RICHARDS

MOOREHEAD & LAING LTD

LANDSCAPE | ENVIRONMENT

Land East of Llanrwst Road,

Gyffin, Conwy

Ecological Impact Assessment (EcIA)

For

Adra

November 2025

3337/11

RML

R I C H A R D S

M O O R E H E A D & L A I N G L T D

L A N D S C A P E | E N V I R O N M E N T

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QUALITY ASSURANCE PROCEDURES: Qp4, QP7.3Doc6

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Executive Summary

Richards, Moorehead & Laing Ltd (RML) were commissioned by Atticus Land and Development on behalf of Adra (Tai) Cyfyngedig to undertake a series of ecological surveys on land at Llanrwst Road, Gyffin, Conwy in 2024. RML were commissioned by Beech Developments in 2025 to provide an Ecological Impact Assessment (EcIA)

This report has been produced to provide an EcIA of the proposed housing development plans at land on Llanrwst Road, south of Gyffin, Conwy centred on approximate Grid reference SH 77794 76524. This Ecological Impact Assessment (ECIA) addresses the potential effects of the proposed residential development at Llanrwst Road, Gyffin, on designated sites, protected species, and priority habitats. The assessment has been conducted in accordance with national and local planning policy (including Planning Policy Wales and relevant Local Development Plan policies) and best practice ecological guidelines.

The site is not within any designated sites. A Landscape and Visual Appraisal (LVA) of the site has been undertaken over the summer and winter of 2025 and will be submitted as part of the planning application for the site.

The submitted drainage strategy includes Sustainable Urban Drainage (SUDS). The drainage will outfall to the unnamed stream to the west of the site near to the culvert.

The submitted landscape proposals include biodiversity gains including wildflower planting, native trees and shrubs as well as new and translocated hedgerows to replace those lost.

No significant effects are envisaged as a result of the plan developments proposals.

No Invasive Non-Native Species as listed on Schedule 9 of the Wildlife and Countryside Act were noted on site.

The current assessment concludes that no further ecological surveys are necessary for the determination of this application. Consequently, focus has been directed toward a detailed suite of mitigation and avoidance strategies, alongside enhancement measures designed to ensure a net gain for local biodiversity.

1. Introduction

1.1 Scope of commission

1.1.1 Richards, Moorehead & Laing Ltd (RML) were commissioned by Atticus Land and Development on behalf of Adra (Tai) Cyfyngedig to undertake a series of ecological surveys on land at Llanrwst Road, Gyffin, Conwy in 2024. RML were commissioned by Beech Developments in 2025 to provide an Ecological Impact Assessment (EcIA)

1.1.2 This report has been produced to provide an EcIA of the proposed housing development plans at land on Llanrwst Road, south of Gyffin, Conwy (hereafter referred to as the 'site'), centred on approximate Grid reference SH 77794 76524. The report sets out the assessment of significant effects, either positive or negative, of the proposals on the nature conservation interest at the site. A 'Significant effect' is an effect that either supports or undermines biodiversity conservation objectives for important ecological features[1].

1.2 Site description

1.2.1 The proposed plan is on a greenfield site of 5.65 hectares currently used as agricultural land for grazing sheep and horses. The site is composed of three fields and in total measures approximately 335 metres long and 100-200 metres wide, roughly rectangular in shape. To the north lies the residential area of Gyffin and to the east a band of mature woodland set on rising ground. To the south is agricultural land and to the west a small belt of woodland that separates the site from Llanrwst Road (B1506). Llanrwst Road is the main road along the western side of the Conwy Valley that connects Conwy with villages and the wider countryside to the south. The site is steeply sloping rising from circa 25 metres AOD in the lowest north-western corner to around 60 metres to the south-east with an average gradient of around 1 in 5 but steeper as it rises in the eastern side of the site.

1.2.2 The site lies approximately 2 kilometres from the eastern boundary of Eryri National Park and circa 750 metres south of Conwy Town, Conwy Castle and castle walls.

1.2.3 A site location plan is provided in ***Appendix A***.

[1] CIEEM (September 2018 version 1.3 updated September 2024) *Guidelines for Ecological Impact Assessment in the UK and Ireland Terrestrial, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester. Available at EcIA-Guidelines-v1.3-Sept-2024.pdf

1.4 Proposed Plans

1.4.1 This is a EcIA of proposed works to land at Llanrwst Road south of Gyffin in Conwy. The development proposals are for the provision of 95 affordable dwellings, access road and associated infrastructure on land currently used as pasture. The proposal would include affordable dwellings, with vehicular access from the B5106 near to Brynglorian and pedestrian connection to Bryn-Seiri Road through Isgoed. Level platforms would be created in the sloping ground to enable the development.

1.5 Aims and objectives

1.5.1 A request for an EIA Screening Opinion regarding the development proposals for 102 No. dwellings was submitted to Conwy County Borough Council (CCBC) in May 2024. CCBC determined (June 2024) that the proposed development does not constitute major development and therefore an EIA is not required. However, and despite this determination, it was thought appropriate that a full Ecological Impact Assessment (EcIA) should be prepared as a precautionary measure to ensure any adverse effects were considered fully. CCBC also requested that an Ecological Assessment should be undertaken in a previous response to a Pre-Application Enquiry (Ref: DC/ENQ/3253) in October 2023.

1.5.2 The aims of the survey and report are:

a) To conduct a site walkover to determine the current baseline conditions.

b) To conduct a data search from COFNOD.

c) To identify and describe all potentially significant ecological effects associated with the proposed development.

d) To set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects.

e) To provide an assessment of the significance of residual effects.

f) To identify appropriate enhancement measures and

g) To set out the requirement for post-construction monitoring.

1.6 Personnel and quality assurance

1.6.1 This report has been written by Katy Morris, reviewed by Jon Stoddard, approved by Jon Stoddard and issued by RML.

1.6.2 Ecologist Katy Morris is an Associate member of CIEEM. Katy has a BSc in Environmental Science from Liverpool John Moores University. Katy is currently involved in numerous

voluntary bat activities, including roost monitoring, bat care and handling as well as working towards gaining her own bat survey licence. Katy has completed the Certificate of Bat Acoustics Analysis (CoBAA) and has achieved Technician Level: Graded B Assessment Result. She is focused on bat ecology but also has experience of surveying dormice, otters, water vole, reptiles, and great crested newts which she holds a licence to survey. She is also proficient in Phase 1 habitat surveys with a level 3 FISC. She is extending her repertoire to include NVC habitat surveys, Green Infrastructure Statement, Habitat Regulation Assessment, QGIS and Qfield.

2. Legislation

2.1 Legislation

2.1.1 The section outlines relevant legislative protection afforded to certain habitats and species.

2.2 Habitat and species

Conservation of Habitats and Species Regulations 2017 (as amended)[2]

2.2.1 This Act ensures the protection of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in the UK which no longer form part of the EU's Natura 2000 ecological network. The amended regulations have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes existing SACs and SPAs, new SACs and SPAs designated under these regulations. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

The Wildlife and Countryside Act 1981 (as amended)[3]

2.2.2 This Act allows for designation of SSSIs related to flora, fauna, physiology, or geology. The Act makes it an offence to kill, injure, take, possess, or trade in many wild animal species and to pick, uproot, possess, or trade in several wild plants. Measures are also outlined to outlaw the spread of invasive non-native species (INNS). This Act also implements certain provisions of the Wild Birds Directive (2009/147/EC).

Wild Mammals (Protection) Act 1996[4]

2.2.3 This Act provides protection against certain acts of deliberate harm for 'wild mammals' (meaning any mammal which is not a 'protected animal' within the meaning of the Animal Welfare Act 2006).

Protection of Badger Act 1992[5]

2.2.4 Badgers and badger setts are protected under the Protection of Badgers Act 1992. This makes it an offence to wilfully kill, injure of take a badger, intentionally or recklessly damage, destroy or obstruct access to a badger sett, or disturb a badger when it is occupying a sett.

[2] The Conservation of Habitats and Species Regulations 2017 (as amended) Available at https://www.legislation.gov.uk/uksi/2017/1012/contents
[3] Wildlife and Countryside Act 1981 Available at (http://www.legislation.gov.uk/ukpga/1981/69)
[4] Available at https://www.legislation.gov.uk/ukpga/1996/3/contents
[5] Available at https://www.legislation.gov.uk/ukpga/1992/51/contents

The Invasive Alien Species (Enforcement and Permitting) Order 2019[6]

2.2.5 The Order came into force on the 1st of October 2019 to allow for the enforcement of Regulation (EU) No. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species in England and Wales including the relevant licenses, permits and rules for keeping invasive alien species.

The Countryside and Rights of Way Act 2000[7]

2.2.6 An Act which provides for public access on foot to certain areas of land and strengthens measures to allow the management and protection of Sites of Special Scientific Interest (SSSIs).

2.3 Environment (Wales) Act 2015[8]

2.3.1 Welsh legislation confirms Wales' legal commitment to biodiversity conservation. Section 6 of the Environment (Wales) Act 2016 introduced an "enhanced biodiversity and resilience of ecosystems duty (the S6 duty)" for public authorities, which requires that they "seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems".

2.4 Well-being of Future Generations (Wales) Act 2015[9]

2.4.1 One of the seven goals of this Act is to strive for a resilient Wales. Both the Environment (Wales) Act and the Well-being of Future Generations Act frame biodiversity and its contribution to achieving ecosystem resilience.

2.5 Planning

Planning Policy Wales 12 [10]

2.5.1 Planning Policy Wales 12 (PPW12) Section 6.4.3 sets out the responsibilities of the Local Planning Authority when assessing proposals and their impacts on biodiversity. This document states:

> '*The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement'.*

[6] Available at https://www.legislation.gov.uk/uksi/2019/527/contents
[7] Available at https://www.legislation.gov.uk/ukpga/2000/37/contents
[8] Available at https://www.legislation.gov.uk/anaw/2016/3/contents/enacted
[9] Available at https://www.legislation.gov.uk/anaw/2015/2/contents
[10] Available at https://www.gov.wales/sites/default/files/publications/2024-02/planning-policy-wales-edition-12_1.pdf

2.5.2 It sets out the requirement for planning authorities to demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act 2016 by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

2.5.3 Policies relevant to nature conservation included into Planning Policy Wales can be summarised as follows:

- **Green Infrastructure**: to include the submission of proportionate green infrastructure statements with planning applications and signposting Building with Nature standards.
- **Net Benefit for Biodiversity and the Step-Wise Approach**: The Step-Wise approach is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity. In doing so, planning authorities must also take account of and promote the resilience of ecosystems, in particular the following attributes, known as the DECCA Framework[11].
- **Protection for Sites of Special Scientific Interest (SSSI's):** strengthened approach to the protection of SSSIs.
- **Trees and Woodlands**: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place. Planning authorities must protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial green infrastructure function.

2.5.4 The Step-wise approach is the means of demonstrating the steps which have been taken towards securing a net benefit for biodiversity, regarding the DECCA framework (**Figure 1).** The stepwise approach should be followed, with the result being enhancements to provide a net benefit for biodiversity.

2.5.5 The Step-wise approach helps secure a net benefit for biodiversity, with the onus on applicants to bring forward proposals which will achieve a net benefit for biodiversity and demonstrate how the Step-wise approach is applied.

[11] Available at Ecosystem Resilience in a Nutshell 1: what is ecosystem resilience? (cyfoethnaturiol.cymru)

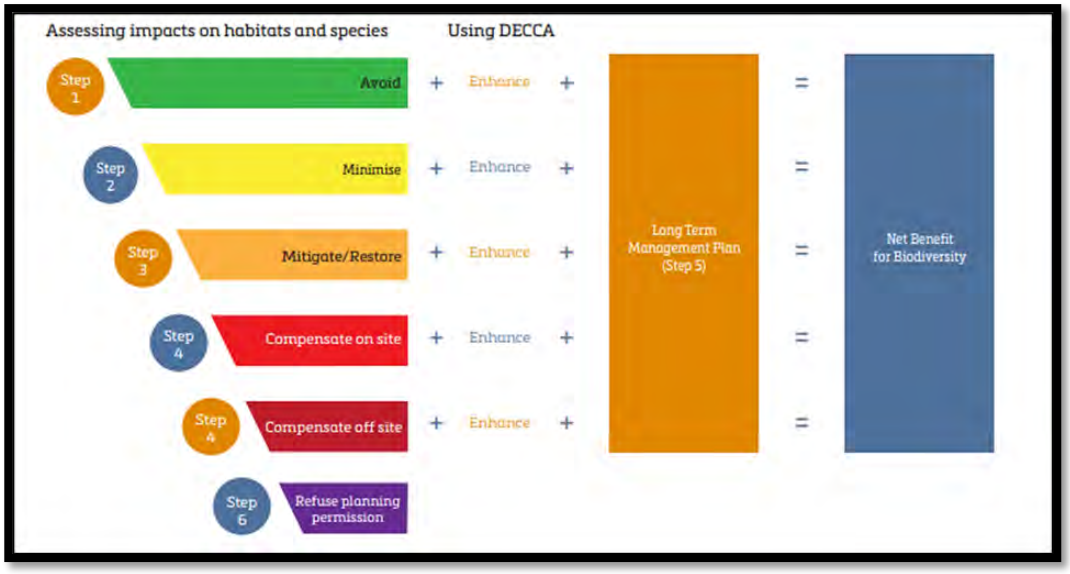

Figure 1: Summary of the Stepwise approach (*source PPW12*).

Technical Advice Note 5[12]

2.5.6 Technical Advice Note (TAN) 5 (Nature Conservation and Planning) provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. This guidance note should be read in conjunction with PPW12.

2.6 Relevant guidance

2.6.1 The assessment has been written in accordance with the best-practice guidelines provided by the Chartered Institute of Ecology and Environmental Management (2018) Version 1.3 - updated September 2024[13].

Net Benefits for Biodiversity and DECCA

2.6.2 The Net-Benefits for Biodiversity (NBB) approach, which is adopted in Wales, has the intention to deliver an overall improvement in biodiversity by putting an emphasis on proactive consideration of biodiversity and wider ecosystem benefits within a placemaking context to be considered early in the design process (Welsh Government (2021) Planning Policy Wales Edition 12[14]).

[12] Available at https://gov.wales/sites/default/files/publications/2018-09/tan5-nature-conservation.pdf
[13] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3 – Updated September 2024. Chartered Institute of Ecology and Environmental Management, Winchester.
[14] PPW 12 accessed at https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf

2.6.3 Natural Resources Wales (NRW) who are the Statutory Body and advisors to the Welsh Government and LPA's, have developed a framework for evaluating ecosystem resilience based on five attributes and properties specified in the Environment (Wales) Act 2016 and PPW. This is referred to as DECCA: Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience ***Table 1***.

Table 1: *The DECCA framework*

D	**Diversity**: at a biological level, including at the genetic, species, habitat, ecosystems or sea/landscape scale, as well as at the geological and physical level underpins biodiversity, resilient ecosystems, their functioning and the delivery of important ecosystem services. More diverse ecosystems are more resilient to external influences (this includes biological, geological and physical diversity on a site). This means strategic planning and individual development proposals should avoid negative impacts on biodiversity, by considering how biodiversity assets, can be maintained and enhanced.
E	**Extent**: to ensure mechanisms allow for the identification of potential habitat, the maintenance of existing biodiversity assets and networks and promote the restoration of damaged, modified or potential habitat and the creation of new habitat. This means that planning decisions should incorporate measures which seek the creation, restoration and appropriate management of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks.
C	**Condition**: Ecosystems and biodiversity assets need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services. Planning decisions should not compromise the condition of ecosystems. By taking an integrated approach to development, for example, which considers both direct and wider impacts and benefits it should be possible to make a positive contribution. Planning for the long-term management of retained habitats is key to maintaining condition through for example, the use of planning obligations.
C	**Connectivity**: to take opportunities to develop functional habitat and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration and appropriate management. The opportunities could include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, and the creation of 'stepping stones' which will strengthen the ability of habitats and ecological networks to adapt to change, including climate change. Individual development proposals should identify and incorporate measures which enable appropriate links to be made between the site and its surroundings so as to improve connectivity.
A	**Adaptation**: resistance and recovery from pressures arise when the attributes of ecosystem resilience – diversity, extent, condition and connectivity of ecosystems are in good condition. Habitats and species are not static: planning for nature recovery should aim to sustain habitats and associated species as the geography and land use changes around them, harnessing natural processes and opportunities for nature-based solutions. This means that strategic planning and individual development proposals should identify impacts to the ecosystem resilience attributes of biodiversity, using the pressures identified in SoNaRR[15]. They should incorporate measures to ensure that biodiversity's ability to adapt to, resist and recover from pressures is enhanced.

