Title	**Proposed Silage Clamp, Cefn Uchaf Farm, Nantyr, Glyn Ceiriog, Llangollen, Wrexham, LL20 7DF – Walkover Survey & Biodiversity Statement**
Date issued	**09th June 2025**
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1 Introduction

Background

1.1 This report presents the findings of an ecology walkover survey of land at Cefn Uchaf Farm,, Nantyr, Glyn Ceiriog, Llangollen, Wrexham, LL20 7DF. The walkover survey was required to consider whether there may be any ecological constraints due to the proposed construction of a silage clamp at approximate NGR 319158, 338452. The silage clamp is proposed to be sited in an agricultural grassland field to the west of the main Cefn Uchaf Farm homestead/ associated agricultural buildings. The farm is located within a rural/ agricultural landscape approximately 1.2 km northwest of Glyn Ceiriog; it is largely a dairy farm, with some Sheep.

1.2 A Biodiversity Statement is also provided. As such this report includes the following:

1. A description and assessment of the existing habitat/ (potential) protected species to be impacted by the proposed silage clamp.
2. Potential ecological constraints and recommendations.
3. Identification of locations and opportunities for potential ecological enhancements.
4. Demonstration of how net benefit for biodiversity (and ecosystem resilience) will be secured and maintained. Full details of the recommended ecological enhancements.

1.3 This report is to provide supporting information to a planning application submitted to Wrexham County Borough Council (WCBC) (ref: P/2025/0314). Consultation has been sought with Emma Broad (WCBC's Ecology and Biodiversity Officer) to agree the approach[1] and inform this report[2].

2 Methodology

Walkover Survey

2.1 The walkover survey focused on the footprint of the proposed silage clamp/ associated access tracks, as indicated on IAGO Cymru Ltd plans:

- drawing no. 1023/37_PA/06, dated 22.03.2025, entitled '*Site Location and Block Plan*', and
- drawing no. 1023/37_PA/07, dated 22.03.2025, entitled '*Existing Site Location and Block Plan*'.

[1] The walkover approach was confirmed as acceptable by 'phone call on 03/04/25.
[2] The NBB recommendations as included within this document have been agreed in principle by email on 28/05/25.

2.2 This footprint is indicated as the 'Site' on *Figure 1.* The walkover survey also encompassed an approximately 30 m buffer. The combination of the Site and the buffer is hereon referred to as the 'survey site', which extends to approximately 1 hectare. Immediately adjacent land was viewed from access boundaries where this was deemed relevant.

2.3 A minor road bisects the survey site. The Site is located to the west of this and comprises part of an improved grassland agricultural field (used for livestock grazing). A roadside hedge characterises the eastern boundary of the Site, which will be breached to facilitate an access track to the silage clamp. Various other hedgerow lengths characterise the roadside edges. An agricultural building/ yard is located to the north of the Site. To the east of the Site (on the opposite side of the road) are located more agricultural buildings, with extensive areas of hard-standing; vegetated habitats include a small pocket of (disturbed) plantation woodland, tall-herbs, and a small/ shallow recently constructed 'pond'.

2.4 The walkover survey involved walking the survey site making notes on the habitat/ vegetation and assessing the potential for protected or other priority/ notable species to be present. It was undertaken on 22nd May 2025 by Max Ellson of Marches Ecology. The weather was cloudy, and dry – there had been a prolonged dry period prior to the survey.

2.5 A Preliminary Ecological Appraisal (Marches Ecology, 2024[3]) of an unrelated slurry lagoon scheme located on land to the south of the current proposal has been used as contextual information.

Survey Limitations

2.6 No particular limitations were encountered during the walkover survey.

3 Proposed Development

3.1 The existing site and proposed development are indicated on a series of IAGO Cymru Ltd plans as follows:

- drawing no. 1023/37_PA/05, dated 22.03.2025, entitled '*Proposed Silage Clamp*',
- drawing no. 1023/37_PA/06, as outlined above, and
- drawing no. 1023/37_PA/07, as outlined above.

3.2 The silage clamp will be located on the eastern edge of an agricultural field (improved grassland). Construction will require the existing ground level to be lowered, a slope battered. The structure will comprise an 'SSAFO Compliant Silage Clamp' and will be 36.5 m long and 14 m wide (511 m^2); it will be based on internal steel supports. The pitched roof, to approximately 8.7 m high, will be constructed of metal box profile sheeting (dark green) or Eternit Fibre Cement Roof Sheets (Grey); roof-lights are described as optional. The walls will be open to the top, with the lower 3 m comprising concrete silage clamp panels.

3.3 A 27280 litre Klargester Silage Effluent Tank will also be installed.

3.4 It is understood that 'through' machine access is required; access to/ from the northeast will be gained from an existing roadside gateway. Access to/ from the southwest will require an approximately 9 m breach in an existing roadside hedge. Associated external areas to facilitate access will be laid to hard-standing (clean hardcore).

[3] Marches Ecology (2024). *Proposed Slurry Lagoon, Cefn Uchaf Farm, Nantyr, Glyn Ceiriog, Llangollen, Wrexham, LL20 7DF – Preliminary Ecological Appraisal*. Unpublished report on behalf of R.J & G.E NEWBROOK & SON.

3.5 No further information is currently available.

4 Results

Statutory Protected Sites

4.1 The closest statutory protected sites (the boundaries of which are concurrent) are located approximately 430 m to the north of the survey site and comprise: Berwyn a Mynyddoedd de Clwyd ~ Berwyn and South Clwyd Mountains Special Area of Conservation (SAC)/ Berwyn Special Protection Area (SPA)/ Berwyn Site of Special Scientific Interest (SSSI).

4.2 Annex I habitats which are given as a primary reason for selection of the SAC are: European dry heaths, Blanket bogs. The citation notes that '*Berwyn contains the largest stands of upland European dry heath....and supports the most extensive tract of near-natural blanket bog....in Wales*'. Annex I habitats which are listed as a qualifying feature (but not a primary reason for selection of the site) are: Semi-natural grasslands and scrubland facies or calcareous substrate, Transition mires and quaking bogs, Calcareous and calcschist screes of the montane to alpine levels, and Calcareous rocky slopes with chamasophytic vegetation. No Annex II species are listed.

