Leigh Ecology Ltd

Protected Species and Habitat Surveys

Dutton Road
Redwither Industrial Estate
LL13 9XQ



Preliminary Ecological Appraisal

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Contents

1. Executive summary.....4

2. Introduction.....5

2.1 Legislation & Policy.....7

3. Methodology.....9

4. Results.....13

5. Constraints and Recommendations.....20

6. References.....21

7. Appendices

Appendix 1 – UKHabs Habitat map and legend
Appendix 2 – Proposed areas for enhancement

1. EXECUTIVE SUMMARY

Leigh Ecology Ltd was commissioned to undertake a preliminary ecological assessment of land at Dutton Road, Redwither Industrial Estate, LL13 9XQ. The assessment was undertaken on the 15th of August 2024.

The site comprises approximately 0.087ha of land that is equally modified grassland and a deciduous wooded area. The site is adjacent to Dutton Road.

The results of the survey indicate that **the proposed development will have a negligible impact on species present and nearby to site**. The footprint of the development being undertaken is atop modified grassland and Deciduous Woodland.

2. INTRODUCTION

Background

Leigh Ecology Ltd was commissioned by Peter Miller to undertake an Ecological Appraisal of a parcel of land identified for a material change of use to an access road. *Refer to the red line boundary shown on Figure 1.1 below.*



Figure 1.1; Site Location and Extent, Including Red line boundary.

This report will therefore provide baseline information as derived from the diurnal appraisal process outlined and recommend any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

The Applicant should be aware that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats/species, or,

- Signs of use by protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion on which the planning application can proceed.

then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

If any protected species was subsequently found during detailed further surveys and / or may be affected by the development proposals, then a European Protected Species Mitigation License (EPSML) may be required to proceed with the development.

Protected/priority species omitted from this report have been discounted due to factors including obvious absence/isolation of suitable habitats, and/or distributional aspects negating the necessity to survey for them, and/or the proposed works were not considered to negatively impact the species or encroach on areas where the species may be present.

2.1 Legislation & Policy

The legislature considered for the purposes of this report includes the following:

- Conservation of Habitats and Species Regulations (amendment) (2019) (EU Exit)
- Wildlife and Countryside Act (1981) (as amended)
- Countryside Rights of Way (CRoW) Act (2000)
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act (1992)
- The Hedgerow Regulations (1997)
- Town and Country Planning Act (1990)
- Wild Mammals Protection Act (1996)

The Environment (Wales) Act 2016

Planning Policy Wales (PPW) Edition 11 (Feb 2021)

These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species/group, for example, some species may purely be protected during one of its life stages (e.g., common species of breeding bird whilst nesting/with eggs/young); some species may receive full protection within the EU (e.g., otter), whereas others may be protected solely on a national basis (e.g., grass snake).

Policy

Paragraph 180 of the National Policy Planning Framework (as revised in September 2023) states: When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists;

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The study is documented in this report and includes the following:

- Preliminary ecological baseline for the site;
- Protected mammals' assessment of the site;
- A desk study including Magic map data search;
- Potential ecological constraints to the development of the site; and
- Further ecological work necessary for a planning submission.

All Work was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Practice.

3. METHODOLOGY

Desk Top Study

The desktop study involved a search for information on statutory sites within 1km of the site and non-statutory sites within 250m. The centre of the site (ordnance Survey Grid Reference SJ383500) was used for the search.

The following sources were searched for information about the site:

- Defra Magic Map app
- Google Earth
- OS Maps
- Bing Maps
- Flintshire County Council
- National Biodiversity Trust Wales Atlas
- Natural Resources Wales

A daytime preliminary ecological appraisal was conducted on the 15th of August 2024 at around 15:30pm in dry conditions by Ecologist, Chris Pickering. The purpose of the appraisal was to determine:

- The habitats present
- Any potential constraints to development
- The potential for legally protected species to be present
- The presence of invasive plant and animals
- Any requirement for additional ecological surveys

Floristic assessment

The survey followed the UK Habitat Classification Version 2.0 (published by the UKHab Working Group (UKHab v1.0 May 2018) and UKHab Ltd (UKHab v1.1. Sept. 2020) introduced as part of Biodiversity Net-gain and reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series "Guidelines for Preliminary Ecological Appraisal, 2nd Edition" (CIEEM, 2017).

