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**Preliminary Ecological Assessment
Land at Tre Angharad, Bodedern
Proposed Housing Development**

25th March 2020



Report by: Chris Hall ACIEEM

Client: Tre Angharad, Bodedern, Ynys Môn, LL65 3ST

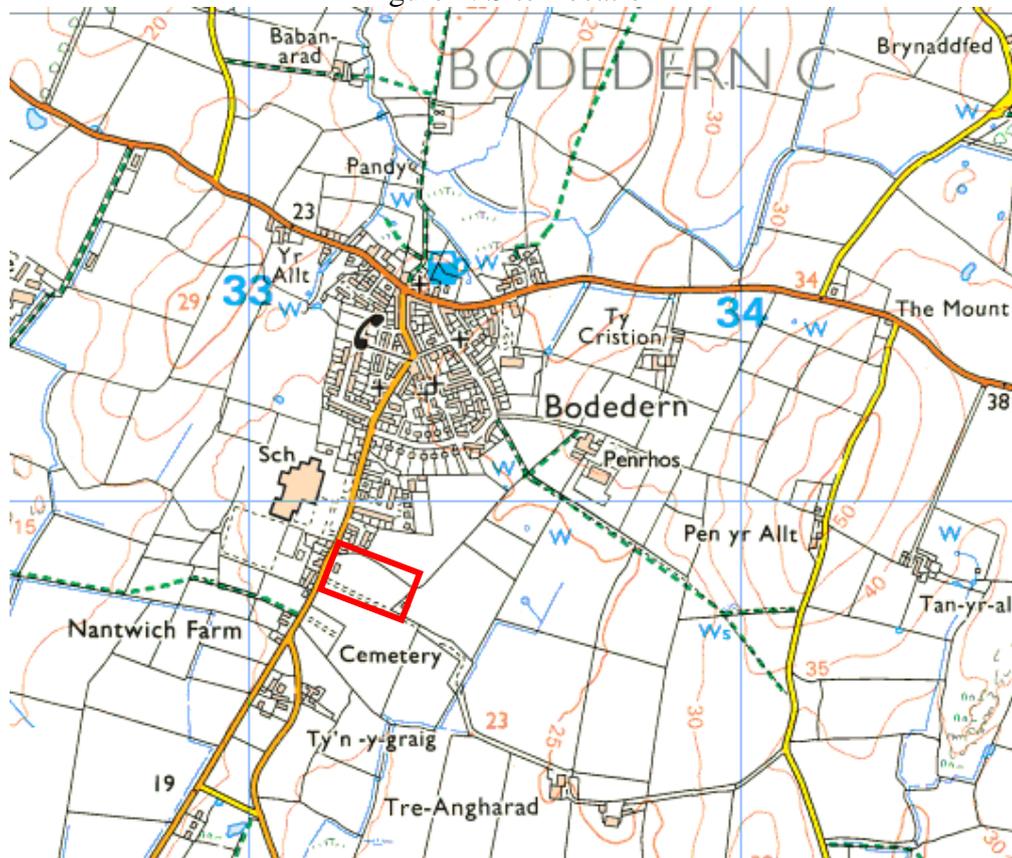
**Planning
Authority:** Isle of Anglesey County Council

**Grid
Reference:** SH 332 798 (Approximate site centre)

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Figure 1: Site Location



Preliminary Ecological Assessment Land at Tre Angharad, Bodedern Proposed Housing Development

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1. Summary

A preliminary ecological assessment, (PEA) was carried out by Cambrian Ecology Ltd on land at Tre Angharad on the outskirts of Bodedern. It is intended to submit a planning application to develop the site for housing.

The surveys revealed that the only habitats that will be lost are heavily improved grassland and a very small area of scrub. The hedge along the northern site boundary is to be retained.

No protected species were recorded during the survey although there is some potential for nesting birds and hedgehogs to be present in the retained hedge and the small area of scrub that will be lost.