4.3 The SPA citation lists species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC, as: Hen Harrier (*Circus cyaneus*), Merlin (*Falco columbarius*), Peregrine (*Falco peregrinus*), and Red Kite (*Milvus milvus*).

4.4 The SSSI citation notes '*The Berwyn is of national and international importance for its moorland breeding birds and vegetation, particularly Calluna dominated heath and blanket mire. It is also notified to conserve a colony of the rare Welsh clearwing moth.*'

4.5 There are no other statutory sites within 1 km.

Non-statutory Protected Sites

4.6 Marches Ecology (2024, *op. cit.*) notes six non-statutory protected sites within 1 km of the survey site considered in that report. This includes Cefn Uchaf Wildlife Site (W103), which is located approximately 50 m to the west of the survey site at the closest point. It is described as '*A small stream valley with unfenced broad-leaved woodland .... There is a small, steep, south facing, semi-improved* [neutral] *grassland.....*[which is] *herb rich* [with] *scrub*'.

Habitat and Flora

4.7 Target Note locations (numbered 1 and 2 for the Site, 3, 4, 4a, 5, 6, 7, 7a, and 8, 8a-10 for the remainder of the survey site, and 11 and 12 for immediately adjacent land) described in the text below are indicated on *Figure 1*; no separate target note descriptions are provided.

The Site

General

4.8 The Site is dominated by a small part of an improved grassland agricultural field (used for livestock grazing – Dairy cows on the day of the survey) at *Target Note 1.* There is also a section of a roadside hedgerow (*Target Note 2*) within the Site. Both these features extend into the remainder of the survey site (and beyond).



General view of the Site from the north. Red star indicates approximate proposed location for Silage Clamp.

Hedgerow

4.9 The roadside hedgerow at *Target Note 2* is located on a slope from the adjacent field. It is approximately 2 m high and 1-1.5 – 2 m wide and appears frequently managed. It is locally gappy/ and also locally has been subject to recent localised works to reduce the width. The woody shrub component is variously dominated by *Crataegus monogyna* (Hawthorn), *Corylus avellana* (Hazel), and *Prunus spinosa* (Blackthorn) with associates at lower levels of abundance including *Fraxinus excelsior* (Ash) (including 1 no. young tree), *Sambucus nigra* (Elder), and *Rosa canina* agg. (Dog-rose). *Rubus fruticosus* agg. (Bramble) is occasional throughout. The base layer/ slope to road edge includes characteristic hedge base plants such as *Mercurialis perennis* (Dog's Mercury), *Polypodium vulgare* (Polypody), *Dryopteris filix-mas* (Male-fern) and *Geum urbanum* (Wood Avens), along with a range of associates such as *Silene dioica* (Red Campion), *Anthriscus sylvestris* (Cow Parsley), *Galium aparine* (Cleavers), *Urtica dioica* (Common Nettle), *Alliaria petiolata* (Garlic Mustard), *Stellaria holostea* (Greater Stitchwort), *Stachys sylvatica* (Hedge Woundwort) and *Glechoma hederacea* (Ground-ivy).



Above and Below. Hedgerow at *Target Note 2*. Above – approximate section to be removed. Below – view of hedge from northern end.



Grassland

4.10 The improved grassland field at *Target Note 1* appears to be frequently grazed; the sward was largely to less than 0.1 m high. The sward is grass dominated, this itself being

dominated by *Lolium perenne* (Perennial Rye-grass) with limited associates including *Poa* sp. (a Meadow-grass) and *Poa annua* (Annual Meadow-grass). The sward is species-poor with a minimal range of characteristic (tall-) herbs/ forbs scattered throughout at low levels of abundance, such as *Trifolium repens* (White Clover), *Ranunculus repens* (Creeping Buttercup), *Ranunculus acris* (Meadow Buttercup), *Cirsium arvense* (Creeping Thistle), *Plantago major* (Greater Plantain), *Taraxacum* sect. *Ruderalia* (Common Dandelion) and *Rumex obtusifolius* (Broad-leaved Dock). There are frequent bare patches.

Remainder of Survey Site

General

4.11 The remainder of the survey site includes various other hedgerow lengths which characterise the roadside edges (*Target Notes 3, 7a, 8a* and *10*). An agricultural building/ yard is located to the north of the Site (*Target Notes 4/ 4a*). To the east of the Site (on the opposite side of the road) are located more agricultural buildings (*Target Notes 5* and *6*), with extensive areas of hard-standing; vegetated habitats include a small pocket of (disturbed) plantation woodland (*Target Note 8*), tall-herbs (*Target Note 7*), and a small/ shallow recently constructed 'pond' (*Target Note 9*).

Plantation Woodland & Hedgerows

4.12 At *Target Note 8* there are three adjacent small blocks of broad-leaved planation woodland associated with a trackway and parking/ turning area. The following is adapted from Marches Ecology (2024, *op. cit.*):

- The ground appears to be manmade and is locally steeply sloping. The canopy trees range from young, through semi-mature to mature, and include *Aesculus hippocastanum* (Horse-chestnut), *Fagus sylvatica* (Beech), Ash, *Larix* sp. (a Larch species), *Pinus sylvestris* (Scot's Pine), *Betula pendula* (Silver Birch), *Sorbus aucuparia* (Rowan) and *Salix* sp. (Willow), with an occasional Elder shrub, or very locally dense Blackthorn. The base layer is larger species-poor and disturbed, frequently bare or characterised by locally frequent low-growing Bramble, with a range of common associates. Farm materials/ discarded equipment are frequent throughout the blocks, largely on the edges – for example there are numerous stored tyres.

4.13 Various hedgerow lengths characterise the roadside edges at *Target Notes 3, 7a, 8a* and *10*. The length at *Target Note 3* appears mature and supports a range of woody shrubs including *Prunus* cf. *padus* (Bird Cherry), Hazel, Elder, Hawthorn, *Malus sylvestris* (Crab Apple), and Ash. At *Target Note 7a* the resource appears planted in the not too distant past, with Hawthorn and Blackthorn dominating a low gappy hedge. At *Target Note 8a* a defunct, gappy hedge forms the roadside boundary to the planation woodland. *Target Note 10* comprises a species-poor Hawthorn dominated hedge.

