



ARBOR VITAE

ECOLOGY • FORESTRY • LAND USE



PRELIMINARY ECOLOGICAL APPRAISAL

17 RHOS BERSE ROAD

Project name: 17 Rhos Berse Road, Coedpoeth, Wrexham,
LL11 3BT

Grid Reference: SJ29175031

Date: 30/03/2022

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1 INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT

Planning permission will be sought for the creation of a dog walking area with car park facilities on land at Rhos Berse Road, Wrexham.

Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species.

1.2 SCOPE OF SURVEY

The survey is primarily designed to:

- Identify and record habitats and important ecological features on site;
- Evaluate the potential of the proposed development site to provide opportunities for protected species;
- Determine any likely impact which the development and landscape proposals may have on these.
- Identify opportunities for the enhancement of habitats and biodiversity features on site.

1.3 KEY PRINCIPLES

All ecological surveys conducted by Arbor Vitae Environment Ltd are underpinned by the following key principles, as outlined by CIEEM (2018):

Avoidance - Seek options that avoid harm to ecological features (for example, by locating on an alternative site).

Mitigation - Adverse effects should be avoided or minimized through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

Compensation - Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

Enhancements - Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

2 SITE DESCRIPTION

2.1 LOCATION, LANDSCAPE, AND BACKGROUND

The site is located just off Rhos Berse Road, south of the A525 approximately 2.5km west of Wrexham (Figure 1). A public footpath runs through the northern part of the site, joining up with Offa's Dyke in the next field parcel to the east. The land along the east boundary is intensively managed arable forming a group of crop fields. Land to the west is mainly agricultural pasture and there is extensive broadleaved woodland to the south (Figure 2).

The proposal will include the use of an agricultural field and planted woodland as a dog walking area. Car parking spaces and fencing are already in place at the site.

3 SURVEY METHODOLOGY

3.1 DESK STUDY

An initial desk study was composed to gain background information regarding any protected species or designations within the area. The main sources of information were MagicMap, Lle Geoportal and NBN Atlas.

3.2 SITE SURVEY

A site visit was made on 07/03/2022. The survey was carried out in accordance with CIEEM (2017) best practice guidelines. The objective of the survey was to find and record any signs of use by protected species and to note the habitat features present.

An assessment of the available habitats both on and adjacent to the site led to consideration of the potential of the site for the following protected species:

- Badger
- Bats
- Breeding birds
- Great Crested Newt
- Reptiles

The survey methodology was tailored to evaluate the area for these species in the following ways:

Badger

An area within 50 metres of the site was closely searched for the following signs of badger activity:

- Setts,
- Tracks and footprints,
- Latrines,
- Snuffle holes.

Bats

The objective of the survey was to find and record any signs of use by bats, for example:

The site was assessed in terms of its suitability to support bat species. Hedgerow habitat and nearby potential habitat were assessed and recorded and potential impacts from the proposals considered.

Breeding birds

The site was assessed in terms of its suitability to support breeding bird populations. Hedgerow habitat and nearby potential habitat were assessed and recorded.

Great crested newt

A desk study and a ground search were conducted to search for any areas of open water within 250 metres. Waterbodies were then assessed based on the Habitat Suitability Index for great crested newts (Oldham et al., 2000 and ARG UK, 2010). One small pond is mapped on MAGIC within 250m of the site.

Reptiles

The site was assessed based on its suitability to support reptile populations including connections to terrestrial land from water and suitable resting habitat nearby.

3.3 PERSONNEL

The survey was carried out by Phillipa Stirling MSc ACIEEM: Ecologist.

Natural Resources Wales bat licence number: S089403-1 and GCN licence number: S089109-1.

3.4 CONSTRAINTS

There were no constraints to the survey being carried out successfully.

