (MG1). Semi-improved grassland was mapped more widely across the field by Gould (2016) when the field was under an annual mowing regime; subsequent abandonment led to an extensive encroachment of bramble scrub and bracken from the field edges. This had been flailed earlier in the year, and regrowth in these areas comprised young bramble, creeping buttercup, rosebay willowherb and goosegrass amongst the more prominent species.

The rather species-poor grassland here is of only minor ecological interest, but is known to support reptile populations.



**Intact Species-Poor Hedge (J2.1.2) / Hedge with Trees (J2.3.2)**

*The eastern boundary of the western field is a hedge with trees alongside a footpath*

The field boundaries against gardens on the western side of the site are ornamental hedges with Leyland's cypress and garden privet the two main species. The roadside boundary to the north of both fields is a managed but bushy hedge with grey willow, hazel and sycamore the dominant species. The southern boundary of the eastern field has a line of established trees, predominantly oak, ash and holly but with some beech, sycamore, blackthorn and grey willow. The eastern side of this field is partly a low, managed beech hedge on a garden boundary, but this gives way to another mature tree line in the northern part. There is a footpath which bisects the two fields, and this also has some established oak trees in part, as well as some hazel, ash and horse chestnut.

The native hedges here, particularly those with mature trees, are of some local ecological significance. None appear to be species-rich enough to class as significant hedges as defined by the Hedgerow Regulations.



### 3.2 Protected species

As shown by Gould (2016), the site holds or held a good population of reptiles and common lizards, and a small number of grass snakes. Although significant areas of the site had become less suitable due to scrub growth during recent years, both fields have retained a core of grassland, which will have become more suitable for reptiles in the absence of regular mowing management. Further survey work would be required to establish the current population sizes of reptiles here, but it should be assumed that these are broadly as they were when first surveyed.

No bat survey was carried out. The mature trees around the boundaries were inspected visually using binoculars from ground level, to ascertain whether potential bat roost features were present. Most trees are too young to have developed cavities or dense, thick-stemmed ivy cover but a single ash tree in the south-eastern part of the site (TN3 on Figure 2, and pictured below) was classed as having moderate potential due to the presence of several cracks and small cavities on the dead or dying trunks. The grassland and scrub may be used by foraging bats, and the hedgerows will provide feeding and commuting corridors.



*Ash tree with moderate potential for roosting bats*



No badger setts, latrines or signs of foraging were found on the site. The development will not affect badgers.

The grassland is of little value to birds. The hedges provide potential nesting habitat, and the bramble areas are likely to have been well-used prior to clearance. Wren was the only Bird of Conservation Concern (Stanbury et al, 2020) seen; this and other species such as dunnock could potentially nest in the hedges. No other BoCC were noted by Gould (2016).

The lack of watercourses on or near the site means that potential impacts on otters or water voles can be discounted.

As noted by Gould (2016), the native hedgerows offer some habitat suitability for hazel dormouse, although the location of the site within a relatively urban area with associated human disturbance reduces the likelihood of their occurrence. Dormice occur 2km away to the southeast of Carmarthen, but survey work has failed to reveal populations to the north or west of the town. No further survey should be required, unless work is proposed which impacts significantly on the northern boundary hedge of the eastern field.



*The northern boundary hedge of the eastern field may have some suitability for dormice*



### 3.3 Invasive Species

Several invasive non-native species are present in small quantity, and the locations of these are indicated on Figure 3. A few bushes of Himalayan cotoneaster occur alongside the footpath which bisects the site, mostly in the northern half of this. Variegated yellow archangel was found near the eastern boundary of the site. These two species are listed on Schedule 9 of the Wildlife and Countryside act, and it is illegal to plant them or otherwise cause them to grow in the wild. Three other potentially invasive non-native species were recorded – a sapling of Billard's bridewort near the northern edge of the western field, a clump of giant montbretia on the eastern boundary bank and some buddleia just outside of the site to the south-west.

## 4. Discussion

### 4.1 Scheme Details

The proposal is for a new housing development across the two fields. No further details were available prior to survey.

