

Land at Leeway, Newport
Preliminary Ecological Appraisal

On behalf of Aldustria Limited

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1 Executive Summary

Avondale Ecology completed a Preliminary Ecological Appraisal including desk study, habitat survey and protected species audit for land at Leeway, Newport. The assessment was completed to inform legal and planning policy compliance relating to construction of a proposed battery storage facility.

The site comprises hardstanding, gravel and bare earth currently used as a storage yard, with boundary habitats including semi-improved/other neutral grassland, ruderal and scattered scrub. There are occasional colonising plants within the yard. There is an adjacent industrial unit to the north-west.

The site is of limited ecological potential, with no semi-natural habitats of any note within the footprint of works. Boundary habitats may support wildlife including reptiles, foraging bats and nesting birds, but are will not be directly impacted by the works.

Avoidance and Mitigation Measures

- Retain and protect adjacent habitat during works, through protective fencing;
- Sensitive lighting design, avoiding light spill onto boundary habitats; and
- Works to cease immediately and an ecologist contacted for advice if any protected or notable species are unexpectedly found or suspected to be present.

Net Benefit for Biodiversity

- Planting such as new native hedgerows could be considered around the toe of the bank protect habitat from encroachment and provide habitat for nesting birds.
- Habitat piles such as brash or log piles could be created around the site boundaries adjacent to the banks.

Measures to demonstrate that net benefit for biodiversity will be achieved will need to be shown on a site plan to comply with Planning Policy Wales 12.

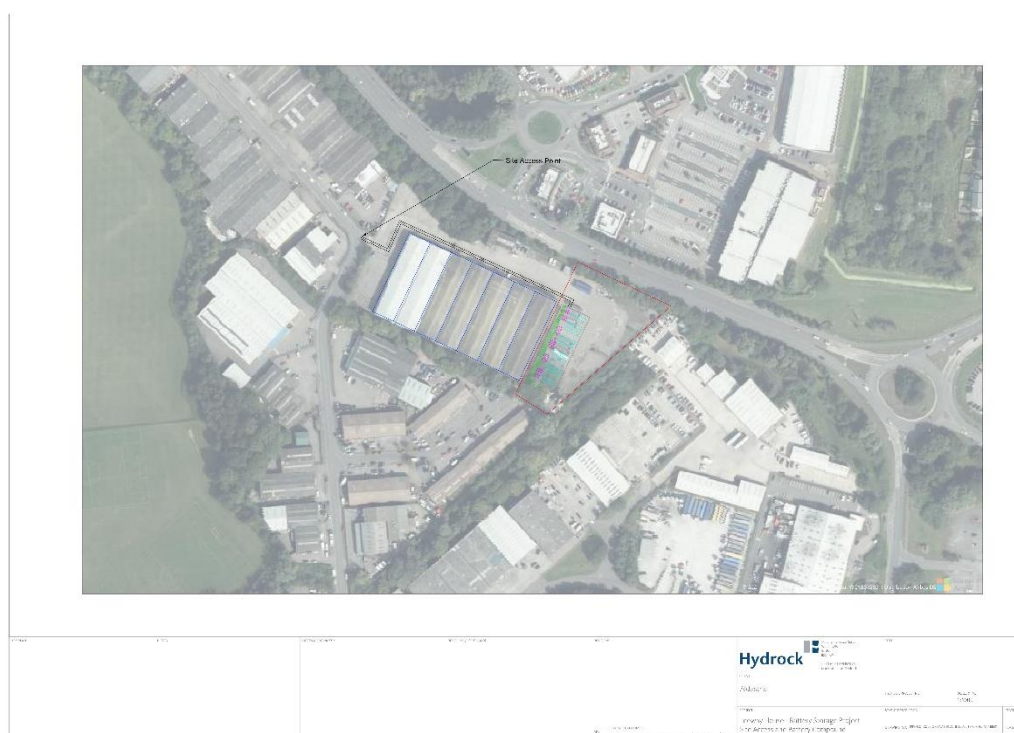
Please be aware that a survey of this nature can only provide a snapshot of the site's ecological importance. Please note that the survey results and any recommendations contained within this report will remain valid for two years following the date of survey.