4 SURVEY RESULTS

4.1 DESK STUDY

The desk study found that within 1km of the site there were the following designations:

Name	Designation	Distance from site
Nant Mill Wood	Restored Ancient Woodland Site Ancient Semi Natural Woodland	0.1km
Wood at Bryn Maelor	Restored Ancient Woodland Site	0.5km
Cil Hendre	Plantation on Ancient Woodland Restored Ancient Woodland Site	0.6km
The search included Ramsar, SSSI, SAC, SPA, LWS, NNR and LNR. ¹		

Results from the desk study revealed that within a 1km radius of the proposed development site the following protected species have been recorded:

Species	Distance	Protection
Great crested newt	0.8km	European Protected Species, Wildlife and Countryside Act 1981.
Otter	0.7km	European Protected Species, Wildlife and Countryside Act 1981.
Common pipistrelle	0.5km	European Protected Species, Wildlife and Countryside Act 1981.
Slow worm*	0.8km	Wildlife and Countryside Act 1981.
Grass snake*	0.8km	Wildlife and Countryside Act 1981.
Adder*	0.9km	Wildlife and Countryside Act 1981.
* Denotes record over 25 years old.		

¹ SSSI: Site of Special Scientific Interest, SAC: Special Area of Conservation, SPA: Special Protection Area, LWS: Local Wildlife Site NNR: National Nature Reserve, LNR: Local Nature Reserve.

4.2 HABITATS ON SITE

All habitats are classified using JNCC's Phase 1 Habitat Survey Handbook (JNCC, 2010).

Improved grassland

Two thirds of the dog walking area is made up of this habitat type. There are two fields currently separated by stock fencing. The grassland on site has been grazed with sheep and at the time of the survey contained no more than a total of 9 species including: perennial ryegrass, Yorkshire fog, cock's foot, creeping buttercup, dandelion, creeping thistle, common nettle, broad leaved dock and occasional stands of soft rush at the south boundary on damp ground.

Plantation woodland

An area of fenced plantation woodland lies along the west boundary of the site. The area contains several mature Scot's pine trees with additional planting to include: oak, sweet chestnut, holly, alder, goat willow and hawthorn with some young ash saplings present. There is a dense stand of common gorse amongst the shrub layer with the rest of the ground layer dominated by stands of cock's foot and other vegetation to include: common nettle, cleavers, broad leaved dock, hard fern, cow parsley, dandelion and common sorrel.

Hardstanding

There is an area of crushed stone to the north west of the site which provides car parking space.

Individual trees

There are several individual *Prunus sp.* planted throughout the grassland fields on site. These are fitted with timber tree guards and stakes.

4.3 ADJACENT HABITATS

Arable

Land immediately at the east boundary of the site is an intensively managed arable field.

Buildings

There is a residential property to the west of the site and also a timber clad garage/outbuilding. There is also a small stone outbuilding at the foot of the property garden.

Other buildings exist to the north west of the site along Rhos Berse Road.

Broadleaved woodland

There is a large and extensive area of broadleaved woodland to the south of the site called Nant Mill Wood, an ancient woodland site.

The wood is not immediately connected to the site in any way.

Agricultural grassland

Much of the land to the west and north of the site is made up of pasture and grazing land.

4.4 PROTECTED SPECIES

Badgers

There was no evidence of badger on or adjacent to the site at the time of the survey. This species has not been recorded within 1km of the site although the presence of mixed and broadleaved woodland within the landscape would increase the likelihood of the species being present.

Bats

The plantation woodland may provide foraging and commuting opportunities for bat species but none of the trees possess potential roosting features which could be exploited by bats.

The grassland habitats on site provide limited opportunities for bats.

Breeding birds

Habitats on site which could be used by breeding birds include dense gorse and mature trees within the woodland. Incidental bird records at the time of the survey include: blue tit, wren, blackbird, robin and woodpigeon.

Great Crested Newt

One pond mapped to the south east of the property on site does not exist on the ground. No further survey work was carried out in respect of GCN.

Reptiles

Adder, grass snake and slow worm have all been recorded within 1km of the site at Nant Mill Wood. These records date back to the 1990's and are likely to provide an inaccurate representation of reptile presence at the current day.

The site provides a small, isolated patch of woodland and grazed agricultural pasture. There is no freshwater on site and given the substantial stone wall which encompasses the sites west and south boundary, it is unlikely that reptile species would attempt to disperse onto the land.

5 POTENTIAL ECOLOGICAL IMPACT

5.1 HABITAT ASSESSMENT

Improved grassland

The proposals will see existing improved grassland fields used for walking dogs in. These have previously been used for grazing sheep and the overall impact of the proposed activity is expected to be of negligible concern.