### 4.2 Recommendations

An updated programme of reptile survey may be required to ascertain the current sizes and distribution of reptile populations on the site. The options outlined by Gould (2016) will require renewed consideration - allocation of a substantial mitigation area within the site or provision of an enhanced external compensatory site to receive reptiles translocated prior to site development. The second option would be preferable, as it avoids further restricting three fairly isolated reptile populations, and allows the applicant to maximise the development potential of the site. Liaison between CCC and the ecological consultant will be required.

Works to hedgerows or any other movement or trimming of woody vegetation should be carried out outside the main bird breeding season (start of March to end of August). Any substantive work to or removal of the native hedges may require a further assessment with regards to the potential presence of hazel dormouse.

The presence of invasive non-native plant species (INNS) on the site may mean that a management plan / Biosecurity Risk Assessment will be required. Landscaping associated with the development should avoid introducing further invasive or potentially-invasive non-native species to the site. A list of Schedule 9 invasive species which should not be planted is given in Appendix 2. Those classed as potentially invasive by [Thomas \(2010\)](#) are also best avoided. Carefully sourced locally-native species should be favoured.

### 4.3 Promotion of Biodiversity at the Site

Carmarthenshire County Council requires that biodiversity enhancements are included in all developments to meet the Authority's Duty of Care under Section 6 of the Environment Act 2016. Planning Policy Wales (PPW) 10 sets out that "*planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*".

Unless significant retention of green-space is proposed within the scheme design, it may be difficult to achieve net biodiversity gain through on-site works. Landscaping associated with the scheme may be able to provide some limited biodiversity benefits, if native species of tree can be accommodated. Bat roost features, and bird nesting boxes for species such as swift could be added to buildings. A contribution to biodiversity enhancement work being carried out elsewhere in the Carmarthen area may provide another route to achieve net-gain.

## 5. Summary and Conclusions

The proposed development does not present a significant risk to habitats in the area. Reptile populations will need accommodating within a designated area on site, or, ideally, translocation to a nearby site under enhanced management; further survey work may be required prior to this. No other protected species are likely to be affected. Invasive non-native plant species will require control.

## 6. References

Gould, R. (2016) Extended Phase I Habitat Survey and Preliminary Ecological Appraisal, land adjacent to Llest-y-Bryn, Carmarthen. Gould Ecology.

Gould, R. (2016) Reptile Survey, land adjacent to Llest-y-Bryn, Carmarthen. Gould Ecology.

Handbook for Phase I habitat survey Nature Conservancy Council 1990

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds* 114: 723-747.



**Appendix 1** Plant species recorded at the site during the walkover visit 18/11/2023

Sycamore	<i>Acer pseudoplatanus</i>
Horse Chestnut	<i>Aesculus hippocastaneus</i>
False Oat-grass	<i>Arrhenatherum elatius</i>
Daisy	<i>Bellis perennis</i>
Buddleia	<i>Buddleia x davidii</i>
Cuckoo Flower	<i>Cardamine pratensis</i>
Pendulous Sedge	<i>Carex pendula</i>
Lesser Knapweed	<i>Centaurea nigra</i>
Rosebay Willowherb	<i>Chamaerion angustifolium</i>
Creeping Thistle	<i>Cirsium arvense</i>
Marsh Thistle	<i>Cirsium palustre</i>
Dogwood	<i>Cornus sp.</i>
Hazel	<i>Coryllus avellana</i>
Himalayan Cotoneaster	<i>Cotoneaster simonsii</i>
Hawthorn	<i>Crataegus monogyna</i>
Giant Montbretia	<i>Crocsmia masoniorum</i>
Leyland's Cypress	<i>Cupressiforme leylandii</i>
Cock's-foot	<i>Dactylis glomerata</i>
Broad-leaved Willowherb	<i>Epilobium montanum</i>
Beech	<i>Fagus sylvatica</i>
Ash	<i>Fraxinus excelsior</i>
Goosegrass	<i>Galium aparine</i>
Herb Robert	<i>Geranium robertianum</i>
Atlantic Ivy	<i>Hedera helix hibernica</i>
Hogweed	<i>Heracleum sphondylium</i>
Yorkshire Fog	<i>Holcus lanatus</i>
Holly	<i>Ilex aquifolium</i>
Common Ragwort	<i>Jacobaea vulgaris</i>
Laburnum	<i>Laburnum anagyroides</i>
Variiegated Yellow Archangel	<i>Lamiastrum galeobdolon ssp. argentatum</i>
Garden Privet	<i>Ligustrum ovalifolium</i>
Honeysuckle	<i>Lonicera periclymneum</i>
Ribwort Plantain	<i>Plantago lanceolata</i>
Blackthorn	<i>Prunus spinosa</i>
Pedunculate Oak	<i>Quercus robur</i>
Creeping Buttercup	<i>Ranunculus repens</i>
Common Dog-rose	<i>Rosa canina</i>
Bramble	<i>Rubus fruticosus</i>
Common Sorrel	<i>Rumex acetosa</i>
Red Campion	<i>Silene dioica</i>
Billard's Bridewort	<i>Spiraea x billardii</i>
Hedge Woundwort	<i>Stachys sylvatica</i>
Greater Stitchwort	<i>Stellaria holosteoides</i>
Yew	<i>Taxus baccata</i>

