



Preliminary Ecological Appraisal and Preliminary Roost Assessment

Gamford House, Gamford Lane, Rossett, Wrexham LL12 0EW
Urban Developments

Status	Issue	Name	Date
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Final	2	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	27/09/2023

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate. The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Urban Developments to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Gamford House, Gamford Lane, Rossett, Wrexham LL12 0EW (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of all existing buildings and the construction of 9no. new dwellings with associated access and landscaping (hereafter referred to as “the proposed development”).

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 8 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Habitats and flora	The site contains native hedgerows and a pond which are listed as a habitat of principal importance under Section 7 of the Environment (Wales) Act (2016). The site also contains mixed scrub and neutral grassland which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). The remaining habitats are common and widespread and have low ecological value. No protected or notable plant species were recorded during the survey.	The existing hedgerow and pond will be retained. The proposed development will result in the loss of scrub and neutral grassland. This could result in a net loss in biodiversity at the site. Other habitats to be lost include existing buildings, hard standing and bare ground, however this is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • An area of wildflower meadow to be incorporated into the proposals • Native shrub planting across the developed site • Native tree planting across the developed site • The retained pond to be enhanced for wildlife • The retained grassland to the east to be managed to increase its suitability for wildlife
Amphibians	The on-site pond (P1) and the nearest off-site pond (P2) were found to have a medium population of GCN during the 2019 bottle-trapping surveys. An updated HSI has been carried out on the ponds and the ponds are still found to be highly suitable for GCN. Further, the site contains optimal terrestrial GCN habitat in the form of rank, tussocky grassland, dense scrub and hedgerows. As such it is concluded likely that GCN are still present within the ponds and therefore terrestrial GCN are highly likely to be present on site.	Scrub and rank grassland will be removed during construction. When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.5725ha of suitable great crested newt habitat (i.e. scrub and grassland). With great crested newts being present within P1 and P2, this will constitute a loss of 0.5725ha within 100m of a potential breeding pond. When completing the rapid risk assessment published by Natural	Given the presence of GCN breeding ponds within 100m and the need to remove approximately 0.5725ha of optimal GNC terrestrial habitat a European Protected Species Mitigation Licence will be required from Natural Resources Wales once planning has been granted to allow the development to proceed legally. The most recent survey data for the ponds is from 2019 and therefore updated surveys are likely to be required to determine the current population of GCN within the ponds. Given that NRW have previously agreed to a reduce survey

		England (Natural England 2015), the proposed development produces an Red risk score , which states: Offence Highly Likely .	effort (i.e. 4 bottle-trapping surveys instead of the normal 6), it is recommended that direct liaison with NRW is undertaken to determine an agreeable scope of further surveys and whether they would accept any historic surveys to inform an upcoming licence application. It is possible a reduced scope will not be considered adequate and full updated bottle-trapping survey will be required in the 2024 survey season, following suitable mitigation and compensation measures can be recommended prior to an application to NRW for an EPSL.
Reptiles	Habitats on site provide optimal foraging, commuting and refuge habitat for reptiles. Grass snakes are also present within 500m of the site. As such it is concluded likely that reptiles are present on site.	Scrub and grassland will be removed during construction, however there will be areas of retained grassland along the eastern side of the site, as well as a retained pond. The site clearance could result in the death or injury of reptiles, if present.	Further surveys are considered to be disproportionate. Therefore, online with the recommendations from the 2015 and 2018 surveys it is recommended that a precautionary working method is implemented during construction.
Roosting bats	B1: This building historically contained a roost of common pipistrelle bats (potentially maternity based on droppings) confirmed during the 2015 surveys. Since then, the building has deteriorated and the roof structure is no longer present. As such the building was concluded as having moderate habitat value for roosting bats during the 2018 surveys, with the 2019 BERS confirming the presence of a common pipistrelle day roost (3no. individuals) within the building. The updated 2023 survey concluded that the building still has moderate habitat value for supporting roosting bats due to the presence of a number of features (i.e. gaps in the brickwork) suitable for low numbers of crevice-dwelling bats. B2: This building was found to have high habitat value for roosting bats during the 2015 and 2018 surveys. The 2019 BERS confirmed the presence of a day roost of common pipistrelles (3 no. individuals) within the building. The 2023 survey found that the building still has high habitat value for supporting roosting bats. B4a: This building was confirmed as having low habitat value during the 2015 survey and moderate habitat value during the 2018 survey. No roosting bats have previously been confirmed in the building. The updated 2023 survey found that the building still has moderate habitat value for supporting roosting bats due to the presence of a number of features suitable for crevice-dwelling	B1, B2, B4a & B5: The proposed development will result in the demolition of these buildings. This could result in destruction of any bat roosts present and could cause disturbance, death or injury to bats.	B1, B2 & B5: Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. 11no. surveyors are required to provide full coverage of the buildings. An EPSL application to Natural Resource Wales will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. B4a: Two bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost in the building. Both of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. Two surveyors are required to provide full coverage of the building.

	bats. Further, the internal areas may provide suitable roosting habitat for void-dwelling bats. B5: This building was concluded as having moderate habitat value for roosting bats during the 2015 and 2018 surveys. The 2019 BERS confirmed the presence of a day roost of common pipistrelle bats (2no. individuals) within B5. The updated 2023 survey found that that building still have moderate habitat suitability for roosting bats due to the presence of a number of features suitable for crevice-dwelling bats. Further, the internal areas may provide suitable roosting habitat for void-dwelling bats.		If bat roosts are confirmed in the building one additional survey may be required to characterise the roost and to inform an EPSL application to Natural Resource Wales. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.
Foraging and commuting bats	Scrub, grassland and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will result in the loss of small areas of scrub and grassland but given the presence of more extensive areas of foraging and commuting habitat in the locality, as well as the retained areas of grassland, pond and hedgerow this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development.
			A precautionary working method will be implemented during construction.
Hedgehog	The site provides optimal hedgehog habitat in the form of scrub, rank grassland and hedgerows.	Scrub and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction.
Water vole	No evidence of water vole occupation was noted on site, however the pond was found to provide suitable habitat for water voles given the presence of shallow earthy banks and suitable vegetation.	No works will be undertaken within 5m of the top of the banks of the watercourse. Therefore, no impacts are anticipated on water vole as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts to water voles, further water vole surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.

Birds	No barn owl nesting/roosting evidence was noted within any of the buildings; however the barn buildings are suitable for barn owl nesting. Further, a barn owl was noted perching in a tree on site during the survey. The scrub, hedgerow and mature trees provide nesting habitat for birds. The barns also provide further nesting habitat for species such as swallows.	Buildings and scrub will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Building vegetation removal works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the buildings and vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.
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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Urban Developments to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Gamford House, Gamford Lane, Rossett, Wrexham LL12 0EW (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of all existing buildings and the construction of 9no. new dwellings with associated access and landscaping (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in Appendix 1.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting.