Pond

4.14 At *Target Note 9* there is a small 'pond' approximately 5 x 3 m in size, with water to approximately 0.05 – 0.1 m deep. This feature has been constructed in the recent past. It is largely devoid of vegetation apart from a small amount of *Agrostis stolonifera* (Creeping Bent) and *Ranunculus* sp. (a Water Crowfoot); a small number of Common Frog (*Rana temporaria*) tadpoles were noted.



'Pond' at *Target Note 9*.

Other Habitats

4.15 Other habitats within the remainder of the survey site are restricted to:

- disturbed areas of tall-herb/ grassland vegetation at the edge of/ associated with a yard (*Target Note 4a*). Variously used for the storage of materials;
- tall-herb/ grassland vegetation on a narrow slope at *Target Note 7* – with occasional young scrub/ tree saplings and discarded materials (such as tyres);
- agricultural buildings at *Target Notes 4, 5* and *6;*
- fences/ walls, and
- hard-standing.

Immediately Adjacent Land

4.16 *Target Note 11* comprises a mature standard Ash tree.

4.17 At *Target Note 12* there is a linear zone of mature scrub comprising Blackthorn, Elder, Hawthorn and Hazel. It is frequently accessed by livestock.

Flora

4.18 No plant species of note in the local context, or included on *Schedule 9* of the *Wildlife and Countryside Act 1981,* were recorded within the survey site, or immediately adjacent land.

Fauna

4.19 Only those species/ species groups that might reasonably be expected to be present at this location or potentially be affected by the proposed development are considered here.

[redacted]

[redacted] the survey site provides habitat of moderate-high potential value for Badger foraging.

Bats

The Site

4.22 There are no potential bat roosting features within the Site, which comprises part of an improved grassland field and a length of roadside hedgerow (with a young Ash tree).

4.23 These habitats offer minimal opportunities for foraging/ commuting bats, these being largely restricted to the resource provided by the hedgerow at *Target Note 2*: however, this does not provide a high/ sheltered flyway and is likely to be of limited potential value. It is however part of a hedgerow (and occasional (plantation) woodland) network in the immediate landscape.

Remainder of Survey Site

4.24 There are no potential roosting opportunities within approximately 10 m of the Site. Buildings or trees within the remainder of the survey site which are outside of this distance (for example at *Target Notes 4, 5, 6, 8* and *11*) were not assessed. Overall however, the habitat resources provided by the remainder of survey site are again likely to be of limited potential value for foraging/ commuting bats.

Great Crested Newts

4.25 There is no aquatic habitat (suitable for breeding Great Crested Newts (*Triturus cristatus*)) within the survey site. The 'pond' at *Target Note 9* is known to have been recently dug – it is shallow and isolated from similar features.

4.26 The terrestrial habitat resource provided by the improved grassland which dominates the Site is of negligible/ low potential value for this species (although animals would be able to traverse across it). The base of the hedge at *Target Note 2* provides high potential value habitat. Similar resources are present in the remainder of the survey site, with the base of the plantation woodland at *Target Note 8* also providing high potential value habitat. However, the potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding pond than by the quality of the terrestrial habitat.

4.27 An initial review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography[4] suggests that there are no other waterbodies within approximately 250 m of the survey site. Taking this into account, along with review of Marches Ecology (2024, *op. cit.*) which provides no records for this species, the likelihood of

[4] https://www.google.co.uk/maps/@52.9376385,-3.2035993,1455m/data=!3m1!1e3?entry=ttu&g_ep=EgoyMDI1MDUyOC4wIKXMDSoASAFQAw%3D%3D

Great Crested Newts utilising terrestrial habitats within the survey site is deemed to be negligible. As such this species will be discounted and will not be considered further in this report.

Reptiles

4.28 Given the habitats present and the perceived intensive levels of agricultural use, along with review of Marches Ecology (2024, *op. cit.*) which provides no nearby records for this species group, the potential presence of reptiles within the Site/ survey site is deemed to be negligible. Whilst the Cefn Uchaf Wildlife Site at could support this species group, it is considered sufficiently remote. As such this species group will be discounted and will not be considered further in this report.

Birds

4.29 Nesting opportunities within the Site are limited to the hedge at *Target Note 2*. Significantly greater opportunities are presented by habitats/ features within the remainder of the survey site including those afforded by hedges, trees/ plantation woodland, scrub and built structures.

Other Species

4.30 Hedgehog (*Erinaceus europaeus*) is known from the locality and could for example use the hedge base at *Target Note 2.*

5 Potential Ecological Constraints and Recommendations

Introduction

5.1 The information provided in *Sections 1-4* of this report has been utilised to undertake a brief assessment of the potential ecological issues associated with the proposed development. Refer to *Appendix 1* for a summary of relevant species-specific legislation.

Protected Sites

5.2 The proposed development would not result in any direct impacts on any statutory or non-statutory protected sites. Due to the nature/ scale of the proposal, habitat within the survey site and location of the survey site, no indirect impacts are anticipated[5].

Habitats and Flora

5.3 Direct impacts (permanent or temporary) to vegetated habitats associated with the proposal will be limited to the loss of a short section (approximately 9 m) of hedgerow (*Target Note 2*), and a small area (approximately 1784 m^2) of improved grassland (associated with an agricultural field) at *Target Note 1.* The grassland resource is considered to be of no more than site[6] value (due to its quality (disturbance *etc.*), and geographical location).

5.4 'Hedgerows' is a priority habitat listed on *Section 7* (of the *Environment (Wales) Act 2016*). This priority habitat covers all hedgerows consisting predominantly (*i.e*. 80% or more cover) of at least one woody UK species (Biodiversity Reporting & Information Group, 2011). The

[5] It is unknown if WCBC/ Natural Resources Wales (NRW) will screen the planning application with regards the consideration of potential indirect impacts of atmospheric ammonia discharge or similar from the slurry clamp on the SAC/ SPA (and/ or Wildlife Site). This is outside the remit of this report.
[6] In accordance with CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.

hedge at *Target Note 2* would qualify under this simplistic definition. It is also likely to fall under the definition of a hedgerow in the *Hedgerow Regulations 1997,* where a 'hedgerow' is a line of shrubs/ tree species usually managed as such. Based on the current level of survey information determining potential 'important' hedgerows in accordance with the 'ecological criteria' established in the *Hedgerow Regulations 1997*, cannot be undertaken. Although simplistically the length supports six woody species and may have three associated 'features' (less than 10% gaps, at least 3 woodland species, and a parallel hedge) which would therefore qualify as 'Important', detailed survey/ assessment would be required to confirm this. Nonetheless, as this hedgerow connects (albeit not directly/ *i.e.* with gaps) to other similar features in the wider landscape, and is therefore an integral part of a network/ wider resource in this locality, it is likely to be of local value.