(*Source: PPW 12*)

[15] Available at https://naturalresources.wales/media/695923/sonarr2020-executive-summary.pdf

3. Survey Methods

3.1 General considerations

3.1.1 Current CIEEM guidance[16] states that *"ecological baseline conditions are those which exist in the absence of proposed activities. The impact assessment determines how the conditions will change in relation to this baseline to facilitate a clear understanding of the effects of a project."*

3.1.2 When describing the baseline conditions in the context of an EcIA it is important that it represents the conditions existing at the start of a specific proposed intervention:

- **Reflecting Current Reality:** The baseline aims to provide a realistic snapshot of the site's current ecological state prior to the proposed plans.
- **Clarity and Relevance:** Assessing the baseline, based on the present conditions keeps the focus on the immediate ecological status, making the assessment relevant to current proposed plans and impacts.

3.1.3 In summary, establishing the baseline as the current condition ensures that the assessment remains accurate, relevant, and applicable to the proposed development.

3.2 Desk study

Review of previous work

3.2.1 A review of previous ecological assessments and reports for the development was made, the key findings of which are summarised in ***Table 8*** in section4.

3.2.2 Third party consultation was undertaken as part of the proposal. Data was requested from COFNOD, the Local Environmental Records Centre for North Wales on 4th November 2025 to obtain the following ecological data:

- Details of any statutory and non-statutory nature conservation designations within 10 km[17] of the site, and
- Records of any legally protected or other notable species within 2 km of the site,

3.2.3 A copy of the public records obtained from Cofnod can be provided upon request.

3.2.4 Ordnance Survey Explorer (1:25,000) mapping and Google Earth Pro aerial imagery was used to identify any mapped water bodies and watercourses within 500 m of the site.

[16] Available at EcIA-Guidelines-v1.3-Sept-2024.pdf
[17] Only those sites within 2 km of the proposals are reported within this document. COFNOD data can be provided upon request.

3.2.5 Data Map Wales online mapping was interrogated to include 10 km around the site for designated sites within the National Site Network and Sites of Special Scientific Interest (SSSI).

3.2.6 Natural Resources Wales Map Browser was searched for data relating to Local Nature Reserves[18].

3.3 Field study

3.3.1 A walkover survey was conducted on the 21St May 2024 by Katy Morris and Rhodri Edwards of RML to determine the current baseline conditions of the site. The survey area included all land affected by the proposed development plans and immediate adjacent land, where accessible. The weather conditions during the survey were warm and sunny with an ambient temperature of 20°C with no precipitation.

3.3.2 Habitats were described following the standard Phase 1 habitat survey methodology[19]. The dominant plant species were recorded, and habitats were classified according to their vegetation types. Where appropriate, consideration was given to whether habitats qualify, or could qualify, as a Habitats of Principal Importance following habitat descriptions published by the Joint Nature Conservation Committee (JNCC, 2008). The survey included the additional recording of specific features indicating the presence, or likely presence of, protected species or other species of nature conservation significance (also referred to as 'notable' species).

3.3.3 The scientific naming of plant species follows those in Stace (2019)[20]. Habitats were marked on a paper base map and were subsequently digitised using a Geographical Information System (QGIS). Target notes (TN) were made to provide information on specific features of ecological interest or habitat features too small to be mapped. These are shown in ***Appendix B.***

3.3.4 Any invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were sought during the habitat survey. Detailed mapping of such species; or a full survey of the Site for all invasive plant species is beyond the scope of this commission.

3.4 Protected species assessment

3.4.1 Any evidence, or potential for protected species and notable species were noted during the walkover survey conducted in 2024, specifically for badgers and bats. The assessment

[18] Available at View open data on access, flood, habitats, landscapes, marine, designated land, water quality, and woodlands
[19] JNCC. (2010) *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit.* Joint Nature Conservation Committee, Peterborough.
[20] Stace, C.A. (2019). *New flora of the British Isles*. Suffolk: C&M Floristics.

of habitat suitability for protected and notable species was based on professional experience, judgement and supplemented by standard sources of guidance on habitat suitability assessment for key faunal groups.

Badger

3.4.2 The Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines. Version 1[21]. methodology was adopted for this survey as there are no specific Welsh guidance, and involved a thorough walk of the area, searching for signs of badgers (setts, hairs, footprints, tracks, holes, latrines, snuffle marks, foraging etc.).

3.4.3 Classification of setts based on the above methodology is set out as follows:

a) *Main sett; Normally each group of badgers has only one main sett, and so by counting all the main setts in an area you can find out how many social groups of badgers are present. Main setts usually have several holes with large spoil heaps, and the sett generally looks well used. There are obvious paths to and from the sett and between sett entrances. In the British National Badger Survey the average number of holes for a main sett was twelve, although main setts may be much smaller, even a single hole in exceptional circumstances. Although normally the breeding sett and in continuous use, it is possible to find a main sett that has some disused or dormant entrances.*

b) *Annexe sett; These are often close to a main sett, normally less than 150 metres away, and are connected to the main sett by one or more well-worn paths. Usually there are several holes but the sett may not be in use all the time, even if the main sett is very active. The average number of holes per annexe sett in the British survey was eight.*

c) *Subsidiary sett; These are usually at least 50 metres from a main sett, and do not have an obvious path connecting with another sett. They are not continuously active. The average number of holes per subsidiary sett in the British survey was four.*

d) *Outlying sett; These often have little spoil outside the holes, have no obvious path connecting them with another sett, and are only used*

[21] Available at https://www.scottishbadgers.org.uk/wp-content/uploads/2020/12/Surveying-for-Badgers-Good-Practice-Guidelines_V1-2020-2455979.pdf

sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the actual entrance hole), which is at least 25 centimetres in diameter, and rounded or a flattened oval shape (i.e. broader than high). Fox and rabbit tunnels are smaller and often taller than they are broad. The average number of holes per outlying sett in the British survey was two.

3.2.4 Classification of holes based on the above methodology is set out as follows:

a) *Well-used holes; are clear of debris and vegetation, sides worn smooth but not necessarily excavated recently.*
b) *Partially-used holes; are not in regular use and have debris e.g. twigs and leaves in the entrance. They could be used after only a minimal amount of clearance.*
c) *Disused-holes; not in use for some time, are partially blocked and could not be used without considerable effort. If the hole has been disused for some time all that may be visible is the overgrown spoil heap and a depression in the ground where the hole used to be. Rabbits and foxes may take over part of a sett and keep disused entrances open.*

Bats

Potential Roost Features

3.4.4 Potential Roost Features (PRF) in trees were assessed as part of the site walkover to those trees within the planning application boundary.

3.4.5 All surveys were conducted from ground level. The surveyor was equipped with a high-powered torch, close-focus binoculars, and camera.

3.4.6 The Bat Survey Good Practise Guidelines (BCT, 2023)[22] were used as a basis to evaluate the surrounding habitat for its potential to support bats.

[22] Collins,J. (ed) (2023) Bat Surveys for Proffessional Ecologists; Good Practice Guidelines (4th Edithion). The Bat Conservation Trust, London

Night-time Bat Walkover survey

3.4.7 Night-time Bat Walkover (NBW) surveys were undertaken to identify the species assemblage within the survey area and to assess the relative importance of the habitat type, and features for commuting and foraging bats.

3.4.8 Three NBW surveys were carried out in 2024 and three in 2025. The weather variables during the surveys are provided in ***Table 2***.

Table 2: Weather variables for the Night-time Bat Walkover surveys.

Date	Time of sunset	Phase of the Moon	Survey start / end times	Weather conditions at start/end
02/05/2024	20:46	Waning Crescent	Start: 21:15 End: 22:45	Start: 18°C, calm, 20% cloud, 39% rH, no precipitation, End: 11°C, calm, 20% cloud, no precipitation,
26/06/2024	21:47	Waning Gibbous	Start: 21:40 End: 21:50	Start: 19°C, no wind, overcast and humid, 48% rH, no precipitation, End: 15°C, no wind, overcast and humid, precipitation,
16/09/2024	19:27	First quarter	Start: 19:15 End: 21:00	Start: 16°C, no wind, 0 cloud cover, 60%rH, 271 Lux. End: 14°C, no wind, 0 cloud cover, 61%rH, no precipitation, 0.02Lux
11/06/2025	21:42	Full Moon	Start: 21:27 End: 22:51	Start: 19°C, no wind, 0 cloud cover, 54%rH, End: 16°C, no wind, 0 cloud cover, 45%rH, no precipitation,
24/07/2025	21:24	New Moon	Start: 21:24 End: 22:25	Start: 18°C, no wind, 0 cloud cover, 54%rH, 136 Lux. End: 16°C, no wind, 0 cloud cover, 45%rH, no precipitation, 0.0046Lux
17/09/2025	19:27	Waning Crescent	Start: 19:15 End: 20:20	Start: 21°C, no wind, 50% cloud cover, 48%rH, 142 Lux. End: 18°C, no wind, 50% cloud cover, 55%rH, no precipitation, 0.0109Lux

3.4.9 The surveys started approximately at sunset and continued for 1 hour and 30 minutes.

3.4.10 Surveyors were equipped with Anabat Walkabout or Scout detectors, to record bat call data for later analysis. During the survey any bat activity was noted by the surveyors, including species, the locations of any emerging bats, flight paths, general activity, commuting, foraging and the timings of these encounters.

3.4.11 Surveyors followed a pre-defined route which had 7 five-minute stopping points. During the second survey the route was followed in reverse.

Automated Static Detector Survey

3.4.12 In addition to the NBW surveys, automated monitoring surveys were undertaken using static bat detectors (Anabat Swift) to record bat activity over continuous periods. These were deployed on trees, there locations and direction of the microphones are shown on in ***Appendix B***. **Table *3*** below shows the dates and periods that the static detectors were deployed.

Table 3 The automated static deployment periods

	Survey 1	Survey 2	Survey 3
Dates	30/04/2024 – 07/05/2024	26/06/2024 – 30/06/2024	16/09/2024 – 23/09/2024
Dates	11/06/2025 – 16/06/2025	24/07/2025 – 04/08/2025	17/09/2025 – 25/09/2025

3.4.13 The detectors were programmed and positioned by an ecologist with suitable training in static detector functionality and deployment.

3.5 Data Analysis

Night-time Bat Walkover survey

3.5.1 Recordings made with the Walkabout and Scout detectors were later analysed in the office by a suitably trained/experienced ecologist using Anabat Insight software. Using the 'Batclassify species auto ID' plugin set at 70% ID certainty threshold to identity species encountered, calls were then manually checked by a competent bat ecologist to ensure ID accuracy.

Automated static detector

3.5.2 In addition to the NBW surveys, automated monitoring surveys were undertaken using four static bat detectors (2x Anabat Swift and 2x Anabat Ranger) to record bat activity

over three continuous periods. These was deployed along potential flight lines of bats i.e hedgerows and treelines.

3.5.3 The recordings from the statics were used to identify species of bat within the site and to measure levels of activity throughout the night. This method is often used to pick up hard to detect bat species such as brown long eared bats which have weak calls and are not always detected using handheld devices.

3.5.4 Upon concluding the survey periods, the detectors were collected from the site. The data was subsequently downloaded and analysed using Anabat Insight, with a manual review conducted by an ecologist possessing appropriate expertise. The static detector data was employed to evaluate the following:

- The species present within the site
- The frequency of bat activity; and
- The frequency of activity for individual species.

3.6 Survey constraints and limitations

3.6.1 During three separate surveys, one static detector malfunctioned. Nevertheless, with a total of four detectors deployed for each survey covering the active survey season, it is deemed that an adequate amount of data was collected.

3.6.2 Records held by local ecological record centres, local recording groups and on the internet are often collected on a voluntary basis; therefore, the absence of records does not demonstrate the absence of species, rather, it may simply indicate a gap in recording coverage.

3.6.3 As the behaviour of wild animals is unpredictable and can change over time, the results of the survey reflect site conditions on the dates of surveys.

3.6.4 No other survey constraints or limitations were identified.

3.7 Consultation

3.7.1 A Pre-Application Enquiry was submitted to CCBC (Ref:DC/ENQ/32353) by Grimster Planning and a response returned on 26th October 2023. The response considered the development to be unacceptable as the application site is in the countryside and beyond the settlement boundary of the Main Urban Area of Conwy and on land not previously developed and designated as a Landscape Conservation Area.

3.7.2 CCBC were also consulted in August 2023 regarding the location of a badger sett located outside the site boundary. The response states that

"If a proposed residential development were to be approved agreement in principle would be granted for the outlier badger sett located on the site boundary to be closed in accordance with a method statement agreed under licence from NRW and compensated with the provision of an artificial sett created in the northern fields adjacent to the ancient woodland compartment. "

3.7.3 The approach to mitigation of the badger sett is described in section 8 of this EcIA.

4. Assessment methodology

4.1 Assessment criteria and assignment of significance

4.1.1 The Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018 v1.3 – updated September 2024) are the current industry standard for ecological assessment and are therefore considered to be current good practice. The assessment of effects on ecological receptors and the assessment of the significance of effects was therefore undertaken in line with the CIEEM guidance.

4.1.2 Ecological impacts are determined by assessing several key characteristics. These include whether the impact is positive or negative, its extent (the geographical area affected), magnitude (size or intensity), duration (how long it will last), frequency and timing (how often and when it occurs), and reversibility (whether the effect can be undone). Positive impacts improve environmental quality, such as increasing species diversity, while negative impacts, like habitat destruction, reduce it.

4.1.3 To assess the significance of an impact, the assessment focuses on how these characteristics affect ecological features. For instance, the removal of a hedgerow may have little impact on the hedgerow itself but could significantly affect species that rely on it, like nesting birds and commuting bats. The timing of an activity, such as during breeding season, can also elevate the impact's significance.

4.1.4 Significant ecological effects are those that either support or undermine biodiversity conservation goals, and they are considered at different geographical scales, from local to international. If significant effects are identified, mitigation, compensation, or enhancement measures are recommended to align the project with conservation objectives. The significance of an impact may influence project approval or require conditions to be imposed to ensure the protection of important ecological features.

4.1.5 A matrix is often used, as shown in ***Table 4*** as to categorise significance of any changes to the baseline according to the environmental value of a specific feature and the magnitude of the expected impact on it. The CIEEM Guidelines avoid and discourage use of the matrix approach and categorisation, unless it forms part of a wider EIA, as such, in this instance.

Table 4: Categories of significant residual effects

		Magnitude of Impact (degree of change)				
Environmental Value (Sensitivity)		**No Change**	**Negligible**	**Minor**	**Moderate**	**Major**
	Very High	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
	High	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

4.1.6 In order to categorise the significance of residual effects, the approach outline in CIEEM has been adopted[23]. This is detailed in ***Table 5.***

Table 5: Categories of significant residual effects

Geographical scale at which the residual effect is assessed as being significant following CIEEM EcIA guidelines	Category of significant residual effect
International, national or regional	Major
Metropolitan, county, vice-county or other local authority wide area	Moderate
Local	Minor

4.1.7 CIEEM states that these categories of significance of residual effect should only be used following completion of the assessment of whether the residual effects are significant or not in terms of conservation objectives or conservation status with reference to an appropriate geographical scale. This table should be used to guide mitigation action at the appropriate geographical scale.