A number of previous ecological surveys have been carried out at this site as outlined below:

- A Preliminary Roost Assessment carried out by TEP in May 2015 (TEP 2015). This survey concluded the following:
 - **GCN:** Two ponds were present within 250m of the site boundary, which were concluded as being either “good” or “excellent” for GCN. Subsequent GCN eDNA sampling concluded a likely absence of GCN from both ponds.
 - **Bats:** Evidence of roosting present within the main dwelling as well as further bat roosting suitability across the outbuildings
 - **Nesting birds:** nesting birds confirmed within the main dwelling and suitability across the outbuildings
 - **Reptiles, hedgehogs & common amphibians:** a precautionary working method statement is required to protect these species during development
- Bat Emergence/re-entry Surveys carried out by Arbtech in August 2015 (Arbtech 2015) these surveys concluded the presence of a common pipistrelle roost within the main dwelling (B1) on site. No other bat roosts were confirmed in the other buildings present on site.
- A Preliminary Ecological Appraisal carried out by Tyrer Ecological Consultants in 2018 (Tyrer 2018). This survey concluded the following:
 - **GCN:** Two ponds were present within 250m of the site boundary, which were concluded as being suitable for GCN
 - **Bats:** No evidence of roosting bats was noted within the building however the buildings across the site were found to have either low or moderate habitat value for roosting bats, with some buildings negligible for bats
 - **Nesting birds:** nesting birds confirmed within some of the buildings on site
 - **Reptiles and hedgehogs:** a precautionary working method statement is required to protect these species during development
- Bat Emergence/re-entry Surveys carried out by Tyrer Ecological Consultants in 2019 (Tyrer 2019). These surveys confirmed the presence of common pipistrelle day roosts within four of the buildings on site (B, B2, B3 and B5)

- GCN surveys were carried out by Tyrer Ecological Consultants in June 2019 (Tyrer 2019) which concluded that GCN were present in both ponds within 250m of the site. Breeding was also confirmed within the ponds by the presence of eggs. A peak count of 25 individuals classifying the population as “medium”.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SJ 37815 57430 and has an area of approximately 1.8ha comprising eight buildings, hard standing, scrub, grassland, hedgerows, mature trees and a pond. It is surrounded by agricultural land with hedgerow and tree lined boundaries. A site location plan is provided in Appendix 2.

A site location plan is provided in Appendix 2.

1.3 Scope of the Report

The PEA element of this report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

The PRA element of this report provides a description of all features suitable for roosting, foraging and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species, including roosting bats.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of the magic.gov.uk database for statutory designated sites. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Existing biological records including notable species, habitats and non-statutory designated sites within a 2km radius were obtained from COFNOD during the 2019 surveys. This data has also been used within this report.

2.2 Field Survey

The survey was undertaken by Mel Reid (accredited agent Natural Resource Wales Bat Licence Number: S092694/1) on 26/09/2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the *Habitat Suitability Index (HSI) Assessment Methodology* (Oldham et al, 2000).

Preliminary Roost Assessment

The PRA focussed on 8no. built structures and all trees which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the buildings for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the buildings was also made, including the living areas and any accessible roof spaces, using a torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

For any surveyed trees:

A visual inspection was undertaken from ground level using binoculars to identify any possible roost features and, where accessible and safe to do so, a close up inspection of the features was completed using an endoscope, torch and ladders.

Suitability Assessment

Built structures and trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 and Table 2 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats

Classification	Feature of building and its context
High	Buildings or structures with features of particular significance for larger numbers of roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Moderate	Buildings or structures with one or more features suitable for more regular roosting due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation value such as maternity or hibernation roosts. Continuous habitat connected to the wider landscape which could be used by bats for commuting such as lines of trees, linked gardens. Foraging habitat in the surrounding area such as trees, scrub, grassland or water.
Low	Buildings or structures with one or more features suitable for use sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. Habitat suitable for foraging in close proximity, but largely isolated in the landscape. Or an isolated site not connected by prominent linear features.
Negligible	Unsuitable for use by bats.

Table 2: Features of a tree that are correlated with use by bats

Classification	Feature of tree and its context
Moderate to high	A tree with one or more potential roost sites that are obviously suitable for use by bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators.
Negligible	Unsuitable for use by bats.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

The following limitations were specific to the PRA survey:

- Full internal access to B1 was not possible due to the deteriorated nature of the building. As such only the ground floor of the building was inspected
- Only a partial inspection of the upper floors of B2 could be carried out due to the poor state of the floors as a result of water damage
- An internal inspection of B4a could not be carried out due to the presence of dense vegetation surrounding the building
- An internal inspection of B5 could not be carried out due to the presence of dense vegetation surrounding the building

The following limitations were specific to the PRA survey:

- Only a small section of the banks of Pond 1 could be accessed due to dense surrounding vegetation
- Only a small section of the banks of Pond 2 could be accessed due to dense surrounding vegetation

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory and non-statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 3 below. The site lies within the SSSI Impact Risk Zones for the River Dee and Bala Lake SSSI, however the proposed development type (i.e. 9no. new dwellings) is not listed as high risk with regards to this site.

Table 3: Statutory and non-statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural Resources Wales and COFNOD
Darnell Wood Local Wildlife Site (LWS)	140m north	N/A

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 4.

Table 4: Weather conditions during the survey

Date:	26/09/2023
Temperature	16°C
Humidity	66%
Cloud Cover	70%
Wind	12mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- Buildings (u1b5)
- Developed land; sealed surface (u1b)
- Sparsely vegetated urban land (u1f)
- Mixed scrub (h3h)
- Neutral grassland (g3)
- Other standing water (r1g)
- Native hedgerow (h2a)
- Mature trees

A description and photograph of each habitat is provided in Table 5.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 5: Description and photographs of habitats within and adjacent to the site

Habitat Type	Habitat description	Photograph
Buildings	There are eight buildings across the site, including a main dwelling and farm outbuildings. See Table 6 below for the full PRA results on all buildings and trees on site.	See Table 6 below
Developed land; sealed surface	Along the centre of the site, connecting all the buildings on site is a tarmac driveway within minimal vegetation present (<10%).	

Sparsely vegetated urban land	There is an area of bare ground with up to 30% ephemeral vegetation. Species present include white clover <i>Trifolium repens</i> (D), nettle <i>Urtica dioica</i> (A), broad-leaved dock <i>Rumex obtusifolius</i> (F), thistle <i>Cirsium vulgare</i> (F) and creeping buttercup <i>Ranunculus repens</i> (F).	
Mixed scrub	There are areas of dense scrub across the site. Species present include bramble <i>Rubus sp</i> (D), nettle <i>Urtica dioica</i> (A), buddleia <i>Buddleja davidii</i> (R), as well as tree saplings including willow <i>Salix sp.</i> and elder <i>Sambucus nigra</i>.	

Neutral grassland	The eastern side of the site, as well the northern and western edges are dominated by rank neutral grassland. The grassland has been unmanaged for a significant amount of time resulting in a tall sward length (up to 80cm). Species present include Yorkshire fog <i>Holcus lanatus</i> (D), cock's-foot <i>Dactylis glomerata</i> (D), red fescue (F), false oat-grass <i>Arrhenatherum elatius</i> (F), broad-leaved dock <i>Rumex obtusifolius</i> (A), common sorrel (F), oxeye daisy <i>Leucanthemum vulgare</i> (O), black medick (O), white clover <i>Trifolium repens</i> (F), nettle <i>Urtica dioica</i> (F), common hogweed <i>Heracleum sphondylium</i> (O), common thistle <i>Cirsium vulgare</i> (O), cow parsley <i>Anthriscus sylvestris</i> (O) and common ragwort <i>Jacobaea vulgaris</i> (O).	
Other standing water	There is one pond located on site at the eastern side of the site. The pond measures approximately 360m² and is surrounded in dense vegetation. The banks of the pond are mildly steeped. A full HSI has been carried out on this pond, and a further off-site pone (see Table 7 for full details).	