Navelwort	<i>Umbilicus rupestris</i>
Nettle	<i>Urtica dioica</i>

## Appendix 2:

### Plants listed on Schedule 9 of the Wildlife & Countryside Act 1981 (as amended)

Alexanders, Perfoliate	<i>Smyrniium perfoliatum</i>
Archangel, Variegated Yellow	<i>Lamiastrum galeobdolon subsp. argentatum</i>
Azalea, Yellow	<i>Rhododendron luteum</i>
Balsam, Himalayan	<i>Impatiens glandulifera</i>
Cotoneaster	<i>Cotoneaster horizontalis</i>
Cotoneaster, Entire-leaved	<i>Cotoneaster integrifolius</i>
Cotoneaster, Himalayan	<i>Cotoneaster simonsii</i>
Cotoneaster, Hollyberry	<i>Cotoneaster bullatus</i>
Cotoneaster, Small-leaved	<i>Cotoneaster microphyllus</i>
Creeper, False Virginia	<i>Parthenocissus inserta</i>
Creeper, Virginia	<i>Parthenocissus quinquefolia</i>
Dewplant, Purple	<i>Disphyma crassifolium</i>
Fanwort	<i>Cabomba caroliniana</i>
Fern, Water	<i>Azolla filiculoides</i>
Fig, Hottentot	<i>Carpobrotus edulis</i>
Garlic, Three-cornered	<i>Allium triquetrum</i>
Hogweed, Giant	<i>Heracleum mantegazzianum</i>
Hyacinth, water	<i>Eichhornia crassipes</i>
Knotweed, Giant	<i>Fallopia sachalinensis</i>
Knotweed, Hybrid	<i>Fallopia japonica x Fallopia sachalinensis</i>
Knotweed, Japanese	<i>Fallopia japonica</i>
Knotweed, Japanese	<i>Polygonum cuspidatum</i>
Leek, Few-flowered	<i>Allium paradoxum</i>
Lettuce, water	<i>Pistia stratiotes</i>
Montbretia	<i>Crocoshmia x crocosmiiflora</i>
Parrot's-feather	<i>Myriophyllum aquaticum</i>
Pennywort, Floating	<i>Hydrocotyle ranunculoides</i>
Potato, Duck	<i>Sagittaria latifolia</i>



Primrose, Floating Water	<i>Ludwigia peploides</i>
Primrose, Water	<i>Ludwigia grandiflora</i>
Primrose, Water	<i>Ludwigia uruguayensis</i>
Rhododendron	<i>Rhododendron ponticum</i>
Rhododendron	<i>Rhododendron ponticum x Rhododendron maximum</i>
Rhubarb, Giant	<i>Gunnera tinctoria</i>
Rose, Japanese	<i>Rosa rugosa</i>
Salvinia, Giant	<i>Salvinia molesta</i>

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