[23] Box, J, Dean, M & Oakley, M (2017) An alternative approach to the reporting of categories of significant residual effects in Environmental Impact Assessment. In Practice – Bulletin of the Chartered Institute of Ecology and Environmental Management 97: 47-50

5. Baseline Ecological Conditions

5.1 Internationally designated sites

5.1.1 There are no sites within the UK National Sites Network5 located within 2 km of the site.

5.2 Nationally designated sites

5.2.1 There are three designated sites located within 2 km of the site as listed in the National Site Network. They are all Sites of Special Scientific Interest (SSSI) within 2 km. There is one designated site for bats within 10 km of the site at Plas Maenan.

5.2.2 There is one Local Nature Reserve (LNR).

5.2.3 Those sites within 2 km are detailed in ***Table 6***. A designated sites location plan is provided in ***Appendix E.***

Table 6 Statutory Designated Sites Within 2 km.

Site name	Designation	Distance from site	Reason for notification
Aber Afon Conwy	Site of Special Scientific Interest (SSSI)	825 m northeast	Aber Afon Conwy is of special interest for its marine and terrestrial invertebrate biology. The tidal reach of the site extends approximately 16 kilometres,
Cadnant	SSSI	830 m north	Cadnant is of special interest for its geology, a complete sequence through the Cadnant Shales. The site consists of rock exposures in a railway cutting immediately outside the town walls of Conwy.
Benarth wood	SSSI	450 m northeast	A mixed deciduous woodland on Silurian rocks adjacent to the Conwy estuary and receiving a low rainfall. The wood is ungrazed and has a diverse ground flora and adequate tree regeneration. Oak (*Quercus petraea*) dominates the estuary edge but is elsewhere co-dominant with Sycamore (*Acer pseudoplatanus),* or Beech (*Fagus sylvatica*). The nationally uncommon Wild Service Tree (*Sorbus torminalis*) occurs.
Eryri	National Park (ENP)	1 km west	Eryri National Park was designated in 1951, primarily for four interconnected reasons stemming from the post-war National Parks and Access to the Countryside Act of 1949. Firstly, it

Site name	Designation	Distance from site	Reason for notification
			was established to conserve and enhance the natural beauty, wildlife, and cultural heritage of the region, protecting its mountains, valleys, forests, and coastline from inappropriate development. Secondly, a core purpose was to promote opportunities for the public understanding and enjoyment of its special qualities; this involved safeguarding public access and recreational uses like walking and climbing. Thirdly, the designation sought to sustain the social and economic well-being of the communities within the park, ensuring that local populations and cultural practices, particularly the Welsh language, were supported. Finally, Eryri was recognised as an area of exceptional historical and geological interest, containing vital evidence of ancient glaciation and human activity, making its protection essential for scientific and cultural study.
Plas Maenan	SSSI	9.70 km south of the site.	Plas Maenan is located 1.5 km east of the village of Dolgarrog and 5 km north of Llanrwst, at an altitude of 50 m. The site is of special interest for its summer and winter population of lesser horseshoe bats. Throughout the year bats use the old cellar-tunnel complex beneath Plas Maenan Hotel, as a nursery roost during the summer and as a hibernaculum over the winter. Plas Maenan is host to one of the largest colonies of lesser horseshoe bats in North Wales, with an average of 170 bats in the summer roost and 50 bats in the winter hibernaculum over the last three years[24]. A substantial proportion of the colony remains to hibernate within the site, though some bats may also be using the old mines nearby.

5.3 Wildlife sites

5.3.1 There are 7 wildlife sites and one Local Nature Reserve within 2 km of the site as detailed in ***Table 7***

[24] It should be noted that surveys conducted in 2024 by the RML surveyor as part of the LHB hibernation and maternity roost counts recorded circa 500 in the summer and 250 in the winter. This indicates an increasing Favorable Conservation Status (FCS) for this site.

Table 7 Non-Statutory Designated Sites within 2 km.

Site name	Distance from site	Reason for notification
Coed Bryn Glorian, Colwyn Bay (WS)	245 m west	Broadleaved woodland
Plas Iolyn grass verge (WS)	500 m south	Roadside verge
Benarth Meadows (WS)	800 m east	Neutral grassland
Gorse Hill Meadow (WS)	1 km southeast	Neutral grassland
Bryn Mawr Woods (C.Hendre,C.Bryn Mawr) (WS)	1 km west	Broadleaved woodland
Coed Bodlondeb (LNR)	1.25 km	No information found
Coed Bodlondeb (WS)	1.25 km north	Broadleaved woodland
Coed Baclan (WS)	1.5 km south	Broadleaved woodland

5.4 Desk Study – Previous reports review

Table 8: Summary of main ecological findings from previous reports

Report	Summary of main ecological findings
EIA Screening Report	• The proposed development covers a total area of 5.31 hectares, which exceeds the 5-hectare threshold for consideration as a Schedule 2 development under the EIA Regulations (Urban Development Projects). While there are no statutory ecological designations (SAC, SSSI, SPA) within the site boundary, the location is deemed environmentally sensitive due to its proximity to significant designations. • The site is predominantly low-value agricultural grazing land, but the perimeter features present specific ecological constraints including woodland and hedgerows, protected species habitat and a watercourse Link. • To mitigate potential effects and aim for biodiversity net gain, the following measures are proposed by the developer: ➢ Biodiversity Enhancement: 2.42 hectares (out of 5.31 ha total) will be retained as open

Report	Summary of main ecological findings
	space and wildlife meadow areas. The upper slopes will be retained and managed as wildflower meadows. ➢ swales and surface water attenuation basins. ➢ Further measures, such as the use of low-level lighting and the provision of bat and nesting bird boxes, will be considered during detailed design stages to address species-specific impacts identified in subsequent surveys. ➢ A Construction Environmental Management Plan (CEMP) is proposed to set out suitable mitigation measures to control emissions and waste during the build phase.
Badger	• Surveys carried out in 2023 observed an outliner sett within the western woodland block which was classified as partially used. • Discussions with the Local Planning Authority Ecologist, agreed that a licence would be required to close the sett. • The activity surveys in 2025 have confirmed an increase in activity at this sett with multiple individual badgers captured at the same time on camera. • Badger guard hairs were found on the fence near to the sett and on the fence at the top of the slope between the lower and middle fields. • As a direct consequence of the 2025 monitoring, the sett's official classification has been elevated from 'partially used' to 'used'. This change in status confirms the sett's active role in supporting the local badger population, granting it full protection under the Protection of Badgers Act 1992. Critically, the sett must therefore be retained and protected in its current state. Any proposed development or ground-disturbing activities that could disturb, damage, or destroy the sett, or that are planned within the surrounding buffer zone, will now be subject to a licence issued from NRW.
Bats	• The bat survey carried out by Richards, Moorehead & Laing Ltd. aimed to determine the presence, distribution, and activity of bats within and adjacent to the proposed development site. • a series of transect surveys and static detector monitoring visits across the main bat activity season (May to September). • The survey determined that the site's primary value to bats is as a foraging resource and as a

Report	Summary of main ecological findings
	commuting corridor connecting off-site roosts to wider habitats. ➢ Commuting Routes: Bat activity was concentrated along the most mature, continuous features: ➢ The eastern boundary woodland (highest activity). ➢ The hedgerow and tree lines between the lower field and middle field. ➢ Potential Roosting Features (PRFs): Several mature trees were identified as having features (e.g., rot holes, cracks, lifted bark) that make them suitable as PRFs. While no bats were recorded emerging from them. • Due to the PRFs and the use of the site as a foraging resource, all works involving the felling of mature trees or the removal of hedgerows must adhere to a Precautionary Method of Working (PMOW) to minimise the risk of encountering and disturbing bats.
Birds	• Breeding Bird Surveys (BBS) were conducted during the 2024 season to establish the avifaunal baseline within the proposed development site. • The assessment concluded that the development area does not pose a significant risk to the breeding success of Schedule 1 protected birds (those with the highest legal protection). • **Barn Owl**: While recorded incidentally on site, no trees or structures within the site or the 50 m buffer zone were identified as having potential suitability for Barn Owl nesting. The northern field does offer suitable foraging habitat. • **Goshawk:** A potential Goshawk was observed displaying over the wider 500m buffer zone, and desk study records exist. However, the woodland immediately adjacent to the east of the site was deemed suboptimal and unlikely to support a breeding pair on a conservative basis. • Other Schedule 1: No evidence of breeding activity by any other Schedule 1 species was recorded within the site or its associated buffer zones. • The most significant residual impact will be the disturbance and potential displacement of generalist nesting birds (e.g., passerines) utilising the retained peripheral scrub and woodland during the construction phase.
Trees	• The tree stock at the site primarily consists of mature specimens, including Oak (*Quercus*

Report	Summary of main ecological findings
	robur) and Sycamore (*Acer pseudoplatanus*), predominantly located along the site's boundaries. The majority of these surveyed trees are generally in Fair condition, indicating both sound structural integrity and good health, with many expected to provide long-term amenity value for twenty years or more. Following the BS 5837:2012 classification, the trees fall into two main categories: Category B (Moderate Quality) and Category C (Low Quality). Category B trees, such as the large Sycamores T76 and T77, are considered desirable for retention due to their significant contribution to the landscape, while Category C trees, such as T73 through T75, are of lower amenity value but are still suitable for retention unless they pose a direct conflict with the development layout.

5.5 Desk study results – habitats

5.5.1 The following habitat records were returned for the site (within the last 10 years) from COFNOD (JNCC alphanumeric codes in parentheses).

- Semi natural broadleaved woodland (A1.1.1).
- Improved grassland (B4).

5.6 Desk study results – protected and notable species

5.6.1 The following section presents the findings of the desk study (species records within 2 km of the site within the last 10 years) from COFNOD

Badger

5.6.2 There were 17 records returned for badgers within the last 10 years and within 2 km of the site. This confirms a presence of the species in the local area. Two records were on the development site itself. An outlier sett was recorded within the western woodland, situated adjacent to the B5106 Llanrwst Road.

5.6.3 Off-site activity, recorded in February 2025, notably, three separate setts were recorded within the grounds of the caravan park located immediately to the south of the site. Furthermore, a main badger sett was identified, located approximately 1,135 metres to the southeast of the site. This main sett was, characterised by 14 visible holes, suggesting a large and well-established social group. The clustering of these multiple setts—including the outlier, the three park setts, and the main sett—in close proximity strongly

suggests a locally active badger population that relies on the surrounding landscape, including the study site, for foraging and movement corridors.

Bats

5.6.4 There were 12 records returned for bats within the last 10 years and within 2 km of the site. There were no records returned within the site. Recent survey data from nearby locations confirms the presence of several protected bat species in the immediate vicinity. An emergence survey conducted approximately 700 metres from the site in 2018 identified two common species utilising a nearby structure for roosting, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*). Thirteen individual soprano pipistrelles were recorded emerging during the same survey, confirming a small breeding or transitional roost of this species. Furthermore, records from 2023 at a location 930 metres southeast included the presence of Whiskered/Brandt's Bat (*Myotis mystacinus/ M. brandtii*) and the Brown Long-eared bat (*Plecotus auritus*). The presence of these species, which often forage along linear features like treelines, watercourses, and hedgerows, suggests that the site's habitats may contribute to the local foraging resource.

5.6.5 The COFNOD data highlights a long-term roost at Monar House, Gorse Hill Park, 1.5 km east of the site, where surveys have been undertaken annually from 2008 to 2024. Records from this roost demonstrate a fluctuation in population size, ranging from a minimum of 26 individuals to over 200 individuals. The proximity and size of this established roost underscore the importance of maintaining habitat connectivity and quality in the local landscape to support the regional bat population.

Birds

5.6.6 There were 1,846 records of bird species within 2 km of the site within the last 10 years. Of particular note are four records confirming the presence of protected or notable bird species within the redline boundary of the development site:

- **Barn Owl** (*Tyto alba*) recorded in 2024: A Schedule 1 protected species known to utilise open habitats for foraging.
- **Chough** (*Pyrrhocorax pyrrhocorax*) recorded in 2022: A species associated with coastal and upland grazing habitats.
- **Red Kite** (*Milvus milvus*) recorded in 2021: A large raptor, protected under Schedule 1.
- **Tawny Owl** (*Strix aluco)* recorded in 2023: A common nocturnal species that relies on mature woodland or large trees for nesting and roosting.

5.6.7 The majority of the bird records were clustered to the northeast of the site, associated with the Conwy Estuary and the Afon Conwy river system.

5.6.8 Given the mobility of avian species, it is highly probable that many of the species detailed in the full list provided in ***Appendix C*** may, at times, utilise habitats within the redline boundary for foraging, passage, or nesting.

5.6.9 The existing habitat features on site, specifically the hedgerows and mature trees, provide suitable nesting and foraging habitat for a range of common and protected breeding bird species.

Hedgehog

5.6.10 The search of historical records for the hedgehog (*Erinaceus europaeus*), a species of principal importance in Wales, within a 2 km radius of the site over the last 10 years returned 32 records.

5.6.11 The nearest record to the development boundary is located approximately 180 metres to the west of the site. This specific record was for one adult individual.

Invertebrates

5.6.12 There were 139 species of invertebrate returned within 2 km of the site in the last 10 years. no records were returned for within the site; the harlequin ladybird (*Harmonia axyridis*) was recorded within 2 m of the northern boundary in 2016. A full list of invertebrates can be found in ***Appendix C***.

Reptiles and amphibians

5.6.13 A search of historical records for reptiles and amphibians (herpetofauna) within a 2 km radius of the site over the last 10 years returned a total of 19 records. No records were returned specifically for the development site boundary itself.

5.6.14 The records confirm the presence of several protected and common herpetofauna species within the local area:

- Common frog (*Rana temporaria*): A breeding event was recorded approximately 610 metres to the north of the site, involving 10 copulating pairs of frogs. This indicates a functioning local breeding pond or waterbody.
- Palmate newt (*Lissotriton helveticus*): This amphibian was recorded approximately 724 metres to the north.
- Slow worm (*Anguis fragilis*): An individual was observed approximately 780 metres to the north, within short grassland adjacent to a footpath.

- Common lizard (*Zootoca vivipara*): Multiple adult individuals were recorded approximately 1.1 km to the south.
- Grass snake (*Natrix helvetica*): Evidence of this species was confirmed via the observation of a shed skin approximately 1.2 km to the south.
- Great crested newt (GCN) (*Triturus cristatus*): A single adult male GCN, a European protected species, was recorded in 2015 approximately 1.3 km to the west.

Otter

5.6.15 A search of historical records for the otter (*Lutra lutra*), a species fully protected under the Wildlife and Countryside Act 1981 (as amended) and listed on Schedule 5, within a 2 km radius of the site over the last 10 years returned seven records.

5.6.16 These records confirm the presence of otters within the local river network. Five of the seven records are associated with the Afon Gyffin. The remaining two records are associated with the larger Afon Conwy.

INNS

5.6.17 There were 264 records returned for INNS species, no records of INNS were returned specifically for the development site boundary (redline area) itself. However, the survey data did confirm the presence of an INNS immediately adjacent to the site, A record for this widespread, predatory INNS was returned less than 5 metres from the northern boundary of the site.

5.7 Field study results – habitats

5.7.1 The surveyed site area comprises pasture grassland, woodland blocks and hedgerows. The site is bounded to the west and south by hedgerows, to the north is a line of trees with a woodland edge to the east. To the west the site is bordered by the B106 Llanrwst road, and associated communities such as Gryffin and Conwy. The semi-natural habitats on the site are managed as agricultural land.