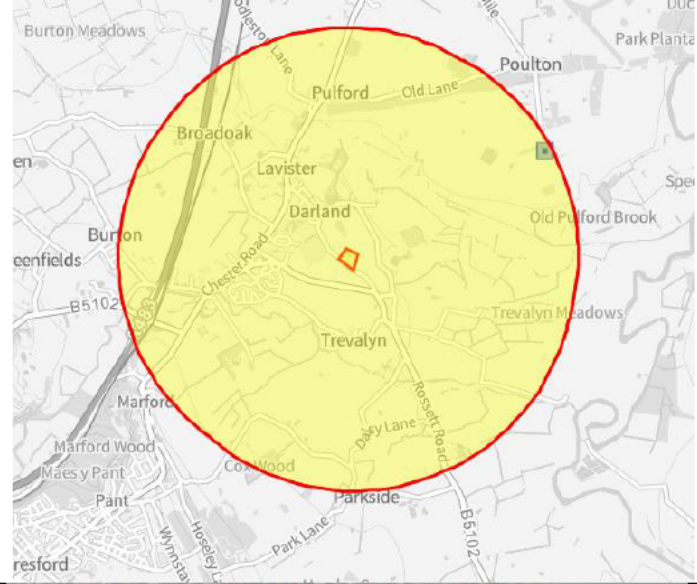
Native hedgerow	There is a hedgerow along a section of the southern site boundary. The hedgerow is dominated by hawthorn <i>Crataegus monogyna</i>, with occasional blackthorn <i>Prunus spinosa</i> and holly <i>Ilex aquifolium</i>. Two mature oak trees are located within the hedgerow (see below).	
Mature trees	There are two mature oak trees located within the hedgerow along the southern site boundary. A full PRA was carried out on these trees (see Table 6 below for full details). Further trees are present across which are mostly young or semi-mature, with species present including oak, willow and elder.	

Fauna

Bats

The results of the PRA are provided in Table 6. No evidence of roosting bats was identified during the survey.

Table 6: Assessment of the suitability of the site for bats

Feature	Description	Photographs
Historical records	There has been on granted EPSL for bats within the 2km radius of the site, located approximately 2km from site. This licence allowed the destruction of a resting place for brown long-eared, common pipistrelle, soprano pipistrelle and Natterer's bats. The data search highlighted the presence of common pipistrelle (10 records), as well as unknown bat species records, within a 3km radius of the site.	
Bat foraging and commuting habitat	Habitats on site provide good quality bat foraging and commuting habitat due to the presence of rank grassland, scrub, mature trees and hedgerows. The linear features (i.e. hedgerows and trees) in particular provide commuting routes for bats. There is further good quality bat foraging habitat across the wider landscape in the form of hedgerows and tree lines. The ponds (on and off site) will also provide high insect activity increasing bat foraging potential across the landscape.	

B1 - exterior	B1 is the main former dwelling on site. The building consists of a double-storey brick-built section with formerly had a pitched slate roof, however due to fire damage this is longer present, and as such all that remains are the brickwork walls. There are a number of gaps in the brickwork suitable for low numbers of crevice-dwelling bats. There are flat roof extensions on the north-eastern and south-eastern elevations of B1. Roosting features suitable for crevice-dwelling bats were noted across these extensions in the form of gaps between the walls and fascia boards. There are numerous open doorways and windows, as well as an open roof, providing access for bats and birds into the interior of the building.	
B1 interior	Internally, the ground floor rooms are still intact, however these are considered unsuitable for void-dwelling bats due to the high levels of light, exposure to the elements and lack of roosting areas. The upper floor of the building could not be inspected due to the condition of the floor as a result of the historic fire damage. However, due to the lack of roof structure the upper sections of the building are also considered unsuitable for void-dwelling bats.	
B1 history & suitability assessment	Historically B1 contained a bat roost, confirmed via droppings noted during the 2015 PRA. The subsequent 2015 BERS confirmed the presence of a common pipistrelle day roost within B1. Since then, the building has changed significantly due to fire damage and the building no longer has any remaining roof structure. The 2018 PRA found that the building was concluded as having moderate habitat value for supporting roosting bats. the 2019 BERS found that the building contained a common pipistrelle day roost. The updated 2023 survey found that that B1 still has moderate habitat value for supporting roosting bats due to the presence of a number of gaps in the brickwork suitable for crevice-dwelling bats. The building is considered unsuitable for void-dwelling bats due to a lack of roof structure providing suitable roosting areas.	

B2 - exterior	B2 consists of a derelict barn building with multiple sections, all of which are brick-built with pitched roofs clad in slate roof tiles. There are numerous missing and raised slate tiles providing suitable roosting habitat for crevice-dwelling bats. There is no internal roof lining (see below) and as such these gaps are likely to only be suitable for low numbers of crevice-dwelling bats. There are numerous open windows and doorways providing access for bats and birds into the interior of the building.	
B2 interior	Internally there is a ground floor and upper floor within B2. The upper floor is open to the roof structure. The internal roof structure is constructed from timber beams with no internal lining present. A full inspection of the upper could not be carried out due to water damage to the floorboards. The interior of the B2 is well lit due to the windows and doors, as well as skylights present in the roof structure, reducing the suitability of the interior for roosting bats.	
B2 history & suitability assessment	B2 was conclude as having low habitat value for supporting roosting bats during the 2015 survey, following which the 2018 survey concluded the building had moderate suitability for roosting bats and the 2019 surveys concluded the presence of a common pipistrelle day roost within the building. The updated 2023 survey conclude that the building still has moderate habitat value for supporting roosting bats due to the presence of gaps across the roof structure suitable for low numbers of crevice-dwelling bats.	

B2a - exterior	B2a is a single-storey brick-built extension on the south-western elevation of B2. The roof structure is flat and has partially collapsed. The brickwork and roof structure offer no gaps suitable for roosting bats. the interior of B2a is considered unsuitable for void-dwelling bats due to high levels of light, exposure to the elements and lack of suitable roosting areas.	
B2a history & suitability assessment	B2a was concluded as having negligible habitat value for supporting roosting during all previous survey. The updated 2023 survey found that the building still has negligible value for roosting bats due to a lack of gaps suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.	
B3 - exterior	B3 consists of a former barn building which previously had a pitched roof clad in slate, however this is no longer present. As such all that remains of the building are single-skinned brick walls. No gaps suitable for crevice-dwelling bats were noted across the building. Due to the lack of roof structure, there are no internal areas suitable for void-dwelling bats.	
B3 history & suitability assessment	B3 was found to have high habitat value for roosting bats during the 2015 survey, following which the 2019 surveys confirmed the presence of a common pipistrelle day roost within the interior of B3 (emergence through an open doorway). However due to the deterioration of the building since the previous surveys (i.e. roof structure no longer present) the building is no longer considered suitable for roosting bats due to a lack of any gaps suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.	

B4 - exterior	B4 consisted of two derelict barns constructed from breezeblock, wooden panelling and corrugated metal. The roof structures are constructed from corrugated asbestos sheeting and metal. A section of roof at the north-western end of the building is no longer present. The building is open sided on some elevations providing access internally for bats and birds. Due the construction material of the walls and roof there are no gaps suitable for crevice-dwelling bats.		
B4 interior	Internally there are two large areas within B4; one in each barn, which are open to the roof structure. There is no internal lining across the interior of B4. The interior is constructed from metal beams. There are skylight panels across the roof structure. There are high levels of internal light due to the open sides and skylight panels, as well as being exposed to the external elements, reducing the suitability of the interior for void-dwelling bats due to a lack of darker areas for roosting. Further due to the construction material there are no suitable roosting areas. As such the building is considered unsuitable for void-dwelling bats.		
B4 history & suitability assessment	B4 was concluded as having negligible habitat value for supporting roosting during all previous survey. The updated 2023 survey found that the building still has negligible value for roosting bats due to a lack of gaps suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.		