During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh et al, 2014; Hodgetts, 2011), s.41 and LBAP species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species (amendment) (EU exit) Regulations (2019). Species nomenclature follows Stace, C. (2019) – definitive English names for vascular plants, Smith, A. (2004) for mosses, and Dobson, F. (2018) for lichens.

In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended).

Faunal assessment

The identification and/or evidence of fauna encountered was documented whilst in tandem the area was assessed for the potential to support the priority species covered in the previous paragraphs. The 'walkover' also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

The application site was assessed for bats; buildings (where present) were inspected for potential places that may be of value to bats and to determine evidence of use.

This typically involves a search for potential roost features (PRF) both internally (investigation of loft spaces/upper floors/internal elevations) as well as externally, comprising an investigation of features (roof material, building components) using a high- powered torch. Field signs of bats typically comprise bat droppings, incidental animal presence, dead specimens and/or prey items. The surrounding habitat was also considered in terms of general suitability.

Trees were inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a search for potential roost features along with an investigation of those features using a high-powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm or bat/bird boxes. All mature trees were assessed for their potential to host roosting bats.

Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th ed. (2023):

Landscape Assessment

Bats use regular commuting and foraging routes; these are usually linear features such as hedgerows and watercourse corridors. The loss and severance of such a feature may have an indirect impact on the bats. Therefore, it is important that if the development impacts on these features, they are assessed.

Breeding Birds

Buildings, trees, hedges, and shrubs were checked for evidence of nesting birds and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting.

Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for the site's capacity to support species especially protected under Schedule 1 of the Wildlife & Countryside Act (1981) (as amended), for example Barn Owl (Tyto alba) and other priority species.

Other terrestrial mammals

The walkover included a search for field signs of Badger (Meles meles) which includes signs of activity such as digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground. Any signs indicative of use of the site by European Hedgehogs (Erinaceus europaeus), or habitats of value to them, were also recorded.

Amphibians and Reptiles

During desktop assessment, a 250m search was undertaken from a site-central grid reference in relation to the presence of ponds, ditches or other water bodies that may support Great Crested Newts (GCN). The information gathered was then used to aid in establishing if more detailed surveys are required.

The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (e.g., south-facing slopes), hibernation sites (e.g., banks, walls, piles of hardcore) and opportunities for foraging (e.g., rough grassland and scrub). The results, conclusions and recommendations of this report are based on several factors i.e., Skills and experience of the surveyor, knowledge of flora and fauna relevant to the site location and geographical range.