5.7.2 The main habitats recorded within the surveyed site are described in the following paragraphs and illustrated on the plan provided in ***Appendix B***. JNCC habitat codes are presented in parenthesis.

Broadleaved woodland (A1.1.1)

5.7.3 Two distinct blocks of broadleaved woodland are present on the site, situated along the eastern and western boundaries, both blocks of woodland are Tree Preservation Order (TPO). The eastern woodland block is generally situated on a gentler slope. The canopy is

characterised by a mix of native and non-native mature trees. Dominant canopy species observed include ash (*Fraxinus excelsior*), oak (*Quercus species*), and sycamore (*Acer pseudoplatanus*). The understorey and scrub layer feature typical broadleaved species, including Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*), and elder (*Sambucus nigra*).

5.7.4 The western woodland block is located on a steep, slope adjacent to the boundary. The dominant canopy and understorey composition mirror the eastern block, ash, oak, sycamore, Holly, Hazel, and elder. A stream runs along the base of this western slope. This watercourse enhances the habitat value of the western woodland block, creating a riparian corridor.

Scrub – dense/continuous (A2.1)

5.7.5 The site contains areas of dense scrub habitat, the most dominant scrub species on the site is gorse (*Ulex europaeus*). This habitat is most notably located on the uppermost slopes of the lower field.

Semi improved grassland (B2.2)

5.7.6 The lower field where the development is proposed has ecological structure and species composition is indicative of a history of low intensity grazing by stock, resulting in a sward of moderate diversity. Species within the grassland consists of Yorkshire gog (*Holcus lanatus*), various species of fescue (*Festuca spp.),* and foxtail (*Alopecurus spp*.). red clover (*Trifolium pratense),* pignut (*Conopodium majus*), and Bird's-foot Trefoil (*Lotus corniculatus*) creeping thistle (*Cirsium arvense*), dock (*Rumex spp.),* ribwort plantain (*Plantago lanceolata*), and ground speedwell (*Veronica persica*).

Poor semi improved grassland (B6)

5.7.7 The proposed development located across the upper and middle fields of the site, which are classified as poor semi-improved grassland. These fields are currently managed through low-to-moderate intensity grazing by sheep and/or horses. This grazing pressure has resulted in a sward of low diversity and reduced ecological value compared to semi-improved grassland. species include Yorkshire fog various species of fescue meadow buttercup (*Ranunculus acris*) and dock.

J2.1.1 Intact hedgerow – species rich

5.7.8 Some of the site boundaries are mature, intact hedgerow features, with specific examples including Hedgerows HR1, HR2 and HR3. These linear features are classified as Species-Rich Intact Hedgerows demonstrating at least seven woody species. Structurally, these hedges are mature and well-developed, with an average height of 2.0 m and an average width of 3.0 m. They exhibit an untrimmed, overgrown, and leggy structure, which is ecologically valuable as it provides dense cover. The presence of several mature standard

trees integrated within the hedgerow lines further enhances the structure, offering additional ecological benefits, such as potential roosting or nesting sites. Post-and-wire fencing runs through the majority of these features, confirming their role as stock boundaries.

5.7.9 The high ecological value of these hedgerows is reinforced by specific features and ecological observations. Hedgerow HR1 is particularly notable for it is adjacent to a ditch, and during the site survey, a common frog, (*Rana temporaria*) was observed within the associated wet grassland sward, confirming the habitat importance for herpetofauna. Furthermore, HR3 is defined as a double hedgerow, where two parallel lines of hedge are separated by a fence, which significantly increases its functional width and buffering capacity as a wildlife corridor. Collectively, these intact, species-rich hedgerows serve as vital linear habitat features and movement corridors, maintaining essential landscape connectivity for commuting fauna, including protected species such as bats and small mammals.

5.7.10 Species noted during the survey include: sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*), elder (*Sambucus nigra*), Hazel (*Corylus avellana*), cherry (*Prunus sp.*), blackthorn (*Prunus spinosa*), hawthorn, gorse (*Ulex europaeus*), Willow (*Salix spp*)., dog rose (*Rosa canina*), bramble, honeysuckle *(Lonicera periclymenum*), Ivy, Common Nettle, Cleavers, Dock, cow parsley (*Anthriscus sylvestris*), red campion (*Silene dioica*), hedge bindweed (*Calystegia sepium*), Foxglove (*Digitalis purpurea*), Lords-and- Ladies (*Arum maculatum*), Dandelion (*Taraxacum agg*)., Daisy *(Bellis perennis*), Ground-ivy (*Glechoma hederacea*).

Defunct hedge – native species rich J2.2.1

5.7.11 Hedgerow HR4 and HR5 were treelines and HR6 was mature trees and hedge line all were species rich with a post and wire fence; there were mature trees with low bat roost potential, but all are good commuting and foraging habitat for bats as well as providing opportunity for nesting birds.

5.7.12 Species noted included horse chestnut (*Aesculus hippocastanum*) black thorn, sycamore, hawthorn, Hazel, oak, ash, meadow buttercup, clover, gorse

Fence

5.7.13 Post and wire fences either as standalone barriers or in association with species-poor hedgerows are present around the site. None were considered to have any ecological value.

5.8 Hedgerow Regulation Assessment

Table 9: Hedgerow Assessment HR1 – HR6

Criteria description[25]	HR1	HR2	HR3	HR4	HR5	HR6
The hedge has existed for 30 years or more	Yes	Yes	Yes	Yes	Yes	Yes
The hedgerow contains protected or otherwise notable species[26]	None highlighted though, hedgerow contains habitat for nesting birds and small mammals. Bats recorded close by are likely to use the hedgerows for foraging and commuting.	Yes. Bats recorded foraging and commuting along the hedgerow. Likely to contain habitat for nesting birds and small mammals.	Yes. Bats recorded foraging and commuting along the hedgerow. Likely to contain habitat for nesting birds and small mammals.	Yes. Bats recorded foraging and commuting along the hedgerow. Likely to contain habitat for nesting birds and small mammals.	Yes. Bats (including lesser horseshoe bats) recorded foraging and commuting along the hedgerow. Likely to contain habitat for nesting birds and small mammals. Badger seen commuting through and along hedgerow.	Yes. Bats recorded foraging and commuting along the hedgerow. Likely to contain habitat for nesting birds and small mammals.
The hedgerow includes:						
at least 7 woody species/30 m	Yes	Yes	No	No	No	No

[25] Please refer to the Hedgerow Regulations for the full explanation http://www.legislation.gov.uk/uksi/1997/1160/contents/made, this is a summary
[26] Presence of protected animal and plant species within the last 5 years as identified from the Cofnod data and surveys conducted in 2019 and 2020.

Criteria description[25]	HR1	HR2	HR3	HR4	HR5	HR6
at least 6 woody species/30m and at least 3 features (refer to the key for a list of features)	Yes	Yes	Yes	No	Yes	Yes
at least 6 woody species/30m, including one of the following—black-poplar tree (*Populus nigra* ssp *betulifolia*); large-leaved lime (*Tilia platyphyllos*); small-leaved lime (*Tilia cordata*); wild service-tree (*Sorbus torminalis*)	No	No	No	No	No	No
at least 5 woody species and has associated with it at least 4 features.	Yes	Yes	Yes	No	No	Yes

Key
Features:

• Bank/wall: The hedgerow is supported along at least half of its length by a bank/wall
• Intact: The hedgerow contains less than 10% gaps in total along its length
• Trees: The hedgerow supports at least 1 standard tree per 50 m length
• 3 flora spp.[27]:The hedgerow supports at least 3 of the valuable ground flora species defined by the Regulations.
• Ditch: There is a ditch along at least half of the length of the hedgerow
• Connections ≥4 points: A hedgerow must score 4 or more 'connection points' where connections with an adjoining hedgerow(s) score 1 point each, and a connection with a pond or woodland (in which the majority of the trees are broad-leaved) scores 2 points each. A hedgerow is considered to be connected if it meets the feature, or if it has a point within 10 m of it and would meet it if the line of the hedgerow continued
• Parallel hedge: A parallel hedgerow is present within 15 m

[27] Valuable ground flora species within the Hedgerow Regulations (1997)

5.9 Field survey results - Priority habitats

5.9.1 ***Table 10*** lists the habitats found within the surveyed area and whether these habitats are listed as Priority Habitats in Section 7 of the Environment (Wales) Act 2016[28].

Table 10: Summary of Priority Habitats

Habitat Ref	Habitat Description	Priority Habitat	Site Context/Justification
A1.1.1	Broadleaved woodland plantation	✓	Woodland blocks of deciduous woodland are present along the edge of Llanrwst Road and the eastern boundary.
A2.1	Dense/continuous scrub	x	The dense scrub was dominated by gorse, located on the upper slopes of the lower field.
B2.2	Semi-Improved neutral grassland	x	Semi-improved neutral grassland is found within the lower field, species-poor grassland with an area of wetter grassland in the northwest corner of the field.
B6	Poor semi-improved grassland	x	Poor semi-improved neutral grassland is found within the middle and upper fields, species-poor grassland used for grazing sheep and horses.
G1	Running water	✓	Unnamed stream flowing south to north along the western boundary of the site within the western woodland block.
J2.1.1	Intact hedgerow – species rich	✓	HR1, HR2 and HR3 are intact species rich hedgerows with mature trees within them especially HR1 which has a TPO veteran oak tree. HR! and HR2 are along the boundary with the B106 Llanrwst Rd and HR3 transects the site from east to west forming the boundary between the upper and middle fields.

[28] Available at https://www.biodiversitywales.org.uk/environment-wales-act

Habitat Ref	Habitat Description	Priority Habitat	Site Context/Justification
J2.2.1	Defunct hedge – native species rich	✓	HR4, HR5 and HR6 are defunct species rich hedgerow/treelines. HR6 is a line of trees which are grouped together under a TPO.
J2.4	Fence	x	Widespread but devoid of ecological value.
Key: ✓ Listed as priority habitat X Not listed as priority habitat			

5.10 Field study results – protected and notable species

5.10.1 The following section presents the findings of the ecological surveys conducted on the 21st May 2024.

5.10.2 Where a species or species group has been omitted, this is due to there being no evidence or no suitability on site to support the species and as such are not considered to be affected by the development proposals.

Badger

5.10.3 Badger activity, a legally protected concern under the Protection of Badgers Act 1992, was confirmed across the middle and lower fields. A badger sett was located on the steep slopes of the middle field, positioned towards the western boundary within the established TPO riparian woodland block.

5.10.4 Initial walkover surveys in 2024 classified this as a 'partially used' sett. Following subsequent targeted surveys in 2025, the status of the sett was officially upgraded to 'used,' reflecting an increase in clear evidence of activity and consistent occupancy.

5.10.5 Evidence confirming the active status of the social group includes:

- **Sett Structure:** The primary sett, located on the field slope, exhibits well-worn entrances and spoil heaps consistent with active excavation.
- **Commuting Routes:** Numerous mammal trails were identified, notably along habitat Feature (HR5), with trails continuing north towards and traversing the gorse scrub at the top of the lower field.
- **Field Signs**: Guard hairs were observed adhering to the wire fence bordering the woodland edge, directly corresponding with the identified mammal trails.

Furthermore, observations of foraging activity (snuffle holes) and the presence of territorial latrines (found outside of the redline boundary) confirm the extent of the badgers' home range across the development parcel.

5.10.6 The continued presence and active status of the sett were confirmed through automated trail camera monitoring. Footage captured multiple badgers in the immediate vicinity of the sett entrance, providing evidence of current on-site use by the social group.

Bats

5.10.7 The site's linear features and trees were assessed for their function in supporting the local bat population, which is confirmed to include multiple species (e.g., common and soprano pipistrelle, myotis sp, brown long eared and Lesser horseshoe bats) in the immediate area.

5.10.8 The hedgerows and treelines, both along the site boundaries and within the development area, are considered ecologically valuable linear features, providing good quality foraging resources and forming essential commuting corridors for the local bat assemblage.

5.10.9 These linear features act as corridors linking the site's habitats (such as the woodland blocks and scrub) to the wider, landscape. Bats use these features to commute efficiently between roosting sites and distant foraging grounds. The retention and enhancement of these hedgerows are therefore essential to mitigate habitat fragmentation and preserve regional ecological connectivity.

5.10.10 There are no buildings on site to provide roosting opportunities to bats.

Birds

5.10.11 The woodlands, hedgerows, and scrub all provide suitable nesting and foraging habitat for birds. Birds were not in abundance during the walkover surveys. Those species commonly encountered included crow (Corvus corone), feral pigeon (*Columba livia*), magpie (*Pica pica),* Additional species of note comprised buzzards (*Buteo buteo*) were noted in the general area, flying at height. Of particular interest were a barn owl (*Tyto alba*) was observed flying low over the lower field during a bat survey. This species is listed on both Schedule 1 and 9 of the WCA 1981. Also, during a bat survey, a tawny owl fledgling was found on the ground next to HR5.

5.10.12 During the habitat and bat surveys across the site, a diverse array of avian species was recorded, buzzard (*Buteo buteo*) was noted, and the nocturnal activity was confirmed by the observation of tawny owl (*Strix aluco*) and an incidental observation of a barn owl (*Tyto alba*) during a bat transect survey. The hedgerows and scrub habitat were utilised by several small birds including the Robin (*Erithacus rubecula*), wren (*Troglodytes troglodytes*), blue tit (*Cyanistes caeruleus*), and sparrow species. Furthermore, species

associated with open-air foraging and common urban areas, such as swallow (*Hirundo rustica*), blackbird (*Turdus merula*), and pigeon species, were also confirmed to be present within the site.

5.10.13 A specific breeding birds survey was commissioned: Breeding Bird Survey Report (Version 3) 19th September 2024 by Biome

Hedgehog

5.10.14 This species could utilise the site boundaries and areas of habitat such as within hedgerows and dense scrub for foraging and dispersal into the wider landscape.

Invertebrates

5.10.15 The majority of the site is defined by poor semi-improved grassland, which is maintained at a low sward height through grazing by sheep and horses. This extensive habitat is considered to offer negligible value for invertebrate fauna, with significantly higher ecological value being concentrated within the established areas of woodland and the adjacent stream corridor, both of which are planned for retention in the development proposals.

Reptiles and amphibians

5.10.16 The site's overall suitability for supporting reptile and amphibian's species is considered to be low. This is primarily because of the land management practice of livestock grazing, which maintains the poor semi-improved grassland at a consistently low sward height. Such heavily grazed conditions limit the development of dense, tussocky vegetation—the essential structure required for thermoregulation, refuge, and successful foraging by native species. The lack of suitable habitat variety for, basking opportunities, and cover minimises the likelihood of these species being present.

5.10.17 A comprehensive review of aquatic features determined that no static water bodies (ponds) are present either within the site boundary or within a 250-meter surrounding buffer zone. This complete absence of suitable breeding habitat severely restricts the potential for the site to support GCN (*Triturus cristatus*) or other pond-breeding amphibian species. Terrestrial habitats, while potentially utilised for overwintering by amphibians from external sources, are isolated from functional aquatic breeding sites, thus rendering the site sub-optimal for these species.

5.10.18 During the phase 1 survey a common frog was observed within the damp grass associated with the ditch near HR1.

Otter

5.10.19 While otter populations in Wales have experienced a recent decline, the presence of a watercourse immediately adjacent to the site necessitates consideration of the species' potential occurrence. However, following terrestrial surveys, no field signs attributable to otters, such as spraints, slides, or resting places were observed. Crucially, a dedicated monitoring effort involving the deployment of a trail camera along the watercourse in 2024 yielded no photographic or video evidence to confirm current usage of the watercourse by otters within the vicinity of the site.