B4a - exterior	B4a is a small single-storey brick-built barn building with a pitched slate roof adjoined to B4. There are numerous missing and raised slate tiles providing suitable roosting habitat for crevice-dwelling bats. There is no internal roof lining and as such these gaps are likely to only be suitable for low numbers of crevice-dwelling bats. There are numerous open windows and doorways providing access for bats and birds into the interior of the building. An internal inspection of the building could not be carried out due to the dense vegetation surrounding the building.	
B4a history & suitability assessment	B4a was concluded as having low habitat value during the 2015 survey and moderate habitat value during the 2018 survey. No bat roosts have been confirmed within B54a during the previous surveys. The updated 2023 survey conclude that the building still has moderate habitat value for supporting roosting bats due to the presence of gaps across the roof structure suitable for low numbers of crevice-dwelling bats.	
B5 - exterior	B5 consists of a brick-built barn with a pitched roof clad in slate roof tiles. There is a lower section at the north-western end and a higher section at the south-eastern end. There are numerous missing and raised slate roof tiles creating suitable roosting habitat for crevice-dwelling bats. There is no internal roof lining (see below) and as such these gaps are likely to only be suitable for low numbers of crevice-dwelling bats. A section of the roof has collapsed at the north-western end of B5. There are no gaps across the brickwork suitable for crevice-dwelling bats. There is an open doorway on the south-eastern elevation, as well as numerous other smaller open doorways and windows providing access for bats and birds into the building. An internal inspection of the building could not be carried out due to the dense vegetation surrounding the building.	
B5 history & suitability assessment	B5 was concluded as having low habitat value for supporting roosting bats during the 2015 survey, following which the 2018 survey concluded the building had moderate suitability for roosting bats and the 2019 surveys concluded the presence of a common pipistrelle day roost within the building. The updated 2023 survey conclude that the building still has moderate habitat value for supporting roosting bats due to the presence of gaps across the roof structure suitable for low numbers of crevice-dwelling bats.	

B6 - exterior	B6 consists of three adjoining barns constructed from breezeblock, wooden panelling and corrugated metal panels. The roof structures are pitched and clad in corrugated metal. There are open sides providing access for bat and bird internally. No features across the exterior of B6 were noted for roosting bats.	
B6 interior	Internally there are three large areas within B6; one in each barn, which are open to the roof structure. There is no internal lining across the interior of B6. The interior is constructed from metal beams. There are skylight panels across the roof structure. There are high levels of internal light due to the open sides and skylight panels, as well as being exposed to the external elements, reducing the suitability of the interior for void-dwelling bats due to a lack of darker areas for roosting. Further due to the construction material there are no suitable roosting areas. As such the building is considered unsuitable for void-dwelling bats.	
B6 history & suitability assessment	B6 is considered to have negligible habitat value for roosting bats due to a lack of external features suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.	

B7 - exterior	B7 consists of a single-storey brick-built barn with a pitch roof constructed from corrugated asbestos panels. There are two extensions to the north-western end of B7, one of which is constructed from breezeblock and has a flat roof structure, the other which is brick-built and previously had a pitched roof constructed from asbestos, however this has now fallen down. The external brickwork and breezeblock offer no gaps suitable for roosting bats.	
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B7 interior	The interior of B7 is open to the roof structure with no loft spaces present. Internally the conditions within B7 are considered unsuitable for void-dwelling bats due to the high levels of internal light, exposure to the elements and lack of suitable roosting areas.	
B7 history & suitability assessment	B7 is considered to have negligible habitat value for roosting bats due to a lack of external features suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.	
B8 - exterior	B8 consists of former animal pens. All that remains of the building are brick walls as the roof structure has previously fallen away/been removed. The brickwork offers no gaps suitable for roosting bats.	
B8 history & suitability assessment	B8 is considered to have negligible habitat value for roosting bats due to a lack of external features suitable for crevice-dwelling bats and lack of suitable internal areas for void-dwelling bats.	

Trees	There are two mature oak trees located within the hedgerow along the southern site boundary. Both trees are covered in dense ivy growth from ground level to the canopy. No features suitable for roosting bats were noted from ground level, however due to the presence of the ivy preventing a full inspection, and given the age and condition of the trees it is considered likely that suitable features may be present across the trees. Other trees across the site were young or semi-mature and lacked features suitable for roosting bats.	
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Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 7.

Table 7: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability	Biological records data																																							
Amphibians	Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). A review of aerial imagery indicates the presence of two ponds within 500m of the site including a pond located within client's ownership boundary (P1 below) and a further pond located approximately 45m south of the site within an arable field (P2 below). The pond within the ownership boundary is suitably connected to the development area due the presence of suitable terrestrial habitats between the pond and development area. The pond located 45m south of the site is separated from the site by a road, however the road is a minor road and likely not a significant barrier to amphibian migration. See Appendix 3d for a pond location map. A HSI was completed of the ponds which returned results indicating excellent suitability for P1 and average suitability for P2 for GCN. The 2019 surveys conclude the presence of a "medium" population of GCN across both P1 and P2. The buildings and areas of hard standing offer sub-optimal terrestrial habitat for GCN, however the areas of scrub and rank grassland provide optimal habitat for this species as this habitat can be used for shelter or hibernation. Further, there are log and refuse piles suitable for amphibian hibernation (See Target Notes 1-4 below and on Habitat Map in Appendix 3). Table 7a: HSI calculation of ponds. <table border="1"> <thead> <tr> <th>SI Description</th><th>SI Value P1</th><th>SI Value P2</th></tr> </thead> <tbody> <tr> <td>Geographic location</td><td>1</td><td>1</td></tr> <tr> <td>Pond Area</td><td>0.9</td><td>0.2</td></tr> <tr> <td>Pond Permanence</td><td>0.9</td><td>0.5</td></tr> <tr> <td>Water Quality</td><td>0.67</td><td>0.33</td></tr> <tr> <td>Shade</td><td>1</td><td>1</td></tr> <tr> <td>Waterfowl Effect</td><td>1</td><td>0.67</td></tr> <tr> <td>Fish Presence</td><td>1</td><td>1</td></tr> <tr> <td>Pond Density</td><td>0.95</td><td>0.95</td></tr> <tr> <td>Terrestrial Habitat</td><td>1</td><td>0.67</td></tr> <tr> <td>Macrophyte Cover</td><td>0.6</td><td>0.4</td></tr> <tr> <td>HSI Score</td><td>0.89</td><td>0.60</td></tr> <tr> <td>HSI Category</td><td>Excellent</td><td>Average</td></tr> </tbody> </table>	SI Description	SI Value P1	SI Value P2	Geographic location	1	1	Pond Area	0.9	0.2	Pond Permanence	0.9	0.5	Water Quality	0.67	0.33	Shade	1	1	Waterfowl Effect	1	0.67	Fish Presence	1	1	Pond Density	0.95	0.95	Terrestrial Habitat	1	0.67	Macrophyte Cover	0.6	0.4	HSI Score	0.89	0.60	HSI Category	Excellent	Average	A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. The data search highlighted the presence of GCN within a 3km radius of the sites (6 records), the closest of which is approximately 600m from site (breeding colony).
SI Description	SI Value P1	SI Value P2																																							
Geographic location	1	1																																							
Pond Area	0.9	0.2																																							
Pond Permanence	0.9	0.5																																							
Water Quality	0.67	0.33																																							
Shade	1	1																																							
Waterfowl Effect	1	0.67																																							
Fish Presence	1	1																																							
Pond Density	0.95	0.95																																							
Terrestrial Habitat	1	0.67																																							
Macrophyte Cover	0.6	0.4																																							
HSI Score	0.89	0.60																																							
HSI Category	Excellent	Average																																							