A biological records search was carried out with the Local Records Centre, (LRC) Cofnod as recommended in the guidance from the Chartered Institute of Ecology & Environmental Management, (CIEEM). This enables the proposed development site to be assessed in a wider context and a potential wider 'zone of influence' of the development to be taken into account.

The biological records search revealed that there are a number of hedgehog; (*Erinaceus europaeus*) records in the area which will need to be taken into account in the site design for this rapidly declining species. There is also a record of a probable maternity roost of pipistrelle bats; (*Pipistrellus spp*) in a nearby building. While this will be unaffected by the proposals, it also provides an opportunity for habitat enhancements to the benefit of this species.

There is a ditch on the eastern boundary of the site and while this is of little significance from an ecological point of view, watercourses such as this can act as a transmission vector for pollutants during the construction phase. This could then extend the 'zone of influence' of the proposals beyond the site boundary. Precautionary measures will be required to be in place to minimise the risk of this occurring,

Due to the botanically impoverished nature of the site, no negative impact is anticipated on Biodiversity as a result of the development.

Under Chapter 6 of Planning Policy Wales 10, planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. To satisfy this condition, the use of plants of benefit to Biodiversity has been recommended for inclusion in any landscaping schemes, along with the management of the hedge and the provision of bat tubes in some of the dwellings as an integral part of the fabric of the buildings.

Key Messages:

- 1. There is the potential for nesting birds and hedgehogs to be present at the appropriate time of year.**
- 2. There is the potential for pollution of the watercourse if precautionary measures are not taken.**
- 3. Enhancements are recommended in the form of new planting of benefit to wildlife, beneficial hedge management practices and new accommodation for bats.**

2. Introduction

Cambrian Ecology Ltd was commissioned by the client _____ to carry out a PEA of land at Tre Angharad, Bodedern. It is intended to submit a planning application to develop the site for housing.

The relevant planning authority is Isle of Anglesey County Council, (IoACC) who require ecological surveys to be carried out as an integral part of the planning process.

The proposed development site is located at Grid Reference SH 332 798.

3. Methodologies

3.1 Habitats

The Habitat survey was carried out on 24th March 2020 by ecologist Chris Hall. The survey took the form of an extended Phase I survey and identified baseline ecological conditions, as well as any important or notable habitats. All habitats within the proposed development site were classified and species lists were drawn up for each habitat type identified and the habitat condition was assessed. In the context of this report, *important or notable habitats* are considered to be those which are of a sustainable size and which meet any of the following criteria:

- Habitats which have a high intrinsic ecological value, i.e. they support a diverse range of vascular plant and/or faunal species;
- Mature or semi-natural habitats in built-up areas;
- Environment Wales Act priority habitats;
- Habitats considered having a significant extent and/or ecological interest.
- Invasive Non-Native Species, (INNS)

All habitats considered to have the potential to support rare, protected or otherwise notable species of flora and fauna were noted, as were any direct signs of these species. Where possible, habitats were cross-referenced to any relevant UK/Wales priority habitats.

3.2 Protected Species

The site was assessed on its potential to support any protected or important species, including reptiles. During this survey, a search was made for field signs of protected or notable species and assessments made of the potential of habitats to support these species. In the context of this report important or notable species are considered to be those that meet any of the following criteria:

- Species protected by British or international law
- Environment Wales Act priority species or local BAP species
- Nationally rare or scarce species
- Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber lists)

3.3 Desk Study

The desktop study aims to collate existing information about priority species, habitats and designated sites within 1km of the survey area. This information has relevance to the likelihood of priority species being present within the survey area, as well as giving context to any species and habitat records from the actual site.

A data search for all priority species, habitats and designated sites was conducted with Cofnod. The search parameters were 1km from the survey site area.

4 **Survey Limitations**

Field signs for protected and important species are often difficult to find or absent from a site. For this reason, the site and its habitats are assessed on their potential to support these species.

