

Preliminary Ecological Appraisal

Primary Substation, Ipsen, Ash Road North, Wrexham Industrial Estate

Introduction

Etive Ecology Ltd were appointed by Lovelock Mitchell Architects Ltd to undertake a Preliminary Ecological Appraisal (PEA) of a plot of land adjacent to the existing Ipsen facility off Ash Road North, Wrexham Industrial Estate. The site is centred on National Grid Reference SJ 3755 5021 and the red-line site boundary is provided in **Figure 1** appended.

The site is proposed for the construction of a new Primary Substation.

Methodology

The ecological appraisal of the proposed scheme is broadly based upon the *Guidelines for Preliminary Ecological Appraisal* (Chartered Institute of Ecology and Environmental Management, 2017).

The aim of the assessment is to obtain information on the existing ecological composition and value of the site, and to conduct a preliminary assessment of the likely significance of ecological impacts.

The survey comprised an extended Phase 1 Habitat Survey. This survey method follows the habitat assessment and classification procedure outlined by the *Handbook for Phase 1 Habitat Survey* (JNCC, 2010), whereby all habitats are identified, described, and mapped using a standard classification.

The extended component of the survey is developed from the methodology described in *Guidelines for Baseline Ecological Assessment* (IEA, 1995). All habitats and features within the survey area are assessed for their potential to support legally protected or notable species (nationally or locally).

The value and sensitivity of ecological features was determined based on the guidance given in *Guidelines on Ecological Impact Assessment* (CIEEM, 2023). Individual ecological receptors (habitats and species that could be affected by the development) were assigned levels of importance for nature conservation in one of the following categories; International, UK, National, County, District, Local or within the immediate zone of influence or Site only. For a given receptor, determination of value includes consideration of the size, secondary or supporting value/function, conservation status and quality of the species or feature.

The site survey was undertaken on the 13th March by Russell Grey (BSc, MCIEEM, CEnv) who has 20 year's experience as an ecological consultant and field surveyor. There were no constraints to the survey of the site or immediately surrounding land.

Results

Desk Study

There are no statutory nature conservation sites located within 1km of the site. The nearest non-statutory nature conservation site is Erlas Black Wood located 100m to the southeast of the site. The woodland is designated for its broadleaved woodland habitat and forms part of the Wrexham Industrial Estate Wildlife Site which supports a significant population of great crested newts (GCN).

There are records of GCN, common toad, grass snake, common lizard, slow worm, badger, hedgehog and numerous species of bat for within 1km of the site, although none of these relate specifically to land within the site boundary.

Habitats

The survey area was found to comprise the following habitats:

- Hard-standing
- Improved grassland
- Scattered scrub
- Scattered broadleaved trees

The red line site boundary occupies an area of hard-standing in the northwest corner of an existing car park. The site is surrounded by improved grassland, scattered bramble scrub and scattered broadleaved trees (semi-mature silver birch and sycamore as well as young willow and beech) to the north and west, with further hard-standing to the east and south. An area of open ditch is located adjacent to the west of the site, found to be holding water to a depth of 20cm at the time of survey, with no aquatic vegetation.

Land approximately 50m to the south of the site is currently under development for a new manufacturing facility (P/2023/0482). This land was found to be of very low ecological value, having previously been the site of a former industrial unit that was demolished and left as bare ground. The development of this site required a scheme of Reasonable Avoidance Measures (RAMs) in relation to the potential presence of GCN (none were found to be present on site).

The aerial image and subsequent photographs provide an illustration of the current condition and composition of the site.

Protected Species

There are no water-bodies located within the application site boundary. There is a single aquatic feature located immediately adjacent to the west; an open section of drain with an inflow and an outflow. At the time of survey the ditch was holding ~20cm of water which was turbid. There are no aquatic plants within the ditch and the banks comprise of bare ground which is regularly managed to keep it in this condition. As a result, this ditch is not considered to offer any potential breeding habitat for amphibians, including GCN.

The terrestrial habitat within the application site boundary is limited to a 1m wide corridor or improved grassland to the north of the car park. The remaining portion of the site is entirely hard-standing. As a result, there is no significant area of land present that could support amphibians.

It is also noted that a period of terrestrial GCN monitoring was undertaken in 2023 in suitable habitat to the south and immediately adjacent to Erilas Black Wood. No GCN or indeed any amphibians were recorded during that survey effort. Therefore, **it is concluded that GCN and all other species of amphibian are absent from the application site boundary.**

As described above, the site is dominated by hard-standing that is used as an active car park. The site is edged by improved grassland and scattered scrub, which offers low potential habitat for reptiles. A

