

Ecological Impact Assessment **at**

Hydro Aluminium Deeside Ltd

Bridge Road, Wrexham,

LL13 9PS

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1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at Hydro Aluminium Deeside Ltd, Wrexham and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails the construction of areas of hard standing for storage of aluminium and also loading areas for lorries.

The land was examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use of the site by bats, badgers, dormice and birds.

Impacts during the development should be low with respect to birds, great crested newts, badgers, bats, and dormice.

No rare or threatened species of plants or animals were found on site or near the site. The areas of creeping cinquefoil to be affected should be preserved by transplanting to the bank at the south west of the site.

2. Introduction

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2) (Natural England) and 72725:OTH:CSAB:2016 (Natural Resources Wales);

Licensed great crested newt worker, registration number 2016-19947-CLS-CLS (NE) and 72936-OTH-SA:2016 (NRW)

This report was commissioned by Joel Priest of Hydro Aluminium Deeside Ltd.

The site, at Wrexham Industrial Estate, comprises approximately 1.4 ha area of hard standing and vegetation in total. The total area of land affected and to be affected is approximately 0.4 ha.

The proposed scheme entails the construction of areas of hard standing for storage of aluminium and also loading areas for lorries.

The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed work. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

3. Methodology

3.1. Scope of the Assessment

The survey was commissioned to search for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:

The Conservation of Habitats and Species Regulations 2017 and listed in:

Schedule 2. European protected species of animals

Schedule 5. European protected species of plants

The protection of Badgers Act 1992

Protected species which might be associated with such a site include bats, owls and other breeding birds. The area around the site might be used by badgers, dormice, amphibians and reptiles, and might contain protected plant species. Zones of influence for great crested newts (GCN) were considered using the rapid risk assessment tool, which forms part of the method statement template for GCN mitigation licence (NE), as guidance to evaluate the impacts of the development in the absence of any licensed mitigation.

3.2. Desk Study

Wrexham Planning Portal was consulted for a review of previous ecological surveys carried out in the area. No rare or threatened species were identified nearby. Magic Maps was consulted for the presence of designated sites and protected habitats. There are records of GCN 250 m from the proposed work, south of the site.

3.3. Field Survey

The site was examined to establish the presence of any protected species or habitats, and for evidence of use by protected species of animals. The site and surrounding habitat was examined for signs of use by badgers and dormice. Maps of the site and surrounding environment were examined to identify any nearby waterbodies suitable for use by great crested newts within an influencing distance of the site. The variety of plant species was mapped according to the convention of Phase 1 habitat surveys as described by the JNCC (2010). Photographs were taken of all areas.

The visual assessment of the site was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 29th August 2019 by Susan Worsfold BSc (Hons) ACIEEM.

4. Baseline Ecological Conditions/Results

4.1 Designated Sites

The nearest designated site is Afon Dyfrdwy (River Dee), (Sites of Special Scientific Interest (Wales) and River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales) 2.8 km south east.

4.2 Habitats

Site: The site is located in the south-west corner of Wrexham Industrial Estate which is 2 km from Wrexham. The area of land to be affected (approximately 0.4 ha altogether) is adjacent to the Hydro Aluminium aluminium remelting facility. It is a combination of hard standing and variously vegetated flat areas of soil and mounds of earth which have become colonised with the plant species listed in the following table. Biodiversity is fairly high in vegetated areas but there are also several large patches of bare earth, particularly on the man made banks, with potential for planting. The site boundary adjacent to these banks was planted with silver birch and field maple by Hydro Aluminium c.2000, these are now mature and provide visual and acoustic screening

Adjacent land: There were mature trees in the neighbouring land at the north, south and east sides. There is no significant woodland within 500 m but there are scattered trees. There are no ponds or rivers within 500 m. There are few hedgerows surrounding the site.

4.3 Species and Species Groups

Plants: Species found on site:

Silver Birch (<i>Betula pendula</i>)	Creeping buttercup (<i>Ranunculus repens</i>)	Rush (<i>Juncus sp.</i>)
Common hogweed (<i>Heracleum sphondylium</i>)	Bramble (<i>Rubus fruticosus</i>)	Gunnera (<i>Gunnera sp.</i>)
Clover (<i>Trifolium sp.</i>)	Ash (<i>Fraxinus exelsior</i>)	Ragwort (<i>Jacobea vulgaris</i>)
Rosebay willowherb (<i>Chamaenerion angustifolium</i>)	Creeping cinquefoil (<i>Potentilla retans</i>)	Plantain (<i>Plantago sp.</i>)
Oak (<i>Quercus sp.</i>)	Hawkbbit (<i>Leontodon sp.</i>)	Ground elder (<i>Aegopodium podagraria</i>)
Ox-eye daisy (<i>Leucanthemum vulgare</i>)	Primrose (<i>Primula polyantha</i>)	Field maple (<i>Acer campestre</i>)
Spear thistle (<i>Cirsium vulgare</i>)	Dock (<i>Rumex sp.</i>)	Knapweed (<i>Centaurea sp.</i>)

Amphibians and Reptiles

None seen during the initial survey. There were no ponds within influencing distance of the site which might be used by great crested newts.