While in some situations it would not be appropriate to carry out a Phase 1 Habitat Survey so early in the season, in this case where the habitat is dominated by heavily grazed, improved grassland, it is not considered that this early timing will have had any undue influence on the survey results.

5 **Results**

The Phase I Habitat Map can be found in Appendix 2.

5.1 Habitat

The habitat on the proposed development site is dominated by improved grassland. There is also a very small area of scrub, a minor ditch and a mortared boundary wall. The hedge along the northern boundary is to be retained as an integral part of the proposals.

Hedge

The retained hedge along the northern site boundary is growing on a clawdd and is to be retained. This hedge is relatively species-poor with hawthorn; (*Crataegus monogyna*) being the dominant species. Also present but as minor components are gorse; (*Ulex europaeus*), blackthorn; (*Prunus spinosa*) and bramble; (*Rubus fruticosus*). There is little vegetation associated with the structure of the clawdd due to the actions of grazing animals and foxglove; (*Digitalis purpurea*) is the only species present in any significant quantity, with ivy; (*Hedera helix*) also present in places as a minor component.

Improved Grassland

This is by far the most dominant habitat on the site and is currently heavily grazed by sheep. Grasses present include perennial ryegrass; (*Lolium perenne*), common bent; (*Agrostis capillaris*) and Yorkshire fog; (*Holcus lanatus*). Broadleaved species include white clover; (*Trifolium repens*), creeping buttercup; (*Ranunculus repens*) ribwort plantain; (*Plantago lanceolata*), dandelion; (*Taraxacum officinale*) and daisy; (*Bellis perennis*). These are all species that are typical of this fairly harsh management regime.

Scrub

There is a very small area of bramble scrub on the western end of the site.

Stone Wall

There is a mortared stone wall separating the site from the adjacent road with no associated vegetation.

Watercourse

There is a small ditch on part of the south-eastern boundary of the site. This watercourse appears to be ephemeral and held little water at the time of the survey. The shallow banks are grazed and there is no specific aquatic vegetation associated with the ditch. There is a clawdd on top of the bank on the site boundary.



Figure 2: Aerial Image of the proposed development site

5.2 Protected Species

The protected species survey was negative.

There is the potential for nesting birds to be present at the appropriate time of the year in the small area of scrub by the proposed new suite access and in the retained hedge on the northern boundary of the site. There is also some potential for hedgehogs to be present at the bottom of the hedge and within the scrub.

The hedgerow has the potential to be used as a flight path by commuting bats, a valuable resource in this habitat with little woodland and few mature trees.

5.3 Desk Study

The most relevant record received from the biological record search was that there are several records of hedgehog within the search area with the nearest record being only 141 metres from the approximate centre of the site.

There is also a record of a possible maternity roost of pipistrelle bats in a nearby building.

There are no designated or protected sites within the search area.