2 Introduction

2.1 Introduction

Avondale Ecology was commissioned by Aldustria Limited to complete a Preliminary Ecological Appraisal for land within an existing industrial site at Leeway Industrial Estate, Leeway, Newport, NP19 4SL (central Ordnance Survey grid reference ST34598643). The proposals are shown in Figure 1.

Figure 1 Proposed Site Plan



2.2 Aims and Objectives

The survey was completed to inform measures required for compliance with biodiversity law and planning policy.

The survey included the following objectives:

- To identify any designated nature conservation sites on or in the vicinity of the site;
- To record and map the suitable features for protected species;
- To record any habitats of ecological importance;
- To identify whether there is any evidence of or potential for protected or notable species to be present;

- To detail potential requirements for Natural England mitigation licences;
- To make suggestions for avoidance, mitigation, compensation measures and working practices to meet legislative and best practice requirements; and
- To calculate the baseline units using Defra's Biodiversity Net Gain metric; and
- To identify ecological enhancement opportunities.

2.3 Legislation

There are several different Acts of legislation and regulations which refer to the protection of wildlife of relevance to the site. The regulations of direct relevance to the site are summarised below.

There are 18 species of bats in the UK, all of which are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). They are also included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). The Wildlife and Countryside Act, the "Habitats Regulations" and the CROW Act 2000 together make it an offence, among other things, to recklessly, intentionally or deliberately:

- Disturb roosting bats or obstruct access to their roosts;
- Disturb a significant number of bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Kill, injure or capture (or take) bats.

A bat roost is defined as "any structure or place (including trees) which any bat uses for shelter or protection". Because bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bat(s) are present at the time.

Statutory protection is given to nesting birds in the UK under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, it is an offence to intentionally or recklessly disturb species listed on Schedule 1 of the Act while they are nest building or at/ near a nest with eggs or young, or to disturb the dependent young of such a bird.

To meet the requirements of Section 6 of the Environment (Wales) Act 2016 and Planning Policy Wales 12, net benefit for biodiversity needs to be demonstrated with every application. A Green Infrastructure Strategy also usually needs to be provided with planning applications.

This is a brief summary of the legislation and is not to be regarded as a definitive legal opinion. When dealing with individual cases, the client is advised to consult the full texts of the relevant legislation and obtain further legal advice.

3 Methodology

3.1 Desk Study

A South-East Wales Biodiversity Records Centre (SEWBRc) data search was submitted for records of protected and notable species within 1km. Internationally and nationally designated sites up to 1km from the site and Special Areas of Conservation (SAC) designated for bat species up to 10km from the site were identified using MAGIC maps (www.magic.gov.uk). Locally designated sites within 1km were identified using the [Newport City Council](#) planning constraints map and the SEWBRc data search. Aerial photographs and Ordnance Survey maps were also reviewed to assess the site in context of surrounding habitats. Recent planning applications within the immediate area were reviewed using Newport City Council's online planning portal for information of relevance to habitats and protected species.

3.2 Habitat Survey and Protected Species Audit

An Extended Phase 1 Habitat survey i.e. habitat survey and protected species audit was completed in accordance with best practice guidance *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2019) and *Handbook for Phase 1 Habitat Survey* (JNCC, 2010) on 12th November 2024. Vegetation type, structure and dominant species were noted. Types of habitat present were also assessed using UK Habitat Code classifications (V2, 2023). The presence of any invasive species subject to legal controls was recorded. The habitats were also assessed for their potential, and any evidence, to support legally protected or otherwise notable flora and fauna such as roosting bats (trees and buildings within 10m), badger, reptiles and nesting birds. Botanical nomenclature in this report follows that laid out by Stace (1997). The survey was completed by Sarah Dale MCIEEM, an experienced ecologist with over eighteen years' professional practice.

3.3 Constraints

The site was fully accessible. The survey was completed at a sub-optimal time of year for botanical identification, but this is unlikely to have constrained the results due to the limited ecological value of habitats which will be impacted.

Ecological assessments are a snapshot. Wildlife can use and colonise sites in a dynamic manner and update assessments are likely to be required over time.