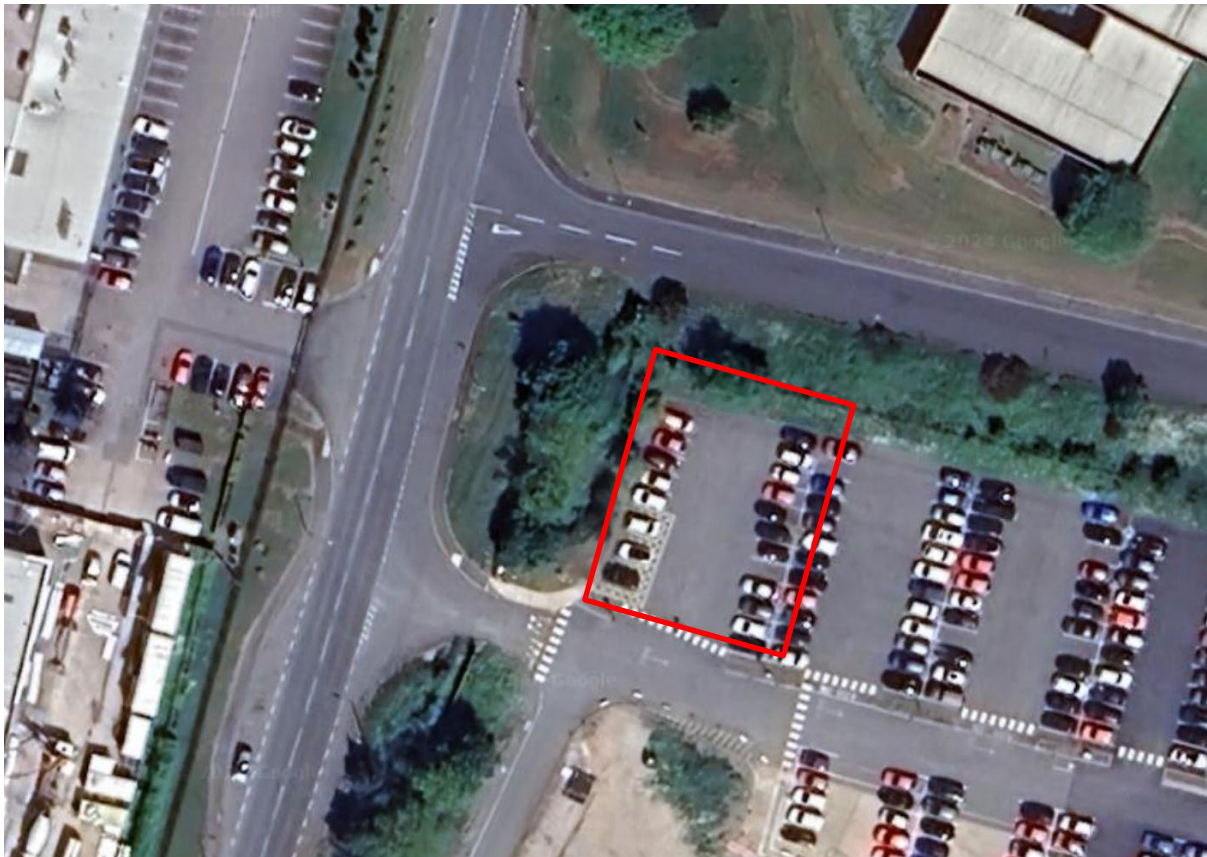
very small section of improved grassland approximately 1m x 20m will be physically disturbed by the scheme. It is noted that there are records of reptile within 1km but that the current usage of the site and associated disturbance makes the presence of reptiles unlikely.

There is no habitat within the application site that could support nesting birds. The adjacent scrub and trees do however have the potential to support nests of common/widespread species.

The site is considered to be unsuitable to support badger, bats, riparian mammals or any notable species of flora or fauna.

No Invasive Non Native Species (INNS) of flora were identified on site or in immediately adjacent land at the time of survey.

Plate 1; aerial image of the site



Photograph 1; hard-standing car park area



Photograph 2; strip of grassland and scrub adjacent to the north



Photograph 3; open ditch adjacent to the west



Net Benefit for Biodiversity (NBB)

The existing site is considered to be of very low ecological value. The site offers negligible value in terms of ecosystem services or functionality. The current use as a car park is likely to contribute towards rapid overland flow and surface runoff, which is unhelpful in terms of flood risk management. Likewise, there is likely to be water quality issues around runoff from an active car park. Therefore, the baseline value for the consideration of NBB is very low.

Discussion

Impacts

The proposed scheme is presented as **Figure 1**.

The scheme will result in the loss of 600m² of hard-standing. There will be no permanent loss of any semi-natural habitat as a result of the proposed scheme.

The construction of the new substation and associated cable works and security fencing is likely to cause a temporary disturbance to ~20m² of existing grassland habitat. All such disturbance would be reinstated as part of the scheme.

Given the low value habitats present there is a very low risk of direct harm to GCN, reptiles or nesting birds as a result of the proposed scheme.

Recommendations

Given the low value habitats present on site and the very low risk posed to any legally protected or notable species of fauna, the following recommendations are considered to be reasonable and proportionate:

- Reinstatement of all habitats disturbed by the proposed scheme using only native species of local provenance.
- Direct ecological supervision of any works that physically disturb the semi-natural habitats on or immediately adjacent to the application site. This is to ensure that no amphibians, reptiles or nesting birds are adversely impacted.
- Installation of three woodcrete nest boxes on the existing trees to the west of the site, to deliver a net benefit for biodiversity.

Green Infrastructure Statement

Given the small size of the application site and the low ecological value of the site, the following paragraph is considered provide a proportionate Green Infrastructure Statement for the proposed scheme.

The site has been found to comprise primarily of hard-standing (negligible ecological value) but is edged by improved grassland and scattered bramble scrub (low ecological value). The site offers little in terms of ecosystem services or ecological functionality. When applying the Step-Wise Approach it has been possible to Avoid all areas of ecological value, as there are none present. Anticipated disturbance to adjacent land has been minimised as part of the design process and will be mitigated by direct ecological supervision of these works and full reinstatement of habitats using native species.

Given the very low impacts anticipated (temporary disturbance of a small area of low value habitat), the only proposed biodiversity enhancement is the provision of bird nest boxes on adjacent trees.

Conclusions

In conclusion, the site has been found to be of very low ecological value, comprising primarily of hard-standing. Temporary disturbance to a small area of adjacent habitat is anticipated, but the risk posed to legally protected and/or notable species is minor. The scheme is therefore likely to result in no change to the ecological value of the site, but the addition of three bird nest boxes will deliver a proportionate net benefit for biodiversity.

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FIGURE 1

Proposed Site Arrangement