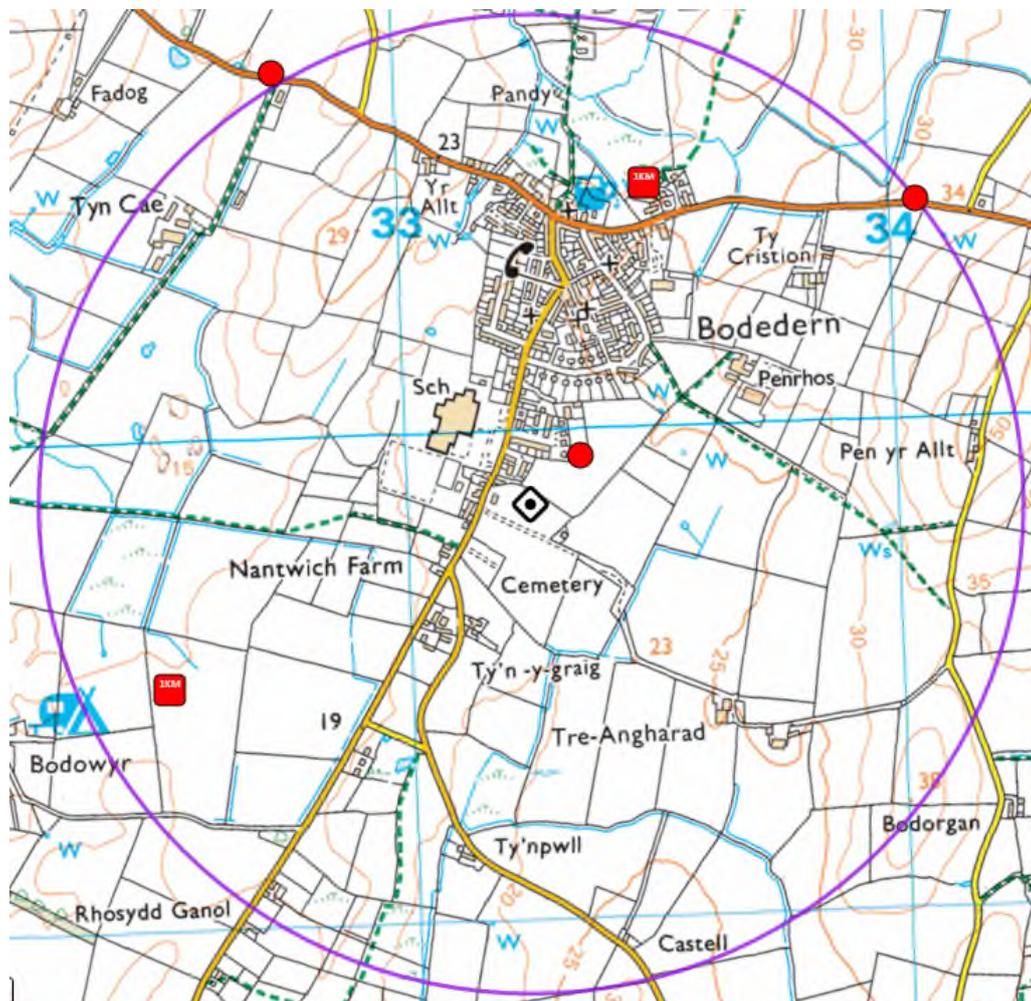


Figure 3: Location of hedgehog records

6 Habitat Evaluation & Impact Assessment

6.1 Habitats

Hedge

The hedge is by far the most valuable habitat on this site providing nesting cover for birds and habitat connectivity for a range of species including bats and hedgehogs. This habitat is however to be retained as an integral part of the proposals. No negative impact is therefore anticipated at any level.

Improved Grassland

The improved grassland has negligible ecological value being composed of a very limited range of common and widespread species of no conservation concern. The value is further diminished by the current management regime. No negative impact on Biodiversity at any level is therefore anticipated as a result of the loss of this habitat.

There is however the potential for a positive impact on Biodiversity as a result of the development if plants of benefit to wildlife are utilised in the landscaping schemes.

Scrub

The scrub habitat on the site is of minimal size and lacks diversity being composed entirely of bramble. No negative impact on Biodiversity at any level is anticipated as a result of the loss of this habitat. There are however potential protected species issues that will need to be taken into account in the form of nesting birds and hedgehogs

Stone Wall

There is a mortared stone wall separating the site from the adjacent road which is of no ecological interest.

Watercourse

While this ditch is of little importance from an ecological point of view, this watercourse has the potential to act as a transmission vector for any siltation/pollution incident during the construction phase. This could then extend the 'zone of influence' of the proposals beyond the site boundary.

7 Species Evaluation & Impact Assessment

Hedgehogs

The scrub and hedge habitats on the site provide potential foraging habitat for hedgehogs in addition to secure day-time concealment.

There is the potential for the killing and/or injury of hedgehogs during the removal of the scrub habitat on the site if this is carried out in an insensitive manner. This could result in a negative impact on hedgehogs at a local level.