4 Results

4.1 Desk Study

4.1.1. Designated Sites

The site lies 615m at its closest point to the Gwent Levels – Nash and Goldcliff Site of Special Scientific Interest (SSSI). The SSSI is designated for wetland habitats related to an extensive drainage ditch (reen) network with associated notable plants, invertebrates and other wildlife.

Although there are Special Areas of Conservation within 10km, the proposals are not of a nature or at a location which would pose any risk to designated sites.

There are two Local Wildlife Sites (LWS) within 1km; Former Steelworks Site off Queenway Meadow Site of Importance for Nature Conservation (SINC) 190m north-east and Solutia Site SINC 690m south-west. Local Wildlife Sites are non-statutory designations afforded protection through local planning policy. The former is designated due to open mosaic habitats and the Solutia site is designated for grasslands with ditches and ponds supporting a range of nesting birds and invertebrates.

Although the area falls within a Lowland Wetland NRW Priority Area, features within the site are not a Habitat of Principal Importance (as defined by Section 7 of the Environment (Wales) Act 2016).

4.1.2 Protected and Notable Species Records

A total of 189 records of protected and notable species within 1km were returned by SEWBrEC. The following records are of potential relevance for the site:

- Bat species: Four different bat species have been recorded within 1km including Brandt's *Myotis brandti*, whiskered *Myotis mystacinus*, brown long-eared *Plecotus auritus*, natterers *Myotis nattereri*. There is also a record for an unidentified bat species 262m from the site; this is the closest record to the site and is for bats roosting within a warehouse on Leeway Industrial Estate in 2006. Records for other species within the wider area include common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Daubenton's *Myotis daubentonii*, and lesser horseshoe *Rhinolophus hipposideros* bats.
- Other mammals: There are 15 records for hedgehog *Erinaceus europaea* within 1km; the closest is 536m from the site. There are two records for badger *Meles meles* approximately 1km from the site. There are four records for hazel dormouse *Muscardinus avellanarius* within 1km (mostly for Dolebury Warren); the closest is 665m from the site.
- Bird species: A high proportion of the SEWBrEC records relate to bird species. Birds of Conservation Concern (RSPB, 2021) which may use habitats within and adjacent to the site include herring gull *Larus argentus*, song thrush *Turdus philomelos*, dunnoek *Prunella modularis*, starling *Sturnus vulgaris*, house sparrow *Passer domesticus* and black-headed gull *Chroicocephalus ridibundus*.

- **Amphibians:** There are no records for great crested newt (GCN) *Triturus cristatus* within 1km. There are recent records for GCN within 1.2-1.4km from the site returned by SEWBRc. There are no ponds within 250m and nearby ditches appear to be ephemeral. The closest pond is 315m to the north-east, separated from the site by the A4810 Queensway Meadows. Smooth newt *Lissotriton vulgaris* have been recorded 745m from the site.
- **Reptiles:** There is one SEWBRc record of slow worm *Anguis fragilis* 853m from the site and two records of grass snake *Natrix Helvetica* 522m and 972m from the site.
- **Invertebrate species:** A range of notable invertebrate species have been recorded including carder bee species, damselflies and dragonflies. There are records for the brown-banded carder bee *Bombus humilis* and shrill carder bee *Bombus sylvarum* 51m from the site.
- **Plant species:** A range of notable plant species have been recorded within 1km including notable native species, as well as non-native invasive species such as Japanese knotweed *Fallopia japonica* and Himalayan balsam *Impatiens glandulifera*. The closest Japanese knotweed record is 210m from the site. A number of notable bryophyte species have also been recorded.

4.1.3 Other Information

There are no recent planning applications from the past decade with ecological information of relevance from the postcode area.

4.2 Site Description

The site is within a yard associated with an existing industrial unit which sits on a bank/elevated ground immediately to the west of the battery storage site. The storage site comprises hardstanding (concrete) and gravel with parked vehicles and stored equipment. There are banks to the south and east, a large industrial warehouse and offices to the west and a narrow strip of scrub woodland alongside the A4810 Queensway Meadows dual carriageway to the north. The site is towards the southern edge of the city of Newport. Open countryside including the Gwent Levels lies 560m south and the Severn Estuary is 4.3km south.