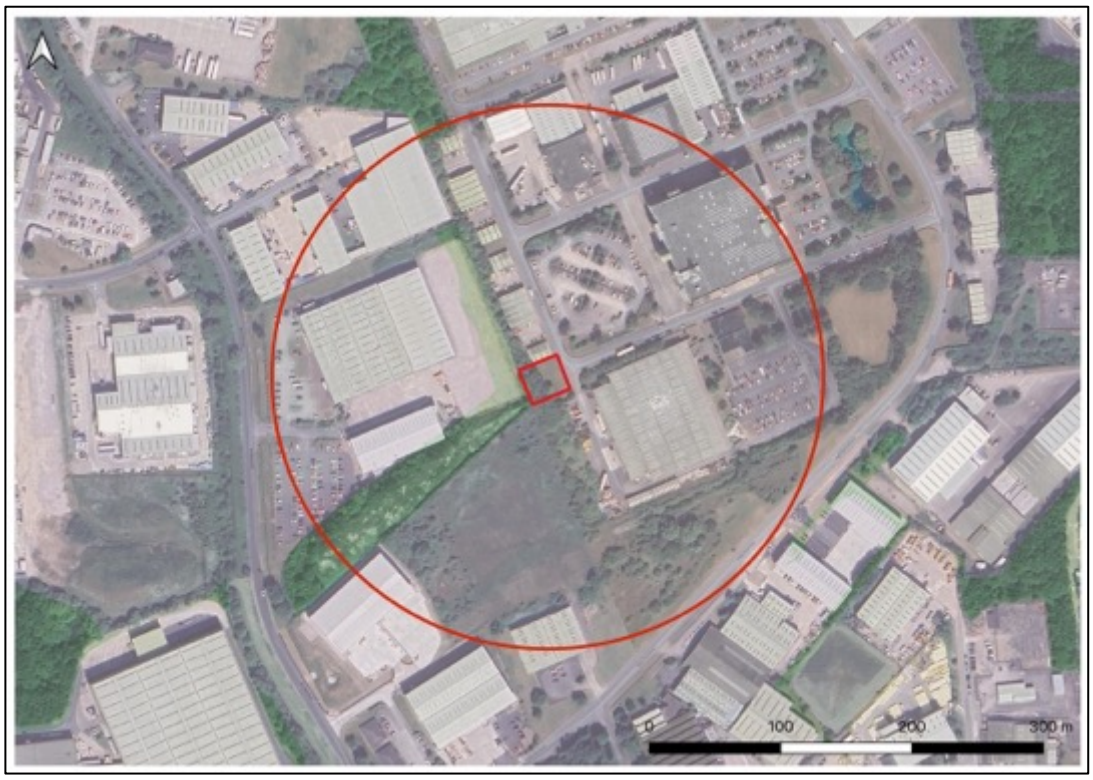


Fig 1.2; Area of development within 250m zone of influence

4 RESULTS

Site survey

Habitats within the survey area

The results of the Habitat survey and details are *shown in Appendix 1*, with accompanying photographs shown within the text (*below*). Habitat descriptions are provided, and plant species are referred to using their English names.

The survey site covers the full extent of the land *shown within the red line in Figs 1.1 and 1.2*. The proposed development will see the addition of a new access road.

Habitats

The site mainly consists of Modified grassland (UKHabs code g4) that is well maintained. The other habitat present are deciduous trees that range in size and age with some self-seeded saplings growing on the boundaries.

Site Boundaries

Three of the four site boundaries are commercial buildings with associated infrastructure. The Southwestern aspect is currently disused land that has pioneer species populating it.

Surrounding habitats

The site sits in the central area of the Wrexham Industrial Estate. The nearest water body is an ornamental pond that lies 280m to the East and separated by buildings and roads.
The nearest designated site is 3km on the East of the site and is the River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales) SSSI. Sontley Marsh SSSI sits a similar distance to the West of the site.

National Resources Wales Map was used to cross reference designations with Magic Map application.



Photograph 1; The whole site from the Eastern Boundary.



Photograph 2; Looking East across the site.



Photograph 3; Looking to the Northern boundary.



Photograph 4; Looking to the Southern boundary.



Photograph 5; The depth of the tree area to the Western boundary.



Photograph 7; The variety of the pioneered tree area.

Protected and notable species

The National Biodiversity Network Trust Atlas Wales (NBN), was used as part of the desk study and where applicable information is included below.

Invertebrates

No notable invertebrate species were recorded; and no suitable species that support flowering vegetation were featured on the site.

Amphibians

Great crested newts (GCN) are protected by Schedule 2 of the Convention of Habitats and Species Regulations (2010) and Schedule 5 of the Wildlife and Countryside Act (1981, as amended), which provide protection to both the individuals and the areas they use for rest, shelter or breeding. Great crested newts are also a UK BAP and LBAP priority species. Fourteen records were listed within The NBN for the site within the 250m zone of influence. They all relate to a parcel of land adjacent to the ornamental pond to the East of the site. GCN will travel up to 500m from their

breeding ponds, although distances vary depending on several factors including the quality of their terrestrial habitat. Therefore, any populations of newts using the ponds within 500m of the works area could potentially be impacted by the works. It is therefore recommended that any construction phase follows the Great Crested Newt RAMS in the appendices.