5.11 Priority and notable species

5.11.1 ***Table 11*** lists the species with known presence or potential to be present on the site which are Priority Species listed on Section 7 of the Environment (Wales) Act 2016 or are considered notable and relevant to the site in question. The Act places duties on Welsh ministers to list species considered to be of key significance to Welsh biodiversity.

Table 11: Summary of Priority Species

Species group	Species	Site Context
Reptiles	Slow worm Common lizard	Some limited suitable habitats on site.
Amphibians	Common frog Common toad Newts	No suitable breeding habitat on site. Nearest pond located over 250 m from the site. Potential habitat for dispersal and foraging into the wider landscape. Recorded in local resident's gardens. One common frog observed onsite during the Phase 1 survey in May 2024.
Birds	Barn owl Tawny owl Red kite Chough	The streams, semi-improved grassland, trees, and woodland provide suitable nesting and foraging habitat for birds.
Mammals	Bats	Roosts not known to be present on site. The existing grassland and treelines provide foraging opportunities while the hedgerows and treelines provide good quality commuting corridors and connectivity to the wider landscape.

Species group	Species	Site Context
	Badger	Commuting/foraging within of the site, along hedgerows. An active used outlier sett is located within the western woodland block adjacent to the B5106. Badgers were observed on trial cameras using the sett and commuting along HR5. Guard hairs were observed on the fence bounding the woodland block and on the fence boundary between the middle and lower fields.
	Hedgehog	Suitable habitat within the field boundaries and scrub habitat.
	Otter	No field signs attributable to otters, such as spraints, slides, or resting places. Crucially the deployment of a trail camera along the watercourse in 2024 yielded no evidence to confirm current use of the watercourse by otters.

5.12 Summary evaluation of ecological baseline

5.12.1 Assessing the ecological impacts of the development by considering every species and habitat which could potentially be affected is impractical. Instead, the focus should be on 'Valued Ecological Receptors' (VERs), selected based on criteria such as legal protection, designation, rarity, and the degree to which they me be significantly impacted by the development. Species and habitats which, according to baseline findings, are widespread, not threatened, resilient to the development's effects, and expected to remain viable and sustainable have been excluded from the assessment. A summary of VERs identified and included within the assessment, and the justification for this is provided in ***Table 12***.

Table 12: Summary of Valuable Ecological Receptors (VERs)

Receptor	Valve	Justification	VER
Statutory Designated Sites – Site of Special Scientific Interest (SSSI)			
Cadnant	**High – National**	No effects on the features of the habitat/geology are envisaged due to location of the site from the development, the small footprint of the proposals	X – scoped out
Aber Afon Conwy	**High – National**	Potential hydrological link via stream and culvert from site to Afon Gyffin that flows into the River Conwy approximately 850 metres north-east.	✓ - scoped in
Benarth wood	**High – National**	No effects on the features of this habitat are envisaged due to location of the site from the development, the small footprint of the proposals and lack of hydrological link.	X – scoped out

Receptor	Valve	Justification	VER
Eryri		No effects on the features on the habitats of the national park are envisaged due to location of the National Park from the development, the small footprint of the proposals and lack of hydrological link.	X – scoped out
Non-statutory Designated Sites – Wildlife Sites and Local Nature Reserves			
Coed Bryn Glorian, Colwyn Bay	**Local**	No effects to the woodland are envisaged due to location of the site from the development.	X – scoped out
Plas Iolyn grass verge	**Local**	No effects to the roadside verge are envisaged due to location of the site from the development.	X – scoped out
Benarth Meadows	**Local**	No effects to the grassland habitats are envisaged due to location of the site from the development.	X – scoped out
Gorse Hill Meadow	**Local**	No effects to the grassland habitats are envisaged due to location of the site from the development.	X – scoped out
Bryn Mawr Woods (C.Hendre,C.Bryn Mawr)	**Local**	No effects to the woodland are envisaged due to location of the site from the development.	X – scoped out
Coed Bodlondeb (LNR)	**Local**	No effects to the woodland are envisaged due to location of the site from the development.	X – scoped out
Coed Bodlondeb	**Local**	No effects to the woodland are envisaged due to location of the site from the development.	X – scoped out
Coed Baclan	**Local**	No effects to the woodland are envisaged due to location of the site from the development.	X – scoped out
Priority Habitats			
Broadleaved semi natural woodland	**Local**	The site has two blocks of TPO semi-natural broadleaved woodlands, one to the east and the second along the western boundary.	✓ - scoped in
Running water	**Local**	An unnamed stream flows adjacent to the eastern boundary of the site and into a culvert at the northeastern corner of the site.	✓ - scoped in
hedgerows	**Local**	There are several intact species rich and defunct species rich hedgerows within the site and along the boundaries.	✓ - scoped in
Species (Fauna)			
Great Crested Newt	**Regional – Medium**	A search of the site and the surrounding land within a 250-meter radius has confirmed the absence of ponds, which are a required feature for the breeding and larval development of the GCN. Despite the absence of breeding ponds, the site maintains some potential for supporting GCN (and other amphibian species) in its terrestrial phase. This potential is associated with the areas proposed for retention within the development boundary,	X – scoped out

Receptor	Valve	Justification	VER
		such as the woodland edges, areas of dense scrub, and riparian corridors adjacent to the stream.	
Other amphibians and reptiles	**Local**	No suitable breeding habitat within the site. Sub-optimal habitat for dispersal, foraging and refugia. One common frog observed incidentally on site during the Phase 1 habitat survey.	✓ - scoped in
Bats	**Regional – Medium**	Suitable foraging and community habitat within the redline boundary. No buildings on site. There is potential connectivity to the Plas Maenan SAC which has lesser horseshoe bats are a feature of interest. The site lies 10 km to the south.	✓ - scoped in
Birds	**Local**	A barn owl (*Tyto alba*) was observed flying across the lower field this species is listed on Schedule 1 of the WCA 1981.	✓ - scoped in
Otter	**Local**	Otters have not previously been noted (from desk study data) on the site. As the species has been recorded in the river catchment along both the Afon Conwy and Afon Gyffin, travel routes could theoretically include animals wandering up into the site when crossing between watercourses.	X – scoped out

5.12.2 Where a species or habitat has been 'scoped out' consideration will still be given to safeguarding biodiversity in general in order to comply with relevant plans, policies and initiatives. For example, all habitats listed in ***Table 10*** which are not Priority habitats, but are of local importance, flora, badgers, reptiles, invertebrates and hedgehogs are not considered to be VERs but are considered important in terms of their biodiversity value and so general mitigation measures are recommended in ***Section 8***.

6. Description of Proposed Development

6.1 The Proposed Development

6.1.1 Adra (the Applicant) is a North Wales' housing association providing quality, energy efficient homes in North Wales. The development proposals for the site at Llanrwst Road is for 95 No. affordable homes comprising of ten different house types as set out in the table below: -

House Type	Description	House Type	Number of dwelling units
A/B	2 person/1 bedroom apartment	Terraced	30
C	4 person /2-bedroom apartment	Block	10
D	4 person /2-bedroom dwelling	Semi – Detached	12
E	3 person/2-bedroom apartment	Block	12
F	3 person/2-bedroom dwelling	Semi-Detached Bungalow	2
G	5 person/3-bedroom dwelling	Block	1
H	5 person/3-bedroom dwelling	Terrace	2
J	5 person/3 dwelling	Semi-Detached	21
K	6 person/4-bedroom dwelling	Semi-Detached	4
L	8 person/5-bedroom dwelling	Detached	1
		Total Dwellings	**95**

6.1.2 The dwellings would be typically one or two storeys in height and predominantly detached and semi-detached houses with the occasional terrace, bungalow and apartments. Parking courts are provided to the south-west corner of the site where density can be increased while off street parking is located along the access road which splits into two cul-de-sacs further north. The site would be accessed off Llanrwst Road towards the southern end of the site carefully located to avoid an existing mature oak tree.

6.1.3 The proposed layout responds to the topography of the site with the main access road following the contours in a meandering north-south alignment to provide a flowing natural streetscape set within the lower sections of the site. The site has been developed to balance the quantity of groundworks in the form of cut and fill. Tiered gardens and retaining structures will also assist with the change in level and assist in softening the development and retaining structures within the landscape when viewed from the Castle walls to the north.

6.1.4 An active travel shared use route would connect the proposed development with the streetscape of Gyffin to the north and provide opportunities for non-motorised users to access the wider footpath network to Conwy town centre.

6.1.5 The existing woodland to the west and the upper Bryn Seiri woodland to the east would be retained and protected. The proposed development would result in the unavoidable loss of some sections of hedgerows and hedgerow trees in the central section of the site. The existing hedgerows to be lost would, if practicable, be translocated and replanted on the upper slopes and along southern boundary of the site.

6.1.6 The upper fields of the site, currently grazed by sheep and horses, would be retained and managed as wildflower meadows to provide biodiversity benefits. The lower slopes of the meadows would be terraced with crib lock retaining walls (circa 3 metres high) to manage the change in levels.

6.1.7 Native hedgerow planting would follow the alignment of the retaining walls providing inter-connecting strong linear landscape features and wildlife corridors through the central sections of the site. A wildlife corridor would be formed within the central section of the site connecting the woodland to the west with the Bryn Seiri woodland to the east. An artificial badger sett would be provided at the top of the lower field close to Bryn Seiri wood within which evidence of badger activity has been recorded. Surface water run-off would be controlled by a series of swales running in a north-south alignment through the upper meadows.

6.2 Timescales

6.2.1 The development would be delivered in three distinct phases. There are currently no timescales known for the commencement of the development as this would be subject to the planning application being approved.

6.3 Habitat creation

6.3.1 The development proposals incorporate the retention of the existing woodlands to the east and west of the site and the provision of additional hedgerow planting along the northern and southern boundaries of the site. Additional hedgerow planting would also be provided along an east-west axis through the upper sections of the site. Wildflower meadows would be created and managed as part of the public realm within the parameters of the development.

6.4 Aftercare and monitoring

6.4.1 The 'Applicant' Adra would be responsible for the care and maintenance of the public realm in areas not adopted by the local authority. Tenants or homeowners would be responsible for the maintenance of the private outdoor space.

7. Potential impacts and mitigation measures

7.1 Background

7.1.1 In accordance with current CIEEM guidelines, only impacts that are likely to be significant need to be examined in detail. Impacts that are unlikely to occur, or that would likely be insignificant if they did occur, can be excluded from the assessment.

7.1.2 Where uncertainty exists, it is prudent to assess the potential impact to ensure thoroughness and that has typically been the case here. Furthermore, the EcIA need only evaluate and report significant residual effects that remain after implementing mitigation measures. However, it is considered best practice to, transparently present both the initial potential significant effects before mitigation and the remaining significant effects after mitigation has been applied. This approach ensures that the full impact of the proposed development of the site is clear, while focusing on the most relevant outcomes.

7.1.3 Potential effects which could arise from the development include the following:

- Direct mortality and disturbance to protected and notable species.
- Direct loss of and disturbance to habitats; and,
- Noise, disturbance, and risk of pollution during development.

7.1.4 This section aims to evaluate the potential impacts of the proposed development on significant ecological features, or "valuable receptors," highlighted as important in the baseline conditions.

7.1.5 Each valuable receptor will be considered, along with the impacts of the development which could potentially have significant impacts on them. For each receptor, this is followed by a description of the mitigation measures which are known to be included in the proposed plans and at which level of the mitigation hierarchy they exist.

7.2 Mitigation hierarchy

7.2.1 The approach to mitigation is based on a hierarchy and step wise approach which places avoidance of significant impacts as the most preferable, while compensation, which is in some circumstances, the least effective and least preferable option to compensate for losses. In between these are minimise and mitigate/restore. With regards to this proposal, the objective is to develop the site to avoid/retain/enhance/protect areas which already have a biodiversity value.

7.3 General avoidance

7.3.1 The proposed development would be carried out to avoid areas of important habitat to minimise loss. Where necessary, appropriate barriers would be installed to protect biodiversity assets.

7.3.2 Best practice guidelines would be followed to avoid impacts from dust, wastewater, contaminated site drainage, chemical and reagent spillage, noise, vibration, and night-time light spillage on the surrounding environment. These would be detailed in the Long-term Landscape and Ecological Management Plan.

7.4 Minimise and mitigate

7.4.1 Any negative effects would be minimised through mitigation measures, either through the design and timing of the proposed works or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

7.4.2 Mitigation measures would be proportional to the potential effect. Any significant impacts remaining after mitigation (the residual impacts), together with an assessment of the likelihood of success of the mitigation, are the factors to be considered against legislation, and policy. Mitigation measures include but are not limited to the following:

- The earthworks completely avoid the loss of semi-mature trees.
- If any future works, including landscaping are located near mature or semi mature trees this would be conducted following best practice guidance BS 5837:2012 Trees[29] in relation to design, demolition, and construction. This includes the requirement for a buffer zone established around the retained trees during construction to avoid unnecessary compaction within the Root Protection Zone.
- Works in or near water would follow the guidance as set out within Guidance for Pollution Prevention (GPP5) – Works and maintenance near water.
- Current safeguards in place to prevent pollutant ingress to the local watercourses would be maintained during the development works.
- The contractor would provide a Construction Environmental Management Plan (CEMP).
- Planting design which allows movement of species, i.e. linear habitats including shrub and tree planting which provide cover and shelter.

[29] https://beta.bathnes.gov.uk/sites/default/files/2020-01/BS5837%202012%20Trees.pdf

- Sensitive lighting designs.
- Toolbox talks to contractors.
- Pre-commencement site walkovers and surveys.

7.5 Enhancement

7.5.1 A Landscape and Ecological Management plan would be produced which would protect the important existing habitats and species on site, as well introducing new habitats, appropriate to the site's conditions, and enhancing existing habitats. This would include the protection, creation and/or enhancement, of meadow grassland, hedgerows, and improve the woodland habitats.

7.6 Compensation

7.6.1 The proposed development may necessitate the closure of one identified outlier badger sett situated within the western woodland block of the site (In 2024 the RML Badger Survey Report classified the sett as a 'partially used' outlier. Discussions with the Local Planning Authority Ecologist agreed that a licence would be required to close the sett). However, this is yet to be finally determined and following 2025 surveys observing increased activity at the sett, the intention is to proceed with the retention of the existing sett but also construct an artificial sett as a precautionary measure. This would be carried out strictly under an appropriate Licence granted by Natural Resources Wales (NRW), thereby ensuring full compliance with the Protection of Badgers Act 1992 (as amended). All licensed works, including the potential sett closure and subsequent construction, will be undertaken at a time agreed upon with NRW, typically outside the main badger breeding and cub-rearing seasons (late autumn/early winter).

7.6.2 To mitigate the potential permanent loss of usage of this outlier set by the badgers and to ensure the continued functionality of the resident badger social group's territory, a purpose-built artificial sett will be created. This compensatory sett will be strategically sited near the eastern boundary of the lower field. The location is specifically chosen due to its direct proximity to a dense block of gorse scrub, which is known, through survey evidence, to be an actively utilised part of the resident badger population's foraging and commuting territory. This placement maximises the probability of successful adoption and continued social connectivity within the badger clan.

7.8 Working methods

7.8.1 The above mitigation approaches would be further supplemented by the incorporation of guidance given to those who will conduct the work.

7.8.2 A Precautionary Works Method Statement (PWMS) would be produced. This document would outline specific, pre-planned procedures to avoid and reduce harm to wildlife, habitats, and protected species. The statements would inform the CEMP and ensure that all activities are conducted in an environmentally responsible manner and in compliance with ecological regulations.