4.3 Habitats

Figure 2 shows the extent of habitats within the redline boundary. Photographs of the site are provided in Appendix A. Habitats comprise:

4.3.1 Developed Land, Sealed Surface (u1b)

Some of the site comprises a surfaced yard (concrete), including the site access.

4.3.2 Unvegetated, Unsealed Surface (u1c) with Ephemeral Vegetation (81)

Some of the yard comprises bare earth and gravel. There were small areas of standing water following recent rain at the time of the survey. There are areas of ephemeral colonising vegetation in less frequently disturbed areas around the margins of the yard. Species include smooth sowthistle

Sonchus oleraceus, broadleaved willowherb *Epilobium montanum*, bittercress *Cardamine hirsute*, buddleia *Buddleja davidii* saplings, hedge bindweed *Calystegia sepium*, groundsel *Senecio vulgaris*, herb Robert *Geranium robertianum*, hemp agrimony *Eupatorium cannabinum*, Canadian fleabane *Erigeron canadensis*, lettuce *Lactuca* sp., annual meadow grass *Poa annua* and common bent *Agrostis capillaris*. There is a small area towards the north-east corner where a slightly more densely vegetated area has grown. This includes common bent, a liverwort, Canadian fleabane, broadleaved willowherb, weld *Reseda luteola*, groundsel, annual meadowgrass, Yorkshire fog *Holcus lanatus* and a fescue *Festuca* species.