Bats

Surrounding habitat and Tree Inspection

The linear features of trees surrounding the overall site boundary are ideal foraging habitat and offer potential for roosting. None of the trees on site exhibit features that would be suitable for bat roosts. Surrounding the proposed development where lighting is necessary in areas adjacent to existing tree lines, this will be low wattage, directional, low level and/or shaded to minimise light spill (<1Lux) onto potential flight lines following linear features and foraging habitat to ensure that the overall impact caused by lighting the site is negligible.

The lighting scheme will be designed regarding guidance such as the Bat Conservation Trust Statement on the impact and design of artificial light on bats, and the Institution of Lighting Professionals Guidance Notes, to minimise disturbance to bats and other wildlife due to artificial lighting. *Common Pipistrelle Bats were recorded 3 times in the NBN records, but not within the site boundaries.*

Breeding Birds

All the trees within the boundary represent potential habitat for birds. Works can take place during the bird nesting season from the beginning of March until the end of July, but the removal of this habitat during these times, must be pre-empted by a thorough inspection by an ecologist for nesting birds and active nests.

However as discussed above, lighting near the tree line should be installed to cause the least impact on to these features of the Eastern boundary.

No instances of ground nesting birds were discovered on the site visit.

Badger

There are no suitable habitats contained within the site.

Other mammals

There were no field signs of other mammals or related activity within the site.

4. CONSTRAINTS AND RECOMMENDATIONS

The proposed development (within the red line site boundary *as shown in Figures 1.1 & 1.2*) will consist of the creation of an access road.

Positioning, construction, and post construction impacts to species immediately adjacent to the site must be considered. Ecological constraints and recommendations regarding any development of the site are discussed below.

Non-native invasive species

Plants

No invasive species were located within the red line boundary. No instances of plant species feature within the red line boundary, and therefore none will be removed.

Other

Impacts of the development must be considered during the construction period. Priority must be given to retain as many of the trees as possible within the construction restraints.

The assessment of the ecological context of the habitats adjacent to the site indicate the potential of the site to support nesting birds and bat species. Lighting of the site must adhere to guidance from the Bat Conservation Trust.

Enhancement.

Any landscaping scheme would benefit from the additional tree planting of Oak, Ash, Beech, Wild Cherry and Crab Apple, in the areas highlighted Lowland mixed deciduous woodland, in Appendix 2 – Proposed development and Enhancement areas.

The baseline tree area is 420.052m^2. The proposal will see an increase of 44.962m^2 of trees planted to 465.014m^2.

The opportunity to incorporate bat roosting features within the trees that are retained along with bird boxes should be encouraged.

It is strongly recommended that hibernacula be built using the felled timber underneath the trees to be retained, to provide sanctuary for amphibians, small mammals and invertebrates.

If the above recommendations are implemented, the development would not result in a negative effect on biodiversity. No further surveys are needed to inform this application.

5. REFERENCES

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Darnhall neighbourhood plan – Basic conditions statement – June 2020