7.8.3 Toolbox Talks (TBTs) complement PWMS by delivering brief, focused training sessions to on-site workers, raising awareness of specific ecological considerations and providing practical steps to protect wildlife. TBTs ensure that workers are informed about the protected species present, the sensitivity of their habitats, and the appropriate actions to avoid harm. For instance, during nesting bird season, a TBT might highlight the need to avoid disturbing active nests and include steps for identifying nests or ceasing work if one is found. Together, PWMS and TBTs help ensure that project activities are conducted with care, reducing the risk of harm to protected species and minimising the project's ecological impact.

8. Potential Impacts and Mitigation Measures by Receptor

8.1 Non statutory Designated Sites

Aber Afon Conwy Species

8.1.1 Of the Sites of Importance for Nature Conservation within 2 km of the redline boundary only the Aber Afon Conwy Species SSSI has the potential to be impacted by the proposed development as an indirect potential pathway of the unnamed stream from the site. However, earthworks will only be taking place to way from the stream to the east). There will be the removal of several trees near to where the stream enters the culvert. The adjacent land will be planted which is considered to be of 'neutral' impact.

8.1.2 The current design proposals include for dedicated surface water drainage infrastructure that would discharge via below ground surface water attenuation cells into the adjacent stream. Consequently, no significant alteration to the existing water levels or flow regime of the stream is anticipated compared to baseline conditions.

8.1.3 The greatest potential impact is likely to be as a result of run-off during the construction period from silt entering the stream which drain into the Afon Conwy.

Mitigate

8.1.4 What risk may be posed to the SSSI from run-off can largely be mitigated through the establishment of physical barriers, such as silt fences during the construction phases, at strategic points around the working area to capture sediment before it enters channels which feed the SSSI. A phased approach to earthworks, disturbing only one section of land at a time, would reduce the amount of exposed soil vulnerable to erosion and run-off.

8.1.5 Separate rainwater runoff would be intercepted from the upper reaches of the site into swales and from surfaced areas of the site into a number of below ground attenuation cells or holding tanks, rather than discharging straight into the watercourses.

8.1.6 The SSSI itself is outside of the proposed development area and will therefore not experience any direct impact.

8.1.7 No significant potential effects are envisaged for any of the non-statutory sites within 2 km of the site from the proposed development.

8.3 Priority Habitats

Woodland

Potential effects

8.3.1 The proposed development directly affects the functional connectivity between the two woodland blocks located to the east and west of the site, with a particular impact on protected species.

8.3.2 **Fragmentation:** The necessary removal of hedgerow HR3 and HR5, which currently serve as wildlife corridors, will result in the physical and ecological severance of the western woodland habitat. These continuous linear features are vital for the safe movement and dispersal of numerous faunal species, including bats, mammals (including badgers), and nesting birds.

8.3.3 When obstacles, disturbances, or removal fragment bat commuting corridors, bats can become separated from vital resources, including their primary roosts, foraging areas, swarming grounds, or hibernation sites. This forces them to use alternative, longer routes, which increases their energy expenditure. At a landscape scale, such increased energetic costs due to fragmented routes could potentially lower the overall fitness and survival of regional bat populations (Fure, 2012).

8.3.4 **Edge Effects on Western Woodland**: Although the western woodland block is intended for retention, its subsequent isolation from the broader landscape will increase the edge effects. This isolation is anticipated to result in habitat degradation, characterised by altered microclimates (e.g., increased light penetration, and temperature fluctuation), and an increased risk of human or domestic animal disturbance. Collectively, these intensified pressures will lead to a reduction in the overall biodiversity value and long-term ecological functionality of the remaining woodland parcel.

8.3.5 **Access Removal**: The partial removal of the hedgerow located immediately south of the Tree Preservation Order (TPO) protected oak tree, required to facilitate site access, further compounds the loss of connectivity and removes a foraging and movement corridor near a high valued, mature tree specimen.

Mitigation and Enhancement

8.3.6 To offset the potential effects resulting from habitat fragmentation and the loss of the protected bat commuting corridor, the following targeted mitigation and enhancement measures are essential:

8.3.8 **Compensatory Bat Flight Line Creation**: The loss of HR3 and HR5 must be fully compensated for by planting a robust, continuous, and ecologically dense native hedgerow of locally appropriate species. This planting must be strategically sited and implemented to provide a like-for-like replacement flight line, maintaining the east - west connectivity required by the Lesser Horseshoe Bat. The new hedgerow must be high-density (e.g., using a double-staggered row) to offer sufficient acoustic and visual shelter for commuting bats.

8.3.9 **Buffer Zone:** A dedicated, protective buffer zone will be established between the retained eastern woodland and the development footprint. This buffer will be enhanced through the creation of species-rich wildflower meadows and native grassland, maximising the habitat's quality right up to the development edge.

8.3.10 **Access Point Enhancement**: To mitigate the partial hedgerow removal at the site access point, compensatory dense native shrub and hedgerow planting should be established immediately adjacent to the new access point, ensuring the TPO oak tree remains protected and a new, functional corridor is established to guide fauna movements safely across the site boundary, particularly at dusk and dawn.

8.3.11 **Sensitive Lighting Design:** A sensitive, low-intensity, and directional lighting scheme must be implemented across the development, specifically ensuring no light spill onto the retained woodland edges, the new compensatory hedgerow (the bat flight line), or the TPO oak tree. The light spectrum must be restricted to long-wavelength sources (e.g., yellow or red LEDs) that minimise disturbance to nocturnal fauna, especially bats.

8.3.12 **Long-term Management:** A detailed Landscape and Ecological Management Plan (LEMP) will be implemented to ensure the new compensatory planting, wildflower meadows, and retained woodland edge habitats are actively managed over the long term to achieve and maintain optimal ecological function as wildlife corridors and bat foraging/commuting resources.

Hedgerows

8.3.13 This assessment focuses on the direct impact of the proposed development on the three hedgerow HR1, HR3 and HR5.

Potential effects

8.3.14 Removal: Hedgerow HR3 will be partially lost while hedgerow/trees in HR5 will be completely lost as they lie within the main development footprint.

8.3.15 **Ecological Severance:** The removal of HR3 and HR5 will remove the main habitat corridor linking the eastern and western woodland blocks, resulting in habitat fragmentation and the isolation of the remaining western woodland.

8.3.16 **Critical Protected Species Impact (HR5):** The loss of HR5 is of high ecological sensitivity as it is confirmed as an active commuting corridor for the legally protected Lesser Horseshoe Bat (*Rhinolophus hipposideros*). The almost complete removal of this flight line will force commuting bats to cross a newly developed, open, and lit area, leading to disruption of movement patterns and an increased risk of mortality and collision.

8.3.17 **Partial Removal:** Hedgerow HR1 (located to the south of the mature oak tree) will be partially removed to facilitate the creation of the primary site access point.

8.3.18 **Corridor Disruption:** Although only partial, this removal creates a break in the linear feature, disrupting continuous foraging and movement corridors for small mammals, common nesting birds and bats, especially in close proximity to the high valued, mature oak tree. The gap increases exposure for fauna attempting to cross the site boundary.

Mitigation and Enhancement

8.3.19 The following measures are necessary to compensate for the loss of the connectivity, particularly the bat commuting route, and mitigate residual impacts.

8.3.20 Compensatory Planting and Connectivity (HR3 & HR5)

- **Like-for-Like Replacement**: The linear lost from HR3 and HR5 must be compensated for by planting a robust, native, and ecologically dense hedgerow, achieving an overall net gain in hedgerow length. This compensatory planting must be placed to re-establish the critical east - west ecological linkage, aiming to replace the lost function of the HR5 bat flight line.
- **Structure:** The new hedgerow should be planted using a double-staggered row of, native, locally appropriate woody species, coupled with protective fencing, to ensure rapid establishment of a dense, visually and acoustically shielded commuting corridor for bats and other wildlife.

8.3.21 Site Access Mitigation (HR1)

- **Gap Bridging and Funnelling:** To mitigate for the gap caused by the site entrance (HR1), dense native shrub and hedgerow planting should be implemented immediately adjacent to the new access point on both sides. This aims to 'funnel' wildlife towards safer crossing points and restore corridor function as quickly as possible, while ensuring the Root Protection Area (RPA) of the adjacent TPO oak tree is strictly maintained.

8.3.22 Lighting Protocol (Targeting HR5 Replacement)

- **Sensitive Lighting Design:** A comprehensive, bat-friendly lighting scheme is mandatory, focusing on minimising light spill onto all retained habitats and,

crucially, the newly planted compensatory hedgerow that replaces HR5's function.

- **Specifications**: All external lighting should be restricted to low-intensity (e.g., maximum 3 lux at ground level), directional fixtures (cut-off luminaires), and utilise long-wavelength spectrums (e.g., warm white or amber LEDs, <2700K) to minimise disturbance to nocturnal species, especially the Lesser Horseshoe Bat.

8.3.23 Long-term Management

8.3.24 A detailed Landscape and Ecological Management Plan (LEMP) will be established to the initial protection and subsequent maintenance of all retained and new hedgerows, ensuring they achieve and maintain the necessary dense structure required for optimal ecological function as effective wildlife corridors.

Running water

Impact

8.3.25 This habitat is primarily associated with the unnamed stream running south to north along the western site boundary.

8.3.26 The activity of machines disturbing soils during earth works on the site could increase the amount of fine sediments entering the flow and settling into the streambed of the nearby stream causing pollution effects and smothering. The use of heavy machinery on site could also result in the spillage of toxic fuels and oils etc. into adjacent watercourses.

8.3.27 Construction work could affect the water quality increased pressure from drainage proposals and nutrient input associated with the development.

Mitigation and enhancement

8.3.28 Mitigation measures would include the following:

8.3.29 Pollution control and containment measures to limit the spread of pollution and reduce the risk of harm to biodiversity in the case of accidents which could result in spillages of pollutants such as fuels or silt.

8.3.30 Works within and adjacent to the watercourse would be monitored by an Environmental Clerk of Works (ECOW). If discolouration of the watercourse is noted, works would stop and working practices reviewed.

8.3.31 Silt would be manged by the use of cut-off drains, silt curtains, straw bales as necessary, placed downstream of the earth works or works within existing watercourses to minimise transfer of any excess sediments downstream.

8.3.32 Road-derived surface water runoff must be intercepted and managed through a sustainable drainage system (SuDS) approach. Runoff must be segregated from the natural hydrological network and directed into designated SuDS attenuation features (such as filtration ponds or holding tanks) rather than being discharged directly into receiving watercourses. This measure is essential for controlling pollutant load and regulating flow rates, thereby protecting the downstream aquatic ecosystem.

8.3.33 Furthermore, the existing river corridor habitat shall be subject to continuous maintenance and strategic improvement. This includes sensitive tree management, specifically targeting the reduction of localized overshading to promote increased light penetration to the water body and riparian zone, thereby supporting diverse in-channel and marginal flora.All fuel, oil and chemicals used on site would be stored away in a locked store which would be bunded to 110% capacity of the volume stored.

8.4 Protected species

Badgers

Potential Impact

8.4.1 The confirmed active sett is classified as a 'used' outlier sett, which is typically used by badgers occasionally, often for temporary shelter, dispersal, or as a satellite to a main social sett located elsewhere. While less critical than a main sett, it still receives full legal protection against damage or destruction.

8.4.2 Direct Loss of Sett (Moderate Significance): The development footprint may, subject to further detailed design considerations, necessitate the permanent closure of this active outlier sett. This loss, while not directly threatening the entire social group, reduces the available habitat and essential refugia within the badger's established territory. This change in habitat is considered a moderate adverse effect and requires legal licensing for sett closure.

8.4.3 There will be temporary disturbance from construction noise and activity, potentially disrupting the badgers' movements between their main sett (likely off-site) and the on-site foraging areas.

8.4.4 The clearance of vegetation will reduce the quantity of suitable foraging grounds and terrestrial cover used for commuting and temporary resting.

8.4.5 Given that the sett is an outlier (not the primary breeding/social residence) and that only a single sett is potentially being lost, the overall impact can be mitigated to negligible levels with licensed procedures. However, in the absence of mitigation, the destruction of an active sett is a criminal offence and constitutes a significant legal and ecological risk.

Mitigation and Compensation

8.4.6 A development licence must be secured from NRW prior to any works that could impact the sett.

8.4.7 The mitigation strategy must adhere to the terms of the development licence obtained from NRW, which permits the disturbance in the vicinity of the outlier sett.

8.4.8 Due to the outlier status, a large-scale, artificial sett is usually not required. Instead, compensation is achieved through the creation of natural refugia within the retained habitat buffers:

8.4.9 Retained areas, particularly woodland and hedgerow bases, must be enhanced by creating large, structured log and rock piles. These features provide immediate, high-quality, and accessible temporary shelter and potential alternative resting sites.

8.4.10 Established badger paths (runs) leading into the site must be clearly marked and avoided where possible during site setup. Where paths must be severed, alternative safe routes to foraging areas must be maintained or created around the site boundary.

8.4.11 Prior to any site clearance, a temporary construction exclusion zone must be established around the sett and the necessary working area to prevent accidental damage by machinery.

8.4.12 Toolbox Talk: All site personnel must receive a briefing on the presence of the protected Outlier Sett, the legal requirements, the function of the one-way gates, and the need to immediately report any badger activity or unauthorized sett disturbance to the ECoW.

8.4.13 Any deep trenches left open overnight must be fitted with escape ramps (e.g., rough planks or logs) to allow badgers (and other wildlife) to climb out safely.

Birds

Potential Impact

8.4.14 **Habitat Suitability:** The existing hedgerow network (HR1, HR3, HR5) and mature trees within the hedges and the surrounding site boundaries provide suitable nesting habitat for numerous common and widespread bird species, including small bird species (e.g., dunnock, robin, wren). Considering the density and location of these linear features, it is highly likely that they are routinely utilised for nesting during the breeding season.

8.4.15 **Timing Conflict (Legal Constraint):** The proposed commencement date for site clearance should avoid recognised peak nesting bird season, which is generally considered to run from to be March - August inclusive but can be earlier or later in the season dependent upon local climatic conditions.

8.4.16 **Nesting sites**: The proposed removal of hedgerows (HR3 and HR5 entirely, HR1 partially) and any associated tree removal during this critical period would result in a direct, unavoidable loss of nesting sites. In the absence of precautionary measures, this could lead to the disturbance, damage, or destruction of active nests, eggs, or dependent young, which is a criminal offence.

8.4.17 **Significance of Effect:** The cumulative loss of habitat and the high risk of disturbing nesting activity during the breeding season represents a moderate adverse effect on nesting birds, a species group of local ecological significance. This risk is unacceptable without robust mitigation that would be implemented as part of the wider mitigation measures.

Mitigation and Enhancement

8.4.18 To comply with legislation and minimise adverse effects on nesting birds, the following mitigation measures are mandatory:

8.4.19 **Avoidance of Breeding Season**: The primary mitigation measure is to schedule all vegetation clearance, including the removal of trees and hedgerows (HR1, HR3, HR5), to take place outside the peak breeding bird season (considered to be March - August inclusive but can be earlier or later in the season dependent upon local climatic conditions). This is the most effective way to eliminate the risk of nest destruction.

8.4.20 **Preferred Window:** The preferred timing for all clearance works is September 1st to February 28th/29th.

8.4.21 **Supervised Inspection**: Should works be unavoidable during the breeding season, all vegetation to be removed or significantly cut must first be subjected to a detailed inspection by a suitably experienced Ecological Clerk of Works (ECoW). This inspection must occur no more than 48 hours before the commencement of works.

8.4.22 **Buffer Zone**: If an active nest is found (i.e., a nest containing eggs or dependent young), a clearly marked Exclusion Zone must be established around the nest location. The size of this zone will be determined by the ECoW based on the species and location but typically involves a minimum 5-meter radius.

8.4.23 All site clearance activities within the Exclusion Zone must cease immediately and only recommence once the ECoW confirms that the young have fledged and the nest is no longer active.