Birds

The adjacent trees could provide food and shelter for birds and also nesting potential.

Bats

The site is suitable for use by foraging and commuting bats.

Badgers

There were no badger setts, tracks or latrines found on the site or within 30 m of the site.

Dormice

No evidence of use by dormice was found.

No rare or threatened species of plants were found on site or near the site. No species of conservation value or Schedule 9 species were seen on site.

5. Description of the Development

The proposed scheme entails the construction of areas of hard standing for storage of aluminium and also loading/parking areas for lorries. An area of hard standing was created in 2014 at the north west of the site.

6. Assessment of Effects and Mitigation Measures

Designated Sites:

It is not considered that the development will have any significant impact on any nearby designated sites due to small scale of the proposed works and the distance from the sites.

Habitats:

Grizzled Skipper butterflies ideally prefer at least 5 ha of land in order to sustain a healthy population.

One of the preferred plant species for feeding and egg laying is creeping cinquefoil.

Creeping cinquefoil comprises approximately 50% of the ground cover in the area where the lorry parking bays are proposed; an area of approximately 0.03 ha. It is recommended that the top layer of soil in this area is removed and placed on top of the bank of earth at the south west of the site during autumn or early winter so that this important plant can continue to thrive and the butterflies can utilise the leaves against the warm stones.

Species:

Amphibians and Reptiles

There were no suitable ponds within 250 m of the site. The nearby balancing pond does not contain water for sufficient periods of time at the appropriate times of year to be used as a breeding pond by great crested newts. Therefore it is unlikely that the development would harm any individual GCN, or affect their conservation status.

Birds

The impacts which the proposed work might have on birds will be low since no trees will be affected during the work.

Bats

No evidence of use by bats was found, however the site is suitable for use by foraging and commuting bats.

Residual Effects

The removal of some areas of habitat will have a small effect on future foraging and commuting for some species, however the negative impact may be mitigated with compensatory planting of plant species with high value to wildlife, such as Candytuft (*Iberis spp*), Alyssum (*Alyssum spp*) and Goldenrod (*Solidago virgaurea*).

7. Compensation

Creeping cinquefoil comprises approximately 50% of the ground cover in the area where the lorry parking bays are proposed. It is recommended that the top layer of soil in this area is removed and placed on top of the bank of earth at the south west of the site during autumn or early winter so that this important plant can continue to thrive and the butterflies can utilise the leaves against the warm stones.

8. Enhancement Recommendations

Wildflower areas to the south west: Planting of wildflowers and shrubs will increase the ecological value of the area.

9. Ecological Constraints

None identified.

10. Monitoring

None considered necessary.

11. Conclusions

If the recommended mitigation, compensation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat.

12. Bibliography

CIEEM (2017) *Guidelines on Ecological Report Writing*. Winchester: Chartered Institute of Ecology and Environmental Management

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: jncc.defra.gov.uk

Google Maps available at: <https://maps.google.com/maps>

Gent A.H, Gibson S.D (eds) (1998) *Herpetofauna Workers' Manual*. Peterborough: Joint Nature Conservation Committee

Great crested newts: surveys and mitigation for development projects available at: <https://www.gov.uk/great-crested-newts-surveys-and-mitigation-for-development-projects>

Magic Maps available at: <http://magic.defra.gov.uk>

The National Vegetation Classification available at: jncc.defra.gov.uk

Langton, T., Beckett, C., Foster, J. (2001) *Great Crested Newt Conservation Handbook*. Halesworth: Froglife

Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

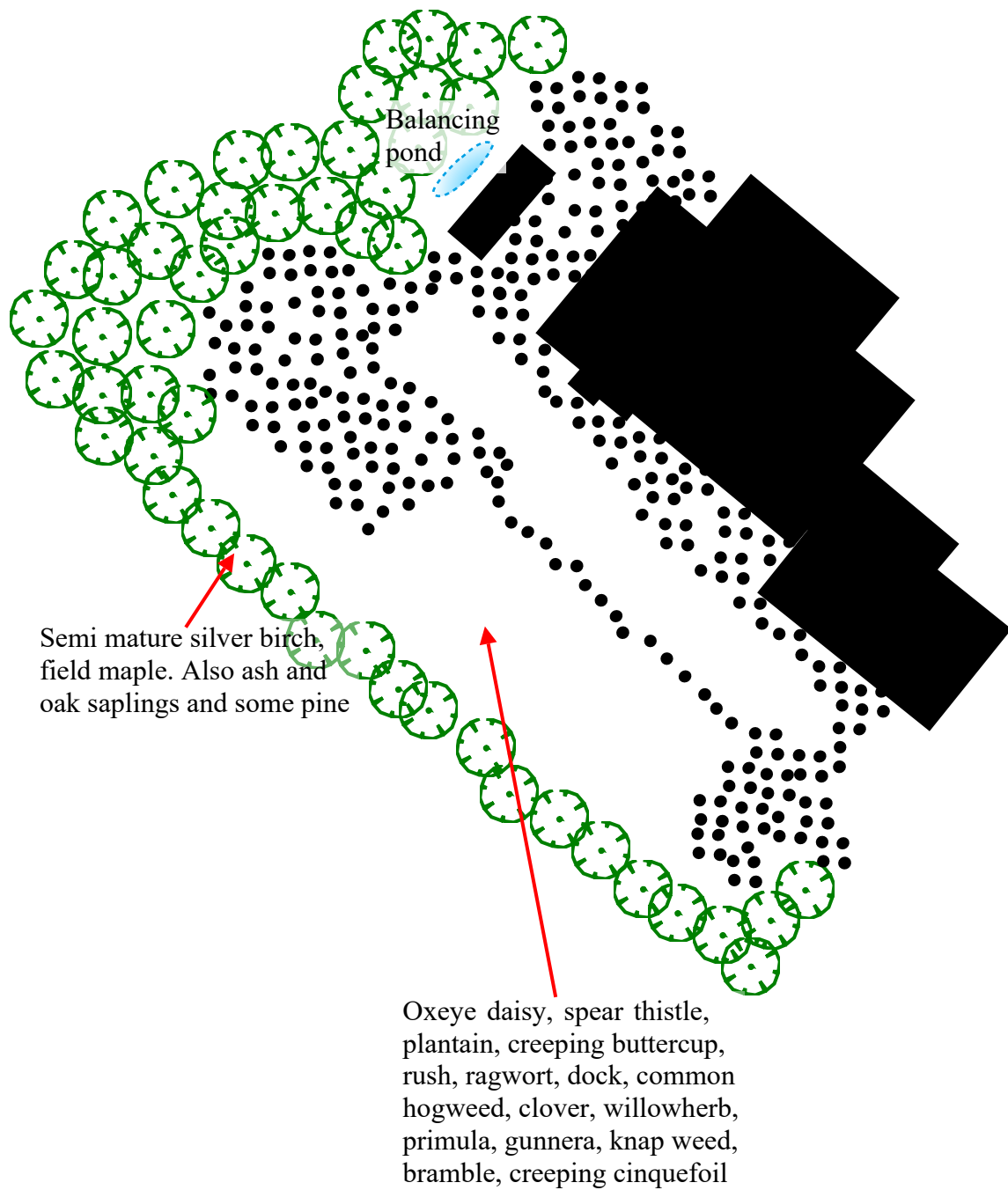
Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000) Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*) *Herpetological Journal* 10 (4), 143-155.

Rapid Risk Assessment Tool available at: <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence>