Figure 1: P1 (on-site pond)



Figure 2: P2 (off-site pond)



Figure 3: Target Note 1



Figure 4: Target Note 2 & 3



Figure 5: Target Note 4

Reptiles	Habitats recorded on site are assessed to provide suitable foraging, commuting, and refuge opportunities for reptiles in the form of scrub, rank grassland and hedgerows with trees. Further, the mosaic structure of the habitats on site (i.e. scrub and grassland adjacent to hard standing) provide suitable reptile basking areas across the site, with suitability dense vegetation sufficiently close enough to provide cover from predation. There are a number of log and refuse piles across the site providing suitable hibernation habitat for reptiles (See Target Notes 1-4 above).	There have been no granted EPSLs for reptiles within a 2km radius of the site. The data search highlighted the presence of grass snake within a 3km radius of the site (5 records of which the closest was approximately 430m from site).
Hazel Dormouse	The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area (i.e. lack of woodland or connectivity to any nearby woodland). As such it is considered likely that hazel dormice are absent from site.	There have been no granted EPSLs for hazel dormice within a 2km radius of the site.
Hedgehog	Habitats recorded on site are assessed to provide foraging, commuting, and refuge opportunities for hedgehogs in the rank grassland, scrub and hedgerows. However, no evidence indicating the presence of hedgehogs was recorded during the site survey. Although no evidence indicating the presence of hedgehogs was recorded, the future presence of hedgehogs cannot be discounted.	The data search highlighted the presence of hedgehogs within 3km of the site (15 records).
Otter	There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance. As such is considered likely that otters are absent from site.	A review of the MAGIC database returned no granted EPSL records for otters within 2km of the site. The data search highlighted the presence of otters within 3km of the site (76 records).
Water Vole	The pond on site may provide suitable habitat for water voles, due to the presence of sloped earthy banks suitable for water vole burrow creation, as well as suitable surrounding vegetation for foraging. No evidence of water vole occupation was noted across the banks, however a full inspection of the ponds edge could not be carried out due to the density of the surrounding vegetation, and therefore water vole evidence may have been missed. As such the presence of water vole within P1 cannot be discounted.	A review of the MAGIC database returned no granted EPSL records for water vole within 2km of the site. The data search highlighted the presence of water vole within 3km of the site (1 record).
Birds	Due to the small size of the site and the extent and type of the habitats recorded, the site is not considered suitable to support a significant assemblage of protected and/or notable birds. However, habitats recorded on site are assessed to provide nesting opportunities for common species of breeding birds in the form of the hedgerows with trees and scattered scrub. Further, the buildings are considered suitable for a number of species such as swallows and barn owl. A barn owl was noted perching in a tree near P1 during the survey, however no evidence of barn owl occupation within any of the buildings on site was noted during the survey.	The data search revealed the presence of a number of bird species present within a 3km radius o the site, the most notable of which include: • Barn owl • Cuckoo • Kestrel • Lapwing

		• House sparrow • Tree sparrow • Swallow • Red kite • Hobby • Quail • Wigeon • Dunlin
Invertebrates	The habitats present on site offer suitability for a common assemblage of invertebrates due to the presence of rank grassland, scrub hedgerows and a pond.	The data search highlighted the presence of a number of invertebrate species including Local BAP and Section 7 species.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. the area covered by the desk study and field survey) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

Taking the desk study and field survey results into account, Table 8 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the demolition of all existing buildings and the construction of 9no. new dwellings with associated access and landscaping.

Table 8: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are no statutory designated sites within 2km of the site. There is one non-statutory sites within 2km of the site, located approximately 140m from site.	No impacts to designated and non-designated sites are anticipated.	Best practice measures to minimise the possibility of pollution must be implemented during construction.	None.

¹ The Local Planning Authority has a duty to ask for enhancements under the Planning Policy Wales (2021).

Habitats and flora	The site contains native hedgerows and a pond which are listed as a habitat of principal importance under Section 7 of the Environment (Wales) Act (2016). The site also contains mixed scrub and neutral grassland which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). The remaining habitats are common and widespread and have low ecological value. No protected or notable plant species were recorded during the survey.	The existing hedgerow and pond will be retained. The proposed development will result in the loss of scrub and neutral grassland. This could result in a net loss in biodiversity at the site. Other habitats to be lost include existing buildings, hard standing and bare ground, however this is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • An area of wildflower meadow to be incorporated into the proposals • Native shrub planting across the developed site • Native tree planting across the developed site • The retained pond to be enhanced for wildlife • The retained grassland to the east to be managed to increase it's suitability for wildlife	Species-specific enhancement opportunities are detailed later in this table.
Amphibians	The on-site pond (P1) and the nearest off-site pond (P2) were found to have a medium population of GCN during the 2019 bottle-trapping surveys. An updated HSI has been carried out on the ponds and the ponds are still found to be highly suitable for GCN. Further, the site contains optimal terrestrial GCN habitat in the form of rank, tussocky grassland,	Scrub and rank grassland will be removed during construction. When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.5725.ha of suitable great crested newt habitat (i.e. scrub and grassland). With great crested newts being present within P1 and P2, this will constitute a loss of 0.5725ha within 100m of a potential breeding pond. When completing the rapid risk assessment published by Natural England (Natural England 2015), the	Given the presence of GCN breeding ponds within 100m and the need to remove approximately 0.5725ha of optimal GNC terrestrial habitat a European Protected Species Mitigation Licence will be required from Natural Resources Wales once planning has been granted to allow the development to proceed legally. The most recent survey data for the ponds is from 2019 and therefore updated surveys are likely to be required to determine the current population of GCN within the ponds. Given that NRW have previously agreed to a reduce survey effort (i.e. 4 bottle-trapping surveys instead of the normal 6),	Mitigation and compensation for GCN will be outlined within the EPSL application to NRW.

	dense scrub and hedgerows. As such it is concluded likely that GCN are still present within the ponds and therefore terrestrial GCN are highly likely to be present on site.	proposed development produces an Red risk score, which states: Offence Highly Likely.	it is recommended that direct liaison with NRW is undertaken to determine an agreeable scope of further surveys and whether they would accept any historic surveys to inform an upcoming licence application. It is possible a reduced scope will not be considered adequate and full updated bottle-trapping survey will be required in the 2024 survey season, following suitable mitigation and compensation measures can be recommended prior to an application to NRW for an EPSL.	
Reptiles	Habitats on site provide optimal foraging, commuting and refuge habitat for reptiles. Grass snakes are also present within 500m of the site. As such it is concluded likely that reptiles are present on site.	Scrub and grassland will be removed during construction, however there will be areas of retained grassland along the eastern side of the site, as well as a retained pond. The site clearance could result in the death or injury of reptiles, if present.	Further surveys are considered to be disproportionate. Therefore, online with the recommendations from the 2015 and 2018 surveys it is recommended that a precautionary working method is implemented during construction, to include following measures: • Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible. • A toolbox talk will be given to contractors regarding the possible presence of reptiles at the site. • A pre-commencement inspection of the site will be undertaken for reptiles. • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area. • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: • Creation of hibernacula using brash to be placed within the retained area of grassland. • Basking areas created in the retained grassland.

			- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.	
Roosting bats	B1: This building historically contained a roost of common pipistrelle bats (potentially maternity based on droppings) confirmed during the 2015 surveys. Since then, the building has deteriorated and the roof structure is no longer present. As such the building was concluded as having moderate habitat value for roosting bats during the 2018 surveys, with the 2019 BERS confirming the presence of a common pipistrelle day roost (3no. individuals) within the building. The updated 2023 survey concluded that the building still has moderate habitat value for supporting roosting bats due to the presence of a number of features (i.e. gaps in the brickwork)	B1, B2, B4a & B5: The proposed development will result in the demolition of these buildings. This could result in destruction of any bat roosts present and could cause disturbance, death or injury to bats. B2a, B3, B4, B6, B7 & B8: Bats are very unlikely to be roosting within these buildings and as such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of these buildings.	B1, B2 & B5: Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. 11no. surveyors are required to provide full coverage of the buildings. An EPSL application to Natural Resource Wales will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. B4a: Two bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost in the building. Both of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart.	

	suitable for low numbers of crevice-dwelling bats. B2: This building was found to have high habitat value for roosting bats during the 2015 and 2018 surveys. The 2019 BERS confirmed the presence of a day roost of common pipistrelles (3 no. individuals) within the building. The 2023 survey found that the building still has high habitat value for supporting roosting bats. B2a: This building was concluded as having negligible habitat value during the 2015 and 2018 surveys. The updated 2023 survey concluded that the building still has negligible habitat for roosting bats due to a lack of suitable features. B3: This building was found to have high habitat value during the 2015 survey and moderate during the 2018 survey. The 2019 BERS concluded the presence of a day roost of common pipistrelle bats (3no. individuals) within the building. The updated 2023 survey found that the building has significantly		Two surveyors are required to provide full coverage of the building. If bat roosts are confirmed in the building one additional survey may be required to characterise the roost and to inform an EPSL application to Natural Resource Wales. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. B2a, B3, B4, B6, B7 & B8: Bats are very unlikely to be roosting within these buildings and as such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of these buildings.	
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	deteriorated since the previous surveys and no longer has any features suitable for roosting bats mostly due to the loss of the entire roof structure. As such the building is concluded as having negligible habitat value for supporting roosting bats. B4: This building was concluded as having negligible habitat value during the 2015 and 2018 surveys. The updated 2023 survey concluded that the building still has negligible habitat for roosting bats due to a lack of suitable features. B4a: This building was confirmed as having low habitat value during the 2015 survey and moderate habitat value during the 2018 survey. No roosting bats have previously been confirmed in the building. The updated 2023 survey found that the building still has moderate habitat value for supporting roosting bats due to the presence of a number of features suitable for crevice-dwelling bats. Further, the internal areas may provide suitable			
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	roosting habitat for void-dwelling bats. B5: This building was concluded as having moderate habitat value for roosting bats during the 2015 and 2018 surveys. The 2019 BERS confirmed the presence of a day roost of common pipistrelle bats (2no. individuals) within B5. The updated 2023 survey found that that building still have moderate habitat suitability for roosting bats due to the presence of a number of features suitable for crevice-dwelling bats. Further, the internal areas may provide suitable roosting habitat for void-dwelling bats. B6: This building was concluded as having negligible habitat value during the 2015 and 2018 surveys. The updated 2023 survey concluded that the building still has negligible habitat for roosting bats due to a lack of suitable features. B7: This building was concluded as having negligible habitat value during the 2015 and 2018			
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	surveys. The updated 2023 survey concluded that the building still has negligible habitat for roosting bats due to a lack of suitable features. B8: This building was concluded as having negligible habitat value during the 2015 and 2018 surveys. The updated 2023 survey concluded that the building still has negligible habitat for roosting bats due to a lack of suitable features. Two buildings previously surveyed in 2015 and 2018 (a concrete tank structure, and a derelict piggery) are no longer present on site.			
Foraging and commuting bats	Scrub, grassland and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will result in the loss of small areas of scrub and grassland but given the presence of more extensive areas of foraging and commuting habitat in the locality, as well as the retained areas of grassland, pond and hedgerow this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to the adjacent grassland and hedgerows should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Planting native trees across the developed site • Planting native shrubs across

			required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	the developed site
		No works will be undertaken within 30m of a badger sett. Scrub and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.	A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use.	None.

			- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist.	
Hazel dormouse	It is considered likely that hazel dormice are absent given the lack of suitable habitat and no known populations in the area.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.
Hedgehog	The site provides optimal hedgehog habitat in the form of scrub, rank grassland and hedgerows.	Scrub and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction, including the following measures: - Site clearance will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible. - A toolbox talk will be given to contractors regarding the possible presence of hedgehogs at the site. - A pre-commencement inspection of the site will be undertaken for hedgehogs. - A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 30cm and left overnight to allow any hedgehogs to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter hedgehogs from the working area. - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: - Permeable fencing to allow mammal migration across the site - A Hedgehog house could be installed within the retained grassland to the east

			retained habitats which hedgehogs could use. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.	
Otter	It is anticipated that otters are likely absent from site given the lack of suitable habitat.	No impacts are anticipated on otters as a result of the proposed development.	None.	None.
Water vole	No evidence of water vole occupation was noted on site, however the pond was found to provide suitable habitat for water voles given the presence of shallow earthy banks and suitable vegetation.	No works will be undertaken within 5m of the top of the banks of the watercourse. Therefore, no impacts are anticipated on water vole as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts to water voles, further water vole surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: - A toolbox talk will be given to contractors regarding the possible presence of water vole at the site. - Heras fencing will be erected around the working area to prevent encroachment within 5m of the watercourse. - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to the watercourse and any retained habitats which water voles could use. - Best practice pollution prevention measures will be implemented to minimise impacts to the watercourse and	None.

			any retained habitats that water vole could use. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that water voles or evidence of water voles is identified, works must cease and advice must be sought from a suitably qualified ecologist.	
Birds	No barn owl nesting/roosting evidence was noted within any of the buildings; however the barn buildings are suitable for barn owl nesting. Further, a barn owl was noted perching in a tree on site during the survey. The scrub, hedgerow and mature trees provide nesting habitat for birds. The barns also provide further nesting habitat for species such as swallows.	Buildings and scrub will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Building vegetation removal works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the buildings and vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on mature trees and new dwellings.
Invertebrates	The is likely to provide habitat for a common assemblage of invertebrates.	Scrub and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: Insect houses can be installed within the