5.5 However, taking into account factors such as existing levels of disturbance, the short overall length of the hedgerow (approximately 80 m), its presence in/ adjacent to a busy agricultural environment, *etc.*, loss of a short (approximately 9 m) section of this hedgerow is not deemed to be a significant impact.

5.6 No further survey with regards habitat/ flora is deemed necessary. Recommendations provided below (under 'General Avoidance and Mitigation Measures') include for temporary fencing of retained hedgerow lengths at *Target Note 2*.

5.7 The general advice contained in the Guidance for Pollution Prevention (GPP) leaflets produced by SEPA, EA and the Environment and Heritage Service (Northern Ireland) should be adhered to, particularly the following:

- GPP1: Understanding Your Environmental Responsibilities – Good Environmental Practices.
- PPG6: Working at Construction and Demolition Sites.

Biosecurity

5.8 As a precautionary approach, the implementation of basic/ standard best practice biosecurity measures[7] are recommended.

[redacted]

Bats

5.11 No further consideration regarding potential (in)direct impacts to roosting bats is required.

5.12 Potential (negative) impacts to foraging/ commuting bats (from habitat loss, for example the loss of a short section of roadside hedgerow at *Target Note 2* which is of likely limited potential value) are deemed to be not significant, and no further survey or specific (additional) mitigation measures are considered necessary. As detailed in *Section 6,* approximately 120 m of hedgerow will be planted around the silage clamp building, linking up with the retained hedgerow at *Target Note 2,* which will provide a longer length of

[7] https://www.forestryengland.uk/sites/default/files/pdf/Biosecurity%20Policy.pdf

hedgerow corridor once established. This, along with the planting of 6 standard Sessile Oak trees, will provide potential foraging/ commuting resources in the long term.

5.13 Assuming best practice measures with regards bats and any external lighting proposals are implemented, no potentially significant (in)direct impacts on any potential foraging/ commuting resources (for example the adjacent hedge) are envisaged to result from the proposal. Any external lighting should follow guidance included in Bat Conservation Trust and Institution of Lighting Professionals (2023)[8]. All external construction works should be completed in daylight hours only.

Birds

5.14 The destruction of any bird nests that are in use is illegal. The simplest option to avoid issues arising from the presence of nesting birds is to schedule work that affects nesting habitat (*e.g.*, clearance of hedge section at *Target Note 2*) outside the nesting period (March to August inclusive). Should any occupied nests be found during the construction phase, a buffer zone (determined on the basis of the species concerned and the location of the nest in the context of the surrounding vegetation, but no less than 5 m) would be retained until it can be ascertained that the chicks have left the nest. The buffer zone will be appropriately fenced and signed.

5.15 If it is not possible to clear the hedge section at *Target Note 2* outside the nesting season, this feature should be subject to a check by a suitably qualified ecologist prior to commencement of works. If any active nests are found at this time, a buffer zone as detailed above would be provided.

Hedgehog

5.16 Hedgehogs[9] may utilise the hedgerow base at *Target Note 2* within the Site including for hibernation purposes. The hedgerow breach should as a minimum, be undertaken carefully (including by hand if necessary) and subject to a 'watching brief' by site personnel. Support from an ecologist should be sought where deemed necessary, for example to undertake hand-searches.

5.17 Any Hedgehog that may be found (when not hibernating) would be moved to a similar, safe location within suitable habitat nearby. Ideally, this work should not be undertaken within the hibernation period (October/ November to March/ April). However, if it is necessary to undertake the work at this time periods of cold weather should be avoided. Should a hibernating Hedgehog be found, it should be covered back up and left where it is until the end of the hibernation period.

General Avoidance and Mitigation Measures

5.18 The potential risks to the various ecological resources detailed in *Section 4* above are generally considered to be negligible. Given the nature of the survey site, likely scale and duration of the works, it is considered sufficient for a watching brief to be maintained by personnel throughout the works. As a precautionary approach the following general avoidance and mitigation measures should be adopted throughout preparatory/ construction phases:

[8] Bat Conservation Trust and Institution of Lighting Professionals (2023). *Guidance Note 08/23. Bats and Artificial Lighting at Night*.
[9] Hedgehog does not receive any statutory protection (beyond it being included on *Schedule 6* of the *Wildlife and Countryside Act 1981*, making it illegal to kill or capture them using certain methods).

1. Protection Measures for Retained Hedgerows. Due to the proximity of retained hedgerow lengths (at *Target Note 2*) it is recommended that temporary protective fencing (*e.g.*, heras panels) is installed prior to the start of any works/ after the breach has been made. This fencing should remain in place throughout the construction work. The aim of this fencing is to avoid inadvertent damage to retained hedgerow lengths. Site personnel should be made aware of the purpose of this fencing.
2. Nesting Bird Season. The avoidance measures as detailed above should be followed.

6 Enhancement Measures: Net Benefit for Biodiversity

Introduction

6.1 Technical Advice Note 5 (Nature Conservation and Planning) (Welsh Assembly Government, 2009)[10] and Wrexham County Borough Council (2011)[11] seek developments to achieve net biodiversity gain. The requirement to secure and maintain net benefit for biodiversity (NBB) (through enhancements) was reinforced in a letter issued by the Chief Planner (Welsh Government) to all planning departments in October 2019. NBB has been defined as '*the concept that development should leave biodiversity and ecosystems in a better state than before, through securing long term, measurable and demonstrable benefit, primarily on site*'[12].

6.2 This was reiterated in a letter from the Minister for Climate Change to the Heads of Planning dated October 2023. An Annex[13] attached to this letter provided text to update Planning Policy Wales (PPW), which has been adopted in PPW 12 (Welsh Government 2024[14]). . Chapter 6 of PPW was updated as of 11/10/23 (and is now included in PPW 12) which provides '*further clarity .... on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort, and, the need to consider enhancement and long-term management at each step*'.