Woodland

The planted woodland provides a good age range and variety of native species. With time, the woodland would develop into a multi-layered system and provide good quality habitat. The proposals will not result in any physical changes to the site but incidental impacts could reduce the quality of the wood in the following ways:

- Clearance or trampling of scrub habitat/shrub layer (gorse, bramble, hawthorn), which is used by a variety of wildlife, to create informal pathways.
- Enrichment of the soil through excessive dog waste being left, leading to a reduction in natural plant communities and increase in 'ruderal' species.

Mitigation will be needed to ensure the proposals will have no negative impact upon the woodland habitat.

5.2 PROTECTED SPECIES ASSESSMENT

Badger

The proposals will have no impact upon badger and no further survey work or mitigation is required.

Bats

Dog walkers will be allowed to access the site during the daytime and there will be no change to the habitats available on site. The proposals will have no impact upon bat species and no further survey work or mitigation is required.

Breeding birds

If breeding birds attempt to nest within the dense gorse or other shrubs on site, they may be disturbed by dogs and dog owners during the main nesting season. A study in 2007 by Banks and Bryant found that, where dog walking in woodland was allowed, there was a 35% reduction in bird diversity and a 41% reduction in bird abundance. Mitigation will be implemented through habitat management.

Great crested newt

There are no ponds within 250m of the site and the proposals will have no impact upon breeding birds.

Reptiles

It is unlikely that reptiles would be found on the site and the proposals will not result in any significant disturbance.

Mitigation and enhancement measures described in Section 6 are likely to improve the habitats found on site and therefore may be more attractive to reptile species moving forward.

6 AVOIDANCE, MITIGATION AND ENHANCEMENT

6.1 HABITAT MITIGATION

In order to limit any informal pathways being created within the woodland, bark chippings should be laid down on the existing path around woodland for use by dog walkers. This will also ensure that the ground flora and undergrowth continue to thrive and avoid trampling or clearance.

The common gorse in the centre of the woodland should be allowed to grow and develop, forming a dense thicket. This will provide habitat microclimates and opportunities for a range of wildlife including invertebrates.

All individual trees planted within the meadows should be retained and protected.

6.2 PROTECTED SPECIES MITIGATION

Breeding birds

The maintenance and development of common gorse within the woodland will provide sheltered, good quality nesting sites for breeding birds. This method focuses on building population resilience and providing areas for nesting birds which cannot be accessed by dogs or walkers amongst dense scrub.

Consideration could also be given to limiting the amount of dog walking within the woodland between May and July annually.

6.3 ECOLOGICAL ENHANCEMENT

The grassland areas will not be altered for the purpose of the application. Management will include mown pathways within the meadow during the main growing season to allow species within to flower and eventually increase diversity of habitat on site. This will also provide a more interesting walking route for both owners and dogs whilst providing better habitat for invertebrates, small mammals and possibly reptiles.

We recommend that a native hedgerow is planted along the east boundary of the site to provide screening. This could provide up to 150m of native hedgerow habitat. The planting should aim to create a species-rich, dense hedge using the following species: hazel, hawthorn, field maple, holly, cherry plum, crab apple, elder, dog rose, honeysuckle and wild privet.

7 SUMMARY

Planning permission will be sought for the creation of a dog walking area with car park facilities on land at Rhos Berse Road, Wrexham. Arbor Vitae were commissioned by Roger Parry and Partners to undertake a Preliminary Ecological Appraisal in order to assess the impact of the development on habitats and protected species. This is summarised as follows:

- The proposals will have no impact upon badger and no further survey work or mitigation is required.
- The proposals will have no impact upon bat species and no further survey work or mitigation is required.
- If breeding birds attempt to nest within the dense gorse or other shrubs on site, they may be disturbed by dogs and dog owners during the main nesting season. Mitigation will be implemented through habitat management.
- There are no ponds within 250m of the site and the proposals will have no impact upon breeding birds.
- It is unlikely that reptiles would be found on the site and the proposals will not result in any significant disturbance.
- Bark chippings will be used to mark the existing path in the woodland to limit any clearance of vegetation and reduce overall disturbance of the undergrowth. Common gorse will be retained and encouraged to grow into a dense thicket.
- Access into the woodland could be limited during May-July if breeding birds are suspected to be present.

Ecological enhancement measures on the site will include:

- Allowing the meadows on site to flower and use mown pathways for visitors,
- Planting a species-rich native hedgerow along the east boundary of the site.