UK BAP Priority Habitats available at: jncc.defra.gov.uk

Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

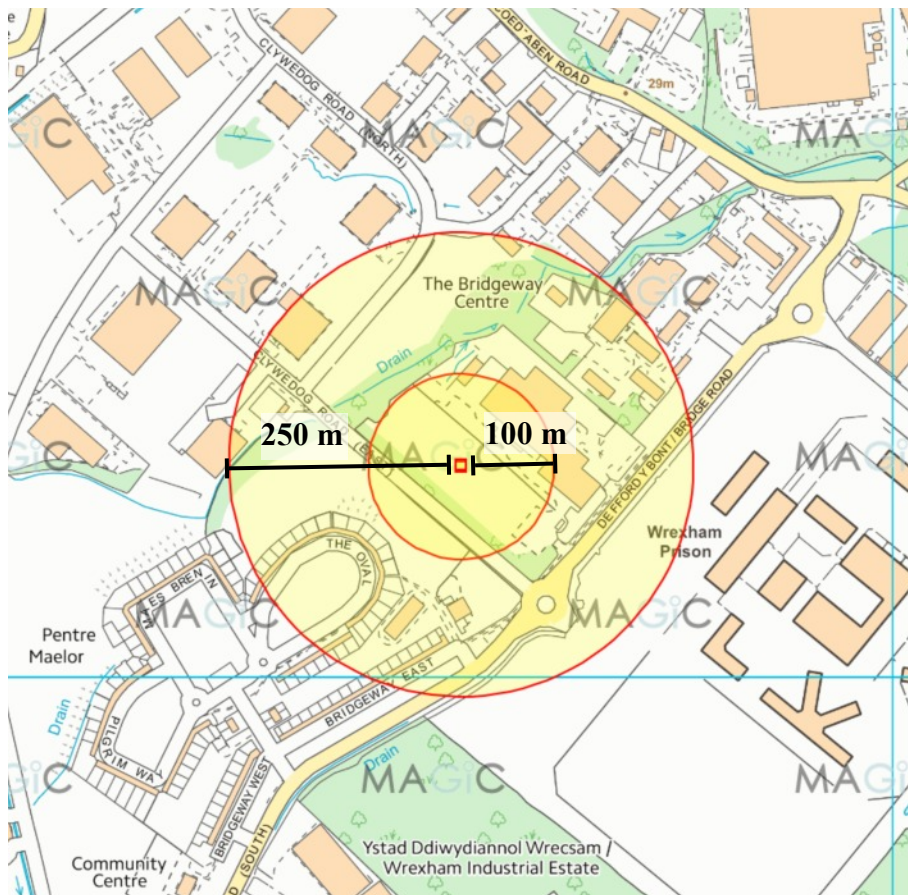
Appendix 13.1: Survey Diagram (2018)



Appendix 13.2: OS Location Map



Appendix 13.3: Map Showing Zones of Influence for Great Crested Newts



Appendix 13.4: Aerial Photograph



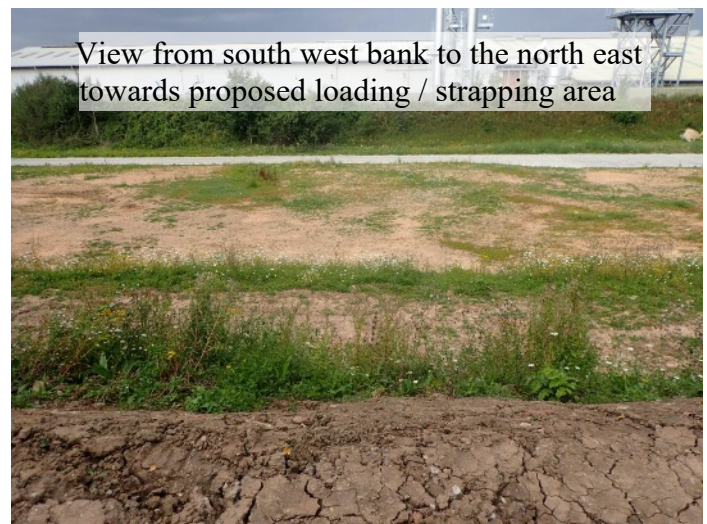
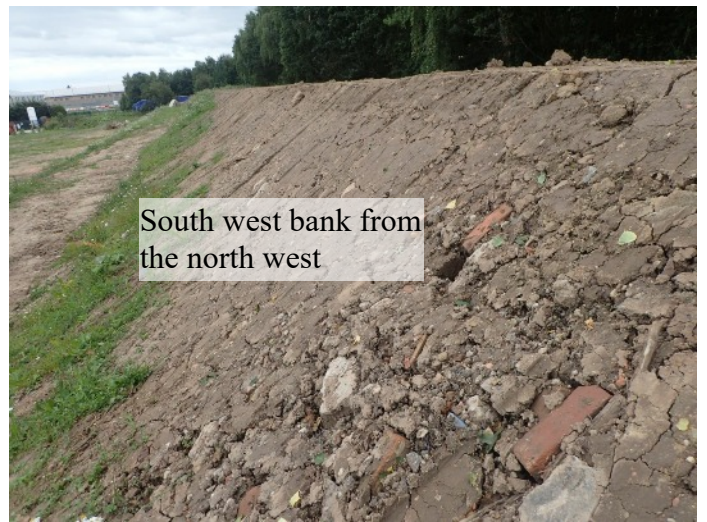
Appendix 13.5: Proposed Plan



Appendix 13.6: Photographs of the Site



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