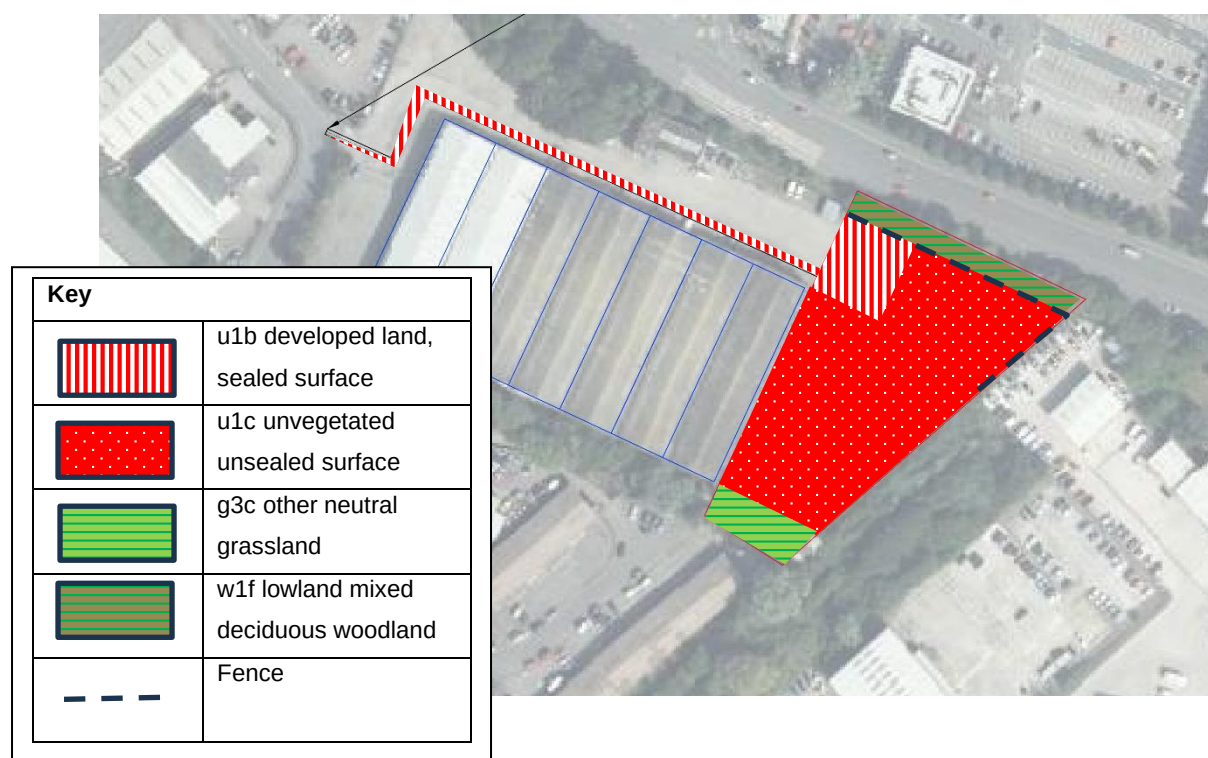
4.3.3 Adjacent and Boundary Habitats

There are vegetated banks around the yard, to the south and east. These include other neutral grassland (semi-improved grassland), ruderal species, scattered scrub and ephemeral vegetation. Species include buddleia, goat willow *Salix caprea*, hemp agrimony, common reed *Phragmites australis*, ragwort *Senecio jacobaea*, red clover *Trifolium pratense*, willowherb, bramble *Rubus fruticosus* agg., common nettle *Urtica dioica*, teasel *Dipsacus fullonum*, dandelion *Taraxacum* agg., Canadian fleabane, Yorkshire fog, evening primrose *Oenothera biennis*, false brome *Brachypodium sylvaticum* and hedge mustard *Sisymbrium officinale*. There were also occasional plants of oxeye daisy *Leucanthemum vulgare*, black knapweed *Centurea nigra*, wild carrot *Daucus carota* and winter heliotrope *Arctostaphylos luciana*. The latter species is a non-native invasive species and the others are indicator species of unimproved/species-rich grasslands. There is no fence between the yard and the vegetation.

There is a large industrial warehouse (u1b5) to the west, constructed of concrete block and metal sheeting.

To the south-west of the building, there is a band of approximately 8m wide of scrub and trees including willow *Salix* sp., nettle and buddleia which is likely to be a habitat corridor.

Behind a chain-link fence to the north of the site, there is a narrow band of remnant broadleaved woodland (w1f) and native shrubs sandwiched between the site and the dual carriageway. Species include sycamore *Acer pseudoplatanus*, ash *Fraxinus excelsior*, bramble, buddleia, goat willow and dogrose *Rosa canina*.

Figure 2 Baseline Habitat Plan

4.4 Protected and Notable Species

4.4.1 Bat Species

There are no trees or buildings with bat roost potential within or immediately adjacent to the site. The warehouse appears to have negligible bat roost potential, especially as the eastern elevation facing the site is extremely well lit. There are six security lights mounted at eaves height on the south-east elevation which are likely to cause significant light spill into the yard. There were no potential bat roost features on adjacent trees to the north. The site may be used by foraging and commuting bats, but habitats within the footprint of works are likely to be of negligible value. There are unlikely to support invertebrate populations of any note and there are no dark, undisturbed potential dispersal corridors. The banks and boundary habitats to the east, north and south may however be of greater value to a range of bat species.

4.4.2 Other Mammals

No evidence of use of the site by badger was found within 50m of the proposals in areas which could be accessed. Badger may be present in the area and could use habitats such as the surrounding banks and wooded strip to the north. There are no habitat piles within the site which would pose a high risk of sheltering hedgehog, although there is potential for the species to be present under stored vehicles/equipment as they are opportunistic. Hedgehog may also use boundary habitats. There is no suitable habitat for any other protected or notable mammal species to be present or impacted.

4.4.3 Nesting Bird Species

Habitats within the footprint of works have negligible potential to support nesting birds. It is likely that herring gull and other gull species will nest on warehouse roofs in the area. Nesting birds are also likely to use dense boundary and adjacent vegetation.

4.4.4 Reptile Species

The footprint of works has negligible potential to support reptile species. The bank immediately east of the large warehouse does not support potential refugia or vegetation which could be used by reptiles. The banks to the east and south of the site have high potential to support reptiles such as grass snake and slow worm.

4.4.5 Great Crested Newt

The footprint of works is currently of low suitability as terrestrial habitat for great crested newt (GCN) with potential limited to stored machinery/debris. However, due to the distance from potential breeding ponds and lack of records in the area, the species is considered likely to be absent.