				retained area of grassland • Native tree plating across the developed site • Native shrub planting across the developed site
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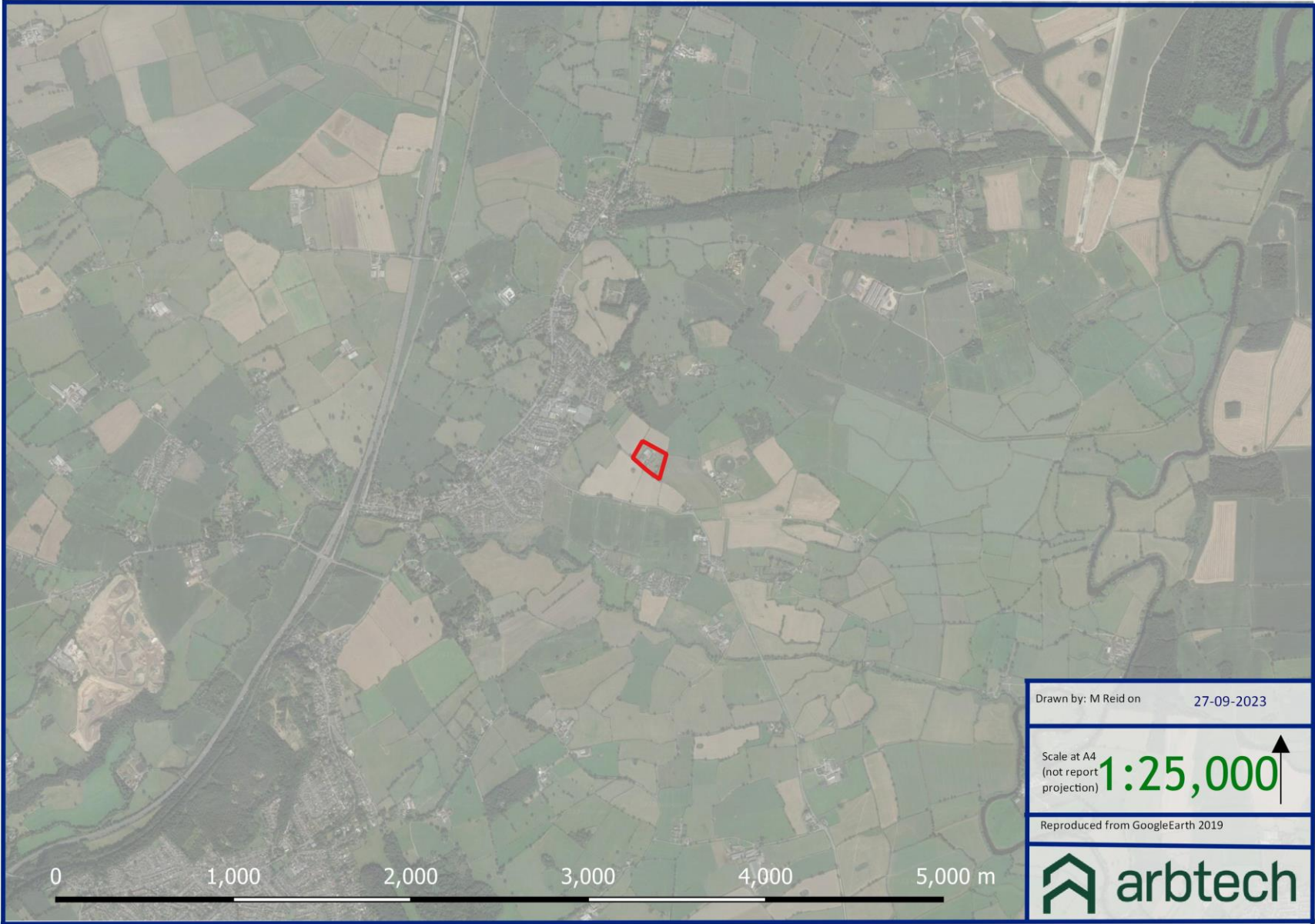
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Appendix 1: Proposed Development Plan



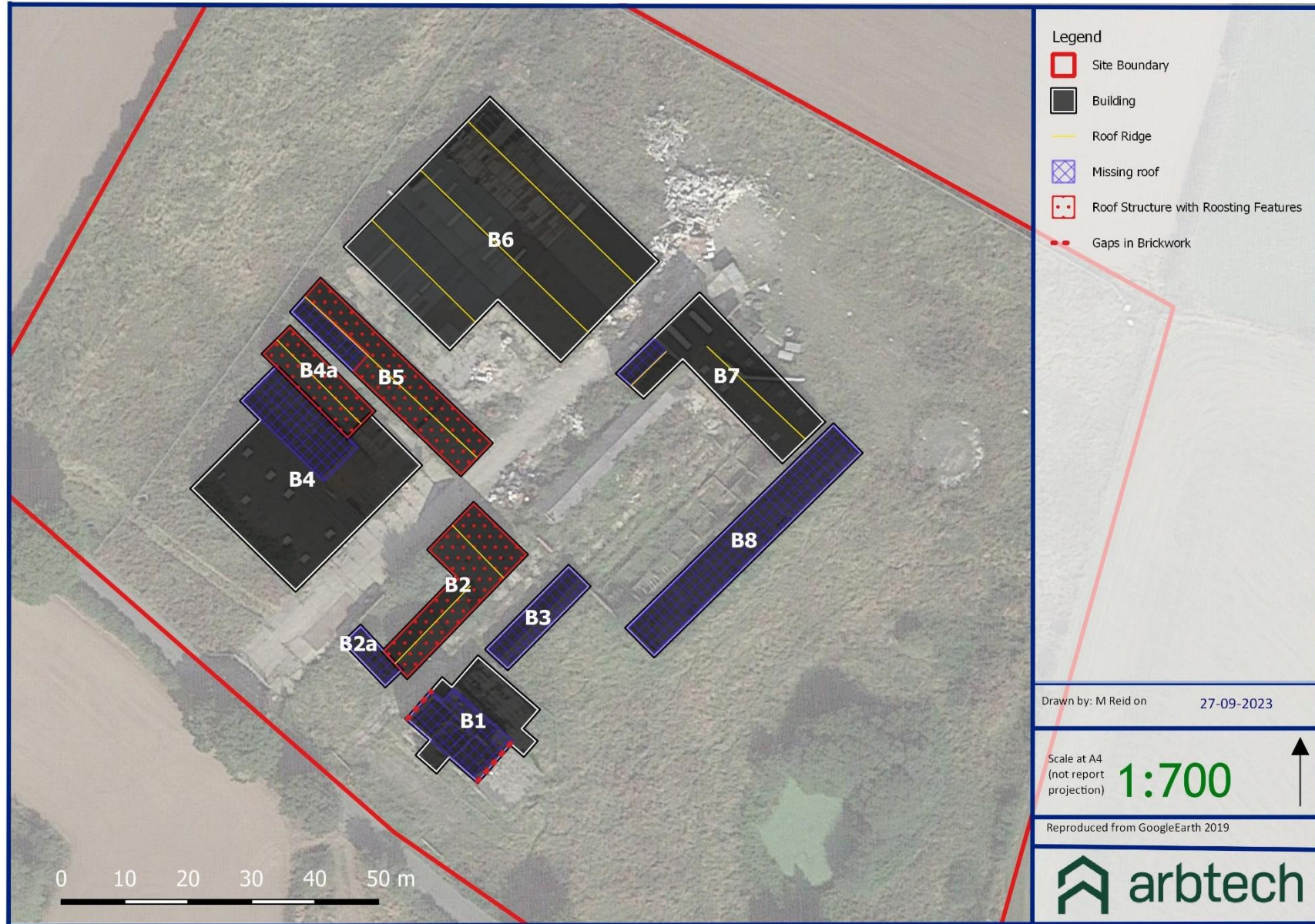
Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