8 REFERENCES

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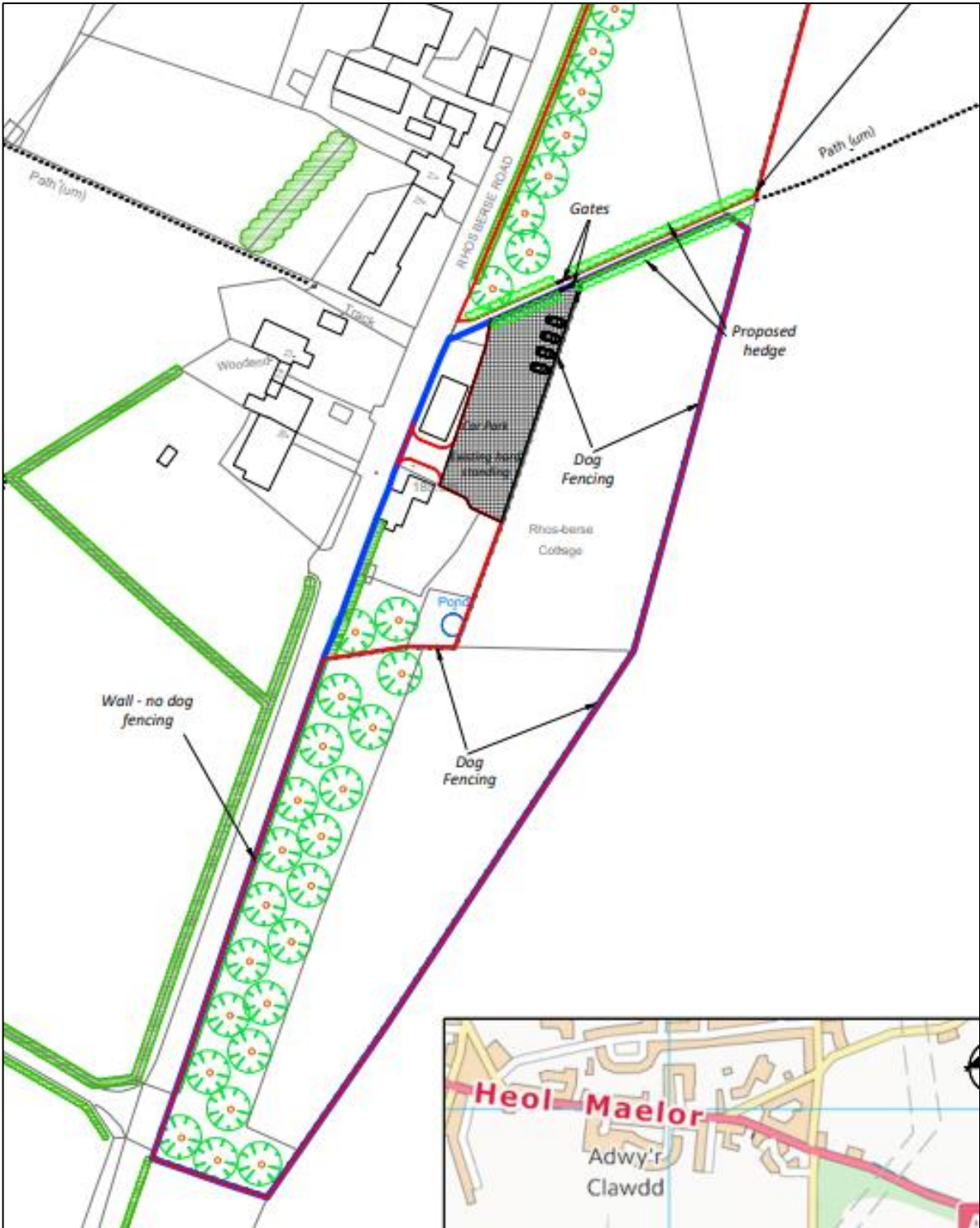
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FIGURE 2 AERIAL PHOTOGRAPH



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FIGURE 3 PROPOSED SITE PLAN



APPENDIX 1 PHOTOGRAPHS



Improved grassland on site.



Plantation woodland.



An existing path through the wood.



Existing hardstanding



Small vegetable patch.



Stone wall along west boundary of wood.



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