There is also the potential for the killing/injury of animals during the construction phase if simple precautionary measures are not in place. The entrapment of animals in open excavations is the primary risk.

The hedgehog is a priority species across North Wales including Anglesey and as a result of this conservation status, any negative impact must be avoided.

Nesting Birds

Nesting birds will potentially be present in the scrub habitat by the proposed new site entrance. Any disturbance during the nesting season resulting in the failure of the brood could have a negative impact at a local level.

All birds, with the exception of some 'pest species' which can be controlled under licence, are protected while nesting. This factor must be taken into account in the mitigation strategy.

8 Mitigation Measures

8.1 Habitats

Hedge

The hedge is to be retained as an integral part of the proposals. No mitigation measures are therefore required.

It is however recommended that beneficial management practices are introduced to maximise the benefit of the hedge to Biodiversity, see section 9; Biodiversity Enhancement.

Improved Grassland

Due to the very limited range of common and widespread species associated with this habitat, no mitigation measures for habitat loss are required.

Scrub

No mitigation measures are required for the loss of such a limited area of scrub habitat which is a mono-culture of bramble. There are however potential protected species issues that will need to be taken into consideration, in particular nesting birds and hedgehogs.

Stone Wall

No mitigation measures are required for the removal of a section of the mortared stone wall on the site boundary to create a new site access.

Watercourse

In the case of the watercourse, due to the potential for any pollution incidents to have a negative impact in the wider landscape, extending the 'zone of influence' of the proposals outside the site boundaries, precautionary measures will be required to be in place.

All works must be carried out in accordance with (Pollution Prevention guidelines (PPG 5 & 6) which can be found at:-

<http://www.netregs.org.uk/media/1303/gpp-5-works-and-maintenance-in-or-near-water.pdf>

<https://www.sepa.org.uk/media/60125/ppg-6-working-at-construction-and-demolition-sites.pdf>

8.2 Protected Species

Hedgehogs

To prevent the killing or injury of hedgehogs, it is recommended that the scrub habitat is initially cut by hand under the supervision of a site ecologist. Any animals found during this operation can then be moved to a place of safety prior to machinery commencing work on the site.

To prevent hedgehogs, and other animals becoming trapped, any excavations left open overnight must be fitted with escape ramps.

To allow hedgehogs to move freely post-development, the new garden boundaries must be permeable to hedgehogs. This involves creating small holes in fencing or walls (13cm x 13cm) at ground level or using permeable fencing. These are easy to include for most fencing contractors and both wooden and concrete hedgehog-friendly boards can be purchased from some suppliers ready-made.

Nesting Birds

Any vegetation removal in habitats where nesting birds may be present must take place outside the nesting season, recognised by RSPB as 1st March – 30th September to avoid potential disturbance to nesting birds. If this is not possible, a thorough search for the presence of active nests must be undertaken by a suitably experienced ecologist prior to work commencing. If any active nests are found, work must be delayed until such time as the young have fledged.

9 **Biodiversity Enhancement**

Under Chapter 6 of Planning Policy Wales 10, planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This policy addresses the Section 6 Duty of the Environment (Wales) Act 2016 and results in the likelihood of planning applications being refused unless they can show a positive impact on biodiversity.

It is recommended that any landscaping scheme employs native shrub species that are of benefit to Biodiversity. The following species are considered appropriate:

Hawthorn; (*Crataegus monogyna*)

Blackthorn; (*Prunus spinosa*)

Holly; (*Ilex aquifolium*)

Hazel; (*Corylus avellana*)

Elder; (*Sambucus nigra*)

Dog rose; (*Rosa canina*)

Guelder rose; (*Viburnum opulus*)

Rowan; (*Sorbus aucuparia*)

Whitebeam; (*Sorbus aria*)

Cherry; (*Prunus avium*)

Bird cherry; (*Prunus padus*)

Cherry plum; (*Prunus cerasifera*)