Enhancement

8.4.24 **Installation of Bird Boxes**: As an enhancement measure, nesting bird boxes, suitable for common local species, will be installed on retained mature trees within the western and eastern woodland blocks as well as integrated into the design of the new dwellings, to provide alternative nesting opportunities and compensate for lost habitat.

Bats

8.4.25 This assessment evaluates the potential effects of the proposed development on local bat populations, focusing on foraging habitats and commuting routes, particularly given the confirmed presence of the legally protected Lesser Horseshoe Bat (*Rhinolophus hipposideros).*

Potential impacts

8.4.26 **Roost Integrity:** To date, no active bat roosts have been identified within trees on site and there are no building structures. Therefore, no direct impact on breeding or resting sites (roosts) are know.

8.4.27 **Loss of Foraging and Commuting Habitat:** The main potential adverse effect on bats within the site context is the loss of key linear habitat features that connect the wider landscape:

- HR1 and HR3: The removal of these hedgerows will result in the loss of local, albeit low-to-moderate, quality foraging habitat used by common bat species (e.g., common pipistrelle). More critically, their removal severs the ecological connectivity linking the eastern and western woodland blocks, leading to habitat fragmentation.
- **HR5 (Critical Impact):** The loss of hedgerow HR5 is of high ecological sensitivity as survey work has confirmed its use as a, active commuting corridor for the Lesser Horseshoe Bat. This species is highly sensitive to fragmentation and open space, relying heavily on linear features like hedgerows for navigation and protection from predators while commuting.
- **Habitat Fragmentation and Isolation:** The removal of HR1, HR3, and particularly HR5, will isolate the remaining woodland block to the west, creating significant gaps and forcing bats to cross large, open areas. This increases energetic costs, risk of predation, and disrupts established flight paths.
- **Disturbance:** Degradation of the foraging and commuting habitat resource can occur through increased disturbance by human activities (e.g. recreation), increased pet density, increased trampling and changes to vegetation,

increased light-spill from residential areas or lighting for safety concerns, pollution by dog faeces.

- **Light Spill Disturbance**: The introduction of new external lighting (e.g., streetlights, domestic lighting) associated with the development poses a significant disturbance risk. Lesser Horseshoe Bats, like many other species, are highly sensitive to light pollution, which can deter them from using previously viable commuting routes and foraging areas, effectively rendering the western woodland habitats unusable. A sensitive lighting strategy would be prepared and agreed prior to the commencement of any development.
- **Significance of Effect:** The confirmed severance of a commuting route for a protected species (Lesser Horseshoe Bat) due to the loss of HR5, coupled with the risk of light pollution, constitutes a significant adverse impact at the local level in the absence of effective mitigation.

Mitigation and Enhancement

8.4.28 Robust and legally compliant mitigation is required to compensate for the loss of commuting habitat and ensure the continued viability of the Lesser Horseshoe Bat population.

8.4.29 **Bat-Specific Hedgerow Compensation**: A dense, high-quality, compensatory native hedgerow must be planted to immediately restore the ecological linkage function lost by the removal of HR5 and the other affected hedgerows. This replacement corridor must be positioned partially outside the development footprint to minimise future disturbance.

8.4.30 **Timing of Planting**: Compensatory planting should be carried out at the earliest possible stage (ideally before or concurrently with the site clearance) to allow for rapid establishment of the linear feature.

8.4.31 **Zero Light Spill Protocol**: A highly restrictive, bat-friendly lighting scheme must be implemented across the entire site, focusing especially on the replacement bat corridor area and the boundaries of the retained woodland blocks. Lighting Specifications:

- **Intensity**: Maximum illumination levels should not exceed 3 lux at the base of the replacement hedgerow and retained boundaries.
- **Spectrum**: Only warm-white or amber LED luminaires (below 2700K) must be used.
- **Directionality**: All lights must be fully cut-off and downward facing to prevent upward light spill or horizontal glare.

- **Timing/Control**: Utilisation of Passive Infra-Red (PIR) sensors and timers to ensure lights are only activated when necessary and turn off quickly.

8.4.32 **Retention of Buffer Zones**: Sensitive retention of a dense vegetation buffer along the boundaries of the eastern and western woodland blocks to shield them from construction and operation phase disturbance.

8.4.33 **Long-Term Monitoring:** Post-development monitoring of the replacement corridor (e.g., using bat detectors) may be required to confirm that the Lesser Horseshoe Bat continues to use the new route successfully and that the mitigation measures are fully effective.

8.4.34 **Provision of Integrated Roosts:** As an enhancement, integrated bat boxes or 'bat bricks' will be incorporated into the design of new buildings in the form of bat access roof tiles or permanent wall cavities to provide futureproofing and a net gain in roosting opportunities.

8.4.35 **Considerations for a Bat Corridor crossing near to northwest Cul-de-sac**

- Lighting Strategy: The primary challenge when crossing a road, especially a cul-de-sac that will have domestic lighting and car headlights, is managing light spill. Bats are highly sensitive to light, and most species will avoid well-lit areas.
- The crossing area and connecting landscape features (hedgerows, trees, etc.) must remain as dark as possible.
- Property number 47, gable end will have no windows to prevent any internal light from spilling out and illuminating the bat flight path.
- Other lighting should be low-level, downward-facing, on a timer, or motion-sensor, and use a warm spectrum (e.g., specific LED lights with low UV output) to minimise light pollution.
- Baffles can be used to prevent light spill onto the flight path.

8.4.36 Connectivity: The corridor must connect existing important habitats, such as foraging areas, roosts, or other green spaces, to be functional. The crossing itself needs to be placed on a known commuting route, which has been identified through pre-construction surveys.

Reptiles and amphibians

Potential impact

8.4.37 The majority of the site, consisting of open and low-sward grassland, this is considered suboptimal for supporting large or diverse populations of reptiles and amphibians due to a lack of a complex habitat mosaic (e.g., tussocks, log piles, bare ground).

8.4.38 Despite the overall low suitability, potential refugia for these species exist in specific locations including hedgerows (HR1, HR3, HR5): These features provide suitable shelter, foraging opportunities, and migratory corridors, particularly for amphibians moving between terrestrial and aquatic habitats.

8.4.39 Potential impact is the direct injury or killing of individuals during the site clearance and vegetation removal phases, especially within the natural refugia (hedgerows).

8.4.40 Removal of hedgerows, although not leading to the loss of any known aquatic breeding ponds, will result in the loss of terrestrial shelter and foraging habitat.

8.4.41 Given the sub-optimal nature of the main site and the absence of aquatic feature loss, the potential effects on these species are considered to be minor adverse effects in the absence of mitigation.

8.4.42 Mitigation

8.4.43 Clearance Protocol (Reasonable Avoidance Measures - RAMs)

- Avoidance of Hibernation Period: refugia (e.g., dense scrub, large root masses) must not be removed during the period of peak hibernation (typically November to February inclusive). Any necessary removal must take place outside of this window.
- Pre-clearance Inspection: All dense, longer vegetation, particularly along the hedgerows and field margins, must be reduced incrementally in two stages to allow any animals present to disperse safely.
- Stage-Strimming: Longer vegetation should first be strimmed to a height of approximately 15-20cm, and then after a period of 24 hours (to allow animals to disperse), reduced to ground level (low sward height).
- Ecological Supervision: Stage-strimming and vegetation removal within high-risk areas should be undertaken under the supervision of a qualified ecological Clerk of Works (ECoW).

8.4.44 **Prevention of Re-colonisation:** Stripped topsoil and other arisings (e.g., spoil heaps, rubble piles) that are not replaced immediately must be "sealed" (e.g., surface compaction using an excavator bucket) to prevent the formation of interstitial spaces that could be colonised by hibernating amphibians or reptiles during the works.

8.4.45 **Open Excavations:** Any open trenches or excavations must be covered overnight, or a ramp (e.g., a board or log) must be provided to allow any trapped animals to escape.

8.4.46 **Toolbox Talk:** All site contractors must be briefed via an ecological toolbox talk on the presence of protected species (especially the potential for reptiles and amphibians in the

refugia), the legal implications of causing harm, and the correct procedures for handling and reporting any animals encountered.

9. Summary of Effects

9.1.1 The summary of effects on VERs, described in the preceding sections taking account of the mitigation and recommendations for the site mitigation are summarised in ***Table 13***

9.1.2 The table also identifies mechanisms to secure commitment to and delivery of the recommended measures e.g. through planning conditions.

9.1.3 The site would be managed and owned by Adra would be responsible for the management and maintenance of the proposed mitigation and enhancement recommendations.

9.1.4 No other projects which could give rise to a significant cumulative effect were identified from the CCBC Planning portal

Table 13: Summary of Effects and Recommendations - Valuable Ecological Receptors Body

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
Non-statutory Designated Sites – Wildlife Sites						
Aber Afon Conwy	Local	Runoff from site during the earthworks. Potential pollution incidences, during and post construction	**Minor** – temporary reduction in water quality.	A phased earthworks approach, disturbing one section at a time to minimise exposed soil and reduce erosion and runoff. Pollution prevention guidelines Methods of control suggested in the SuDS Manual. Pollution prevention and control measures during and post construction.	**Neutral / Negligible**	Approved drainage strategy and Details set out within a CEMP which can be Conditioned
Priority Habitats						
Broadleaved semi natural woodland	Local	Fragmentation: The necessary removal of hedgerow HR3 and HR5, which currently serve as wildlife corridors, will result in the physical and ecological severance of the western woodland habitat.	**Moderate**	Avoiding encroachment by the proposed development. Retain habitat connectivity. Sensitive lighting designs. Following best practise guidance were construction works need to be carried out adjacent to trees e.g. Root Protection Areas. Retention and Enhancement of habitat connectivity corridors	**Minor - Moderate**	Strict adherence to the recommendations of the developments Arboricultural Impact Assessment (AIA) and the methodology set out in BS 5837:2012 Trees in relation to design, demolition and construction— Recommendations.

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
						Details set out within a CEMP which can be Conditioned
Running water	Local	Increased silt or pollutants during activities, which discharge into the watercourse.	**Minor** – temporary reduction in water quality	Works within and adjacent to the watercourse would be monitored by an Environmental Clerk of Works (ECOW). Road-derived surface water runoff must be intercepted and managed through a sustainable drainage system (SuDS) approach. Runoff must be segregated from the natural hydrological network and directed into designated SuDS attenuation features (such as filtration ponds or holding tanks) rather than being discharged directly into receiving watercourses. This measure is essential for controlling pollutant load and regulating flow rates, thereby protecting the downstream aquatic ecosystem. Furthermore, the existing river corridor habitat shall be subject to continuous maintenance and strategic improvement. This includes sensitive tree management,	**Neutral**	Details set out within a CEMP which can be Conditioned

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
				specifically targeting the reduction of localised overshading to promote increased light penetration to the water body and riparian zone, thereby supporting diverse in-channel and marginal flora.		
Hedgerows	Local	Loss of and disturbance to hedgerows, resulting in a loss of connectivity of the landscape to wildlife. Nesting birds and bat foraging and commuting habitat.	**Moderate**	The permanent removal of hedgerows must be undertaken with strict adherence to wildlife legislation protecting nesting birds. Retained hedgerows are crucial for maintaining ecological function and must be protected from direct and indirect damage during the construction phase. To compensate for the functional loss of HR3 and HR5, a detailed, mitigation and enhancement strategy must be implemented to include: Species richness and structure, landscape connectivity, and aftercare plans	**Minor - Moderate**	Appropriately worded condition. Landscape planting scheme and management as well as maintenance plan.

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
Species (Fauna)						
Badger	**Local**	Damage to the one outlier sett during site works. Disturbance to the badgers from site works and form increased human presence. Isolation from the main sett. Removal of the badger active route along HR5 to the sett.	**Moderate** - Fragmentation and loss of foraging and commuting habitat. Disturbance or loss to setts	Creation of an artificial sett to be an enhancement of the project, however if badgers no longer choose to use the sett in the western woodland then the artificial sett would provide compensation for the isolation of their sett. Avoid encroachment within 30 m of active badger setts by the proposed development. Maintaining movement for badgers along existing commuting routes. Avoiding disturbing setts between December-June. Exclusion of badgers from setts under licence and construction of alternative setts if one is removed. Sensitive lighting designs to avoid disturbance to badger commuting and foraging routes. Installation of permanent badger fencing may be required.	**Minor - Moderate**	Appropriately worded condition and badger licence with method statement

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
				Creating wildlife corridors and maintaining connectivity to the wider landscape.		
Bats	**Local**	Protected species. Disturbance to and loss of suitable roosting, foraging and commuting habitat. Disturbance to bat roosts. Fragmentation of bat flight lines. Disturbance to bat activity (foraging, commuting, roosting) through lighting schemes.	**Moderate - High**	Maintaining, restoring and creating suitable habitat for bats to mitigate for any losses. Maintaining bat flight lines. Sensitive lighting designs to avoid disturbance to bats. Installation of bat boxes integrated into new buildings Additional suitable habitat and planting, including night scented flowers. Increased landscape connectivity across the development to include new hedgerow planting. Buffer planting to mitigate for the potential effects of external and internal light spill. Retaining dark corridors of movement	**Moderate**	Appropriately worded condition. Landscape planting scheme and Landscape and Ecological management Plan.

VER	Valve	Description of potential effect	Effect without Mitigation	Mitigation	Significance of Residual Effects	Mechanism for Securing
Birds	**Local**	Protected species. Disturbance to and loss of nesting and foraging habitat.	**Moderate**	If vegetation is to be removal outside the nesting bird season, checks would be required by a qualified ecologist prior to site clearance works. Incorporate landscaping which would provide suitable habitat for foraging, and nesting birds e.g. trees, shrubs, hedgerows. Installation of a selection of integrated bird boxes into the new buildings.	**Minor**	Appropriately worded condition
Hedgehogs	**Local**	Potential disturbance during site clearance. Potential obstruction to movement across habitats	**Negligible**	Creation of wildlife corridors and maintaining connectivity to the wider landscape. Planting and improving of native hedgerows across the development to aid small mammal dispersal.	**Negligible**	Appropriately worded condition Sensitive landscape proposals
Reptiles and amphibians	**Local**	Potential disturbance during site clearance.	**Minor**	Reasonable Avoidance Measures. Creation of wildlife corridors and maintaining connectivity to the wider landscape.	**Neutral/negligible** (could be minor beneficial with the proposed landscape plans,	Appropriately worded condition Sensitive landscape proposals

10. Aftercare and Monitoring

10.1 Summary of measures for the aftercare and monitor period

10.1.1 Aftercare would be carried out by the client for a period of 5 years. During that time a contractor (employed by the client) would carry out tasks such as grass cutting, weed control, replacement of dead plants, watering, repair of fences, cleaning out ditches, and other environmental measures. These tasks would be performed to ensure that the seeding and planting survive and successfully establish as new vegetation. At the end of the aftercare period the contractor would hand over the now established and healthily growing landscape and environmental mitigation to the client or other interested parties.

10.1.2 Throughout the aftercare period, and for as long as is necessary to fulfil commitments, the client would employ suitably qualified personnel to monitor the mitigation measures to:

- Ensure that it continues to develop properly to meet commitments and functions (E.g. trees should grow as planned)
- Review if it would achieve the commitment and function in the required time period
- Check for adverse or changing conditions that might compromise the effectiveness of mitigation measures
- Advise on maintenance interventions that might be required if a failure to meet commitments is identified, and
- Once the mitigation achieves full effectiveness monitoring could continue to ensure that it continues to perform its proposed function.

10.1.3 These measures are set out in more detail in the Landscape and Ecology Management Plan.

10.1.4 Details of the monitoring required would be established in consultation with NRW and the LPA and incorporated into the CEMP and carried through to the Landscape and Ecological Management Plan. Monitoring would include but is not limited to:

10.1.5 Requirements for monitoring of protected species (for example badgers and bats) would be set out in any required PWMS. This could include surveys of the site, where accessible, post development and during the aftercare period to ensure continued use by badgers and bats and to advise upon any adaptations which would be required.