6.3 WCBC (2011, *op. cit.*) lists '*examples of how enhancements could be achieved on development sites*'. The options provided include for '*planting native trees and shrubs of local provenance*', '*connecting existing habitats with species-rich hedgerows*', and '*bird boxes*'. CIEEM (2022) states that '*a key requirement is that the measures put forward are suitable in the local context of the site*'[15]. As such it is proposed to plant a small number of native trees, establish a new native species-rich hedgerow, and install bird boxes.

Assessment of Required Level of Provision

6.4 Construction of the silage clamp/ associated access can be categorised as a small/ low impact proposal. The development of this site would not result in a significant impact on any valued ecological resource at this location.

[10] Welsh Government (2009). *Planning Policy Wales - Technical Advice Note 5: Nature Conservation and Planning*. September 2009.
[11] Wrexham County Borough Council (2011). *Local Planning Guidance Note 32 Biodiversity and Development*. Adopted March 2011.
[12] https://www.gov.wales/targeted-policy-changes-planning-policy-wales-net-benefit-biodiversity-and-ecosystems-resilience
[13] *Annex to Heads of Planning Letter Dated 11 October 2023: Addressing the Nature Emergency through the Planning System: Updated National Planning Policy for Chapter 6 of Planning Policy Wales*.
[14] Welsh Government (2024). *Planning Policy Wales*. Edition 12, February 2024.
[15] CIEEM (2022). *Welsh Government's Approach to Net Benefits for Biodiversity and the DECCA Framework in the Terrestrial Planning System. CIEEM Briefing Paper September 2022*. CIEEM, Romsey.

6.5 NBB provision '*should be proportional to the extent and impact of development* (CIEEM 2022, *op. cit.*). The proposed compensation/ enhancements will therefore target priority habitats (hedgerow (a priority habitat under *Section 7* of the *Environment (Wales) Act 2016*)), and priority species/ species of nature conservation interest likely to be present at the site (House Sparrow (*Passer domesticus*)[16]).

Biodiversity Enhancement Recommendations

6.6 The locations of the proposed enhancements as detailed below are indicated on drawing no. 1023/37_PA/06 (a copy of which is attached to this report), as outlined above.

6.7 Where possible planting will utilise native species of certified British origin and ideally local provenance (Local Seed Zone 304). All planting will be fenced off from livestock as required.

Hedgerow Planting

6.8 It is proposed to plant approximately 120 m of native species-rich hedgerow around the footprint of the development footprint. This will be provided partly as compensation for loss of the 9 m section required to facilitate access, and partly as an enhancement.

6.9 This resource will be planted as a staggered, double row with four to five plants per metre. A minimum of six native woody species will be planted to establish the hedgerow. Ideally the species composition will reflect nearby hedges and include Hawthorn, Blackthorn, Hazel, Elder, Crab Apple, and Dog-rose. An appropriate mix might be: 30%: 30%: 15%: 10%: 10%: 5%.

6.10 It may however be appropriate to source a 'hedgerow tree pack' from the Woodland Trust[17] in which case the 'traditional mix' and/ or 'upland mix' would be suitable options. These two mixes include Hawthorn, Blackthorn, Hazel, Crab Apple, Dog-rose, and *Ilex aquifolium* (Holly). These packs also include the option of purchasing hedgerow trees: it is understood that trees are not to be planted in this hedgerow.

6.11 Bare-rooted forestry size transplants should be used with the individual plants being notch planted between November and March. They will be planted in accordance with the advice provided by the Woodland Trust[18]. The trees/ shrubs will need stakes and Rabbit guards.

Native Trees

6.12 Six native *Quercus petraea* (Sessile Oak) trees will be planted as standard trees within improved grassland field to the southwest/ west of the Site. Bare-rooted whips will be purchased. They will be planted between November and March in accordance with the advice provided by the supplier(s).

[16] House Sparrow is a priority species listed on *Section 7*
[17] https://shop.woodlandtrust.org.uk/hedging-trees
[18] https://www.woodlandtrust.org.uk/plant-trees/advice/how-to-plant/

Bird Boxes

6.13 The proposed boxes as detailed below will be installed under the direction/ advice of a suitably qualified ecologist to ensure correct installation. On installation the location of each box will be photographed, and a record kept accordingly.

6.14 Two bird boxes are to be provided as follows:

- 2 no Vivara Pro WoodStone House Sparrow Nest Box[19] (double chamber). To be installed on the northeastern elevation of the existing agricultural shed at *Target Note 10*.
    - The bird boxes will be installed out of reach, 3 m or more off the ground, and at least 1 m apart.
    - These bird boxes should be subject to checking/ cleaning out on an annual basis; refer below.



Proposed approximate House Sparrow nest box locations.

Maintenance and Monitoring

6.15 The importance of securing long-term management/ maintenance and monitoring is central to the NBB approach (*e.g.*, CIEEM 2022, *op. cit.*). This should also be proportional to the scale and impact of the development.

<u>All Planting</u>

6.16 Once the trees and hedgerow have been planted, an area of at least 1 m^2 around them should be kept weed-free. This will be achieved either through the use of mulch mats or the appropriate application of glyphosate-based herbicides (such as Roundup) during the

[19] https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box

growing season. This maintenance operation should be undertaken once a year for the first 3 years. Watering may also need to be undertaken during establishment. Any losses will be replaced.

Native Trees

6.17 Once the tree resource is successfully established, no long-term management is likely to be required.

Hedgerow

6.18 The young plants within the hedgerow should be cut back in the first year to approximately one-third of their height to promote bushy growth.

6.19 A well-established hedge will require trimming from about the sixth year. Ideally maintained hedges should be shaped to be 1.8-2 m high and at least 1.8-2 m wide. Once established, the requirement for annual management should be reviewed. If possible, the top and sides of the hedgerow could be left uncut every other year (this can also be undertaken for individual/ shorter lengths on rotation). Otherwise cutting should be undertaken after January but before March. Once established the hedge should be laid every 10-30 years between mid-November and early March. The best time to lay the hedge would be when stem growth reaches between 5-10 cm diameters at the base.