Crab apple; (*Malus sylvestris*)

Ornamental Planting

In some cases such as landscaping within the gardens of the houses, it may be more appropriate to utilise exotic/ornamental species. Advice on beneficial species can be obtained from the North Wales Wildlife Trust at: <https://www.northwaleswildlifetrust.org.uk/take-action/wildlife-gardening>

There are however a number of plant species to avoid in any planting scheme for the site, as they can become invasive and/or cause long-term problems. The *Cotoneaster* genus is a prime example. Almost all of this species produce a profusion of flowers in spring which attract an equally profuse quantity of pollinating insects, particularly bees. The plant then produces a large crop of berries, which are eaten by birds and most ‘wildlife gardening’ sources heartily recommend the planting of *Cotoneasters*. The problem however lies with this attractiveness of the berries to birds. There is no way of controlling the spread of *Cotoneaster* into the wild via seeds deposited in bird’s droppings. This spread can be over vast distances.

As a result, five *Cotoneasters* are listed as INNS under the Wildlife & Countryside Act. While it is not illegal to grow these plants in a garden situation, it is recommended that they are avoided due to this lack of control over the spread of the species into the wild. The five to avoid are *C. horizontalis*, *C. simonsii*, *C. integrifolius*, *C. Bullatus* & *C. microphyllus*.

Provided that these five are avoided, the planting of this species can be very beneficial to biodiversity in a garden situation.

The planting of *Buddleia* is also widely recommended in many sources. Again care should be taken with regards to cultivar/species selection. While not listed as ‘invasive’ it is recommended that the planting of *B. davidii* is avoided. There are however some *Buddleias* worthy of consideration. Their common name of ‘butterfly bush’ is deserved and *B. x weyeriana* is a hybrid that is worth consideration along with *B. fallowiana alba*.

Hedge Management

The introduction of beneficial management practices such as the rotational management of hedges to maximise fruit production to the benefit of wildlife is recommended. Advice regarding this management can be found on the RSPB website at:

ww2.rspb.org.uk/Images/Englishhedgerows1_tcm9-133255.pdf

Bat Boxes

It is also recommended that new bat accommodation is built into the new properties. The ‘Schwegler’ Bat Tube (or similar) would be ideal for this purpose as it is built into the fabric of the buildings. These are very discreet as they are rendered over leaving only the small access point exposed. It is recommended that one bat tube is built into the elevation of each building facing the hedge on the northern boundary of the site where it will be unaffected by lighting, and where the hedge provides habitat connectivity. These bat tubes must be clearly shown on the architect’s drawings.

10 Legal Implications

10.1 Hedgehogs

The hedgehog is a priority species across North Wales, including Anglesey and is included in Section 7 of the Environment Wales Act (2016) as a species of importance to the maintenance and enhancement of Biodiversity in Wales.

10.2 Nesting Birds

Under the Wildlife and Countryside Act 1981, all nesting birds and their nests are protected. Once a bird places a single piece of material then it constitutes a nest. It is then an offence to cause damage to the bird, nest, eggs or chicks and immediate habitat which is likely to result in damage by causing the bird to desert its nest. This covers all bird species, with a small number of exceptions (pest species which can be controlled by special license).

In 2000, the Countryside and Rights of Way Act (CROW Act) was made law, strengthening the legal protection for many species and introducing a ‘reckless disturbance’ offence. Planning Authorities are also obliged to take nesting birds into account in relation to planning decisions following guidance from the Welsh Government detailed in Technical Advice Note (TAN) 5.