10.1.6 Monitoring for birds (e.g. Peregrine falcons) would be undertaken during development by the appointed ECoW, and any occurrences and nesting behaviour would be noted and

reported. It is likely that birds would be deterred by and displaced from utilising the site due to ongoing noise and development, though breeding may occur during the aftercare period.

10.1.7 During the aftercare period regular monitoring visits would be undertaken to monitor the performance of the mitigation, including the establishment of tree, shrub and grass seeding.

10.1.8 Reports would be prepared for the client giving the results of each visit, any requirements for additional maintenance work and indicating how the scheme of mitigation is performing against agreed indicators. These reports can be made available to interested parties, i.e. NRW and the LPA.

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APPENDIX A: SITE LOCATION

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Tel: +44(0)1824 704366
Registered in England and Wales No. 1848683 VAT Reg No. 401 424 313

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0 100 200 m

PW FB Car Pk

BRYN FELIN

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Bryn Gynog Residential Park

Weir

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NEW ST

MAES-Y-LLAN

ISGOED

19m

BRYN SEIRI RD

PARC BENARTH

HENDRE ROAD

Afon Gyffin

The Old Rectory

Bryn Iocyn

Mast

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82m

Coed Bryn-glorian

Path

Track

Bryn-glorian-bach

Bryn-seiri

Path

Issues

Cleient / Client:

Adra

Enw project / Project name:

Land at Llanrwst Road
Gyffin, Conwy

Teitl lluniad / Drawing title:

Site Location

Eglurhad / Key:

Site Boundary

Insert map 1:200,000@A3

Based upon Getmapping Aerial Photography. © Getmapping plc

Graddfa / Scale (A3):	Dyddiad / Date:	Darlunwyd gan: / Drawn by:	KM
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Rhif lluniad / Drawing number: 3222-RML-RT-DR-01		Cywiriad: / Revision:	01

Darparwyd gan / Prepared by:

RML

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APPENDIX B: DEVELOPMENT PROPOSED PLANS

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Registered in England and Wales No. 1848683 VAT Reg No. 401 424 313

NOTES / KEY:

HOUSE TYPE	DESCRIPTION	No. OF BEDROOMS	INTERNAL FLOOR AREA m2	GARAGE AREA m2	NUMBER
A/B	2P1B APT	1	51 m2	NO	30
C	4P2B	2	83 m2	NO	10
D	4P2B	2	83 m2	NO	12
E	3P2B APT	2	65 m2	NO	12
F	3P2B BUNG	2	59 m2	NO	2
G	5P3B	3	93 m2	NO	1
H	5P3B	3	96 m2	NO	2
J	5P3B	3	92 m2	NO	21
K	6P4B	3	114 m2	NO	4
L	8P5B	3	131 m2	NO	1
			TOTAL		95

- PROPOSED LANDSCAPING, SPECIES TO BE AGREED.
- TREES TO BE RETAINED AND PROTECTION
- DENOTES SCREEN FENCE.
- VIZIBILITY SPLAYS AT JUNCTIONS
- PARKING BAYS 2.6M X 4.8M MIN
- HEDGE TO BE RETAINED AND PROTECTION
- TURFED AREAS OR GRASS SEEDED
- MONA PRECAST PERMEABLE PAVING - COLOUR CHARCOAL.
- MONA PRECAST PERMEABLE PAVING - COLOUR NATURAL.
- TARMAC.
- CONCRETE BLOCK PAVING AROUND PROPERTIES.

LLANRWST ROAD
Bodhyfryd
Fishermore
Bryn-y-Coed
Cefn y Bryn
Bryn Derwen
Brynglorian
Brookfield House
Woodmans Cottage
The Cottage
Yr Hafan
Plas Glorian
The Coach House
The Stables
36.0m
49.4m
EQUIPPED PLAY AREA
WILDFLOWER MEADOW AMENITY SPACE
19,908 m2
30m EXCLUSION ZONE

C	GENERAL REVISIONS	JHG	17/10/25
B	GENERAL REVISIONS	JHG	13/10/25
A	DESCRIPTION	DWN	20/01/20

REVISIONS

FEASIBILITY

beechdevelopments
Beech Developments (NW) Ltd
Anson House
1 Cae'r Llynen
Llandudno Junction
Conwy
LL31 9LS
www.beech-developments.co.uk

LLANRWST ROAD

OFF LLANRWST ROAD

GYFFIN
CONWY

DEVELOPMENT LAYOUT PLANNING

BD0157-PL-01

DRAWN BY	DRAWING DATE	APPROVED BY
JHG	17/09/25	~

SCALE: 1:500 AT A0

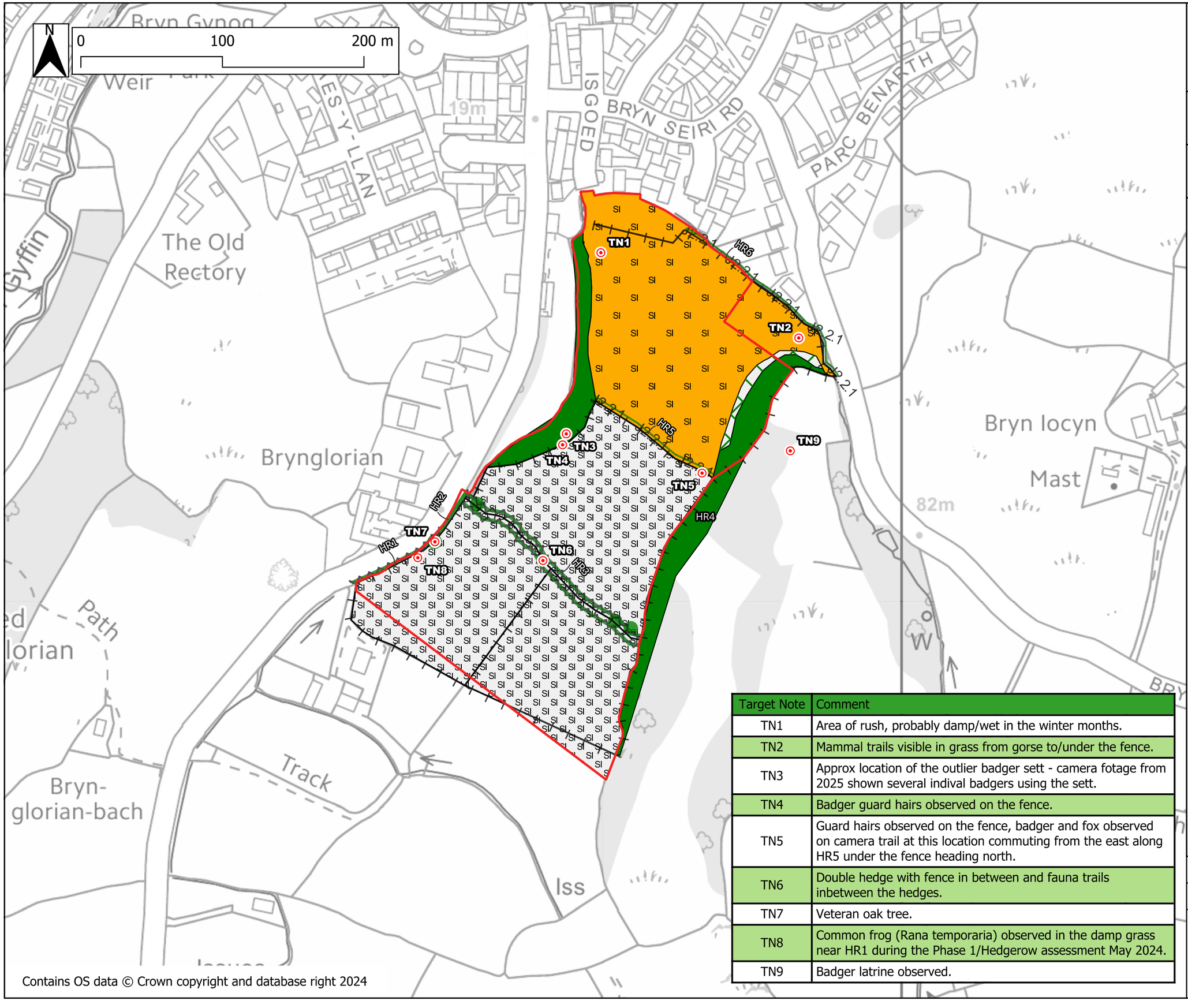
REVISION: C

Y:\Beech Live Jobs\BD0157-Gyffin - Off Llanrwst Road\04-Drawings\Layouts

APPENDIX C: COFNOD DATA

APPENDIX D: PHASE 1 PLAN

1 Llys Clwyd, Cwrt Y Dderwen, Ffordd Celyn, Ruthin, Denbighshire LL15 1NJ
email: rml@rmlconsult.com web: www.rmlconsult.com
Tel: +44(0)1824 704366
Registered in England and Wales No. 1848683 VAT Reg No. 401 424 313



Target Note	Comment
TN1	Area of rush, probably damp/wet in the winter months.
TN2	Mammal trails visible in grass from gorse to/under the fence.
TN3	Approx location of the outlier badger sett - camera fotage from 2025 shown several indival badgers using the sett.
TN4	Badger guard hairs observed on the fence.
TN5	Guard hairs observed on the fence, badger and fox observed on camera trail at this location commuting from the east along HR5 under the fence heading north.
TN6	Double hedge with fence in between and fauna trails inbetween the hedges.
TN7	Veteran oak tree.
TN8	Common frog (Rana temporaria) observed in the damp grass near HR1 during the Phase 1/Hedgerow assessment May 2024.
TN9	Badger latrine observed.

Cleient / Client:

Adra

Enw project / Project name:

LAND AT LLANRWST ROAD

Teitl lluniad / Drawing title:

Phase 1 Plan

Eglurhad / Key:

- A1.1.1 - Broadleaved woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- B2.2 - Neutral grassland - semi-improved
- B6 - Poor semi-improved grassland
- J2.1.1 - Intact hedge: native species-rich
- J2.1.2 - Intact hedge: species-poor
- J2.2.1 - Defunct hedge: native species-rich
- J2.4 - Fence
- Parkland, scattered trees, broad-leaved
- Target Note

Graddfa / Scale (A3): 1:2500@ A3	Dyddiad / Date: May 2024	Darlunwyd gan: Drawn by: KM
		Gwirwyd gan: Checked by: DH
Rhif lluniad / Drawing number: Appendix D		Cywiriad: Revision: 01

Darparwyd gan / Prepared by:

RML
RML Cwyd, Cwrt Y Ddderwen, Ffordd Cefyn, Ruthin, Denbighshire LL15 1NJ
Rhif Ffon/Tel: +44 (0)1824 704366, Ffacs/Fax: +44 (0)1824 705450
e-bost/e-mail: rml@rmlconsult.com, Gwefan/Website: www.rmlconsult.com

APPENDIX E: LOCATIONAND DIRECTION OF THE STATIC DETECTORS

1 Llys Clwyd, Cwrt Y Dderwen, Ffordd Celyn, Ruthin, Denbighshire LL15 1NJ
email: rml@rmlconsult.com web: www.rmlconsult.com
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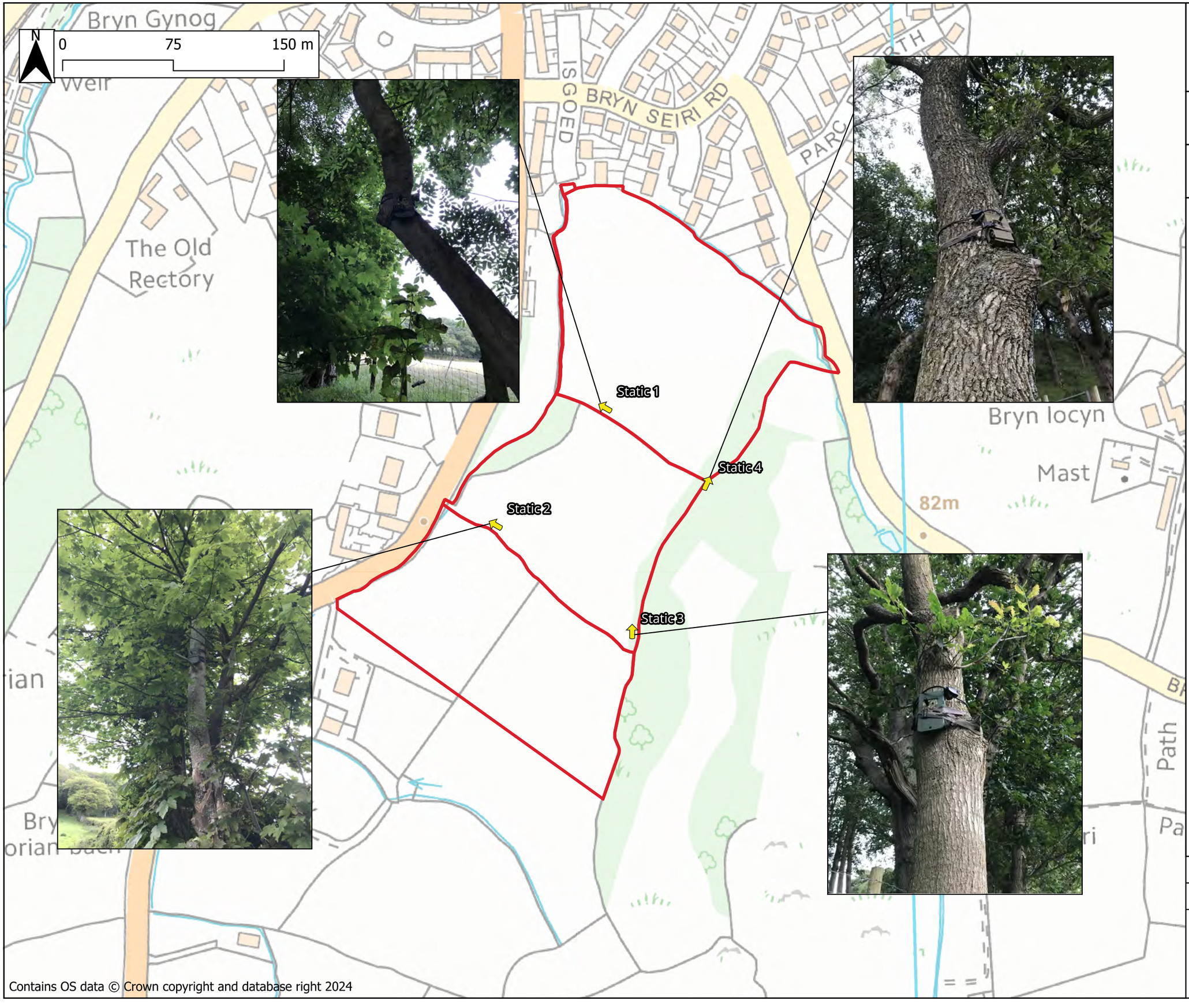
Registered in England and Wales No. 1848683 VAT Reg No. 401 424 313



Cleient / Client:

Adra

Enw project / Project name:

Land at Llanrwst Road Gyffin, Conwy

Teitl lluniad / Drawing title:

Static & Camera Locations

Eglurhad / Key:

- Red Line Boundary
- Static Detector Location

Graddfa / Scale (A3): 1:4000@ A3	Dyddiad / Date: May 2024	Darlunwyd gan: Drawn by: KM
		Gwirwyd gan: Checked by: DH
Rhif lluniad / Drawing number: 3222-RML-RT-DR-04		Cywiriad: Revision: 01

Darparwyd gan / Prepared by:

RML
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