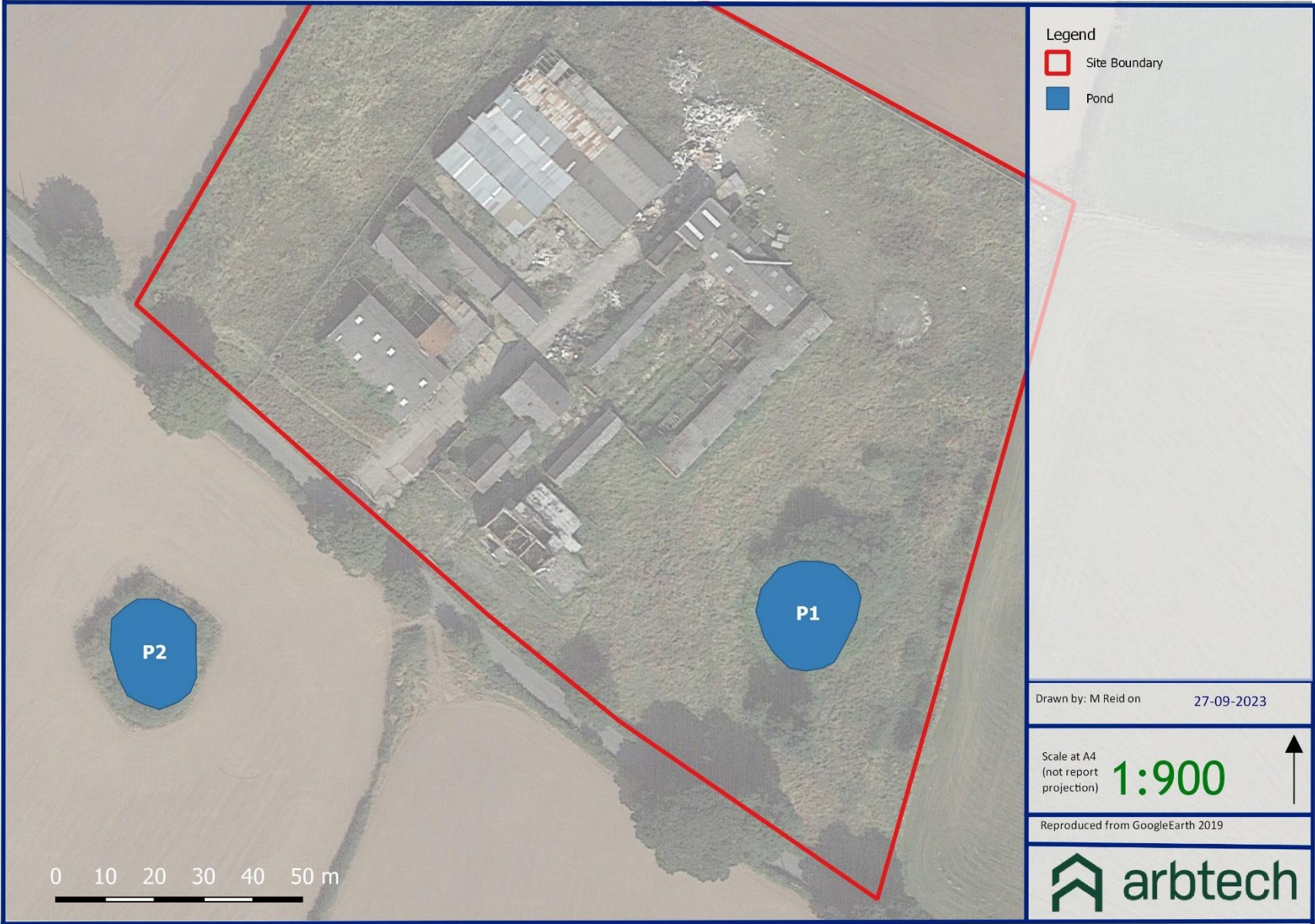
Appendix 3b: PRA Plan



Appendix 3c: Proposed BERS Plan



Appendix 3d: Pond Location Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*”. However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof

- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural Resources Wales) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural Resources Wales) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural Resources Wales). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural Resources Wales) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned

and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
 - Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
 - Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural Resources Wales) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY***Environment (Wales) Act 2016 and the Biodiversity Duty***

The Environment (Wales) Act 2016 introduces a new biodiversity duty, which highlights biodiversity as an essential component of ecosystem resilience. This new duty replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006 (referred to as the NERC Act). Part 1 of the Act deals with Sustainable management of natural resources including Biodiversity and Resilience of Ecosystems Duty. The Environment Act enhances the current NERC Act duty to require all public authorities, when carrying out their functions in Wales, to seek to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”. As under the NERC Act the new duty will apply to a range of public authorities such as the Welsh Ministers, local authorities, public bodies and statutory undertakers. This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long-term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

Planning Policy Wales (2021)

Paragraph 6.4.3 of the document refers to Biodiversity and Ecological Networks and 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. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Information contained in SoNaRR, Area Statements and species records from Local Environmental Record Centres should be taken into account. Development plan strategies, policies and development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;
- ensure statutorily and non-statutorily designated sites are properly protected and managed;
- safeguard protected and priority species and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil, including peat; and
- secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. Planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

- a) Diversity between and within ecosystems;
- b) The connections between and within ecosystems;
- c) The scale of ecosystems;
- d) The condition of ecosystems (including their structure and functioning); and
- e) The adaptability of ecosystems.

In fulfilling this duty, planning authorities must have regard to:

- a) The list of habitats of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016;
- b) The State of Natural Resources Report (SoNaRR), published by NRW; and
- c) Any Area Statement that covers all or part of the area in which the authority exercises its functions.

Planning Authorities should also refer to up to date ecological survey information (where appropriate).

A proactive approach towards facilitating the delivery of biodiversity and resilience outcomes should be taken by all those participating in the planning process. In particular, planning authorities should demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

The broad framework for implementing the duty and building resilience through the planning system includes addressing:

- Diversity: to ensure mechanisms are in place to minimise further loss and that circumstances allow for species' populations to expand and recolonise their natural range (former range) or adapt to future change. This means development should provide a net benefit for biodiversity, and at the very least, with no significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity;
- Extent: to ensure mechanisms allow for the maintenance of existing assets and networks and promote the restoration of damaged, modified or potential habitat and the creation of new habitat. This means that planning choices should incorporate measures which seek the creation and restoration of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks;
- Condition: Ecosystems 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;
- 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; and

- Adaptability to change: primarily in the form of climate change, for both species (diversity) and ecosystems requires action to protect the extent, condition and connectivity of habitats, features and ecological networks. Development plans, planning proposals and applications which build on protecting designated sites and securing and enhancing green infrastructure will be key ways of addressing the attributes of ecosystems resilience identified in the Environment Act as well as facilitating social and economic resilience aspirations of the Well-being of Future Generations Act.

Good Practice Guide GPG 3 (October 2015) NRW Approach to Bats and Planning

As explained in Planning Policy Wales (Chapter 5 - Conserving and Improving Natural Heritage and the Coast), the presence of a European protected species is a material consideration for a development proposal that would be likely to result in disturbance or harm to the species or its breeding sites or resting places. Planning Policy Wales also explains that planning authorities should seek the advice of Natural Resources Wales for all planning applications likely to result in disturbance or harm to bats and should always consult them before granting permission. Local Planning Authorities address this by screening applications to identify when there is a reasonable likelihood that bats may be present and, therefore, when to require a bat survey and report that will confirm if bats are present and if they likely to be disturbed or harmed by the proposal. The overall requirement on Local Planning Authorities, Natural Resources Wales and developers is to avoid harm or disturbance to bats and their breeding sites and resting places, unless Natural Resources Wales has given a licence to allow the harm or disturbance. Natural Resources Wales may only give a licence if the requirements for derogation are met, including that disturbance or harm to individual bats (or to their breeding sites and resting places) would not be detrimental to the maintenance of the population.

LOCAL PLANNING POLICY

Wrexham Unitary Development Plan (2005)

Accessed via: <https://www.wrexham.gov.uk/sites/default/files/2020-05/udp-statement.pdf>

Policy PS11

Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.

Policy EC4

Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.

Policy EC6

Development either within or close to sites of biodiversity interest will only be permitted where it can be clearly demonstrated that the need for the development outweighs the need to safeguard the intrinsic nature conservation value of the site. Where such development is permitted, damage should be kept to a minimum, and compensatory measures should be provided. Measures to improve the biodiversity value of sites and enhance their natural conservation interest and landscape quality including the establishment of local nature reserves, will be supported.