11 Appendices

11.1 Site photographic record



The improved grassland of the proposed development site



The ditch on the site boundary

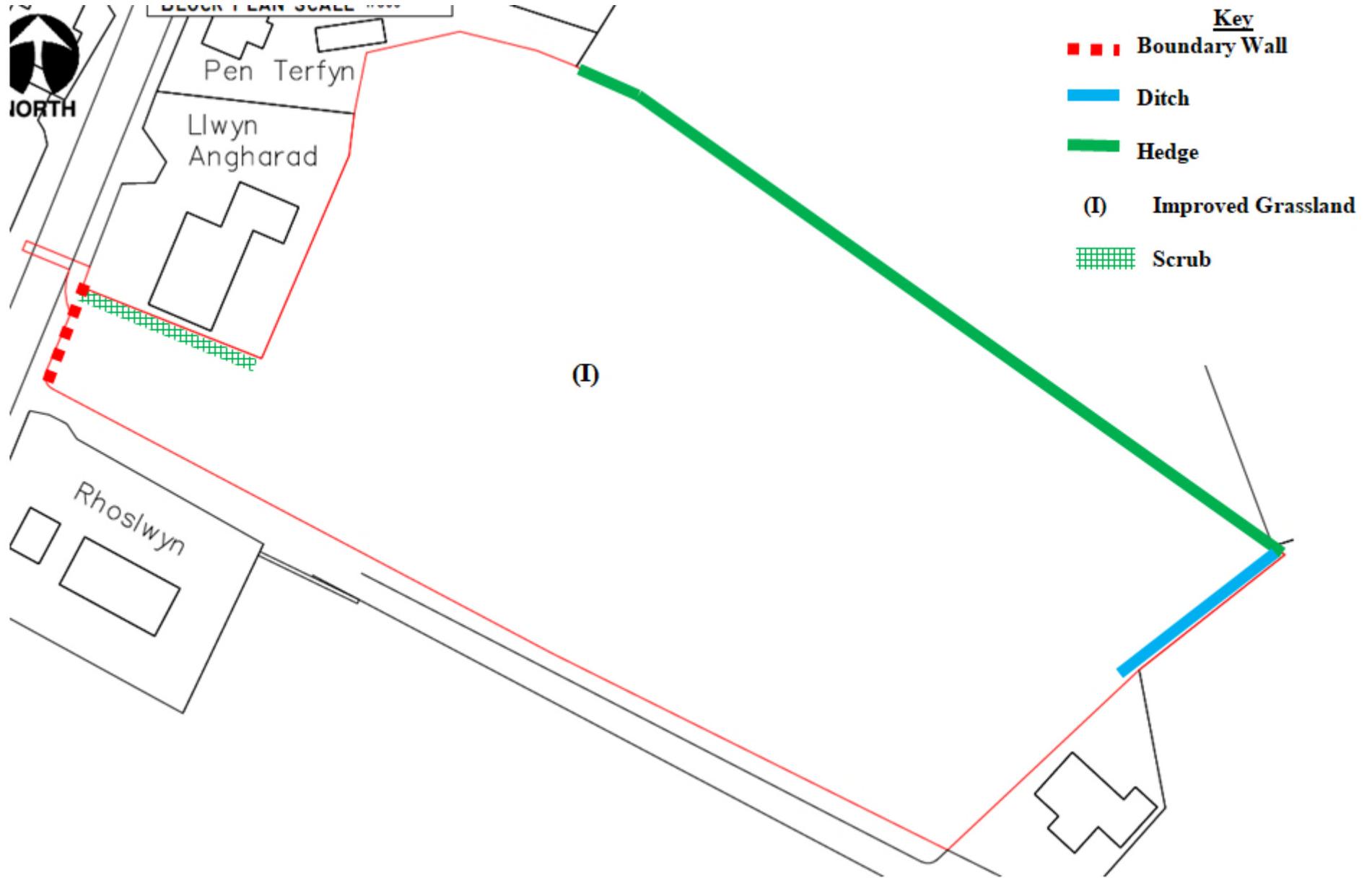


The scrub near the proposed new site entrance



The retained hedge

11.2 Phase 1 Habitat Map



11.3 Review Table

Name	Task	Date
Chris Hall	Author	30.03.2020
Kate Williamson	Review	31.03.2020