Bird Boxes

6.20 The Sparrow boxes should be inspected annually and cleaned if necessary. This can be undertaken by the house occupants. All maintenance should be carried out when the last bird has left the nest-box; at least October. Nest-boxes should be cleaned in late-autumn (late October/ November). At least 2 to 3 weeks should be allowed after fledging before undertaking any cleaning. The *Wildlife and Countryside Act 1981*, as amended states that cleaning should only be carried out between 1st August and 31st January and that any eggs present should be destroyed immediately. All nest material should be completely removed and disposed of safely along with any other debris. To ensure that parasite build-up is controlled the inside of the nest-box should be cleansed with boiling water. Care should be taken when opening nest-boxes as it is possible that they could be inhabited by bees, wasps or even bats.

6.21 It is important to remember that once discovered, a bat roost is legally protected and must not be disturbed. If a bat roost is suspected to be present a suitably qualified bat consultant or the Clwyd Bat Group[20] should be contacted and may need to undertake the annual maintenance operations detailed above.

6.22 The use of either of the bird boxes should be recorded during the nesting season (March to August inclusive). Where possible a record should be maintained of which bat boxes have been utilised and by what species. Records of nesting birds should be submitted to Cofnod[21] (the Local Environmental Records Centre for North Wales).

[20] http://www.clwydbatgroup.com/
[21] https://www.cofnod.org.uk/Home

7 Appendix 1

Introduction

7.1 The species-specific legislation below is presented here due either to the actual or suspected/ possible presence of each species on the site or within the zone of influence and is therefore considered to be relevant for this study.

7.2 This sub-section provides a brief summary of key relevant species legislation. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation, but summarises the salient points.

[redacted]

Bats

7.4 All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. They are also listed as European Protected Species on *Schedule 2* of *The Conservation of Habitats and Species Regulations 2017* which gives them full protection under *Regulation 42(1)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act 2000).

7.5 Under the above legislation it is an offence to intentionally or recklessly:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

7.6 Several species of bat are included on *Section 7* of the *Environment Act 2016*.

7.7 All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

Birds

7.8 All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the *CRoW Act 2000*.

7.9 The legislation makes it an offence to intentionally or recklessly:

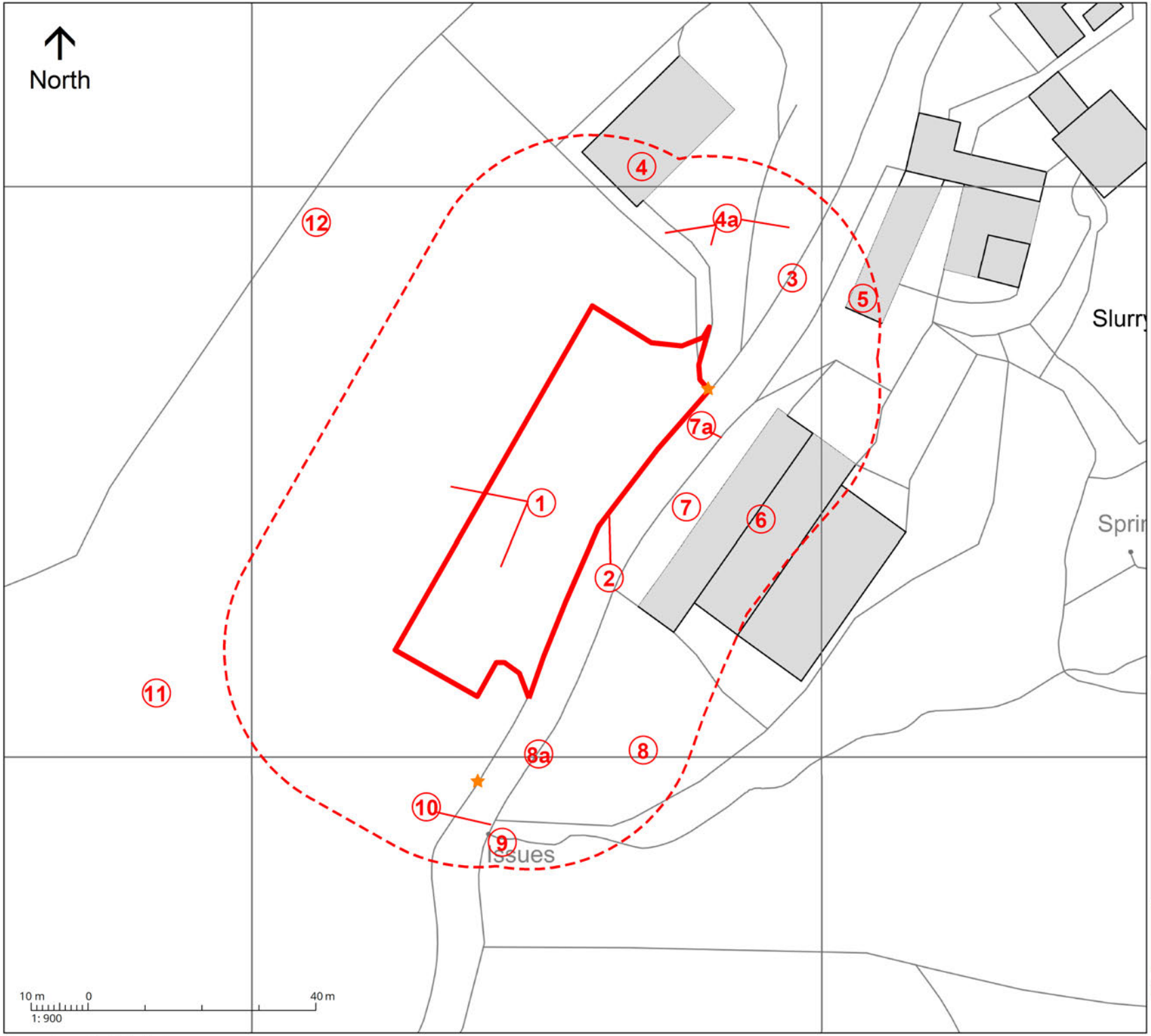
- kill, injure or take any wild bird;

- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

7.10 Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

7.11 *Section 7* of the *Environment Act 2016* includes several birds.



Site boundary

Survey site boundary
30 m buffer

Approx extents of hedgerow at Target Note 2

C571 Proposed Silage Clamp, Cefn Uchaf Farm, Nantyr, Glyn Ceiriog, Llangollen, Wrexham, LL20 7DF - Walkover Survey & Biodiversity Statement

***Figure 1* - Target Notes**

Date: 02/06/2025

marches ecology

www.marchesecology.co.uk

Base mapping provided by the client.