Appendices

Appendix 1 – UKHabs Map

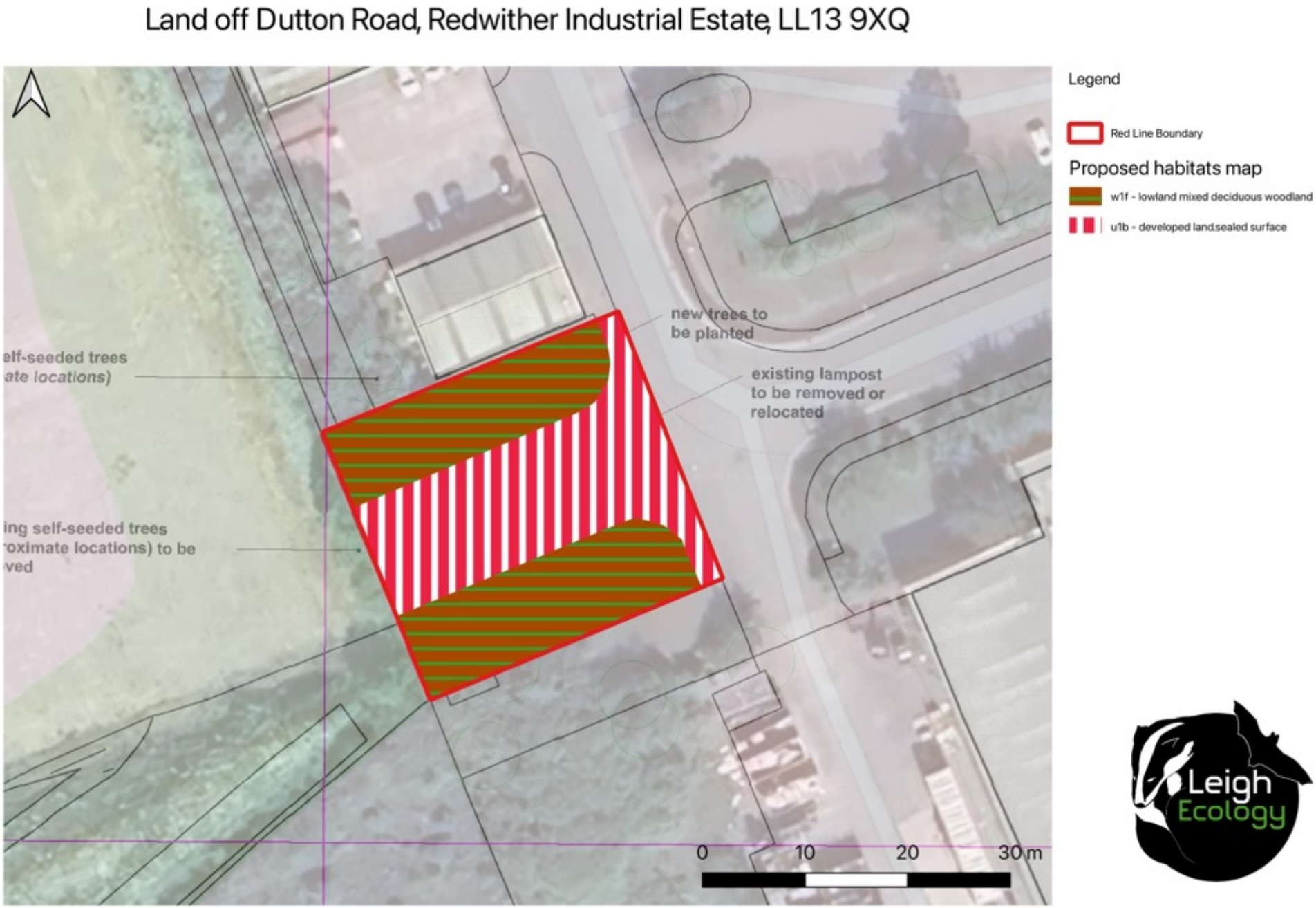
Land off Dutton Road, Redwither Industrial Estate, LL13 9XQ



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Appendices

Appendix 2 – Proposed development and enhancement areas



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Appendices

Appendix 2 – GCN Reasonable Avoidance Measures

Amphibian Safeguarding Method Statement

This method statement should be followed for the initial phase of works within the site, which may affect the surrounding terrestrial habitat. Minor or short term destructive or disturbance works will also follow this Method Statement to ensure legal compliance and to ensure the favourable conservation status of the species is not compromised.

The following measures will be adopted throughout the construction period of the proposed development.

- A toolbox talk covering the following points will be presented to the developer undertaking the construction activities.
- A fingertip search, by a licensed ecologist, of the proposed construction area immediately prior to any turf removal or excavation commencing.
- Should any trenches or excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered.
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling.
- There will be no impacts on surrounding hedgerows. All hedgerows will be maintained throughout the construction programme.
- Any excavated material should be placed on boards or sheeting to reduced damage to the grass sward (if present). If left overnight this material should be searched prior to being used as infill.
- Back filling should be completed immediately after any excavations, ideally back filling as an ongoing process to the work in hand.
- **If a GCN is found during the construction activities, work must stop immediately and contact should be made with a licensed, qualified ecologist, who will liaise with Natural England.**

  Compliance checks on the will be undertaken at regular intervals.