4.4.6 Invertebrates

The footprint of works does not support a variety of vegetation which would provide habitat for invertebrates. The surrounding banks and boundary habitats are likely to support a range of invertebrate species, potentially including notable species such as carder bee.

4.4.7 Other Species

There is negligible potential for impacts on other protected or notable species.

5 Impact Assessment and Recommendations

The recommendations are based on Hydrock's Drawing Entitled *Site Access and Battery Compound*. If proposals change, an ecologist will need to be contacted for advice.

5.1 Habitat Constraints

5.1.1 Designated Sites

There is negligible risk of direct or indirect impacts on designated sites due to the nature of the proposals, as long as appropriate drainage and pollution prevention measures are implemented during construction and operation.

5.1.2 Habitats and Flora

No Habitats of Principal Importance will be impacted. All boundary habitats will need to be retained and protected during works. There are currently no barriers between boundary banks and the yard. Heras fencing (or similar) will need to be installed around the site area before works commence and waste and materials stored within this area. Ideally, the banks should be fenced off or demarcated with thorny hedgerows during operation to prevent potential harm to associated habitats. Adjacent trees will need to be protected, including their Root Protection Zones in accordance with BS5837 *Trees in relation to design, demolition and construction*. No notable or non-native invasive plant species are present. Although winter heliotrope is a non-native invasive species, it is not subject to legal controls.

5.1.3 Bat Species

Boundary habitats will need to be retained and protected as set out in Section 5.1.2. Even though there is existing floodlighting, best practice will need to be followed when designing external lighting sensitively in accordance with *Bats and Artificial Lighting at Night* (ILP, 2023). Measures should include:

- Minimising light spill onto east and south boundaries which are likely to be at least partially dark at night;
- Only using external lighting where absolutely necessary for safety reasons;
- External lighting should be fitted with PIR sensors and short-duration timers;
- Use wall mounted, downward facing and/or bollard lighting rather than indiscriminate floodlighting wherever possible; and
- Warmer light colours below 2700K to be used.

5.1.3 Other Species

All open excavations must be covered or fitted with an escape ramp every evening, such as scaffold boards, for use by any amphibians and mammals which may fall in. If protected species such as great crested newt or reptiles are unexpectedly found during construction, all works must

cease and an ecologist contacted for advice. A NRW mitigation licence may be required for works to proceed lawfully. If notable species such as hedgehogs or common toad are found within the working area they must be moved to safety into nearby habitats.

5.2 Net Benefit for Biodiversity

To meet requirements set out in various letters to Heads of Planning as well as Planning Policy Wales 12 and the Environment (Wales) Act 2016, net benefit for biodiversity will need to be clearly indicated on a site plan submitted with any planning application. As the baseline ecological value of the site is so low, proportional options include:

- Planting native boundary hedgerows with at least 4-5 species of local provenance (e.g. similar species mix as hedgerows to the south) and managing on rotation outside of the nesting bird season to no less than 2m in height to benefit wildlife. A suitable location would be along the toe of the east and south banks which would protect them from disturbance/accidental damage. This would also create habitat for nesting birds.
- Habitat piles such as brash or log piles could be created around the site boundaries adjacent to the banks.

A definitive approach will need to be shown on plans submitted with any planning application.

References

- Collins, J. Ed. (2023). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 4th Edition. Bat Conservation Trust, London.
- Institute of Ecology and Environmental Management (2018). *Guidelines for Preliminary Ecological Appraisal*. IEEM, Winchester. Available at www.ieem.net/docs/GPEA_web.pdf.
- Institute of Lighting Professionals (2023). *Bats and Artificial Lighting at Night*.
- JNCC (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit.
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- RSPB (2015). The Population Status of Birds in the UK - Birds of Conservation Concern 4.

Appendices

Appendix A Site Photographs



A1 Site facing north



A2 Site facing west – battery storage area



A3 Site facing north-east



A4 Adjacent warehouse and battery storage area



A5 Northern boundary



A6 Eastern boundary - bank



A7 Southern boundary - bank



A8 North-east corner