A2

IAGO Cymru Ltd
Sustainable Solutions
Cynllunio Cynaliadwy.

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The plan shows information taken from the index map. It is illustrative only and does not define the extent of the land in any individual title. For information about general boundaries of a title please refer to the register and filed plan.

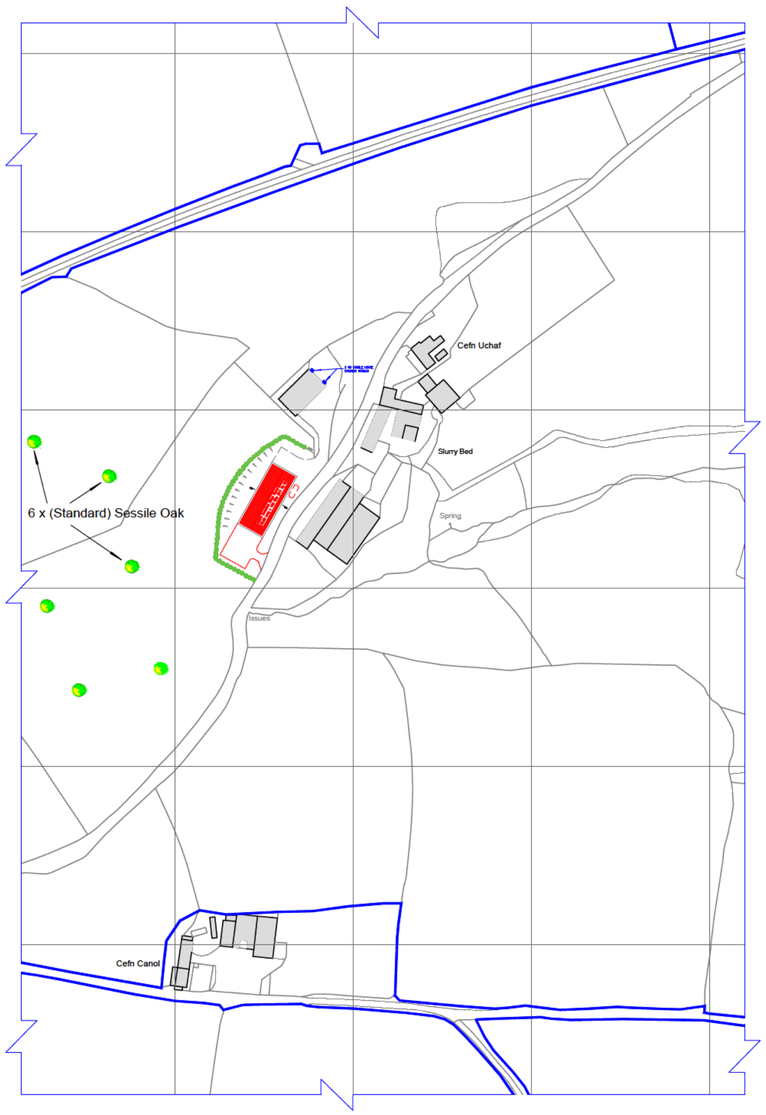
RICS

iago cymru ltd
welsh national
regeneration award
winners 2010

Planning Drawing Issue No 2
Submission Date: 02.06.2025

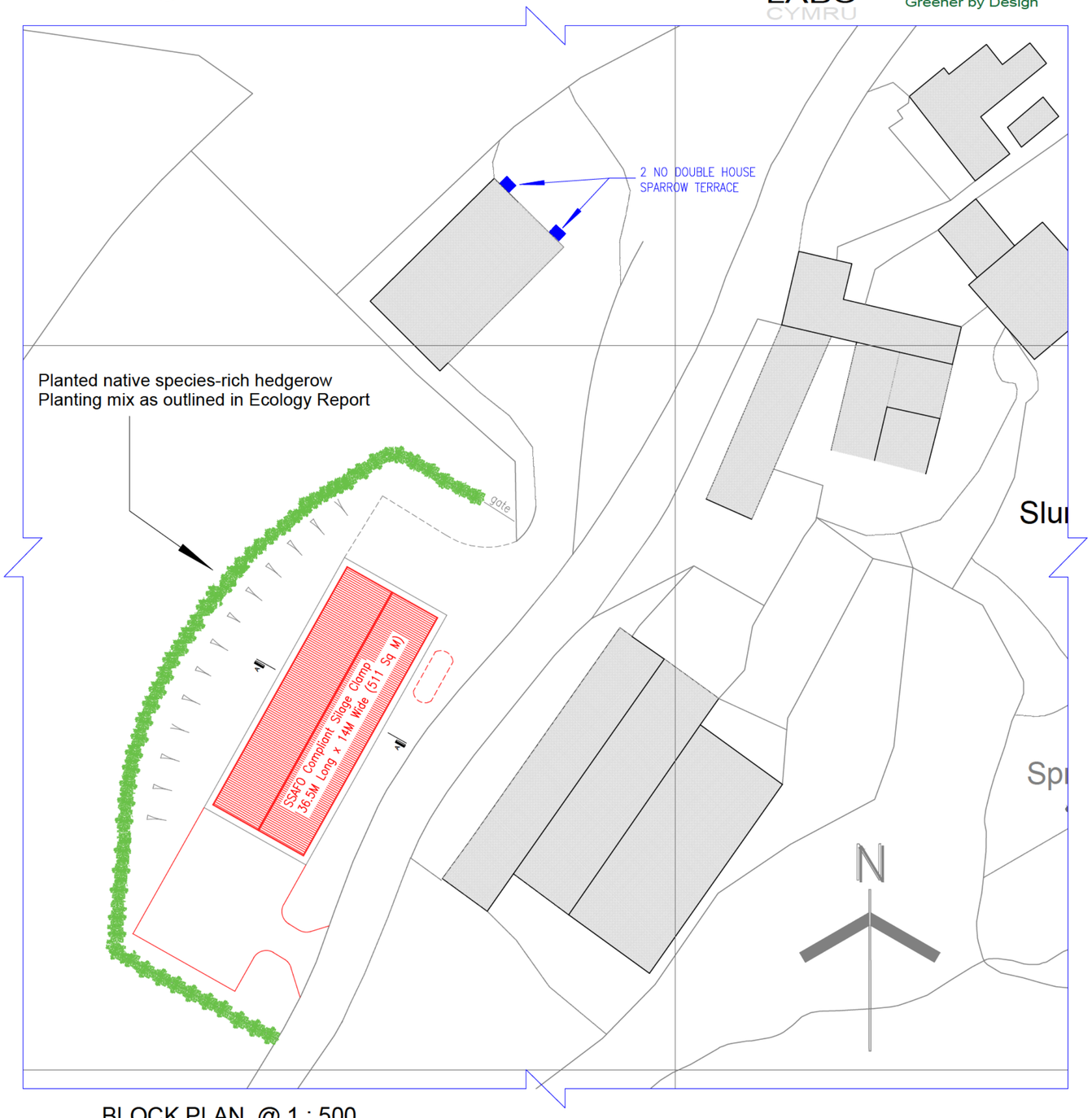
partner LABC CYMRU

KeBeK Greener by Design



SITE LOCATION PLAN - 1 : 2500 Scale
PLAN LLEOLIAD (Cyfeirniod Grid SJ 19204 38339)

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BLOCK PLAN @ 1 : 500

Site Boundary / Curtilage
Land in Ownership / Rented

NODIADAU/NOTES

MAE'R LLUNIAD HWN WEDI EI WNEUD AR GYFRIFIADUR, NI DDYLID GYWIRIO GYDA LLAW. (AutoCAD LT / Revit 2021).

THIS IS A CAD PRODUCED DRAWING, AND SHOULD NOT BE AMENDED BY HAND. (AutoCAD LT / Revit 2021).

EARTH BANK SLURRY STORES AND TANKS

Any alteration works to an existing earth bank slurry store, or a replacement earth bank slurry store will be expected to meet the requirements of The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013). Commonly referred to as SSAFO and apply in England. Also (Control of Agricultural Pollution) (Wales) Regulations 2021

The works contractor must be fully conversant with the regulations, and will provide written confirmation that the design, construction, and installation, will meet the legal requirements.

Any works within a Nitrate Vulnerable Zone (NVZ) then there are rules to follow concerning slurry storage capacity. See Defra guidance.

Ground Water Protection - no system to be located within a groundwater Source Protection Zone 1 or within 50 meters of a borehole, well, or spring used to supply drinking water.

SUITABILITY OF EARTH BANK STORES

Soils- where the soils are suitable (impermeable and stable), they are appropriate for storing slurry or semi-solid manure, or as a series of tanks or lagoons to settle and store dirty water.

To be suitable they must have a permeability of 0.000001 mm per second or less, following compaction if necessary. Impermeable soil must be present to a depth of at least one meter below the bottom of the store.

Soils with a clay content of between 20 - 30 per cent are generally ideal and produce stable embankments. Lower clay content may not meet the required permeability, whilst a higher one should be suitable for the base, but may be difficult to form into a stable embankment and could tend to shrink and crack on drying. The suitability of the material should be confirmed by analysis in a soil laboratory, and preferably verified by a civil engineer. Materials that is intended for use in-situ without any re-compaction need only be tested for permeability and depth.

SOIL TESTING

Initial soil tests to be taken from at least 5 locations to identify any variability in clay content and depth of impermeable soil. Where there is little variability in clay content, soils from only one sample location needs to be sent for detailed testing, otherwise send a range of samples. They need to be tested in an approved soils' laboratory to show whether the required level of impermeability can be achieved. This involves the direct measurement of soil permeability as well as other soil characteristics. Testing should meet BS 1377 (methods of tests for soils for civil engineering purposes)

Where the in-situ soils are not fully suitable, then import appropriate material, or use an impermeable synthetic liner.

SITE SELECTION

Sites in a flood plain or with a high water table to be avoided, including ground that has been previously made up or disturbed.

- Trees, scrub, roots, etc need to be removed
- Relocate any land drains at least 10 meters away from the outside of the embankment, and carefully back-fill the trench with impermeable material.

CONTROL OF AGRICULTURAL POLLUTION) (WALES) REGULATIONS 2021

The key aspects of the regulations are:

Notify NRW about any new, substantially enlarged or substantially reconstructed system at least 14 days before construction begins.

- The notification must include the type of structure and where it is to be used. Request details of the proposed design and construction, and once an agreed proposal has been constructed forward a completed notification form before using the new facility.
- The structure(s) must be impermeable. Soil permeability to be confirmed by a qualified civil engineer or soil scientist.
- No part of the system can be within 10 meters of inland freshwaters or costal waters that slurry could enter.

Note that 'inland water' includes any stream, ditch or land drain, even if it flows for only part of the year.

- Where the store has a gravity-fed outlet or connection to another store, it must be fitted with two lockable valves in series, unless the receiving store is larger or at the same height as the outlet store.
- Each valve must be capable of completely shutting off the total flow of slurry from the store. The design and positioning of the valves should take into account the possibility of a single piece of debris obstructing both valves. The space between the valves must be at lest one meter.
- The valves must be locked shut when not in use. They must only be used under close supervision and never left unattended while open or partly open
- All parts of the system must comply with the regulations whenever it is used. Proper maintenance is therefore essential, i.e. do not allow tree growth on the embankment and repair rodent damage frequently.

SIZE OF THE STORE OR TANK

The Drawings are to be read in conjunction with the Design and Access Statement produced by KeBeK, this document identifies the maximum quantity of slurry likely to be produced and directed to this system in any continuous four month period. The store may form part of a slurry/dirty water irrigation system.

Earth bank stores have been designed to include a freeboard of 750mm They must never be filled above this level

During reproduction Drawing may Shrink or Expand

Chartered Institute of Architectural Technologists

Cwsmer/Client: [redacted]		Rhif/Job No: 1023/37	Lluniad/Drawing Title: Site Location and Block Plan / Plan Lleoliad		Graddfa/Scale: 1: 2500 & 1: 500
Prosiect/Project: Planning Application - Cefn Uchaf Farm, Nantyr, Llangollen, Wrexham LL20 7DF		Rhif Feil/File Name: iago: 1023/37	Lluniad/Drawing No: PA/06	Cywyriad/Rev:	Dyddiad/Date: 22.03.2025
					Lluniwr/Drawn: G IAGO
				Cyw/Rev:	Dyddiad/Date:

IAGO Cymru (Cyf).
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